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Web of Science
Page 1 (Records 1 -- 50)

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◀ [1] ▶

Record 1 of 50

Title: Analytical Model of a Bulb Flat**Author(s):** Oanta, E (Oanta, E.); Hreniuc, V (Hreniuc, V.); Brice, P (Brice, P.)**Edited by:** Doroftei I; Popescu A; Bujoreanu C**Source:** 8TH INTERNATIONAL CONFERENCE ON ADVANCED CONCEPTS IN MECHANICAL ENGINEERING **Book Series:** IOP Conference Series-Materials Science and Engineering **Volume:** 444 **Article Number:** 062006 **DOI:** 10.1088/1757-899X/444/6/062006 **Published:** 2018**Times Cited in Web of Science Core Collection:** 0**Total Times Cited:** 0**Usage Count (Last 180 days):** 0**Usage Count (Since 2013):** 0**Cited References:** Oanta E, 2016, IOP CONF SER-MAT SCI, V145, DOI 10.1088/1757-899X/145/8/082011

Oanta E, 2014, ADV MAT RES, V1036, P697, DOI DOI 10.4028/WWW.SCIENTIFIC.NET/AMR.1036.697

Panait C, 2017, P3P112PCCDI201704043

Precupetu P, 1987, 2 NAT C PROJ GEOM TE

Precupetu P, 1986, NAT C PROGR ROM SCI

Raicu A, 2017, IOP CONF SER-MAT SCI, V227, DOI 10.1088/1757-899X/227/1/012109

Cited Reference Count: 6

Abstract: The computer based analytical model of a bulb flat is a component of a larger project where an analytical model of a ship hull is developed. The calculus domain of a bulb flat is defined starting from its main dimensions and it is discretized in polygons. We used notions of computer aided analytical geometry in order to define the boundary of the domain. The number of inner points along the fillets is parameterized. The output values of the model are the geometrical characteristics and they are compared with the values found in the manufacturers' data sheets. In order to have an effective solution we developed a software consisting of more than 2000 computer code lines. The original program is flexible, being possible to add new bulb flat dimensions. After extensive tests for various dimensions of the bulb flats and inner points in which a fillet is discretized we draw the conclusion that the results are accurate. Moreover, for fillets' discretization angles larger than 10 there is a very slight improvement of the accuracy. This computer aided analytical model is important because it offers the product moment of area, value that cannot be found in the manufacturers' brochures where are also missing some bulb flats dimensional variants. The analytical model may be included in upper level of complexity models or in computer aided hybrid models. The solution may be considered an inspirational environment in order to conceive other analytical models.

Accession Number: WOS:000467443600093**Language:** English**Document Type:** Proceedings Paper**Conference Title:** 8th International Conference on Advanced Concepts in Mechanical Engineering (ACME)**Conference Date:** JUN 07-08, 2018**Conference Location:** Iasi, ROMANIA**Conference Sponsors:** Gheorghe Asachi Tech Univ Iasi, Mech Engn Fac, Romanian Minist Natl Educ & Sci Res, Romanian Acad Tech Sci, Acad Romanian Scientists**Addresses:** [Oanta, E.; Brice, P.] Constanta Maritime Univ, Fac Naval Electromech, 104 Mircea cel Batran St, Constanta 900663, Romania.

[Hreniuc, V.] Constanta Maritime Univ, Fac Nav & Naval Transport, 104 Mircea cel Batran St, Constanta 900663, Romania.

Reprint Address: Hreniuc, V (reprint author), Constanta Maritime Univ, Fac Nav & Naval Transport, 104 Mircea cel Batran St, Constanta 900663, Romania.**E-mail Addresses:** Victor.Coriolan.Hreniuc@gmail.com**Publisher:** IOP PUBLISHING LTD**Publisher Address:** DIRAC HOUSE, TEMPLE BACK, BRISTOL BS1 6BE, ENGLAND**Web of Science Categories:** Engineering, Mechanical**Research Areas:** Engineering**IDS Number:** BM6WT**ISSN:** 1757-8981**29-char Source Abbrev.:** IOP CONF SER-MAT SCI**Source Item Page Count:** 7**Funding:**

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Romanian Ministry of Research and Innovation, CCCDI-UEFISCDI acronym HORESEC, within PNCDI III	PN-III-P1-1.2-PCCDI-2017-04-04/31PCCDI/2018

This work was supported by a grant of the Romanian Ministry of Research and Innovation, CCCDI-UEFISCDI, project number PN-III-P1-1.2-PCCDI-2017-04-04/31PCCDI/2018, acronym HORESEC, within PNCDI III, [11].

Open Access: Other Gold**Output Date:** 2019-06-12

Record 2 of 50

Title: New Developments of the Computer Aided Analytical Definition of the Map-Wise Calculus Domains**Author(s):** Oanta, E (Oanta, E.); Raicu, A (Raicu, A.); Panait, C (Panait, C.)**Edited by:** Doroftei I; Popescu A; Bujoreanu C**Source:** 8TH INTERNATIONAL CONFERENCE ON ADVANCED CONCEPTS IN MECHANICAL ENGINEERING **Book Series:** IOP Conference Series-Materials Science and Engineering **Volume:** 444 **Article Number:** 062007 **DOI:** 10.1088/1757-899X/444/6/062007 **Published:** 2018**Times Cited in Web of Science Core Collection:** 0**Total Times Cited:** 0**Usage Count (Last 180 days):** 0**Usage Count (Since 2013):** 0**Cited References:** Oanta E, 2017, IOP CONF SER-MAT SCI, V227, DOI 10.1088/1757-899X/227/1/012083

Oanta E, 2017, IOP CONF SER-MAT SCI, V227, DOI 10.1088/1757-899X/227/1/012084

Oanta E, 2004, QUALITY, RELIABILITY, AND MAINTENANCE, P265

Oanta E, 2016, IOP CONF SER-MAT SCI, V145, DOI 10.1088/1757-899X/145/8/082011

Oanta E, 2009, OPTOELECTRON ADV MAT, V3, P1226
Oanta E, 2000, 2000010520 SAE, DOI [10.4271/2000-01-0520, DOI 10.4271/2000-01-0520]
Oanta E, 2013, NET PUBLICATIONS ADV, V837, P141, DOI [10.4028/www.scientific.net/AMR.837.141, DOI 10.4028/WWW.SCIENTIFIC.NET/AMR.837.141]
Oanta E, 2014, ADV MAT RES, V1036, P697, DOI DOI 10.4028/WWW.SCIENTIFIC.NET/AMR.1036.697
Oanta E, 1999, P DETC99 1999 ASME D, V2, P457
Oanta EM, 2015, PROC SPIE, V9258, DOI 10.1117/12.2070409
Panait C, 2017, PN3P112PCCDI20170404
Raicu A, 2017, IOP CONF SER-MAT SCI, V227, DOI 10.1088/1757-899X/227/1/012109

Cited Reference Count: 12

Abstract: The development of the computer aided analytical models is useful for the knowledge integration process that leads to hybrid models of the complex phenomena. The authors have a long run experience in conceiving original software instruments in mechanical engineering, at present being explored new paradigms. The resulting general concepts may be used to create new software general libraries and, further on, to easily develop new software instruments. From this standpoint, the new general definitions are paramount for the upper level developments. In this way, the general definitions of the calculus domain are tested by implementing the according data processing operations included in the definition-calculus visualization triad. The calculus domain is divided in polygonal geometrical entities, similar to the LEGO pieces that may be added or extracted. The definition is general because a set of polygons may be used for the approximate discretization of any continuous domain The computer code developed by us is structured in several header files that may be reused in other projects and the results' accuracy was tested in several case studies. The paper conceived as a progress report also presents the strengths of our approach and the future development directions.

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Conference Sponsors: Gheorghe Asachi Tech Univ Iasi, Mech Engrn Fac, Romanian Minist Natl Educ & Sci Res, Romanian Acad Tech Sci, Acad Romanian Scientists

Addresses: [Oanta, E.; Raicu, A.; Panait, C.] Constanta Maritime Univ, Fac Naval Electromech, 104 Mircea cel Batran St, Constanta 900663, Romania.

Reprint Address: Raicu, A (reprint author), Constanta Maritime Univ, Fac Naval Electromech, 104 Mircea cel Batran St, Constanta 900663, Romania.

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Publisher: IOP PUBLISHING LTD

Publisher Address: DIRAC HOUSE, TEMPLE BACK, BRISTOL BS1 6BE, ENGLAND

Web of Science Categories: Engineering, Mechanical

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This work was supported by a grant of the Romanian Ministry of Research and Innovation, CCCDI-UEFISCDI, project number PN-III-P1-1.2-PCCDI-2017-04-04/31PCCDI/2018, acronym HORESEC, within PNCDI III, [12].

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Output Date: 2019-06-12

Record 3 of 50

Title: Discretization method of the ship hull cross sections

Author(s): Brice, PNT (Brice, P. N. T.); Hreniuc, A (Hreniuc, A.); Hreniuc, VC (Hreniuc, V. C.); Oanta, E (Oanta, E.)

Edited by: Oanta E; Naito M; Carausu C; Topala P; Placzek M; Schnakovszky C; Paunoiu V; Cohal V; Nedelcu D

Source: MODTECH INTERNATIONAL CONFERENCE - MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING VI (MODTECH 2018) **Book Series:** IOP Conference Series-Materials Science and Engineering **Volume:** 400 **Article Number:** 042007 **DOI:** 10.1088/1757-899X/400/4/042007 **Published:** 2018

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Usage Count (Last 180 days): 0

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Cited References: Oanta E, 2017, IOP CONF SER-MAT SCI, V227, DOI 10.1088/1757-899X/227/1/012084

Oanta E, 2016, IOP CONF SER-MAT SCI, V145, DOI 10.1088/1757-899X/145/8/082011

Oanta E, 2014, ADV MAT RES, V1036, P697, DOI DOI 10.4028/WWW.SCIENTIFIC.NET/AMR.1036.697

Oanta E, 1998, P TEHNONAV 1998, VII, P159

Oanta E, 2011, P 22 INT DAAAM S 23

Oanta E, 2012, CONSTANTA MARITIME U, V18, P129

Oanta E, 2012, DEV COMPUTER ASSISTE

Panait C, 2017, PNIIP112PCCDI201704

Raicu A, 2017, IOP CONF SER-MAT SCI, V227, DOI 10.1088/1757-899X/227/1/012109

Cited Reference Count: 9

Abstract: The paper presents an original computer based method used for the discretization of the ship hull cross sections, activity which is a part of a larger project - the ship hull analytical model. We started the discretization process with the so called 'typical sections'. The resulting 'templates' are useful because the parameterized analytical models may be reused for a particular frame which has particular dimensions, i.e. thickness of the side outer/inner shell plates. The section was divided into 'simple' shapes, i.e. rectangles, circles, half-circles, quarter-circles, polygons and bulb flats. A sign which may be either +1 or -1 is assigned to each 'simple' shape in order to create a Boolean algebra. The specific data which define the 'simple' shapes was stored in spreadsheet documents where it can be easily identified, filtered and saved in CSV format in order to be loaded in the upper-level data processing application. We already created an application which lists the data included in a selectable CSV file in order to test the header files already developed in the 'calculus domains' software development project and to verify the correctness of the cross section discretization. The results are used to compute the weighting forces which

are used to develop the loads' model. The discretization is also useful to compute the geometrical characteristics of the sections to be used in the calculus of the stresses and of the displacements.

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Language: English

Document Type: Proceedings Paper

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Conference Location: Constanta Maritime Univ, Constanta, ROMANIA

Conference Sponsors: ModTech Profess Assoc, Gheorghe Asachi Tech Univ Iasi, Soc Powder Technol Japan, Silesian Univ Technol Gliwice, Alecu Russo Univ Balti, Lucian Blaga Univ Sibiu, Dunarea Jos Univ Galati, Stefan cel Mare Univ Suceava, Gen Assoc Engineers Romania

Conference Host: Constanta Maritime Univ

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Publisher: IOP PUBLISHING LTD

Publisher Address: DIRAC HOUSE, TEMPLE BACK, BRISTOL BS1 6BE, ENGLAND

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Research Areas: Engineering; Materials Science

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Open Access: Other Gold

Output Date: 2019-06-12

Record 4 of 50

Title: Computer based original method employed to assess the force and the torque on the rudder's shaft

Author(s): Dordescu, M (Dordescu, M.); Oanta, E (Oanta, E.)

Edited by: Oanta E; Naito M; Carausu C; Topala P; Placzek M; Schnakovszky C; Paunoiu V; Cohal V; Nedelcu D

Source: MODTECH INTERNATIONAL CONFERENCE - MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING VI (MODTECH 2018) **Book Series:** IOP Conference Series-Materials Science and Engineering **Volume:** 400 **Article Number:** 042015 **DOI:** 10.1088/1757-899X/400/4/042015 **Published:** 2018

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 0

Cited References: Benedict K, 2014, TRANSSNAV INT J MARIN, V8, P1

Dordescu M, 2015, NAVAL ELECT DRIVES

Dordescu M, 2015, NAVAL ELECT DRIVE SY

Freidzon I-R, 1979, ELECT DRIVES NAVAL M

Ionita Ion C., 1986, ON BOARD NAVAL EQUIP

Liu J, 2017, SHIPS OFFSHORE STRUC, V12, P6

Liu JL, 2017, SHIPS OFFSHORE STRUC, V12, P495, DOI 10.1080/17445302.2016.1178205

Oanta E, 2017, IOP CONF SER-MAT SCI, V227, DOI 10.1088/1757-899X/227/1/012084

Oanta Emil, 2014, Advanced Materials Research, V1036, P1017, DOI 10.4028/www.scientific.net/AMR.1036.1017

Oanta E, 2007, COMPUTED AIDED ADV S

Oanta E, 2010, MATH MODELS INTERDOM

Sgrumala M, 1978, DESIGN CONSTRUCTION

Zelazny K, 2014, TRANSSNAV INT J MARIN, V8, P3

Cited Reference Count: 13

Abstract: Appropriate dimensioning of the electric drives belonging to the steering gear of a ship is based on the maximum values of the torque applied on the rudder's shaft. Evaluation of the moment may be done in several ways. The paper presents a method based on dimensionless coefficients given as diagrams. To express analytically the diagrams resulted from experimental studies, we use a digitization stage followed by an interpolation process based on spline functions. The output data of this stage consist of the spline functions coefficients stored in text files using the CSV format. An original application was developed, program which considers a general balanced rudder with a parameterised balance ratio and two directions of motion, ahead and astern. The output data of the application is the moment applied on the rudder's shaft with respect to the angle of attack for the both directions of motion. We plan to continue the study by considering a general shape of the rudder, in this case being required a new algorithm. The results of the new approach may be tested using the output data of this study.

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Language: English

Document Type: Proceedings Paper

Conference Title: 6th International Conference on Modern Technologies in Industrial Engineering (ModTech)

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Conference Location: Constanta Maritime Univ, Constanta, ROMANIA

Conference Sponsors: ModTech Profess Assoc, Gheorghe Asachi Tech Univ Iasi, Soc Powder Technol Japan, Silesian Univ Technol Gliwice, Alecu Russo Univ Balti, Lucian Blaga Univ Sibiu, Dunarea Jos Univ Galati, Stefan cel Mare Univ Suceava, Gen Assoc Engineers Romania

Conference Host: Constanta Maritime Univ

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In the paper are used concepts resulted from the MIEC2010 bilateral Ro-Md research project, E. Oanta, C. Panait, L. Lepadatu, R. Tamas, M. Constantinescu, I. Odagescu, I. Tamas, G. Batrinca, C. Nistor, V. Marina, G. Iliadi, V. Sontea, V. Marina, V. Balan, V. (2010-2012), "Mathematical Models for Inter-Domain Research with Applications in Engineering and Economy", [12], under the guidance of the National Committee of Scientific Research, Romania, project that continues the studies of the ID1223 scientific research project: E. Oanta, C. Panait, B. Nicolescu, S. Dinu, A. Pescaru, A. Nita, G. Gavrilă, (2007-2010), "Computer Aided Advanced Studies in Applied Elasticity from an Interdisciplinary Overview", [13], under the guidance of the National University Research Council, Romania.

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Output Date: 2019-06-12

Record 5 of 50

Title: Effective method used to create the analytical models of large sets of curves - application for the ship hull body plan

Author(s): Oanta, E (Oanta, E.); Hreniuc, VC (Hreniuc, V. C.); Grosu, CD (Grosu, C. D.)

Edited by: Oanta E; Naito M; Carausu C; Topala P; Placzek M; Schnakovszky C; Paunoiu V; Cohal V; Nedelcu D

Source: MODTECH INTERNATIONAL CONFERENCE - MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING VI (MODTECH 2018) **Book Series:** IOP Conference Series-Materials Science and Engineering **Volume:** 400 **Article Number:** 042043 **DOI:** 10.1088/1757-899X/400/4/042043 **Published:** 2018

Times Cited in Web of Science Core Collection: 0

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Usage Count (Last 180 days): 0

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Cited References: Carausu Constantin, 2015, International Journal of Modern Manufacturing Technologies, V7, P22

Cohal Viorel, 2015, International Journal of Modern Manufacturing Technologies, V7, P32

Deleanu Dumitru, 2015, International Journal of Modern Manufacturing Technologies, V7, P12

Hanzul Radu, 2015, International Journal of Modern Manufacturing Technologies, V7, P62

Hotchkiss T, 2002, CADALYST

Huwaldt J. A, 2015, PLOT DIGITIZER

Oanta Emil, 2014, Advanced Materials Research, V1036, P1017, DOI 10.4028/www.scientific.net/AMR.1036.1017

Oanta E, 2015, CONSTANTA MARITIME A, V23, P71

Oanta E, 2014, ADV MAT RES, V1036, P697, DOI DOI 10.4028/WWW.SCIENTIFIC.NET/AMR.1036.697

Oanta E, 2015, CONSTANTA MARITIME A, V23, P67

Oanta EM, 2015, PROC SPIE, V9258, DOI 10.1117/12.2070409

Panait C, 2017, PNIIP112PCCDI201704

Cited Reference Count: 12

Abstract: Information presented graphically as diagrams may be expressed analytically in order to be used in computer based analytical models. The paper presents several methods to extract the coordinates of the points which define a curve whose drawing is stored as a pdf or as an image file. The output information is expressed as text files in CSV format which may be easily accessed by other applications. If the data extraction methods are used for a complex pattern of curves, such as the sectional lines of a ship hull body plane, there must be conceived a hierarchy of data structures which makes the information readily accessible from upper level models. The analytically expressed sectional lines are useful to model the buoyancy forces, which are a part of the loads' submodel and of the buoyancy centre's location, necessary to solve the ship equilibrium problems. After we convert the coordinates of the drawing in units of length by using scaling and translation, we analyse a sectional line and we conclude that its complex shape may be expressed as a piecewise-defined function of the breadth with respect of the draft. The necessary data used to structure the information of the body plan is also presented in the paper.

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Document Type: Proceedings Paper

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Conference Sponsors: ModTech Profess Assoc, Gheorghe Asachi Tech Univ Iasi, Soc Powder Technol Japan, Silesian Univ Technol Gliwice, Alecu Russo Univ Balti, Lucian Blaga Univ Sibiu, Dunarea Jos Univ Galati, Stefan cel Mare Univ Suceava, Gen Assoc Engineers Romania

Conference Host: Constanta Maritime Univ

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[Hreniuc, V. C.] Constanta Maritime Univ, Fac Nav & Naval Transport, 104 Mircea cel Batran St, Constanta 900663, Romania.

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Record 6 of 50

Title: Calculus of the geometrical characteristics of the sections using CAD/CAE commercial applications

Author(s): Oanta, E (Oanta, E.); Sabau, A (Sabau, A.); Barhalescu, M (Barhalescu, M.)

Edited by: Oanta E; Naito M; Carausu C; Topala P; Placzek M; Schnakovszky C; Paunoiu V; Cohal V; Nedelcu D

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Cited References: Constantinescu E, 2017, IOP CONF SER-MAT SCI, V227, DOI 10.1088/1757-899X/227/1/012031

Oanta E, 2016, IOP CONF SER-MAT SCI, V145, DOI 10.1088/1757-899X/145/8/082011

Oanta E, 2016, P SPIE ADV TOPICS OP, XVIII, P10010

Oanta E, 1999, P REZMAT6 C CONST JU, P81

Oanta E, 2014, ADV MAT RES, V1036, P697, DOI DOI 10.4028/WWW.SCIENTIFIC.NET/AMR.1036.697

Oanta E, 2014, BASIC KNOWLEDGE STRE, V1

Oanta E, 1994, P REZMAT C TIM MARCH, P36

Oanta E, 1998, P TEHNONAV 1998 INT, VII, P159

Panait C, 2017, PN3P112PCCDI20170404

Raicu A, 2017, IOP CONF SER-MAT SCI, V227, DOI 10.1088/1757-899X/227/1/012109

Cited Reference Count: 10

Abstract: Analytical and numerical models of the structures use the geometrical characteristics in most of the problems, such as: calculus of the stresses, of the displacements, in elastic stability problems and others. Being an important problem to be solved, we conceived general methods to compute the geometrical characteristics. Along the time, an interesting question for us was how our calculus methods may be linked to the existing commercial software applications. From this standpoint we started to extensively test the CAD/CAE applications in order to understand their generality and flexibility in the calculus of the geometrical characteristics and, further on, of the stresses. We followed several aspects: if the boundary of a section may be automatically loaded, if there are 'tricks' regarding the definition of the model in the current CAD application, if there are commands/functions for the automatic calculus of the geometrical characteristics and how the results may be exported. We tested AutoCAD, NX, FEMAP/NASTRAN and ANSYS, detailed information regarding the solutions being presented for each CAD. Last but not least, this study is interesting in order to test the results of our computing methods and to assess their accuracy and their level of generality.

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Conference Sponsors: ModTech Profess Assoc, Gheorghe Asachi Tech Univ Iasi, Soc Powder Technol Japan, Silesian Univ Technol Gliwice, Alecu Russo Univ Balti, Lucian Blaga Univ Sibiu, Dunarea Jos Univ Galati, Stefan cel Mare Univ Suceava, Gen Assoc Engineers Romania

Conference Host: Constanta Maritime Univ

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Web of Science Categories: Engineering, Industrial; Materials Science, Multidisciplinary

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Output Date: 2019-06-12

Record 7 of 50

Title: Upgraded Original Automatic Interpolation Data Processor

Author(s): Oanta, EM (Oanta, Emil M.); Pescaru, A (Pescaru, Alexandru); Micu, A (Micu, Alexandru)

Edited by: Vladescu M; Tamas R; Cristea I

Source: ADVANCED TOPICS IN OPTOELECTRONICS, MICROELECTRONICS, AND NANOTECHNOLOGIES IX **Book Series:** Proceedings of SPIE **Volume:** 10977 **Article Number:** UNSP 109771R **DOI:** 10.1117/12.2323169 **Published:** 2018

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Cited References: Oanta Emil, 2014, Advanced Materials Research, V1036, P1017, DOI 10.4028/www.scientific.net/AMR.1036.1017

Oanta E, 2015, CONSTANTA MARITIME A, V23, P71

Oanta E, 2018, MODTECH2018 MODTECH

Oanta E, 2010, MIEC2010 BILATERAL R

Oanta E, 2014, ADV MAT RES, V1036, P697, DOI DOI 10.4028/WWW.SCIENTIFIC.NET/AMR.1036.697

Oanta E, P MODTECH2017 MOD TE, V22

Oanta E., 1988, APPL SPLINE FUNCTION

Oanta E, 2015, CONSTANTA MARITIME A, V23, P67

Oanta E, 2007, ID1223 CNCSIS

Oanta EM, 2016, PROC SPIE, V10010, DOI 10.1117/12.2242996

Oanta EM, 2015, PROC SPIE, V9258, DOI 10.1117/12.2070409

Cited Reference Count: 11

Abstract: A thorough analysis reveals that the approximation theory has various applications in the computer aided engineering. The early ideas about approximation and spline functions were related to the graphical aspects in the general design of a motor vehicle¹. Since then, the ideas evolved together with the tremendous progress of the computer science which offered software platforms with advanced numerical methods' solvers. Beside the original computer instruments we developed, a far better idea is to gather 'la creme de la creme', the best of the best software concepts and solutions in a unique strategy of development. This meta-level of understanding and integration is useful for the rapid development of computer based hybrid models to be used in complex research problems. We consequently selected GNU OCTAVE as a scientific programming platform which might provide the solutions (in various forms) of the interpolation problems using spline functions. The initial solution⁽⁴⁾ was constantly upgraded with respect to the context of the case studies to be solved. After 98 interpolation problems solved over 5 years, new important facilities were added to the initial software solution. The main directions are: generalization of the program which should not include case studies dedicated sequences (no hard coded sequences), several and more reliable links to upper level applications and new facilities used to control the aspect of the graphical output because the visual control may evaluate the output data in a more effective way than the mathematical/technical conditions. The upgraded version of the software may be considered a milestone in the progress of the 'general modeling original platform development' concept⁽⁹⁾.

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Author Keywords: automatic interpolation; spline functions; new important facilities; models' rapid development instrument

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Publisher Address: 1000 20TH ST, PO BOX 10, BELLINGHAM, WA 98227-0010 USA

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The paper is based on the results of the: ID1223 - "Computer Aided Advanced Studies in Applied Elasticity from an Interdisciplinary Perspective¹⁰", and MIEC - "Mathematical Models for Inter-Domain Approaches with Applications in Engineering and Economy¹¹", research projects.

Output Date: 2019-06-12

Record 8 of 50

Title: General Data Structure for the Dynamic Memory Allocation in the Development of the Computer Based Models in Engineering

Author(s): Oanta, EM (Oanta, Emil M.); Pescaru, A (Pescaru, Alexandru); Lazaroiu, G (Lazaroiu, Gheorghe)

Edited by: Vladescu M; Tamas R; Cristea I

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Cited References: Hreniuc V, 2017, IOP CONF SER-MAT SCI, V227, DOI 10.1088/1757-899X/227/1/012059

Kumbetlian G, 1993, P 2 NAT C BOUNDARY F, P37

Kumbetlian G, 1993, P 2 NAT C BOUNDARY F, P44

Oanta E, 2017, IOP CONF SER-MAT SCI, V227, DOI 10.1088/1757-899X/227/1/012084

Oanta E, 1997, P 8 INT C IMAM IMAM

Oanta E, 1995, P 3 INT C BOUND FIN, P44
Oanta E, 2006, B TRANSILVANIA U B3, V13, P343
Oanta E, 1999, P DETC99 1999 ASME D, V2, P457
Oanta EM, 2016, PROC SPIE, V10010, DOI 10.1117/12.2243000
Panait C, PN3P112PCCDI20170404

Cited Reference Count: 10

Abstract: The paper explores the possibility to create a general data management system based on doubly connected circular lists. This system would be very useful for the rapid development of the computer based models in engineering. The basic element of the list must have a general structure because it is the basic 'building block' in the concept development. Several solutions were studies, two of them being finally considered for extensive tests. The first solution is based on the 'union' data type which is simple and robust, but it has a series of inconveniencies. The second solution includes the declaration of a pointer to a random location in memory, at that address being found a given data type. The declaration is general, but the handling of a given data type requires particular declarations and functions. This latest solution is the most general one and it may be used to develop software for the most common data types, which will be useful for the rapid development of the upper level of complexity software applications. So far, the testing of the solutions and of their variants is still in progress in order to have a more accurate insight.

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Author Keywords: general data structure; array of doubly connected circular lists; rapid software development

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Output Date: 2019-06-12

Record 9 of 50

Title: General Solving Concepts in Models' Design

Author(s): Oanta, EM (Oanta, Emil M.); Tamas, R (Tamas, Razvan); Paun, M (Paun, Mirel)

Edited by: Vladescu M; Tamas R; Cristea I

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Cited References: Hreniuc V, 2017, IOP CONF SER-MAT SCI, V227, DOI 10.1088/1757-899X/227/1/012059

Hreniuc V., 2004, NAVAL ARCHITECTURE D

Jamil M, 2011, STUD COMPUT INTELL, V359, P183

Maier V, 1985, SHIPS STRENGTH CONST, V1

Oanta E, 2004, QUALITY, RELIABILITY, AND MAINTENANCE, P265

Oanta E, 2010, MATH MODELS INTERDOM

Panait C, PNIIP112PCCDI201704

Ratiu-Suciu C., 2001, MODELING SIMULATION

Cited Reference Count: 8

Abstract: The paper is an exploratory research regarding the identification of some of the basic ideas used to conceive solutions of general-defined problems. In this way, there is firstly presented the set of ideas used to choose the type of model to be developed. The general problem solver and the related problems are also presented in the paper. In this case there is used a greedy approach which may lead to large run time values of the according software. To significantly decrease the computer time used to solve such a problem, there is also presented a method used to minimize the search space of the candidate solutions, in this case being used an intelligent solver, that is more effective than the greedy method. Two examples of models based on the previously presented general directions are also given. The first example presents an algorithm used to solve an equilibrium problem in ship strength problems. The second example is in electronic engineering. The ideas presented in the paper are important to identify the concepts employed to design modeling strategies and also for the development of the original software instruments structured as reusable libraries.

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Author Keywords: general solving concepts; heuristic algorithms; search space minimization; several domains' applications

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Record 10 of 50

Title: Deducing the form factors for shear used in the calculus of the displacements based on strain energy methods. Mathematical approach for currently used shapes

Author(s): Constantinescu, E (Constantinescu, E.); Oanta, E (Oanta, E.); Panait, C (Panait, C.)

Edited by: Kifor C; Naito M; Carausu C; Topala P; Wrobel A; Oanta E; Schnakovszky C; Paunoiu V; Spanu S; Nedelcu D

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Usage Count (Last 180 days): 0

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Cited References: Buzdugan G, 1968, STRENGTH MATER, P168

Oanta E, 2004, QUALITY, RELIABILITY, AND MAINTENANCE, P265

Oanta E, 2003, ANN CONSTANTA MARITI, V5, P53

Oanta E, 2015, BASIC KNOWLEDGE STRE, V2, P621

Oanta E, 2007, COMPUTED AIDED ADV S

Oanta E, 2010, MATH MODELS INTER DO

Cited Reference Count: 6

Abstract: The paper presents an initial study concerning the form factors for shear, for a rectangular and for a circular cross section, being used an analytical method and a numerical study. The numerical study considers a division of the cross section in small areas and uses the power of the definitions in order to compute the according integrals. The accurate values of the form factors are increasing the accuracy of the displacements computed by the use of the strain energy methods. The knowledge resulted from this study will be used for several directions of development: calculus of the form factors for a ring-type cross section of variable ratio of the inner and outer diameters, calculus of the geometrical characteristics of an inclined circular segment and, using a Bool algebra that operates with geometrical shapes, for an inclined circular ring segment. These shapes may be used to analytically define the geometrical model of a complex composite section, i.e. a ship hull cross section. The according calculus relations are also useful for the development of customized design commands in CAD commercial applications. The paper is a result of the long run development of original computer based instruments in engineering of the authors.

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[Oanta, E.; Panait, C.] Constanta Maritime Univ, Fac Naval Electromech, 104 Mircea Cel Batran St, Constanta 900663, Romania.

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The paper presents a study inspired by the MIEC2010 bilateral Ro-Md research project, E. Oanta, C. Panait, L. Lepadatu, R. Tamas, M. Constantinescu, I. Odagescu, I. Tamas, G. Batrinca, C. Nistor, V. Marina, G. Iliadi, V. Sontea, V. Marina, V. Balan, V. (2010-2012), "Mathematical Models for Inter-Domain Research with Applications in Engineering and Economy", [6], under the guidance of the National Committee of Scientific Research, Romania, this project being a follow-up of the ID1223 scientific research project: E. Oanta, C. Panait, B. Nicolescu, S. Dinu, A. Pescaru, A. Nita, G. Gavrilă, (2007-2010), "Computer Aided Advanced Studies in Applied Elasticity from an Interdisciplinary Overview", [3], under the guidance of the National University Research Council, Romania.

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Record 11 of 50

Title: Experimental data filtration algorithm
Author(s): Oanta, E (Oanta, E.); Tamas, R (Tamas, R.); Danisor, A (Danisor, A.)
Edited by: Kifor C; Naito M; Carausu C; Topala P; Wrobel A; Oanta E; Schnakovszky C; Paunoiu V; Spanu S; Nedelcu D
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Cited References: [Anonymous], [Patent US, Google Patents], Patent No. 7098918
Goodman T., 2001, P 2001 INT S, VIV, P24
Oanta Emil, 2014, Advanced Materials Research, V1036, P1017, DOI 10.4028/www.scientific.net/AMR.1036.1017
Oanta E, 2007, ID1223 CNCIS R
Oanta E, 2000, P SAE 2000 WORLD C
Oanta E, 2010, MATH MODELS INTERDOM
Oanta E, 2014, ADV MATER RES-SWITZ, V837, P141, DOI 10.4028/www.scientific.net/AMR.837.141
Oanta EM, 2016, PROC SPIE, V10010, DOI 10.1117/12.2242996
Oanta EM, 2015, PROC SPIE, V9258, DOI 10.1117/12.2070409

Cited Reference Count: 9

Abstract: Experimental data reduction is an important topic because the resulting information is used to calibrate the theoretical models and to verify the accuracy of their results. The paper presents some ideas used to extract a subset of points from the initial set of points which defines an experimentally acquired curve. The objective is to get a subset with significantly fewer points as the initial data set and which accurately defines a smooth curve that preserves the shape of the initial curve. Being a general study we used only data filtering criteria based geometric features that at a later stage may be related to upper level conditions specific to the phenomenon under investigation. Five algorithms were conceived and implemented in an original software consisting of more than 1800 computer code lines which has a flexible structure that allows us to easily update it using new algorithms. The software instrument was used to process the data of several case studies. Conclusions are drawn regarding the values of the parameters used in the algorithms to decide if a series of points may be considered either noise, or a relevant part of the curve. Being a general analysis, the result is a computer based trial-and-error method that efficiently solves this kind of problems.

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Reprint Address: Oanta, E (reprint author), Constanta Maritime Univ, Fac Naval Electromech, 104 Mirceacel Batran St, Constanta 900663, Romania.
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Author	Web of Science ResearcherID	ORCID Number
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Record 12 of 50**Title:** Ideas for the rapid development of the structural models in mechanical engineering**Author(s):** Oanta, E (Oanta, E.); Raicu, A (Raicu, A.); Panait, C (Panait, C.)**Edited by:** Kifor C; Naito M; Carausu C; Topala P; Wrobel A; Oanta E; Schnakovszky C; Paunoiu V; Spanu S; Nedelcu D**Source:** MODTECH INTERNATIONAL CONFERENCE - MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING V **Book Series:** IOP Conference Series-Materials Science and Engineering **Volume:** 227 **Article Number:** UNSP 012084 **DOI:** 10.1088/1757-899X/227/1/012084 **Published:** 2017**Times Cited in Web of Science Core Collection:** 4**Total Times Cited:** 4**Usage Count (Last 180 days):** 0**Usage Count (Since 2013):** 1**Cited References:** Joshi Vratraj, 2016, International Journal of Modern Manufacturing Technologies, V8, P25

Mukhamedova Ziyoda, 2016, International Journal of Modern Manufacturing Technologies, V8, P48

Oanta Emil, 2014, Advanced Materials Research, V1036, P1017, DOI 10.4028/www.scientific.net/AMR.1036.1017

Oanta E, 2009, APPL ELASTICITY COMP, P270

Oanta E, 2007, COMPUTED AIDED ADV S

Oanta E, 2016, CONSTANTA MARITIME U, V25, P101

Oanta E, 2010, MATH MODELS INTERDOM

Oanta E, 1999, P 19 COMP INF ENG AS, V2

Oanta E, 2014, ADV MATER RES-SWITZ, V837, P141, DOI 10.4028/www.scientific.net/AMR.837.141

Oanta EM, 2016, PROC SPIE, V10010, DOI 10.1117/12.2243000

Oanta EM, 2015, PROC SPIE, V9258, DOI 10.1117/12.2069927

Paszek Alfred, 2015, International Journal of Modern Manufacturing Technologies, V7, P47

Pescaru A, 2015, IOP CONF SER-MAT SCI, V95, DOI 10.1088/1757-899X/95/1/012125

Wrobel A, 2016, IOP CONF SER-MAT SCI, V145, DOI 10.1088/1757-899X/145/4/042010

Cited Reference Count: 14

Abstract: Conceiving computer based instruments is a long run concern of the authors. Some of the original solutions are: optimal processing of the large matrices, interfaces between the programming languages, approximation theory using spline functions, numerical programming increased accuracy based on the extended arbitrary precision libraries. For the rapid development of the models we identified the following directions: atomization, 'librarization', parameterization, automatization and integration. Each of these directions has some particular aspects if we approach mechanical design problems or software development. Atomization means a thorough top-down decomposition analysis which offers an insight regarding the basic features of the phenomenon. Creation of libraries of reusable mechanical parts and libraries of programs (data types, functions) save time, cost and effort when a new model must be conceived. Parameterization leads to flexible definition of the mechanical parts, the values of the parameters being changed either using a dimensioning program or in accord to other parts belonging to the same assembly. The resulting templates may be also included in libraries. Original software applications are useful for the model's input data generation, to input the data into CAD/FEA commercial applications and for the data integration of the various types of studies included in the same project.

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Ionescu D, 2012, EVOLUTION SOLID FRAC, V13, P300

Oanta E, 2016, IOP CONF SER-MAT SCI, V145, DOI 10.1088/1757-899X/145/8/082011

Oanta Emil, 2014, Advanced Materials Research, V1036, P1017, DOI 10.4028/www.scientific.net/AMR.1036.1017

Oanta E, 2009, J OPTOELECTRON ADV M, V3, P1226

Oanta E, 2014, ADV MAT RES, V1036, P697, DOI DOI 10.4028/WWW.SCIENTIFIC.NET/AMR.1036.697

Oanta E, 2004, P 5 INT C QUAL REL M, P265

Oanta E, 2010, MATH MODELS INTERDOM
Oanta E, 2007, COMPUTED AIDED ADV S

Cited Reference Count: 9

Abstract: Our previous computer based studies dedicated to structural problems using analytical methods defined the composite cross section of a beam as a result of Boolean operations with so-called 'simple' shapes. Using generalisations, in the class of the 'simple' shapes were included areas bounded by curves approximated using spline functions and areas approximated as polygons. However, particular definitions lead to particular solutions. In order to ascend above the actual limitations, we conceived a general definition of the cross sections that are considered now calculus domains consisting of several subdomains. The according set of input data use complex parameterizations. This new vision allows us to naturally assign a general number of attributes to the subdomains. In this way there may be modelled new phenomena that use map-wise information, such as the metal alloys equilibrium diagrams. The hierarchy of the input data text files that use the comma-separated-value format and their structure are also presented and discussed in the paper. This new approach allows us to reuse the concepts and part of the data processing software instruments already developed. The according software to be subsequently developed will be modularised and generalised in order to be used in the upcoming projects that require rapid development of computer based models.

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Conference Host: Lucian Blaga Univ Sibiu

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Reprint Address: Oanta, E (reprint author), Constanta Maritime Univ, Fac Naval Electromech, 104 Mircea Cel Batran St, Constanta 900663, Romania.

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Some of the generalisations presented in this paper are originating in the reports and conclusions of the MIEC2010 bilateral Ro-Md research project, E. Oanta, C. Panait, L. Lepadatcu, R. Tamas, M. Constantinescu, I. Odagescu, I. Tamas, G. Batrinca, C. Nistor, V. Marina, G. Iliadi, V. Sontea, V. Marina, V. Balan, V. (2010-2012), "Mathematical Models for Inter-Domain Research with Applications in Engineering and Economy", [8], under the guidance of the National Committee of Scientific Research, Romania, project that is a follow up of the ID1223 scientific research project: E. Oanta, C. Panait, B. Nicolescu, S. Dinu, A. Pescaru, A. Nita (Raicu), G. Gavrilă, (2007-2010), "Computer Aided Advanced Studies in Applied Elasticity from an Interdisciplinary Overview", [9], under the guidance of the National University Research Council, Romania.

Open Access: Other Gold

Output Date: 2019-06-12

Record 14 of 50

Title: Making objective decisions in mechanical engineering problems

Author(s): Raicu, A (Raicu, A.); Oanta, E (Oanta, E.); Sabau, A (Sabau, A.)

Edited by: Kifor C; Naito M; Carausu C; Topala P; Wrobel A; Oanta E; Schnakovszky C; Paunoiu V; Spanu S; Nedelcu D

Source: MODTECH INTERNATIONAL CONFERENCE - MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING V **Book Series:** IOP Conference Series-Materials Science and Engineering **Volume:** 227 **Article Number:** UNSP 012108 **DOI:** 10.1088/1757-899X/227/1/012108 **Published:** 2017

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Usage Count (Last 180 days): 1

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Cited References: Albu Adriana, 2014, International Journal of Modern Manufacturing Technologies, V6, P7

Alexandru I, 1997, ELECTION USE METALLI, P380

Dinescu C, 1986, MATH MODELS SUPPORT, P91

Gendarz Piotr, 2014, International Journal of Modern Manufacturing Technologies, V6, P15

Gheorghita Catalin, 2015, International Journal of Modern Manufacturing Technologies, V7, P17

Kumbetlian G, 1992, PROCS CONCEPTS TECHN, P5

Leon F, 2017, MODELLING ANAL MULTI, P26

Nita A, 2008, EXPERT SYSTEM MOLDED, V7297

NITA A, 2009, RAIC G 2009 ANN, P1531

Oanta E, 2007, COMPUTED AIDED ADV S

Oanta E, 2006, PROCS OF ICBE, P296

Oanta E, 2000, ANN CONSTANTA MARITI, P47

Oanta E, 1988, GEN DESIGN SPORT CAR

Oanta E, 2010, MATH MODELS INTERDOM

Petryaeva Irina, 2016, International Journal of Modern Manufacturing Technologies, V8, P75

Raicu A, 2012, PROC SPIE, V8411, DOI 10.1117/12.966407

Sabau A, 2009, ANN DAAAM 2009

Sabau A, 2009, ANN DAAAM 2009

Sabau A, 2010, INT CONF ENVIR GEOL, P126

Wittbrodt Piotr, 2015, International Journal of Modern Manufacturing Technologies, V7, P81

Cited Reference Count: 20

Abstract: Decision making process has a great influence in the development of a given project, the goal being to select an optimal choice in a given context. Because of its great importance, the decision making was studied using various science methods, finally being conceived the game theory that is considered the background for the science of logical decision making in various fields. The paper presents some basic ideas regarding the game theory in order to offer the necessary information to understand the multiple-criteria decision making (MCDM) problems in engineering. The solution is to transform the multiple-criteria problem in a onecriterion decision problem, using the notion of utility, together with the weighting sum model or the weighting product model. The weighted importance of the criteria is computed using the so-called Step method applied to a relation of preferences between the criteria. Two relevant examples from engineering are also presented. The future directions of research consist of the use of other types of criteria, the development of computer based instruments for decision making general problems and to conceive a software module based on expert system principles to be included in the Wiki software applications for polymeric materials that are already operational.

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Conference Title: 5th International Conference on Modern Technologies in Industrial Engineering (ModTech)

Conference Date: JUN 14-17, 2017

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Conference Sponsors: Soc Powder Technol Japan, Silesian Univ Technol Gliwice, Alecu Russo Univ Balti, Maritime Univ Constanta

Conference Host: Lucian Blaga Univ Sibiu

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Reprint Address: Oanta, E (reprint author), Constanta Maritime Univ, Fac Naval Electromech, 104 Mircea Cel Batran St, Constanta 900663, Romania.

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In this paper are presented follow-up studies based on the conclusions of the MIEC2010 bilateral Ro-Md research project, E. Oanta, C. Panait, L. Lepadatu, R. Tamas, M. Constantinescu, I. Odagescu, I. Tamas, G. Batrinca, C. Nistor, V. Marina, G. Iliadi, V. Sontea, V. Marina, V. Balan, V. (2010- 2012), "Mathematical Models for Inter-Domain Research with Applications in Engineering and Economy", [14], under the guidance of the National Committee of Scientific Research, Romania, project which continues the research work from the ID1223 scientific research project: E. Oanta, C. Panait, B. Nicolescu, S. Dinu, A. Pescaru, A. Nita, G. Gavrila, (2007-2010), "Computer Aided Advanced Studies in Applied Elasticity from an Interdisciplinary Overview", [15], under the guidance of the National University Research Council, Romania.

Open Access: Other Gold

Output Date: 2019-06-12

Record 15 of 50

Title: Finite elements model of a rotating half-bridge belonging to a circular settling tank

Author(s): Dascalescu, AE (Dascalescu, A. E.); LazaroIU, G (LazaroIU, G.); Scupi, AA (Scupi, A. A.); Oanta, E (Oanta, E.)

Edited by: Cohal V; Lobont L; Topala P; Oanta E; Placzek M; Carcea I; Carausu C; Nedelcu D

Source: MODTECH INTERNATIONAL CONFERENCE - MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING IV, PTS 1-7 **Book Series:** IOP Conference Series- Materials Science and Engineering **Volume:** 145 **Article Number:** 042007 **DOI:** 10.1088/1757-899X/145/4/042007 **Published:** 2016

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 0

Cited References: Oanta E, 2010, MIEC2010

Oanta E, 2013, P 11 WSEAS INT C ENV, P21

Oanta E, 2007, ID1223 CNCIS

Oanta EM, 2015, PROC SPIE, V9258, DOI 10.1117/12.2069927

Cited Reference Count: 4

Abstract: A circular settling tank is an open reservoir used for the gravitational separation of the sludge and of the clarified water which is discharged in the launder which is mounted at the periphery of the basin. The extraction of the sludge is done by the use of a rotating half-bridge which sweeps the sludge, vacuums it using a system of scrapping blades and suction pipes, collects it in some local sludge chambers and pour it in a central collecting tank. The rotating half-bridge is a complex structure under a complex system of loads, therefore advanced instruments of investigation are required to assess the state of strains and stresses in this structure. Until now an analytical model was developed based on the hypotheses specific to the strength of materials academic discipline. The numerical models presented in the paper use the finite element method to determine the displacements of the main beam loaded by the weight of the structure and by the Archimedes. forces. The results of the models developed so far are conclusive for the future directions of research which aims a higher degree of accuracy of the models and of the according research methodology.

Accession Number: WOS:000396437600059

Language: English

Document Type: Proceedings Paper

Conference Title: International Conference on Modern Technologies in Industrial Engineering IV (ModTech)

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Publisher: IOP PUBLISHING LTD

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Part of the investigation presented in the paper was done in the framework of the POSDRU 132397 project: "Excellence in research by offering doctoral and postdoctoral scholarships - ExcelDOC" in which Anca-Elena Dascalescu is involved.

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Record 16 of 50

Title: Model of the hydrodynamic loads applied on a rotating half-bridge belonging to a circular settling tank

Author(s): Dascalescu, AE (Dascalescu, A. E.); Lazaroiu, G (Lazaroiu, G.); Scupi, AA (Scupi, A. A.); Oanta, E (Oanta, E.)

Edited by: Cohal V; Lobont L; Topala P; Oanta E; Placzek M; Carcea I; Carausu C; Nedelcu D

Source: MODTECH INTERNATIONAL CONFERENCE - MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING IV, PTS 1-7 **Book Series:** IOP Conference Series- Materials Science and Engineering **Volume:** 145 **Article Number:** 042008 **DOI:** 10.1088/1757-899X/145/4/042008 **Published:** 2016

Times Cited in Web of Science Core Collection: 0

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Usage Count (Last 180 days): 0

Usage Count (Since 2013): 0

Cited References: Oanta E, 2007, ID1223 CNC SIS ROM RE

Oanta E, 2010, MIEC2010 ANCS RO MD

Panaiteescu M, 2013, P EEEAD, p128

Sagau M, 2013, P 2013 INT C ENV EN, p135

Scupi A, 2015, J FLUID ENG-T ASME, V137, DOI 10.1115/1.4030482

Cited Reference Count: 5

Abstract: The rotating half-bridge of a settling tank is employed to sweep the sludge from the wastewater and to vacuum and sent it to the central collector. It has a complex geometry but the main beam may be considered a slender bar loaded by the following category of forces: concentrated forces produced by the weight of the scrapping system of blades, suction pipes, local sludge collecting chamber, plus the sludge in the horizontal sludge transporting pipes; forces produced by the access bridge; buoyant forces produced by the floating barrels according to Archimedes. principle; distributed forces produced by the weight of the main bridge; hydrodynamic forces. In order to evaluate the hydrodynamic loads we have conceived a numerical model based on the finite volume method, using the ANSYS-Fluent software. To model the flow we used the equations of Reynolds Averaged Navier-Stokes (RANS) for liquids together with Volume of Fluid model (VOF) for multiphase flows. For turbulent model k-epsilon we used the equation for turbulent kinetic energy k and dissipation epsilon. These results will be used to increase the accuracy of the loads. sub-model in the theoretical models, i.e. the finite element model and the analytical model.

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Language: English

Document Type: Proceedings Paper

Conference Title: International Conference on Modern Technologies in Industrial Engineering IV (ModTech)

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Publisher Address: DIRAC HOUSE, TEMPLE BACK, BRISTOL BS1 6BE, ENGLAND

Web of Science Categories: Engineering, Industrial; Materials Science, Multidisciplinary

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Part of the investigation presented in the paper was done in the framework of the POSDRU 132397 project: Excellence in research by offering doctoral and postdoctoral scholarships - ExcelDOC in which Anca-Elena Dascalescu is involved.

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Record 17 of 50

Title: Assumption tests regarding the 'narrow' rectangles dimensions of the open thin wall sections

Author(s): Oanta, E (Oanta, E.); Panait, C (Panait, C.); Sabau, A (Sabau, A.); Barhalescu, M (Barhalescu, M.); Dascalescu, AE (Dascalescu, A. E.)

Edited by: Cohal V; Lobont L; Topala P; Oanta E; Placzek M; Carcea I; Carausu C; Nedelcu D

Source: MODTECH INTERNATIONAL CONFERENCE - MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING IV, PTS 1-7 **Book Series:** IOP Conference Series- Materials Science and Engineering **Volume:** 145 **Article Number:** 082010 **DOI:** 10.1088/1757-899X/145/8/082010 **Published:** 2016

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 1

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Cited References: Gitin M M, 1995, HDB MECH DESIGN

Noels L, 2013, AIRCRAFT STRUCTURES

Oanta E, 2014, CONSTANTA MARITIME U, V22, P71

Oanta E, 2015, CONSTANTA MARITIME U, V24, P87

Oanta E, 2007, COMPUTED AIDED ADV S

Oanta E, 2014, CONSTANTA MARITIME U, V22, P65

Oanta E, 2010, MATH MODELS INTERDOM

Oanta E, 2003, CONSTANTA MARITIME U, V5, P53

Cited Reference Count: 8

Abstract: Computer based analytic models that use the strength of materials theory are inheriting the accuracy given by the basic simplifying hypotheses. The according assumptions were rationally conceived hundreds of years ago in an age when there was no computing instrument, therefore the minimization of the necessary volume of calculi was an important requirement. An initial study was an attempt to evaluate how 'thin' may be the walls of an open section in order to have accurate results using the analytic calculus method. In this initial study there was compared the calculus of the rectangular sections loaded by twisting moments vs. a narrow section under the same load. Being compared analytic methods applied for a simple shape section, a more thorough study was required. In this way, we consider a thin wall open section loaded by a twisting moment, section which is discretized in 'narrow' rectangles. The ratio of the sides of the 'narrow' rectangles is the variable of the study. We compare the results of the finite element analysis to the results of the analytic method. The conclusions are important for the development of computer based analytic models which use parametrized sections for which different sets of calculus relations may be used.

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Addresses: [Oanta, E.; Panait, C.; Sabau, A.; Barhalescu, M.] Constanta Maritime Univ, Fac Naval Electromech, 104 Mircea Cel Batran St, Constanta 900663, Romania.

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Reprint Address: Oanta, E (reprint author), Constanta Maritime Univ, Fac Naval Electromech, 104 Mircea Cel Batran St, Constanta 900663, Romania.

Oanta, E (reprint author), Univ Politehn Bucuresti, Fac Power Engrn, 313 Splaiul Independentei, Sect 6, Bucharest 060042, Romania.

E-mail Addresses: eoanta@yahoo.com

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Web of Science Categories: Engineering, Industrial; Materials Science, Multidisciplinary

Research Areas: Engineering; Materials Science

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Record 18 of 50

Title: Calculus domains modelled using an original bool algebra based on polygons

Author(s): Oanta, E (Oanta, E.); Panait, C (Panait, C.); Raicu, A (Raicu, A.); Barhalescu, M (Barhalescu, M.); Axinte, T (Axinte, T.)

Edited by: Cohal V; Lobont L; Topala P; Oanta E; Placzek M; Carcea I; Carausu C; Nedelcu D

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Usage Count (Last 180 days): 0

Usage Count (Since 2013): 1

Cited References: Oanta E, 2009, OPTOELECTRON ADV MAT, V3, P1226

Oanta E, 2014, ADV MAT RES, V1036, P697, DOI DOI 10.4028/WWW.SCIENTIFIC.NET/AMR.1036.697

Oanta E, 2015, COMPUTER AIDED SOLUT, V1, P245

Oanta E, 2007, COMPUTED AIDED ADV S

Oanta E, 2013, CONSTANTA MARITIME U, V20, P91

Oanta E, 2010, MATH MODELS INTERDOM

Cited Reference Count: 6

Abstract: Analytical and numerical computer based models require analytical definitions of the calculus domains. The paper presents a method to model a calculus domain based on a bool algebra which uses solid and hollow polygons. The general calculus relations of the geometrical characteristics that are widely used in mechanical engineering are tested using several shapes of the calculus domain in order to draw conclusions regarding the most effective methods to discretize the domain. The paper also tests the results of several CAD commercial software applications which are able to compute the geometrical characteristics, being drawn interesting conclusions. The tests were also targeting the accuracy of the results vs. the number of nodes on the curved boundary of the cross section. The study required the development of an original software consisting of more than 1700 computer code lines. In comparison with other calculus methods, the discretization using convex polygons is a simpler approach. Moreover, this method doesn't lead to large numbers as the spline approximation did, in that case being required special software packages in order to offer multiple, arbitrary precision. The knowledge resulted from this study may be used to develop complex computer based models in engineering.

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Language: English

Document Type: Proceedings Paper

Conference Title: International Conference on Modern Technologies in Industrial Engineering IV (ModTech)

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Reprint Address: Oanta, E (reprint author), Constanta Maritime Univ, Fac Naval Electromech, 104 Mircea Cel Batran St, Constanta 900663, Romania.

E-mail Addresses: eoanta@yahoo.com

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Title: Original Data Preprocessor for Femap/Nastran

Author(s): Oanta, EM (Oanta, Emil M.); Panait, C (Panait, Cornel); Raicu, A (Raicu, Alexandra)

Edited by: Vladescu M; Tamas R; Cristea I

Source: ADVANCED TOPICS IN OPTOELECTRONICS, MICROELECTRONICS, AND NANOTECHNOLOGIES VIII **Book Series:** Proceedings of SPIE **Volume:** 10010 **Article Number:** UNSP 1001020 **DOI:** 10.1117/12.2243000 **Published:** 2016

Times Cited in Web of Science Core Collection: 2

Total Times Cited: 2

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 4

Cited References: Kumbetlian G., 1993, P ELFIN2, P53

Kumbetlian G., 1994, NAV AC CONST P 18 SO

Oanta E., MIEC2010 BILATERAL R

Oanta E., 2009, P 2 INT MULT ENG TEC, P270

Oanta E, 1998, P TEHNONAV 1998, VII, P159

Oanta E., 2010, ROMANIAN NORWEGIAN M

Oanta E., 2016, CONSTANTA M IN PRESS, V25

Oanta E., 1998, P TEHNONAV 1998, P143

Oanta E., 1995, ACTA U CIBINIENSIS T, VXIII, P227

Oanta E, 2013, P 11 WSEAS INT C ENV, P21

Oanta E, 2007, ID1223 CNCSIS

Cited Reference Count: 11

Abstract: Automatic data processing and visualization in the finite elements analysis of the structural problems is a long run concern in mechanical engineering. The paper presents the 'common database' concept according to which the same information may be accessed from an analytical model, as well as from a numerical one. In this way, input data expressed as comma-separated-value (CSV) files are loaded into the Femap/Nastran environment using original API codes, being automatically generated: the geometry of the model, the loads and the constraints. The original API computer codes are general, being possible to generate the input data of any model. In the next stages, the user may create the discretization of the model, set the boundary conditions and perform a given analysis. If additional accuracy is needed, the analyst may delete the previous discretizations and using the same information automatically loaded, other discretizations and analyses may be done. Moreover, if new more accurate information regarding the loads or constraints is acquired, they may be modelled and then implemented in the data generating program which creates the 'common database'. This means that new more accurate models may be easily generated. Other facility consists of the opportunity to control the CSV input files, several loading scenarios being possible to be generated in Femap/Nastran. In this way, using original intelligent API instruments the analyst is focused to accurately model the phenomena and on creative aspects, the repetitive and time-consuming activities being performed by the original computer-based instruments. Using this data processing technique we apply to the best Asimov's principle 'minimum change required / maximum desired response'.

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Language: English

Document Type: Proceedings Paper

Conference Title: 8th International Conference on Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies (ATOM-N)

Conference Date: SEP 25-28, 2016

Conference Location: Constanta, ROMANIA

Conference Sponsors: Politehnica Univ Bucharest, Optoelectron Res Ctr, Maritime Univ Constanta, Romanian Minist Educ & Res, Natl Author Sci Res & Innovat, Agilrom Sci, ADVI TECH Consulting SRL

Author Keywords: rapid modelling; common database; csv format; finite elements model; increased accuracy

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Publisher: SPIE-INT SOC OPTICAL ENGINEERING

Publisher Address: 1000 20TH ST, PO BOX 10, BELLINGHAM, WA 98227-0010 USA

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Record 20 of 50

Title: Original Analytical Model of the Hydrodynamic Loads Applied on the Half-Bridge of a Circular Settling Tank

Author(s): Oanta, EM (Oanta, Emil M.); Dascalescu, AE (Dascalescu, Anca-Elena); Sabau, A (Sabau, Adrian)

Edited by: Vladescu M; Tamas R; Cristea I

Source: ADVANCED TOPICS IN OPTOELECTRONICS, MICROELECTRONICS, AND NANOTECHNOLOGIES VIII **Book Series:** Proceedings of SPIE **Volume:** 10010 **Article Number:** UNSP 100102Q **DOI:** 10.1117/12.2243009 **Published:** 2016

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 1

Cited References: Dascalescu A. E., 2016, MODTECH2016 IN PRESS

Oanta E., MIEC2010 BILATERAL R

Oanta E., 2014, BASIC KNOWLEDGE STRE, V1, P110

Oanta E., 2010, DEV COMPUTER ASSISTE

OANTA E., 2007, COMPUTER AIDED ADV S

Cited Reference Count: 5

Abstract: The paper presents an original analytical model of the hydrodynamic loads applied on the half-bridge of a circular settling tank. The calculus domain is defined using analytical geometry and the calculus of the local dynamic pressure is based on the radius from the center of the settling tank to the current area, i.e. the relative velocity of the fluid and the depth where the current area is located, i.e. the density of the fluid. Calculus of the local drag forces uses the discrete frontal cross sectional areas of the submerged structure in contact with the fluid. In the last stage is performed the reduction of the local drag forces in the appropriate points belonging to the main beam. This class of loads is producing the flexure of the main beam in a horizontal plane and additional twisting moments along this structure. Taking into account the hydrodynamic loads, the results of the theoretical models, i.e. the analytical model and the finite element model, may have an increased accuracy.

Accession Number: WOS:000391359600098

Language: English

Document Type: Proceedings Paper

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Author Keywords: hydrodynamic loads; analytic model; reduction of the local forces; increased accuracy

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Reprint Address: Oanta, EM (reprint author), Constanta Maritime Univ, Dept Gen Engr Sci, 104 Mircea Cel Batran, Constanta 900663, Romania.

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Publisher: SPIE-INT SOC OPTICAL ENGINEERING

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Record 21 of 50

Title: Original Analytic Solution of a Half-Bridge Modelled As a Statically Indeterminate System

Author(s): Oanta, EM (Oanta, Emil M.); Panait, C (Panait, Cornel); Raicu, A (Raicu, Alexandra); Barhalescu, M (Barhalescu, Mihaela)

Edited by: Vladescu M; Tamas R; Cristea I

Source: ADVANCED TOPICS IN OPTOELECTRONICS, MICROELECTRONICS, AND NANOTECHNOLOGIES VIII **Book Series:** Proceedings of SPIE **Volume:** 10010 **Article Number:** UNSP 100102P **DOI:** 10.1117/12.2243003 **Published:** 2016

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 1

Cited References: Oanta E., 2015, BASIC KNOWLEDGE STRE, V2, P668

Oanta E, 2015, COMPUTER AIDED SOLUT, V1, P245

Oanta E., 2016, P MODTECH20 IN PRESS

Oanta E, 2013, P 11 WSEAS INT C ENV, P21

Oanta E., 2010, SCI RES STUDY ROMANI

Oanta E., MIEC2010 BILATERIAL

Oanta E, 2007, ID1223 CNCSIS

Oanta EM, 2015, PROC SPIE, V9258, DOI 10.1117/12.2069927

Cited Reference Count: 8

Abstract: The paper presents an original computer based analytical model of a half-bridge belonging to a circular settling tank. The primary unknown is computed using the force method, the coefficients of the canonical equation being calculated using either the discretization of the bending moment diagram in trapezoids, or using the relations specific to the polygons. A second algorithm based on the method of initial parameters is also presented. Analyzing the new solution we came to the conclusion that most of the computer code developed for other model may be reused. The results are useful to evaluate the behavior of the structure and to compare with the results of the finite element models.

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Language: English

Document Type: Proceedings Paper

Conference Title: 8th International Conference on Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies (ATOM-N)

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Conference Sponsors: Politehnica Univ Bucharest, Optoelectron Res Ctr, Maritime Univ Constanta, Romanian Minist Educ & Res, Natl Author Sci Res & Innovat, Agilrom Sci, ADVI TECH Consulting SRL

Author Keywords: original analytic solution; calculus domain divided in polygons; increased accuracy

Addresses: [Oanta, Emil M.; Panait, Cornel; Raicu, Alexandra; Barhalescu, Mihaela] Constanta Maritime Univ, Dept Gen Engn Sci, 104 Mircea Cel Batran, Constanta 900663, Romania.

Reprint Address: Oanta, EM (reprint author), Constanta Maritime Univ, Dept Gen Engn Sci, 104 Mircea Cel Batran, Constanta 900663, Romania.

E-mail Addresses: eoanta@yahoo.com

Publisher: SPIE-INT SOC OPTICAL ENGINEERING

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Web of Science Categories: Engineering, Electrical & Electronic; Nanoscience & Nanotechnology; Optics

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Record 22 of 50

Title: Study Regarding the Spline Interpolation Accuracy of the Experimentally Acquired Data

Author(s): Oanta, EM (Oanta, Emil M.); Danisor, A (Danisor, Alin); Tamas, R (Tamas, Razvan)

Edited by: Vladescu M; Tamas R; Cristea I

Source: ADVANCED TOPICS IN OPTOELECTRONICS, MICROELECTRONICS, AND NANOTECHNOLOGIES VIII **Book Series:** Proceedings of SPIE **Volume:** 10010 **Article Number:** UNSP 1001007 **DOI:** 10.1117/12.2242996 **Published:** 2016

Times Cited in Web of Science Core Collection: 4

Total Times Cited: 4

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 0

Cited References: Constantinescu I., 1980, COMPUTER BASED EXPT

Oanta Emil, 2014, Advanced Materials Research, V1036, P1017, DOI 10.4028/www.scientific.net/AMR.1036.1017

Oanta E., 2002, ESDA 2002

Oanta E, 2014, ADV MAT RES, V1036, P697, DOI DOI 10.4028/WWW.SCIENTIFIC.NET/AMR.1036.697

Oanta E., 2010, DEV COMPUTER ASSISTE

Oanta E, 2010, MATH MODELS INTERDOM

Oanta E, 2007, ID1223 CNCSIS

Oanta EM, 2015, PROC SPIE, V9258, DOI 10.1117/12.2070409

Cited Reference Count: 8

Abstract: Experimental data processing is an issue that must be solved in almost all the domains of science. In engineering we usually have a large amount of data and we try to extract the useful signal which is relevant for the phenomenon under investigation. The criteria used to consider some points more relevant than some others may take into consideration various conditions which may be either phenomenon dependent, or general. The paper presents some of the ideas and tests regarding the identification of the best set of criteria used to filter the initial set of points in order to extract a subset which best fits the approximated function. If the function has regions where it is either constant, or it has a slow variation, fewer discretization points may be used. This means to create a simpler solution to process the experimental data, keeping the accuracy in some fair good limits.

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Language: English

Document Type: Proceedings Paper

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Conference Sponsors: Politehnica Univ Bucharest, Optoelectron Res Ctr, Maritime Univ Constanta, Romanian Minist Educ & Res, Natl Author Sci Res & Innovat, Agilrom Sci, ADVI TECH Consulting SRL
Author Keywords: experimental data reduction; data subset selection; spline interpolation; accuracy tests
Addresses: [Oanta, Emil M.] Constanta Maritime Univ, Dept Gen Engr Sci, 104 Mircea Cel Batran, Constanta 900663, Romania.
[Danisor, Alin; Tamas, Razvan] Constanta Maritime Univ, Dept Elect & Telecommun, 104 Mircea Cel Batran, Constanta 900663, Romania.
Reprint Address: Oanta, EM (reprint author), Constanta Maritime Univ, Dept Gen Engr Sci, 104 Mircea Cel Batran, Constanta 900663, Romania.
E-mail Addresses: eoanta@yahoo.com
Author Identifiers:

Author	Web of Science ResearcherID	ORCID Number
Tamas, Razvan Q-9181-2019		

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Record 23 of 50
Title: PLM in the context of the maritime virtual education
Author(s): Raicu, A (Raicu, Alexandra); Oanta, EM (Oanta, Emil M.)
Edited by: Vladescu M; Tamas R; Cristea I
Source: ADVANCED TOPICS IN OPTOELECTRONICS, MICROELECTRONICS, AND NANOTECHNOLOGIES VIII **Book Series:** Proceedings of SPIE **Volume:** 10010 **Article Number:** UNSP 100102J **DOI:** 10.1117/12.2243343 **Published:** 2016
Times Cited in Web of Science Core Collection: 0
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Usage Count (Last 180 days): 0
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Cited References: Oanta E, 2014, ADV MAT RES, V1036, P697, DOI DOI 10.4028/WWW.SCIENTIFIC.NET/AMR.1036.697
Oanta E., 2012, DEV COMPUTER ASSISTE
Oanta E., 2016, BASIC KNOWLEDGE STRE, V1, P14
Opran C, 2012, KEY ENG MATER, V498, P151, DOI 10.4028/www.scientific.net/KEM.498.151
Raicu A., 2015, BOOK SERIES IOP C SE, V95
Raicu A, 2014, ADV MATER RES-SWITZ, V837, P769, DOI 10.4028/www.scientific.net/AMR.837.769

Cited Reference Count: 6
Abstract: This paper presents new approaches regarding the use of Product Lifecycle Management concept to achieve knowledge integration of the academic disciplines in the maritime education context. The philosophy of the educational system is now changing faster worldwide and it is in a continuous developing process. There is a demand to develop modern educational facilities for CAD/CAE/CAM training of the future maritime engineers, which offers collaborative environments between the academic disciplines and the teachers. It is well known that the students must understand the importance of the connectivity between the academic disciplines and the computer aided methods to interface them. Thus, besides the basic knowledge and competences acquired from the CAD courses, students learn how to increase the design productivity, to create a parametric design, the original instruments of automatic design, 3D printing methods, how to interface the CAD/CAE/CAM applications. As an example, the Strength of Materials discipline briefly presents alternate computer aided methods to compute the geometrical characteristics of the cross sections using the CAD geometry, creation the free body diagrams and presentation the deflected shapes of various educational models, including the rotational effect when the forces are not applied in the shear center, using the results of the FEM applications. During the computer aided engineering academic disciplines, after the students design and analyze a virtual 3D model they can convert it into a physical object using 3D printing method. Constanta Maritime University offers a full understanding of the concept of Product Lifecycle Management, collaborative creation, management and dissemination.
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Document Type: Proceedings Paper
Conference Title: 8th International Conference on Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies (ATOM-N)
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Author Keywords: CAD model; CAE simulation; 3D printing; PLM concept; maritime education; virtual learning
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Reprint Address: Raicu, A (reprint author), Constanta Maritime Univ, Dept Gen Engr Sci, 104 Mircea Cel Batran, Constanta 900663, Romania.
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Publisher Address: 1000 20TH ST, PO BOX 10, BELLINGHAM, WA 98227-0010 USA
Web of Science Categories: Engineering, Electrical & Electronic; Nanoscience & Nanotechnology; Optics
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Record 24 of 50

Title: Approximation method to compute domain related integrals in structural studies**Author(s):** Oanta, E (Oanta, E.); Panait, C (Panait, C.); Raicu, A (Raicu, A.); Barhalescu, M (Barhalescu, M.); Axinte, T (Axinte, T.)**Edited by:** Oanta E; Comaneci R; Carausu C; Placzek M; Cohal V; Topala P; Nedelcu D**Source:** MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING (MODTECH2015) **Book Series:** IOP Conference Series-Materials Science and Engineering **Volume:** 95 **Article Number:** 012124 **DOI:** 10.1088/1757-899X/95/1/012124 **Published:** 2015**Times Cited in Web of Science Core Collection:** 0**Total Times Cited:** 0**Usage Count (Last 180 days):** 0**Usage Count (Since 2013):** 4**Cited References:** Oanta E, 1999, ASME DES ENG TECH C

Oanta E, 2007, THESIS, P246

OANTA E, 1998, INT S MAR TECHN MAN, V2, P159

Oanta E, 2013, CONSTANTA MARITIME U, V20, P91

Oanta E, 2001, P 25 NAT C SOL MECH, P103

Oanta E, 1997, INT C IMAM IMAM 97 I

Oanta E, 1993, ANN SCI SESS SECT IC, P33

Oanta E, 2003, CONSTANTA MARITIME U, V5, P53

Cited Reference Count: 8

Abstract: Various engineering calculi use integral calculus in theoretical models, i.e. analytical and numerical models. For usual problems, integrals have mathematical exact solutions. If the domain of integration is complicated, there may be used several methods to calculate the integral. The first idea is to divide the domain in smaller sub-domains for which there are direct calculus relations, i.e. in strength of materials the bending moment may be computed in some discrete points using the graphical integration of the shear force diagram, which usually has a simple shape. Another example is in mathematics, where the surface of a subgraph may be approximated by a set of rectangles or trapezoids used to calculate the definite integral. The goal of the work is to introduce our studies about the calculus of the integrals in the transverse section domains, computer aided solutions and a generalizing method. The aim of our research is to create general computer based methods to execute the calculi in structural studies. Thus, we define a Boolean algebra which operates with 'simple' shape domains. This algebraic standpoint uses addition and subtraction, conditioned by the sign of every 'simple' shape (-1 for the shapes to be subtracted). By 'simple' shape or 'basic' shape we define either shapes for which there are direct calculus relations, or domains for which their frontiers are approximated by known functions and the according calculus is carried out using an algorithm. The 'basic' shapes are linked to the calculus of the most significant stresses in the section, refined aspect which needs special attention. Starting from this idea, in the libraries of 'basic' shapes, there were included rectangles, ellipses and domains whose frontiers are approximated by spline functions. The domain triangularization methods suggested that another 'basic' shape to be considered is the triangle. The subsequent phase was to deduce the exact relations for the calculus of the integrals associated to the transverse section problems. Thus we use a virtual rectangle which is framing the triangle, being generated supplementary right angled triangles. The sign of rectangle and the signs of the supplementary triangles are conditioned by the sign of the initial triangle. In this way, a generally located triangle for which we have direct calculus relations may be used to generate the discretization of any domain in transverse section associated integrals. A significant consequence of the paper is the opportunity to create modern computer aided engineering applications for structural studies, which use: intelligent applied mathematics background, modern informatics technologies and advanced computing techniques, such as calculus parallelization.

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Record 25 of 50

Title: Extended precision data types for the development of the original computer aided engineering applications**Author(s):** Pescaru, A (Pescaru, A.); Oanta, E (Oanta, E.); Axinte, T (Axinte, T.); Dascalescu, AD (Dascalescu, A-D)**Edited by:** Oanta E; Comaneci R; Carausu C; Placzek M; Cohal V; Topala P; Nedelcu D**Source:** MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING (MODTECH2015) **Book Series:** IOP Conference Series-Materials Science and Engineering **Volume:** 95 **Article Number:** 012125 **DOI:** 10.1088/1757-899X/95/1/012125 **Published:** 2015**Times Cited in Web of Science Core Collection:** 1**Total Times Cited:** 1**Usage Count (Last 180 days):** 0**Usage Count (Since 2013):** 0**Cited References:** Fousse L, 2007, ACM T MATH SOFTWARE, V33, DOI 10.1145/1236463.1236468

Ghazi KR, 2010, COMPUT SCI ENG, V12, P62

Joldes M, 2015, RES REPORT

Krougly Z L, MATH METHODS APPL CO, P103

Li XYS, 2002, ACM T MATH SOFTWARE, V28, P152, DOI 10.1145/567806.567808
 Oanta Emil, 2014, Advanced Materials Research, V1036, P1017, DOI 10.4028/www.scientific.net/AMR.1036.1017
 Oanta E, 2014, ADV MAT RES, V1036, P697, DOI DOI 10.4028/WWW.SCIENTIFIC.NET/AMR.1036.697
 Oanta E, 2012, CONSTANTA MARITIME U, V18, P129
 Oanta E, 3 NAT C BOUND FIN, P44
 Oanta E, 1998, INT S MAR TECHN MAN, VII, P151
 Oanta E, 1999, ASME DES ENG TECHN C
 Oanta E, 1993, ANN SCI SESS SECT IC, P33

Cited Reference Count: 12

Abstract: Computer aided engineering is based on models of the phenomena which are expressed as algorithms. The implementations of the algorithms are usually software applications which are processing a large volume of numerical data, regardless the size of the input data. In this way, the finite element method applications used to have an input data generator which was creating the entire volume of geometrical data, starting from the initial geometrical information and the parameters stored in the input data file. Moreover, there were several data processing stages, such as: renumbering of the nodes meant to minimize the size of the band length of the system of equations to be solved, computation of the equivalent nodal forces, computation of the element stiffness matrix, assemblation of system of equations, solving the system of equations, computation of the secondary variables. The modern software application use pre-processing and post-processing programs to easily handle the information. Beside this example, CAE applications use various stages of complex computation, being very interesting the accuracy of the final results. Along time, the development of CAE applications was a constant concern of the authors and the accuracy of the results was a very important target. The paper presents the various computing techniques which were imagined and implemented in the resulting applications: finite element method programs, finite difference element method programs, applied general numerical methods applications, data generators, graphical applications, experimental data reduction programs. In this context, the use of the extended precision data types was one of the solutions, the limitations being imposed by the size of the memory which may be allocated. To avoid the memory-related problems the data was stored in files. To minimize the execution time, part of the file was accessed using the dynamic memory allocation facilities. One of the most important consequences of the paper is the design of a library which includes the optimized solutions previously tested, that may be used for the easily development of original CAE cross-platform applications. Last but not least, beside the generality of the data type solutions, there is targeted the development of a software library which may be used for the easily development of node-based CAE applications, each node having several known or unknown parameters, the system of equations being automatically generated and solved.

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Language: English

Document Type: Proceedings Paper

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Conference Sponsors: Profess Assoc Modern Mfg Technol, Constanta Maritime Univ, Silesian Univ Technol, Tech Univ Chisinau Republ Moldova, Donetsk Natl Tech Univ

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Reprint Address: Pescaru, A (reprint author), Constanta Maritime Univ, Fac Nav & Naval Transport, 104 Mircea Cel Batran St, Constanta 900663, Romania.

E-mail Addresses: eoanta@yahoo.com

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Research Areas: Engineering; Materials Science

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Record 26 of 50

Title: Original Computer Method for the Experimental Data Processing in Photoelasticity

Author(s): Oanta, EM (Oanta, Emil M.); Panait, C (Panait, Cornel); Barhalescu, M (Barhalescu, Mihaela); Sabau, A (Sabau, Adrian); Dumitrache, C (Dumitrache, Constantin); Dascalescu, AE (Dascalescu, Anca-Elena)

Edited by: Cristea I; Vladescu M; Tamas R

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9258 **Article Number:** 92582A **DOI:** 10.1117/12.2070409 **Published:** 2015

Times Cited in Web of Science Core Collection: 5

Total Times Cited: 5

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 4

Cited References: Oanta E., 2012, ANN DAAAM 2012

Oanta E., 2010, DEV COMPUTER ASSISTE, V1, P1

Oanta E., 2014, MODTECH 2014 INT C 1

Oanta E., 2010, MTH MODELS INTERDOMA, V1, P1

Oanta E., 2007, COMPUTER AIDED ADV S, V1, P1

Theocaris P. S., 1976, EXPT STRESS ANAL THE, V1, P326

VISHAY PRECISION GROUP, 2011, TN7022 VISH PREC GRO

Cited Reference Count: 7

Abstract: Optical methods in experimental mechanics are important because their results are accurate and they may be used for both full field interpretation and analysis of the local rapid variation of the stresses produced by the stress concentrators. Researchers conceived several graphical, analytical and numerical methods for the experimental data reduction. The paper presents an original computer method employed to compute the analytic functions of the isostatics, using the pattern of isoclinics of a photoelastic model or coating. The resulting software instrument may be included in hybrid models consisting of analytical, numerical and experimental studies. The computer-based integration of the results of these studies offers a higher level of understanding of the phenomena. A thorough examination of the sources of inaccuracy of this computer based numerical method was done and the

conclusions were tested using the original computer code which implements the algorithm.

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Language: English

Document Type: Proceedings Paper

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Conference Sponsors: Politehnica Univ Bucharest, Optoelectron Res Ctr, Constanta Maritime Univ, Romanian Minist Educ, Teamnet Int, Adv Tech Consulting RL, SOEL Syst SRL, Electromagnetica S A, WING Comp Grp SRL, Agilrom Sci

Author Keywords: optical method; photoelasticity; isoclines; analytic function of isostatics; original computer method

Addresses: [Oanta, Emil M.; Panait, Cornel; Barhalescu, Mihaela; Sabau, Adrian; Dumitrache, Constantin] Constanta Maritime Univ, Dept Gen Engr Sci, Constanta 900663, Romania.

[Dascalescu, Anca-Elena] Univ Politehn Bucuresti, Fac Power Engr, Bucharest 060042, Romania.

Reprint Address: Oanta, EM (reprint author), Constanta Maritime Univ, Dept Gen Engr Sci, 104 Mircea Cel Batran, Constanta 900663, Romania.

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29-char Source Abbrev.: PROC SPIE

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Record 27 of 50

Title: Conceiving a Hybrid Model of a Weighting Device

Author(s): Oanta, EM (Oanta, Emil M.); Panait, C (Panait, Cornel); Lazariou, G (Lazariou, Gheorghe); Raicu, A (Raicu, Alexandra); Axinte, T (Axinte, Tiberiu); Dascalescu, AE (Dascalescu, Anca-Elena)

Edited by: Cristea I; Vladescu M; Tamas R

Source: ADVANCED TOPICS IN OPTOELECTRONICS, MICROELECTRONICS, AND NANOTECHNOLOGIES VII **Book Series:** Proceedings of SPIE **Volume:**

9258 **Article Number:** 925829 **DOI:** 10.1117/12.2069927 **Published:** 2015

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Total Times Cited: 3

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 4

Cited References: Oanta E., 2007, COMPUTER AIDED ADV S, V2007, P1

Oanta E., 2010, MIEC2010 ANCS ROM MO, P1

Oanta E., 2010, DEV COMPUTER ASSISTE, V2010, P1

Oanta E, 2013, P 11 WSEAS INT C ENV, P21

Cited Reference Count: 4

Abstract: Research and design engineers usually use three sources of information: analytic models, numerical models and experimental studies. Analytic and numerical models are theoretical models which must be calibrated and verified regarding the accuracy of their results using the data acquired from experimental studies. If these models are deeply integrated from the beginning, the overview result is a hybrid model. From this standpoint, the paper presents the underlying concepts and studies employed to create a hybrid model of a weighting device. The paper presents the analytic background of the problem to be solved, the numerical model and the dimensioning of the experimental device. The study is still in progress, the following stages being the manufacturing of the device and calibration of the weighting platform.

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Language: English

Document Type: Proceedings Paper

Conference Title: 7th International Conference on Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies (ATOM-N)

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Conference Location: Constanta, ROMANIA

Conference Sponsors: Politehnica Univ Bucharest, Optoelectron Res Ctr, Constanta Maritime Univ, Romanian Minist Educ, Teamnet Int, Adv Tech Consulting RL, SOEL Syst SRL, Electromagnetica S A, WING Comp Grp SRL, Agilrom Sci

Author Keywords: hybrid model; FEM model; analytic model; experimental data; calibration; application

Addresses: [Oanta, Emil M.; Panait, Cornel; Raicu, Alexandra; Axinte, Tiberiu] Constanta Maritime Univ, Dept Gen Engr Sci, Constanta 900663, Romania.

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Web of Science Categories: Engineering, Electrical & Electronic; Nanoscience & Nanotechnology; Optics

Research Areas: Engineering; Science & Technology - Other Topics; Optics

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Record 28 of 50**Title:** Aspects Regarding the Hybrid Models in Engineering**Author(s):** Oanta, E (Oanta, Emil); Panait, C (Panait, Cornel)**Edited by:** Carausu C; Cohal V; Doroftei I; Wrobel A; Nedelcu D**Source:** MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING **Book Series:** Advanced Materials Research **Volume:** 837 **Pages:** 141-146 **DOI:** 10.4028/www.scientific.net/AMR.837.141 **Published:** 2014**Times Cited in Web of Science Core Collection:** 3**Total Times Cited:** 3**Usage Count (Last 180 days):** 0**Usage Count (Since 2013):** 2**Cited References:** Oanta E, 2003, ANN CONSTANTA MARITI, V5, P53

Oanta E., 2009, P 2 INT MULT ENG TEC, P270

Oanta E., 2000, P SAE 2000 WORLD C D, DOI [10.4271/2000-01-0520, DOI 10.4271/2000-01-0520]

Oanta E, 2013, P 11 WSEAS INT C ENV, P21

Oanta E, 2012, ANN DAAAM, V23, P493

Theocaris P. S., 1976, EXPT STRESS ANAL THE, VII

Theocaris P.S., 1976, EXPT STRESS ANAL THE, VI

Cited Reference Count: 7

Abstract: Physical phenomena in engineering are studied using several types of research instruments. In the class of the theoretical instruments may be considered the analytic and numeric models and the category of the practical approaches includes the experimental studies. However, complex phenomena require information resulted from several types of studies. The integration of the information may be done using original software applications which offer speed, accuracy and flexibility in the context of that certain project. If the research plan considers right from the beginning the integration of the results of different types of studies in a unique investigation methodology, the model of the phenomenon may be considered hybrid.

The paper presents several research projects in engineering, the project dedicated to the strains and stresses in the cylinder block is the most complex one and it required several studies of different types, together with original software employed to integrate the data. It may be considered a relevant example of hybrid model.

To conclude, the analysis of the phenomenon to be studied must lead to a certain high overview which offers the grounds of a holistic approach in the design of the research plan. Thus, there must be identified all the sources of experimental data, using various experimental techniques, even the redundant information being useful for cross-checking purposes.

Accession Number: WOS:000337000500026**Language:** English**Document Type:** Proceedings Paper**Conference Title:** ModTech International Conference - Modern Technologies in Industrial Engineering**Conference Date:** JUN 27-29, 2013**Conference Location:** Profess Assoc Modern Mfg Technol, Sinaia, ROMANIA**Conference Sponsors:** Silesian Univ Technol, Maritime Univ Constanta**Conference Host:** Profess Assoc Modern Mfg Technol**Author Keywords:** analytic; numeric and experimental models; case studies; data integration; hybrid models**Addresses:** [Oanta, Emil; Panait, Cornel] Constanta Maritime Univ, Constanta 900663, Romania.**Reprint Address:** Oanta, E (reprint author), Constanta Maritime Univ, 104 Mircea cel Batran, Constanta 900663, Romania.**E-mail Addresses:** eoanta@yahoo.com; cornel.panait@gaad.ro**Publisher:** TRANS TECH PUBLICATIONS LTD**Publisher Address:** LAUBLSRUTISTR 24, CH-8717 STAFA-ZURICH, SWITZERLAND**Web of Science Categories:** Engineering, Industrial; Engineering, Manufacturing; Operations Research & Management Science; Materials Science, Multidisciplinary**Research Areas:** Engineering; Operations Research & Management Science; Materials Science**IDS Number:** BA5TM**ISSN:** 1022-6680**ISBN:** 978-3-03785-929-2

29-char Source Abbrev.: ADV MATER RES-SWITZ

Source Item Page Count: 6

Output Date: 2019-06-12

Record 29 of 50

Title: Original Computer Based Solutions in Structural Studies**Author(s):** Oanta, E (Oanta, Emil)**Edited by:** Carausu C; Cohal V; Doroftei I; Wrobel A; Nedelcu D**Source:** MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING **Book Series:** Advanced Materials Research **Volume:** 837 **Pages:** 440-445 **DOI:** 10.4028/www.scientific.net/AMR.837.440 **Published:** 2014**Times Cited in Web of Science Core Collection:** 0**Total Times Cited:** 0**Usage Count (Last 180 days):** 1**Usage Count (Since 2013):** 3**Cited References:** Oanta E, 2009, OPTOELECTRON ADV MAT, V3, P1226

Oanta E., P 1999 ASME DES ENG

Oanta E., P 2 INT MULT ENG TEC, P270

Oanta E, 2009, ANN DAAAM, V20, P759

Cited Reference Count: 4

Abstract: The paper is inspired by the computer based solutions developed over a period of almost 30 years. Thus, the original computer based solutions were developed for a wide range of problems: computer aided geometry for domain definition, data generators for finite element applications, output data file processors with visualization facilities, matrices defined as random access files with a wide range of subsequent applications in several disciplines and

domains of science, FDM and FEM applications,, customized solutions for heat transfer problems, computational fluid dynamics, experimental data reduction software applications, virtual reality facilities, semi-numeric modeling, computer based decisions. Dedicated solutions were developed for applied elasticity problems related to marine engineering problems as we as naval architecture problems: ship strength computing based on the method of initial parameters, geometrical characteristics of the cross sections, automatic calculus of the stresses of a general-shaped section and others. Most of these applications present the output data in a graphical way, in order to be more relevant for a structural analyst. Another objective was to offer not only values of different parameters, but laws of variation which may be used in other subsequent analytic studies. According to the complexity of the problem to be solved, these applications are in a range which starts at the data-crunching level up to complex and intelligent solutions, some of them being implemented in programs of tens of thousands of computer code lines.

The paper presents the main features of each computer based solution, the connectivity with other solutions, the possibility to extend or adapt a given solution for a particular case study. Last but not least, there must be noticed that computer based solutions may be used in several directions of development: research, design and education.

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Language: English

Document Type: Proceedings Paper

Conference Title: ModTech International Conference - Modern Technologies in Industrial Engineering

Conference Date: JUN 27-29, 2013

Conference Location: Profess Assoc Modern Mfg Technol, Sinaia, ROMANIA

Conference Sponsors: Silesian Univ Technol, Maritime Univ Constanta

Conference Host: Profess Assoc Modern Mfg Technol

Author Keywords: original solutions; case studies; flexibility; reusability; components of artificial intelligence

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E-mail Addresses: eoanta@yahoo.com

Publisher: TRANS TECH PUBLICATIONS LTD

Publisher Address: LAUBLSRUTISTR 24, CH-8717 STAFA-ZURICH, SWITZERLAND

Web of Science Categories: Engineering, Industrial; Engineering, Manufacturing; Operations Research & Management Science; Materials Science, Multidisciplinary

Research Areas: Engineering; Operations Research & Management Science; Materials Science

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ISSN: 1022-6680

ISBN: 978-3-03785-929-2

29-char Source Abbrev.: ADV MATER RES-SWITZ

Source Item Page Count: 6

Output Date: 2019-06-12

Record 30 of 50

Title: Modern education facilities for CAD/CAM/CAE training of the future maritime engineers

Author(s): Raicu, A (Raicu, Alexandra); Oanta, E (Oanta, Emil)

Edited by: Carausu C; Cohal V; Doroftei I; Wrobel A; Nedelcu D

Source: MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING **Book Series:** Advanced Materials Research **Volume:** 837 **Pages:** 769-774 **DOI:** 10.4028/www.scientific.net/AMR.837.769 **Published:** 2014

Times Cited in Web of Science Core Collection: 3

Total Times Cited: 3

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 8

Cited References: Oanta E, 2009, OPTOELECTRON ADV MAT, V3, P1226

Oanta E, 2013, P 11 WSEAS INT C ENV, P21

Raicu A., 2010, 6 INT SEM QUAL MAN H, V2, P575

Raicu G., 2009, 6 INT C MAN TECHN CH, V2, P145

Cited Reference Count: 4

Abstract: This paper presents the modern education principles for Computer Aided Design, Computer Aided Manufacturing and Computer Aided Engineering (CAD/CAM/CAE) Training Centre of the future maritime engineers. To improve, share and distribute our training we combine the classical pedagogical approaches with the web-based learning which provides interactivity for students, the possibility of exchanging views, opinions and materials in a multimedia environment. According to the actual concept, the teaching and learning will be interactive and live. The paper presents the means to enhance the quality of training programs of study using the long term experience of the authors in this field. The authors settle the principles of implementation of a special Training Centre using e-Learning in Constanta Maritime University (CMU) and introduce the modern concepts and technologies for the acquisition of Product Lifecycle Management knowledge.

Accession Number: WOS:000337000500132

Language: English

Document Type: Proceedings Paper

Conference Title: ModTech International Conference - Modern Technologies in Industrial Engineering

Conference Date: JUN 27-29, 2013

Conference Location: Profess Assoc Modern Mfg Technol, Sinaia, ROMANIA

Conference Sponsors: Silesian Univ Technol, Maritime Univ Constanta

Conference Host: Profess Assoc Modern Mfg Technol

Author Keywords: CAD/CAM/CAE; PLM knowledge; Training Center; virtualization; e-Learning technologies

Addresses: [Raicu, Alexandra; Oanta, Emil] Constanta Maritime Univ, Dept Gen Engn Sci, Constanta 900663, Romania.

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E-mail Addresses: alexandra.raicu@cmu-edu.eu; eoanta@yahoo.com

Publisher: TRANS TECH PUBLICATIONS LTD

Publisher Address: LAUBLSRUTISTR 24, CH-8717 STAFA-ZURICH, SWITZERLAND

Web of Science Categories: Engineering, Industrial; Engineering, Manufacturing; Operations Research & Management Science; Materials Science, Multidisciplinary

Research Areas: Engineering; Operations Research & Management Science; Materials Science

IDS Number: BA5TM**ISSN:** 1022-6680**ISBN:** 978-3-03785-929-2**29-char Source Abbrev.:** ADV MATER RES-SWITZ**Source Item Page Count:** 6**Output Date:** 2019-06-12

Record 31 of 50**Title:** COMPUTER AIDED SOLUTION IN AN APPLIED ELASTICITY EDUCATIONAL CASE STUDY - STATICALLY INDETERMINATE SYSTEM OF BARS**Author(s):** Oanta, E (Oanta, Emil); Panait, C (Panait, Corneli); Barhalescu, ML (Barhalescu, Mihaela Liminita); Sabau, A (Sabau, Adrian); Axinte, T (Axinte, Tiberiu)**Edited by:** Katalinic B**Source:** ANNALS OF DAAAM FOR 2012 & PROCEEDINGS OF THE 23RD INTERNATIONAL DAAAM SYMPOSIUM - INTELLIGENT MANUFACTURING AND AUTOMATION - FOCUS ON SUSTAINABILITY **Book Series:** Annals of DAAAM and Proceedings **Volume:** 23 **Pages:** 485-488 **Published:** 2012**Times Cited in Web of Science Core Collection:** 0**Total Times Cited:** 0**Usage Count (Last 180 days):** 0**Usage Count (Since 2013):** 0**Cited References:** Karnovsky IA, 2010, ADVANCED METHODS OF STRUCTURAL ANALYSIS, P513, DOI 10.1007/978-1-4419-1047-9_14

Oanta E, 2011, MANAGEMENT OF TECHNOLOGICAL CHANGES, BOOK 2, P589

Oanta E., 2012, SOLVED PROBLEMS STRE

Oanta E., 2011, ANN DAAAM 2011 P 22, P0501

Oanta E., 2011, ANN DAAAM 2011 P 22, P0505

Oanta E., 2011, ANN DAAAM 2011 P 22, P0503

Sabau A, 2011, MANAGEMENT OF TECHNOLOGICAL CHANGES, BOOK 2, P425

Sabau A, 2011, MANAGEMENT OF TECHNOLOGICAL CHANGES, BOOK 2, P421

Cited Reference Count: 8

Abstract: Most of the real structures are statically indeterminate and they cannot be analytically computed by simply applying the equilibrium conditions. This is why students must possess the appropriate knowledge to approach this type of problems, a first solution being based on analytic methods. The paper presents a case-study regarding the use of the Mohr-Maxwell method to conceive a solution which, once implemented, it can be used to solve a series of educational models. The original software application has many parameters and it can be easily used by the professor in order to solve the indeterminacy for other structures which have a similar or simpler shape. Moreover, using the specific attributes of the symmetrical and anti-symmetrical structures and applying the superposition principle, several other problems may be solved. The original software was developed in MINGW using ECLIPSE and it consists of 1100 computer code lines for the basic modules and for the case studies solved, until now.

Accession Number: WOS:000392423800112**Language:** English**Document Type:** Proceedings Paper**Conference Title:** 23rd International DAAAM Symposium on Intelligent Manufacturing and Automation - Focus on Sustainability**Conference Date:** OCT 24-27, 2012**Conference Location:** Zadar, CROATIA**Conference Sponsors:** Danube Adria Assoc Automat & Mfg Int, Univ Studiorum Jadertina, Univ Zadar, Int Acad Engr, Vienna Univ Technol, Austrian Soc Engineers & Architects OIAV 1848, Univ Appl Sci Technikum Wien, Danube Rectors Conf, Danube Adria Assoc Automat & Mfg Int, Rectors Honor Comm**Author Keywords:** Statically-indeterminate-system; computer-based-solution; applied elasticity; educational applications; original software**Publisher:** DAAAM INT VIENNA**Publisher Address:** VIENNA UNIV TECHNOLOGY, KARLSPLATZ 13, WIEN, A-1040, AUSTRIA**Web of Science Categories:** Automation & Control Systems; Engineering, Multidisciplinary**Research Areas:** Automation & Control Systems; Engineering**IDS Number:** BG8LR**ISSN:** 1726-9679**ISBN:** 978-3-901509-91-9**29-char Source Abbrev.:** ANN DAAAM**Source Item Page Count:** 4**Funding:**

Funding Agency	Grant Number
RoNoMar	

Several of the ideas presented in the paper are the result of the models developed in the framework of the scientific research study 'Development of computer assisted marine structures', Emil Oanta, Corneli Panait, Gheorghe Batrinca, Alexandru Pescaru, Alexandra Nita, Feiza Memet, which is a component of the RoNoMar project, 2010, sponsor of this paper.

Output Date: 2019-06-12

Record 32 of 50**Title:** IDEAS REGARDING THE MODELING OF THE BEHAVIOR OF THE SECTIONS HAVING A DISTINCT SHEAR CENTER**Author(s):** Oanta, E (Oanta, Emil); Panait, C (Panait, Corneli); Sabau, A (Sabau, Adrian); Barhalescu, ML (Barhalescu, Mihaela Luminita); Axinte, T (Axinte, Tiberiu)**Edited by:** Katalinic B**Source:** ANNALS OF DAAAM FOR 2012 & PROCEEDINGS OF THE 23RD INTERNATIONAL DAAAM SYMPOSIUM - INTELLIGENT MANUFACTURING AND AUTOMATION - FOCUS ON SUSTAINABILITY **Book Series:** Annals of DAAAM and Proceedings **Volume:** 23 **Pages:** 489-492 **Published:** 2012**Times Cited in Web of Science Core Collection:** 0**Total Times Cited:** 0**Usage Count (Last 180 days):** 0**Usage Count (Since 2013):** 1

Cited References: Barber JR, 2011, SOLID MECH APPL, V175, P559, DOI 10.1007/978-94-007-0295-0

Oanta E, 2011, MANAGEMENT OF TECHNOLOGICAL CHANGES, BOOK 2, P589

Oanta E., 2011, ANN DAAAM 2011 P 22, P0501

Oanta E., 2011, ANN DAAAM 2011 P 22, P0505

Oanta E., 2011, ANN DAAAM 2011 P 22, P0503

Sabau A, 2011, MANAGEMENT OF TECHNOLOGICAL CHANGES, BOOK 2, P425

Sabau A, 2011, MANAGEMENT OF TECHNOLOGICAL CHANGES, BOOK 2, P421

Cited Reference Count: 7

Abstract: One of the measures frequently undertaken to minimize the cost of a structure is to use pre-engineered members, such as I-shaped members. The designer must take into consideration the behavior of such pre-engineered beams, being aware about the applied elasticity phenomena which might impose additional conditions regarding the numerical model. The paper presents some interesting aspects regarding the shear center issue, which may be applied in the concept and the design of the structures. Beside the theoretical aspects, there is presented a comparative study of two finite element models. Some practical conclusions are drawn, together with the identification of a new direction of study regarding the automatic calculus of the structures.

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Language: English

Document Type: Proceedings Paper

Conference Title: 23rd International DAAAM Symposium on Intelligent Manufacturing and Automation - Focus on Sustainability

Conference Date: OCT 24-27, 2012

Conference Location: Zadar, CROATIA

Conference Sponsors: Danube Adria Assoc Automat & Mfg Int, Univ Studiorum Jadertina, Univ Zadar, Int Acad Engrn, Vienna Univ Technol, Austrian Soc Engineers & Architects OIAV 1848, Univ Appl Sci Technikum Wien, Danube Rectors Conf, Danube Adria Assoc Automat & Mfg Int, Rectors Honor Comm

Author Keywords: Shear center; applied elasticity; appropriate finite element selection; practical solutions

Publisher: DAAAM INT VIENNA

Publisher Address: VIENNA UNIV TECHNOLOGY, KARLSPLATZ 13, WIEN, A-1040, AUSTRIA

Web of Science Categories: Automation & Control Systems; Engineering, Multidisciplinary

Research Areas: Automation & Control Systems; Engineering

IDS Number: BG8LR

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Several of the ideas presented in the paper are the result of the models developed in the framework of the scientific research study 'Development of computer assisted marine structures', Emil Oanta, Cornel Panait, Gheorghe Batrinca, Alexandru Pescaru, Alexandra Nita, Feiza Memet, which is a component of the RoNoMar project, 2010, sponsor of this paper.

Output Date: 2019-06-12

Record 33 of 50

Title: ANALYTIC METHOD TO COMPUTE THE ISOSTATICS USING THE ISOCLINIC FRINGES

Author(s): Oanta, E (Oanta, Emil); Panait, C (Panait, Cornel); Sabau, A (Sabau, Adrian); Barhalescu, ML (Barhalescu, Mihaela Luminita); Axinte, T (Axinte, Tiberiu)

Edited by: Katalinic B

Source: ANNALS OF DAAAM FOR 2012 & PROCEEDINGS OF THE 23RD INTERNATIONAL DAAAM SYMPOSIUM - INTELLIGENT MANUFACTURING AND AUTOMATION - FOCUS ON SUSTAINABILITY **Book Series:** Annals of DAAAM and Proceedings **Volume:** 23 **Pages:** 493-496 **Published:** 2012

Times Cited in Web of Science Core Collection: 1

Total Times Cited: 1

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 1

Cited References: Oanta E, 2011, MANAGEMENT OF TECHNOLOGICAL CHANGES, BOOK 2, P589

Oanta E., 2012, SOLVED PROBLEMS STRE

Oanta E., 2011, ANN DAAAM 2011 P 22, P0505

Sabau A, 2011, MANAGEMENT OF TECHNOLOGICAL CHANGES, BOOK 2, P421

Theocaris P. S., 1976, EXPT STRESS ANAL THE, VI

Theocaris P. S., 1976, EXPT STRESS ANAL THE, VII

Cited Reference Count: 6

Abstract: Research projects require advanced and appropriate means of investigation which might use theoretical approaches like analytic methods, numerical methods as well as experimental studies. A high degree of integration may be achieved if the main instrument to be used is the computer. Moreover, the effectiveness of each study is increased if computer based methods are conceived. From this standpoint, the paper presents an analytic method to compute the points which define the isostatic curves on the surface of the photoelastic coating, using the isoclines defined as sets of points. Several methods to process the data are presented and a computer code may be easily developed using these relations; this computer code may increase the effectiveness of the data processing in terms of accuracy, time and volume of the data.

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Language: English

Document Type: Proceedings Paper

Conference Title: 23rd International DAAAM Symposium on Intelligent Manufacturing and Automation - Focus on Sustainability

Conference Date: OCT 24-27, 2012

Conference Location: Zadar, CROATIA

Conference Sponsors: Danube Adria Assoc Automat & Mfg Int, Univ Studiorum Jadertina, Univ Zadar, Int Acad Engrn, Vienna Univ Technol, Austrian Soc Engineers & Architects OIAV 1848, Univ Appl Sci Technikum Wien, Danube Rectors Conf, Danube Adria Assoc Automat & Mfg Int, Rectors Honor Comm

Author Keywords: Experimental mechanics; analytic method; computer aided instrument

Publisher: DAAAM INT VIENNA

Publisher Address: VIENNA UNIV TECHNOLOGY, KARLSPLATZ 13, WIEN, A-1040, AUSTRIA
Web of Science Categories: Automation & Control Systems; Engineering, Multidisciplinary
Research Areas: Automation & Control Systems; Engineering
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RoNoMar	

Several of the ideas presented in the paper are the result of the models developed in the framework of the scientific research study 'Development of computer assisted marine structures', Emil Oanta, Cornel Panait, Giorghie Batrinca, Alexandru Pescaru, Alexandra Nita, Feiza Memet, which is a component of the RoNoMar project, 2010, sponsor of this paper.

Output Date: 2019-06-12**Record 34 of 50****Title:** INCREASING WEAR RESISTANCE OF THE SUPERFICIAL MICROALLOYING LAYERS**Author(s):** Barhalescu, ML (Barhalescu, Mihaela Luminita); Sabau, A (Sabau, Adrian); Oanta, E (Oanta, Emil)**Edited by:** Katalinic B**Source:** ANNALS OF DAAAM FOR 2012 & PROCEEDINGS OF THE 23RD INTERNATIONAL DAAAM SYMPOSIUM - INTELLIGENT MANUFACTURING AND AUTOMATION - FOCUS ON SUSTAINABILITY **Book Series:** Annals of DAAAM and Proceedings **Volume:** 23 **Pages:** 1015-1018 **Published:** 2012**Times Cited in Web of Science Core Collection:** 0**Total Times Cited:** 0**Usage Count (Last 180 days):** 0**Usage Count (Since 2013):** 0**Cited References:** Barankova H., 1996, SURFACE COATING TECH

Barhalescu M., 2009, ANN DAAAM 2011 P 22, P0845

Barhalescu M, 2007, THESIS

Chatterjee SK, 2008, SPRINGER SER MATER S, V113, P1

Ladd M. F. C., 1985, STRUCTURE DETERMINAT

Morton P. H., 1990, PROCEDES TECHNOLOGIQ

Pauleau Y., 1994, MAT PROCESESFOR SURF

Cited Reference Count: 7

Abstract: Structural changes occurring in the superficial layers of samples processed through electrical sparking method has major influences for increasing the wear resistance. The paper shows some theoretical and experimental aspects with respect to superficial hardening of the grey cast irons and carbon steels. The used process for the superficial hardening allows obtaining very high hardness (H OOHV) on the treatment surfaces, without the change of the bulk structure. The microalloying and deposition with vibrator electrode give the superficial hardening.

Accession Number: WOS:000392423800235**Language:** English**Document Type:** Proceedings Paper**Conference Title:** 23rd International DAAAM Symposium on Intelligent Manufacturing and Automation - Focus on Sustainability**Conference Date:** OCT 24-27, 2012**Conference Location:** Zadar, CROATIA**Conference Sponsors:** Danube Adria Assoc Automat & Mfg Int, Univ Studiorum Jadertina, Univ Zadar, Int Acad Engrn, Vienna Univ Technol, Austrian Soc Engineers & Architects OIAV 1848, Univ Appl Sci Technikum Wien, Danube Rectors Conf, Danube Adria Assoc Automat & Mfg Int, Rectors Honor Comm**Author Keywords:** Deposition; layer; discharges; hardness; wear**Publisher:** DAAAM INT VIENNA**Publisher Address:** VIENNA UNIV TECHNOLOGY, KARLSPLATZ 13, WIEN, A-1040, AUSTRIA**Web of Science Categories:** Automation & Control Systems; Engineering, Multidisciplinary**Research Areas:** Automation & Control Systems; Engineering**IDS Number:** BG8LR**ISSN:** 1726-9679**ISBN:** 978-3-901509-91-9**29-char Source Abbrev.:** ANN DAAAM**Source Item Page Count:** 4**Funding:**

Funding Agency	Grant Number
RoNoMar project	
National University Research Council (CNCSIS), Romania	1223

Giorghie Batrinca, Alexandru Pescaru, Alexandra Nita, Feiza Memet, which is a component of the RoNoMar project, 2010, sponsor of this paper.

That is the follow-up of the ID1223 scientific research project: Oanta, E., Panait, C., Nicolescu, B., Dinu, S., Pescaru, A., Nita, A., Gavrilă, G., (2007-2010), "Computer Aided Advanced Studies in Applied Elasticity from an Interdisciplinary Perspective", under the supervision of the National University Research Council (CNCSIS), Romania.

Output Date: 2019-06-12**Record 35 of 50****Title:** MODELING OF HIGH-PRESSURE FUEL INJECTION SYSTEMS**Author(s):** Sabau, A (Sabau, Adrian); Barhalescu, ML (Barhalescu, Mihaela Luminita); Oanta, E (Oanta, Emil)**Edited by:** Katalinic B

Source: ANNALS OF DAAAM FOR 2012 & PROCEEDINGS OF THE 23RD INTERNATIONAL DAAAM SYMPOSIUM - INTELLIGENT MANUFACTURING AND AUTOMATION - FOCUS ON SUSTAINABILITY **Book Series:** Annals of DAAAM and Proceedings **Volume:** 23 **Pages:** 1019-1022 **Published:** 2012

Times Cited in Web of Science Core Collection: 1

Total Times Cited: 1

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 0

Cited References: Kegl B, 2006, ENERGY FUEL, V22, P2377

Kolade Babajide, 2003, 2003010702 SAE

Lee Hang-kyung, 1995, 950604 SAE

Oanta E., 2011, P 22 INT DAAAM S, P0505

Rodriguez-Anton L. M., 2000, PSAE 2000 WORLD C

Sabau A, 2011, MANAGEMENT OF TECHNOLOGICAL CHANGES, BOOK 2, P425

Cited Reference Count: 6

Abstract: The aim of this study is to present a mathematical model of the wave pressure in the Diesel injection system. The injection process of a high-speed Diesel engine was studied in detail, using an original computer program developed in MATLAB. The governing equations are solved by the use of the finite difference method with central pattern at space coordinate in combination with the separation of flux vector. Simulations show satisfactory results, but improvements are possible. Since the models are developed for certain conditions it was not expected to be valid for all working conditions.

Accession Number: WOS:000392423800236

Language: English

Document Type: Proceedings Paper

Conference Title: 23rd International DAAAM Symposium on Intelligent Manufacturing and Automation - Focus on Sustainability

Conference Date: OCT 24-27, 2012

Conference Location: Zadar, CROATIA

Conference Sponsors: Danube Adria Assoc Automat & Mfg Int, Univ Studiorum Jadertina, Univ Zadar, Int Acad Engrn, Vienna Univ Technol, Austrian Soc Engineers & Architects OIAV 1848, Univ Appl Sci Technikum Wien, Danube Rectors Conf, Danube Adria Assoc Automat & Mfg Int, Rectors Honor Comm

Author Keywords: injection; nozzle; finite difference; fuel pipe; mathematical model; simulation; partial diferential equation

Publisher: DAAAM INT VIENNA

Publisher Address: VIENNA UNIV TECHNOLOGY, KARLSPLATZ 13, WIEN, A-1040, AUSTRIA

Web of Science Categories: Automation & Control Systems; Engineering, Multidisciplinary

Research Areas: Automation & Control Systems; Engineering

IDS Number: BG8LR

ISSN: 1726-9679

ISBN: 978-3-901509-91-9

29-char Source Abbrev.: ANN DAAAM

Source Item Page Count: 4

Funding:

Funding Agency	Grant Number
RoNoMar project	

Several of the ideas presented in the paper are the result of the models developed in the framework of the scientific research study 'Development of computer assisted marine structures', Emil Oanta, Cornel Panait, Ghiorghe Batrinca, Alexandru Pescaru, Alexandra Nita, Feiza Memet, which is a component of the RoNoMar project, 2010, sponsor of this paper.

Output Date: 2019-06-12

Record 36 of 50

Title: REASONS TO ACQUIRE A MORE ACCURATE KNOWLEDGE ABOUT CORROSION RESISTANCE IN MARITIME ENGINEERING EDUCATION

Author(s): Barhalescu, M (Barhalescu, M.); Sabau, A (Sabau, A.); Oanta, E (Oanta, E.)

Edited by: Rusu C

Source: MANAGEMENT OF TECHNOLOGICAL CHANGES, BOOK 2 **Pages:** 329-332 **Published:** 2011

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 1

Usage Count (Since 2013): 4

Cited References: Barhalescu M., 2007, THESIS U LASI

Barhalescu M., 2007, PROT COAT THIN FILMS

Kelly R.G., 2003, ELECTROCHEMICAL TECH

Marcus P, 2002, CORROSION MECH THEOR

OANTA E, 2007, COMPUTER AIDED ADV S

Oanta E., 2010, MIEC2010 BIL ROM MOL

Pop D., 1999, B I POLITEHNIC, VXLV, P95

Cited Reference Count: 7

Abstract: The paper is based on a series of educated observations and case studies regarding the role of the corrosion in the actual maritime conditions. Together with the salt-saturated atmosphere specific to the maritime environment, pollution is an additional hazard which must be taken into consideration in the protection against the corrosion. The study of the corrosion phenomena requires interdisciplinary approaches the accordingly modification of the curricula being an actual imperative teaching methods.

Accession Number: WOS:000306940000083

Language: English

Document Type: Proceedings Paper

Conference Title: 7th International Conference on Management of Technological Changes

Conference Date: SEP 01-03, 2011

Conference Location: Alexandroupolis, GREECE

Conference Sponsors: Democritus Univ Thrace, Gheorghe Asachi Tech Univ, Central & E European Management Dev Assoc, Ctr Continu Educ & Train, Region E Macedonia & Thrace

Addresses: [Barhalescu, M.; Sabau, A.; Oanta, E.] Constanta Maritime Univ, Constanta, Romania.

E-mail Addresses: barhalescum@yahoo.com; ady1_sabau@yahoo.com; eoanta@yahoo.com

Publisher: DEMOCRITUS UNIV THRACE

Publisher Address: UNIV CAMPUS, KOMOTINI, 69100, GREECE

Web of Science Categories: Economics; Management

Research Areas: Business & Economics

IDS Number: BBI19

ISBN: 978-960-99486-3-0

Source Item Page Count: 4

Output Date: 2019-06-12

Record 37 of 50

Title: IMPACT OF THE USE OF THE MODERN METHODS IN THE TRAINING OF MARINE ENGINEER CADETS

Author(s): Sabau, A (Sabau, A.); Oanta, E (Oanta, E.); Barhalescu, M (Barhalescu, M.)

Edited by: Rusu C

Source: MANAGEMENT OF TECHNOLOGICAL CHANGES, BOOK 2 **Pages:** 421-424 **Published:** 2011

Times Cited in Web of Science Core Collection: 3

Total Times Cited: 3

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 3

Cited References: Chen C. J., 2004, J INTERACTIVE LEARNI, V15, P147

Oanta E, 2007, THESIS ACAD EC STUDI

Sabau A., 2007, THESIS TRANSILVANIA

Sternberg RJ, 1977, INTELLIGENCE INFORM

Tudor D., MARITIME TRANSPORT, P433

Cited Reference Count: 5

Abstract: The aim of the paper is to establish a set of criteria employed to ascertain the best methods of teaching for the marine engineer cadets. The results of the paper are useful to create optimum curricula and an according plan of investments as well as proper lesson plans.

Accession Number: WOS:000306940000106

Language: English

Document Type: Proceedings Paper

Conference Title: 7th International Conference on Management of Technological Changes

Conference Date: SEP 01-03, 2011

Conference Location: Alexandroupolis, GREECE

Conference Sponsors: Democritus Univ Thrace, Gheorghe Asachi Tech Univ, Central & E European Management Dev Assoc, Ctr Continu Educ & Train, Region E Macedonia & Thrace

Addresses: [Sabau, A.; Oanta, E.; Barhalescu, M.] Constanta Maritime Univ, Constanta, Romania.

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Publisher: DEMOCRITUS UNIV THRACE

Publisher Address: UNIV CAMPUS, KOMOTINI, 69100, GREECE

Web of Science Categories: Economics; Management

Research Areas: Business & Economics

IDS Number: BBI19

ISBN: 978-960-99486-3-0

Source Item Page Count: 4

Output Date: 2019-06-12

Record 38 of 50

Title: SIMULATION PROGRAMS IN TEACHING ACTIVITY

Author(s): Sabau, A (Sabau, A.); Barhalescu, M (Barhalescu, M.); Oanta, E (Oanta, E.)

Edited by: Rusu C

Source: MANAGEMENT OF TECHNOLOGICAL CHANGES, BOOK 2 **Pages:** 425-428 **Published:** 2011

Times Cited in Web of Science Core Collection: 3

Total Times Cited: 3

Usage Count (Last 180 days): 1

Usage Count (Since 2013): 4

Cited References: ALESSI S. M., 2001, MULTIMEDIA LEARNING, V214, P254

Duffy T. M., 1996, HDB RES ED COMMUNICA

DUSCHL RA, 1991, J RES SCI TEACH, V28, P839, DOI 10.1002/tea.3660280909

DYKSTRA DJ, 1992, PHYS EDUC, V76, P615

Henning P., 1998, HDB RES ED COMMUNICA

Hung D., 2002, ED TECHNOLOGY SOC, V5, P148

MUSSELMAN KJ, 1992, P 1992 WINT SIM C, P115

Oanta E, 2007, THESIS ACAD EC STUDI

Sabau A., 2006, ANN MARITIME U CONST, V9, P82

Sabau A., 2007, THESIS TRANSILVANIA

Winn W., 1996, HDB RES ED COMMUNICA

Cited Reference Count: 11

Abstract: The main objective of this work is quantifying the influence of simulation programs used in the classes taught in the discipline process in internal combustion engines. We measured the quantity and quality of theoretical knowledge acquired and the time used for this activity. Finally it is presented a comparative study between using the classic method of teaching and the simulation programs.

Accession Number: WOS:000306940000107

Language: English

Document Type: Proceedings Paper

Conference Title: 7th International Conference on Management of Technological Changes

Conference Date: SEP 01-03, 2011

Conference Location: Alexandroupolis, GREECE

Conference Sponsors: Democritus Univ Thrace, Gheorghe Asachi Tech Univ, Central & E European Management Dev Assoc, Ctr Continu Educ & Train, Region E Macedonia & Thrace

Addresses: [Sabau, A.; Barhalescu, M.; Oanta, E.] Constanta Maritime Univ, Constanta, Romania.

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Publisher: DEMOCRITUS UNIV THRACE

Publisher Address: UNIV CAMPUS, KOMOTINI, 69100, GREECE

Web of Science Categories: Economics; Management

Research Areas: Business & Economics

IDS Number: BBI19

ISBN: 978-960-99486-3-0

Source Item Page Count: 4

Output Date: 2019-06-12

Record 39 of 50

Title: MANAGEMENT OF CHANGE BASED ON CREATIVE INTER-DOMAIN SYNTHESSES

Author(s): Oanta, E (Oanta, E.); Barhalescu, M (Barhalescu, M.); Sabau, A (Sabau, A.)

Edited by: Rusu C

Source: MANAGEMENT OF TECHNOLOGICAL CHANGES, BOOK 2 **Pages:** 589-592 **Published:** 2011

Times Cited in Web of Science Core Collection: 3

Total Times Cited: 3

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 3

Cited References: Barhalescu M., 2007, THESIS U IASI

Goldberg D., 1991, ACM COMPUTING SURVEY, V23

Haret S., 2001, SOCIAL MECH

NITA A, 2010, REV MAT PLASTICE, V47, P69

Oanta E., 2001, THESIS U BUCHAREST

Oanta E., 2000, 2000 SAE INT C EXP M

Oanta E., 2007, 11 WORLD MULT SYST C, VIV, P384

OANTA E, 2007, COMPUTER AIDED ADV S

Oanta E, 2010, MATH MODELS INTERDOM

Oanta E., 2007, THESIS ACAD ECONOMIC

Sabau A., 2007, THESIS U BRASOV

Cited Reference Count: 11

Abstract: The paper presents the actual stage and original research carried out by the authors along the past 20 years where the inter-disciplinary and inter-domain approaches were successfully employed to solve complex problems. Management of change based on intelligent solutions can rely on creative inter-disciplinary and inter-domain syntheses in order to be more adaptive and more effective to the actual dynamic and complex conditions.

Accession Number: WOS:000306940000148

Language: English

Document Type: Proceedings Paper

Conference Title: 7th International Conference on Management of Technological Changes

Conference Date: SEP 01-03, 2011

Conference Location: Alexandroupolis, GREECE

Conference Sponsors: Democritus Univ Thrace, Gheorghe Asachi Tech Univ, Central & E European Management Dev Assoc, Ctr Continu Educ & Train, Region E Macedonia & Thrace

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Publisher: DEMOCRITUS UNIV THRACE

Publisher Address: UNIV CAMPUS, KOMOTINI, 69100, GREECE

Web of Science Categories: Economics; Management

Research Areas: Business & Economics

IDS Number: BBI19

ISBN: 978-960-99486-3-0

Source Item Page Count: 4

Output Date: 2019-06-12

Record 40 of 50

Title: TECHNOLOGICAL CHANGES INDUCED BY THE THIN SUPERFICIAL LAYERS APPLIED ON COMMONLY USED MATERIALS

Author(s): Barhalescu, M (Barhalescu, M.); Oanta, E (Oanta, E.); Sabau, A (Sabau, A.)

Edited by: Rusu C

Source: MANAGEMENT OF TECHNOLOGICAL CHANGES, BOOK 1 **Pages:** 457-459 **Published:** 2011

Times Cited in Web of Science Core Collection: 1

Total Times Cited: 1

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 3

Cited References: Barhalescu M., 2007, THESIS U IASI

Barhalescu M., 2007, PROT COAT THIN FILMS

Boian R., 2004, ASTM PUBLICATION

OANTA E, 2007, COMPUTER AIDED ADV S

Oanta E., 2010, MIEC2010 BIL ROM MOL

Cited Reference Count: 5

Abstract: The paper presents the research dedicated to the improvement of the mechanical properties and the resistance to corrosion by the use of the deposition of thin layers on the metallic surface of the mechanical parts. The results are a technological advancement which leads to high reliability and low costs for most of the metallic parts. Advanced experimental research studies were performed in order to establish the most proper parameters of the thin layer and of the processing technology parameters. Results were compared one to the other and useful concluding remarks were drawn. New directions of research were also identified. An effective management of the technological change must rely on the surface engineering research which offers large saving for both existing equipment and parts to be manufactured in the future.

Accession Number: WOS:000306939900115

Language: English

Document Type: Proceedings Paper

Conference Title: 7th International Conference on Management of Technological Changes

Conference Date: SEP 01-03, 2011

Conference Location: Alexandroupolis, GREECE

Conference Sponsors: Democritus Univ Thrace, Gheorghe Asachi Tech Univ, Central & E European Management Dev Assoc, Ctr Continu Educ & Train, Region E Macedonia & Thrace

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Publisher: DEMOCRITUS UNIV THRACE

Publisher Address: UNIV CAMPUS, KOMOTINI, 69100, GREECE

Web of Science Categories: Economics; Management

Research Areas: Business & Economics

IDS Number: BBI18

ISBN: 978-960-99486-2-3

Source Item Page Count: 3

Output Date: 2019-06-12

Record 41 of 50

Title: Multidisciplinary Studies Regarding the Residual Stress Minimization in Polymeric Injected Parts

Author(s): Nita, A (Nita, Alexandra); Oanta, E (Oanta, Emil)

Source: MATERIALE PLASTICE **Volume:** 47 **Issue:** 1 **Pages:** 69-73 **Published:** MAR 2010

Times Cited in Web of Science Core Collection: 1

Total Times Cited: 1

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 0

Cited References: BARSANESCU PD, 2003, TENSIUNI REMANENTE

BARSANESCU PD, 2004, TENSOMETRIE ELECT RE

BILOVOL VV, 2003, THESIS DELFT U TECHN

CHAE HK, 2007, POLYM TEST, V26, P862

Fetecau C, 2007, MATER PLAST, V44, P180

HYLTON DC, 2004, UNDERSTANDING PLASTI

Iliescu N, 2009, MATER PLAST, V46, P91

MIHAIL R, 1989, SIMULAREA PROCESELOR

NITA A, 2009, J INT SCI PUBLICATIO, P34

NITA A, 2006, 30 NAT C SOL MECH ME, V9, P327

OANTA E, 2007, PROGR REPORTS D, V1223

OANTA E, 2001, THESIS POLITEHNICA

SHOEMAKER J, 2006, MOLDFLOW DESIGN GUID, P326

VAZ M, 2004, REV MAT, V9, P453

2008, 91000 VISH MICR

MOLDFLOW TUTORIALS

2007, MEASUREMENT RESIDUAL

Cited Reference Count: 17

Abstract: The paper presents the multidisciplinary studies dedicated to the minimization of the residual stresses in an Acrylonitrile-Butadiene-Styrene part. The first stage of the study consists of an experimental research employed to measure the physical characteristics of the polymeric material. The next stage is a simulation of the moulding process for a plate-wise specimen made of the material previously tested, being interested by the values of the residual stresses. The next stage is the experimental research of the residual stresses by the use of the hole-drilling method applied on the previously simulated plate-wise specimen. The results of the two studies are close one to the other and the conclusion regarding the material and the parameters employed for the simulation are used for the next study dedicated to the simulation of the moulding process for a complex part. Several studies were performed in order to find the best parameters of the moulding process which lead to a minimum level of the residual stresses. Other parts made of the same material may be also simulated in order to minimize the residual stresses. We conclude considering that a high degree of confidence regarding the results of the numerical model may be achieved only if the results of experimental studies are employed.

Accession Number: WOS:000276587100013

Language: English

Document Type: Article

Author Keywords: polymeric part; residual stress; experiment; numerical model; applications

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Publisher: CHIMINFORM DATA S A

Publisher Address: CALEA PLEVNEI NR 139, SECTOR 6, BUCHAREST R-77131, ROMANIA

Web of Science Categories: Materials Science, Multidisciplinary

Research Areas: Materials Science

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ISSN: 0025-5289

29-char Source Abbrev.: MATER PLAST

ISO Source Abbrev.: Mater. Plast.

Source Item Page Count: 5

Funding:

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Constanta Maritime University	

Ideas presented in the paper are the result of the research activities of the IDI223 project, under the supervision of the National University Research Council (CNCSIS), Romania, [17]. We mention the support of the Constanta Maritime University who offered the financial aid for the experimental research presented in the paper. The experimental studies mentioned in the paper were conducted by professor Paul Barscinescu, from the Technical University of Iasi to whom we express our gratitude. We remind the support of professor Catalin Fetacau, who allowed our access to the numerical analysis software of the Polymeric Materials Research Laboratory belonging to the "Dunarea de Jos" University of Galati. We also mention the aid offered by Maids Metal Plast, Bucharest, where the mould and the mould model were designed and manufactured.

Output Date: 2019-06-12

Record 42 of 50**Title:** X-RAY DIFFRACTION ANALYSIS AT NAVAL WELDED STEEL**Author(s):** Dumitrache, C (Dumitrache, Constantin); Barhalescu, M (Barhalescu, Mihaela); Sabau, A (Sabau, Adrian); Oanta, E (Oanta, Emil)**Edited by:** Panait C; Barsan E; Bulucea A; Mastorakis N; Long C**Source:** ADVANCED MANUFACTURING ENGINEERING, QUALITY AND PRODUCTION SYSTEMS **Book Series:** Electrical and Computer Engineering Series **Pages:** 43-46 **Published:** 2010**Times Cited in Web of Science Core Collection:** 0**Total Times Cited:** 0**Usage Count (Last 180 days):** 0**Usage Count (Since 2013):** 2**Cited References:** DUMITRACHE C, 2000, 3 INT C MAT SCI ENG, P145

DUMITRACHE C, 2000, THESIS IASI

GHEORGHIES C, 1990, CONTROLUL STRUCTURII, V10

Gheorghies C., 2003, NAT TRIB C ROTRIB 03, P302

Cited Reference Count: 4

Abstract: In the article [2] the authors present experimental investigations regarding of residual stress distribution in weld bead vicinity of submerged arc welded naval plates. In this way, residual stresses from vicinity of weld bead acts like compressive stresses and are happening at all the thin plates which have low stiffness. After the thermal stress relief, the points removed from the weld, experiences a rapid change to tensile stresses. The thermal stress-relief process, which are conditioned by the plastic yield speed phenomenon, is acting in order to relaxing the weld bead and the heat affected zone. In this paper are presented X-ray analysis to obtain information about mosaic block dimensions, micro stresses fields and density of dislocations after thermal and ultrasonic stress-relief processes.

Accession Number: WOS:000290464600010**Language:** English**Document Type:** Proceedings Paper**Conference Title:** 2nd International Conference on Manufacturing Engineering, Quality and Production Systems**Conference Date:** SEP 03-05, 2010**Conference Location:** Constantza Maritime Univ, Constantza, ROMANIA**Conference Host:** Constantza Maritime Univ**Author Keywords:** Residual Stresses; X-Ray Analysis; Thermal Stress-Relief; Ultrasonic Stress-Relief**Addresses:** [Dumitrache, Constantin; Barhalescu, Mihaela; Sabau, Adrian; Oanta, Emil] Maritime Univ Constanta, Constanta, Romania.**Reprint Address:** Dumitrache, C (reprint author), Maritime Univ Constanta, Constanta, Romania.**E-mail Addresses:** ldumitr@yahoo.com**Author Identifiers:**

Author	Web of Science ResearcherID	ORCID Number
Dumitrache, Constantin L	D-4823-2009	

Publisher: WORLD SCIENTIFIC AND ENGINEERING ACAD AND SOC**Publisher Address:** AG LOANNOU THEOLOGOU 17-23, 15773 ZOGRAPHOU, ATHENS, GREECE**Web of Science Categories:** Computer Science, Interdisciplinary Applications; Engineering, Manufacturing**Research Areas:** Computer Science; Engineering**IDS Number:** BUV64**ISBN:** 978-960-474-220-2**29-char Source Abbrev.:** ELE COM ENG**Source Item Page Count:** 4**Output Date:** 2019-06-12**Record 43 of 50****Title:** Improving the quality of the molded polymeric parts by reducing the residual stress**Author(s):** Nita, A (Nita, Alexandra); Oanta, E (Oanta, Emil)**Edited by:** Panait C; Barsan E; Bulucea A; Mastorakis N; Long C**Source:** ADVANCED MANUFACTURING ENGINEERING, QUALITY AND PRODUCTION SYSTEMS **Book Series:** Electrical and Computer Engineering Series **Pages:** 77-82 **Published:** 2010**Times Cited in Web of Science Core Collection:** 3**Total Times Cited:** 3**Usage Count (Last 180 days):** 2**Usage Count (Since 2013):** 4**Cited References:** NITA A, 2010, THESIS CONSTANTA MAR

NITA A, 2010, REV MAT PLASTICE, V1, P69

Oanta E, 2004, P 5 INT C QUAL REL M, P265

OANTA E, 2001, THESIS POLITEHNICA U

OANTA E, 2007, COMPUTER AIDED ADV S

Cited Reference Count: 5

Abstract: The paper presents a method to increase the quality of molded polymeric parts using CAE technology by reducing the residual stresses. In order to find the best parameters of the molding process which lead to a minimum level of the residual stresses several studies were performed. Parts made of polymeric materials may be also simulated in order to minimize the residual stresses. We consider that a high degree of confidence of the simulating software results may be achieved only if they are cross-checked with the results of some experimental studies. Computer Aided Engineering analysis provides insights useful in designing parts, molds and molding processes. Using this method we can obtain information such as polymer melt filling patterns, weld line and air trap locations, required injection pressure and clamp tonnage, fiber orientation, cycle time, the final part shape and deformation and mechanical properties of molded parts. CAE technology helps us save time, money and raw material, as well as cuts scrap, reduces the rejection rate, improves product quality and ensures a smaller time-to-market. It is a useful method to approach most of the molding problems.

Accession Number: WOS:000290464600017

Language: English

Document Type: Proceedings Paper

Conference Title: 2nd International Conference on Manufacturing Engineering, Quality and Production Systems

Conference Date: SEP 03-05, 2010

Conference Location: Constantza Maritime Univ, Constantza, ROMANIA

Conference Host: Constantza Maritime Univ

Author Keywords: Polymeric material; molded parts; CAE analysis; residual stress; experiment; numerical model

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Publisher: WORLD SCIENTIFIC AND ENGINEERING ACAD AND SOC

Publisher Address: AG LOANNOU THEOLOGOU 17-23, 15773 ZOGRAPHOU, ATHENS, GREECE

Web of Science Categories: Computer Science, Interdisciplinary Applications; Engineering, Manufacturing

Research Areas: Computer Science; Engineering

IDS Number: BUV64

ISBN: 978-960-474-220-2

29-char Source Abbrev.: ELE COM ENG

Source Item Page Count: 6

Output Date: 2019-06-12

Record 44 of 50

Title: Soot Modeling in Diesel Engine

Author(s): Sabau, A (Sabau, Adrian); Oanta, E (Oanta, Emil)

Edited by: Panait C; Barsan E; Bulucea A; Mastorakis N; Long C

Source: ADVANCES IN ENVIRONMENTAL AND GEOLOGICAL SCIENCE AND ENGINEERING **Book Series:** International Conference on Environmental and Geological Science and Engineering-Proceedings **Pages:** 126-+ **Published:** 2010

Times Cited in Web of Science Core Collection: 3

Total Times Cited: 3

Usage Count (Last 180 days): 1

Usage Count (Since 2013): 5

Cited References: Hiroyasu H., 1983, B JSME, V26

Law Chung K, 2006, COMBUSTION PHYS

NAGLE J, 1962, 5TH P CARB C, V1, P154

PATTERSON MA, 1994, 940523 SAE

Poinsot T, 2005, THEORETICAL NUMERICA

Sabau A., 2007, THESIS U BRASOV TRAN

Sabau A., 2006, ANN MARITIME U CONST, V9, P82

STIESCH G, 2003, MODELING ENGINE SPRA

Cited Reference Count: 8

Abstract: This paper presents an advanced version of the original software developed by the author in order to simulate the combustion in the Diesel engines, focusing on simulate soot formation. Complex kinetic mechanisms are need for realistic modeling of shoot formations, but this is applicable only for simple flame computations (e.g. one dimensional, laminar, etc.). For real turbulent flame calculations, their use is impractical, due to the complexity of the interacting processes (turbulence, radiation, heat transfer, etc.). A model derived by systematic reduction of multi-step chemistry is used. This reduction is based on the partial equilibrium assumption of the considered elementary reactions using the skeletal chemistry for n-decan for ignition, combustion and emissions. Subsequently, predictions of heat release rate, as well as NO and soot emissions are compared with experimental data. It is demonstrated that the model can predict the rate of heat release and engine performance with high fidelity. However, additional effort is required to enhance the fidelity of NO and soot predictions across a wide range

Accession Number: WOS:000302000200025

Language: English

Document Type: Proceedings Paper

Conference Title: 3rd International Conference on Environmental and Geological Science and Engineering (EG 10)

Conference Date: SEP 03-05, 2010

Conference Location: Constantza Maritime Univ, Constanta, ROMANIA

Conference Host: Constantza Maritime Univ

Author Keywords: soot formation; soot oxidation; NOx; fuel spray; kinetic reaction

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Reprint Address: Sabau, A (reprint author), Maritime Univ Constantza, Dept Naval Mech Engrn, Mircea Cel Batran St 104, Contantza, Romania.

E-mail Addresses: ady.sabau@gmail.com; eoanta@yahoo.com

Publisher: WORLD SCIENTIFIC AND ENGINEERING ACAD AND SOC

Publisher Address: AG LOANNOU THEOLOGOU 17-23, 15773 ZOGRAPHOU, ATHENS, GREECE

Web of Science Categories: Engineering, Environmental; Engineering, Geological

Research Areas: Engineering

IDS Number: BZM15

ISSN: 1792-4685

ISBN: 978-960-474-221-9

29-char Source Abbrev.: INT CONF ENVIR GEOL

Source Item Page Count: 2

Output Date: 2019-06-12

Record 45 of 50

Title: ON THE PATH TO A PROJECT MANAGEMENT APPROACH IN THE HIGHER EDUCATION

Author(s): Oanta, EM (Oanta, Emil M.)

Edited by: Frunzeti T; Hanganu M

Source: EUROPEAN SECURITY AND DEFENCE IN THE CONTEXT OF THE ECONOMIC AND FINANCIAL CRISIS **Pages:** 71-76 **Published:** 2010

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 0

Cited References: Oanta Emil., 2009, P BALK REG C ENG BUS, VI, P174

Oanta Emil, 2008, PERFECTIONAREA MANAG

Oanta Emil, 2008, P 16 C MET SAF SEC Q, P479

Oanta Emil, 2005, EFECTE EC ALE IMPLEM

Toffler A, 1980, 3 WAVE

Cited Reference Count: 5

Abstract: Some of the main features of the current conditions are:

A highly dynamic system;

the volume of information doubles every 2 years;

graduates must solve problems in areas they are not aware of;

globalization.

According to the job market feedback, universities fail to respond to these new demands.

The main question is how the educational system must be adapted in order to meet these new requirements. Some of the strategic solutions might be used extensively for the Project Management principles in the restructuring of the universities.

The lower level policies proposed are:

increased flexibility;

stronger transborder competencies;

extensive use of visual communication;

multidisciplinarity;

The actual educational system is designed to respond to these demands but there are still many things to be done.

Accession Number: WOS:000392673600012

Language: English

Document Type: Proceedings Paper

Conference Title: 6th International Conference Strategies XXI

Conference Date: APR 15-16, 2010

Conference Location: Carol I Natl Defence Univ, Bucharest, ROMANIA

Conference Sponsors: Carol I Natl Defence Univ

Conference Host: Carol I Natl Defence Univ

Author Keywords: project management; education; flexibility; policies

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Kudriavtseva, Elena Igorevna	C-4057-2016	0000-0003-3063-1156

Publisher: CAROL I NATL DEFENSE UNIV

Publisher Address: PANDURI STR NO 68-72, SECTOR 5, BUCHAREST, 00000, ROMANIA

Web of Science Categories: Economics; Political Science

Research Areas: Business & Economics; Government & Law

IDS Number: BG8RG

ISBN: 978-973-663-843-5

Source Item Page Count: 6

Output Date: 2019-06-12

Record 46 of 50

Title: COMPUTER BASED INSTRUMENTS IN TEACHING STRENGTH OF MATERIALS

Author(s): Oanta, E (Oanta, Emil)

Edited by: Rusu C

Source: QUALITY MANAGEMENT IN HIGHER EDUCATION, VOL 2 **Pages:** 579-582 **Published:** 2010

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 1

Usage Count (Since 2013): 1

Cited References: NITA A, 2009, REV MAT PLASTICE, P69

Oanta E, 2009, OPTOELECTRON ADV MAT, V3, P1226

OANTA E, 2009, P 20 DAAAM WORLD S V, P625

OANTA E, 2009, P 2 INT MULT ENG TEC

OANTA E, 2009, DAAAM INT SCI BOOK, pCH40

OANTA E, 2007, COMPUTER AIDED ADV S
Oanta Emil., 2009, P BALK REG C ENG BUS, VI, P174

Cited Reference Count: 7

Abstract: Computer instruments are used to present visual information employed to educate the way the student is reasoning with the technical information and also to offer a profound analytic comprehension of the concepts. Once the original software applications are created, they can be used in education, design and research. Computer is also an integrating environment, ideal for knowledge refinement, on the path to the creation of hybrid models. Latest information technologies and artificial intelligence offer an inspiring environment which is not used in an effective way yet. Using computer based instruments along the years, a better involvement and responsibility of the students can be noticed who are consequently prepared to understand the scientific background of the simulators they will use in the next years. Finally, computer based instruments are an effective support in educating students who will become open-minded graduates, capable to deal with new situations in a creative way.

Accession Number: WOS:000288291700145

Language: English

Document Type: Proceedings Paper

Conference Title: 6th International Seminar on the Quality Management in Higher Education

Conference Date: JUL 08-09, 2010

Conference Location: Tulcea, ROMANIA

Conference Sponsors: Minist Educ Res Youth & Sports, Dimitrie Cantemir Univ, Sif Moldova, SC Leineweber Ro SRL, SC Doipitici SRL

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Publisher: UNIV TECH GHEORGHE ASACHI IASI

Publisher Address: ADRESA BD DIMITRIE MANGERON, NR 67, IASI, 700050, ROMANIA

Web of Science Categories: Education & Educational Research; Social Sciences, Interdisciplinary

Research Areas: Education & Educational Research; Social Sciences - Other Topics

IDS Number: BTW63

ISBN: 978-973-662-568-8

Source Item Page Count: 4

Output Date: 2019-06-12

Record 47 of 50

Title: An original method to compute the stresses in applied elasticity

Author(s): Oanta, E (Oanta, E.); Nita, A (Nita, A.)

Source: OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS **Volume:** 3 **Issue:** 11 **Pages:** 1226-1230 **Published:** NOV 2009

Times Cited in Web of Science Core Collection: 5

Total Times Cited: 5

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 3

Cited References: OANTA E, 1998, INT S MAR TECHN MAN, V2, P159

OANTA E, ID1223 CNCSIS NAT U

Cited Reference Count: 2

Abstract: The paper presents an original method employed to compute the normal and tangential stresses generated by shear forces and bending moments. The method uses an algorithmic approach together with concepts from elasticity, analitical geometry, numerical methods and computer programming. A boolean algebra was created which uses simple shapes as basic elements employed in upper level operations. It was conceived an algorithm which offers the most relevant values of the stresses, based on a set of points located on the simple shaped bodies which are subjected to complex filtering conditions at a later stage. The method was implemented in an 12000 computer code lines application.

Accession Number: WOS:000273207200021

Language: English

Document Type: Article

Author Keywords: Applied elasticity; Bool algebra; Algorithms; Stresses

Addresses: [Oanta, E.; Nita, A.] Constanta Maritime Univ, Constanta 900663, Romania.

Reprint Address: Oanta, E (reprint author), Constanta Maritime Univ, 104 Mircea Cel Batran Str, Constanta 900663, Romania.

E-mail Addresses: eoanta@yahoo.com

Publisher: NATL INST OPTOELECTRONICS

Publisher Address: 1 ATOMISTILOR ST, PO BOX MG-5, BUCHAREST-MAGURELE 76900, ROMANIA

Web of Science Categories: Materials Science, Multidisciplinary; Optics

Research Areas: Materials Science; Optics

IDS Number: 538TP

ISSN: 1842-6573

eISSN: 2065-3824

29-char Source Abbrev.: OPTOELECTRON ADV MAT

ISO Source Abbrev.: Optoelectron. Adv. Mater.-Rapid Commun.

Source Item Page Count: 5

Funding:

Funding Agency	Grant Number
National University Research Council (CNCSIS), Romania	

Several ideas presented in the paper are the result of the "Computer Aided Advanced Studies in Applied Elasticity from an Interdisciplinary Perspective" ID1223 scientific research project, under the supervision of the National University Research Council (CNCSIS), Romania, [3].

Output Date: 2019-06-12

Record 48 of 50

Title: INTERPOLATION AND COMPUTER BASED MODELS

Author(s): Gavrilă, G (Gavrilă, Gabriela); Oanta, E (Oanta, Emil)

Edited by: Katalinic B

Source: ANNALS OF DAAAM FOR 2009 & PROCEEDINGS OF THE 20TH INTERNATIONAL DAAAM SYMPOSIUM **Book Series:** Annals of DAAAM and Proceedings **Volume:** 20 **Pages:** 579-580 **Published:** 2009

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 0

Cited References: GAVRILA G, 2004, THESIS BABES BOLYAI

GAVRILA G, 2001, THESIS U CLUJ NAPOCA

GAVRILA G, 2005, THESIS BABES BOLYAI

GAVRILA G, 2004, THESIS U CLUJ NAPOCA

Oanta E, 2007, THESIS ACAD EC STUDI

OANTA E, 2009, 2 INT MULT ENG TECHN

OANTA E, 2001, THESIS POLITEHNICA U

OANTA E, 2007, COMPUTER AIDED ADV S

OANTA E, 2007, P 12 INT C INT MAR A, V2, P1095

Cited Reference Count: 9

Abstract: In the class of the investigation instruments offered by the numerical analysis, a particular role is performed by the interpolation methods. We can notice that most of the so-called classical analytic models can nowadays be used in computer based approaches as components of some more complex hybrid models. Interpolation, as a part of the numerical methods is used in all the sub-models of a complex model and the performance of the implementations have an important overall influence. The paper presents several ideas regarding the interpolation instruments employed in computer based models in engineering, weak point of some software applications which offer this kind of facilities and functionalities which should be implemented in the next generation software.

Accession Number: WOS:000282335600290

Language: English

Document Type: Proceedings Paper

Conference Title: 20th International Danube-Adria-Association-for-Automation-and-Manufacturing Symposium

Conference Date: NOV 25-28, 2009

Conference Location: Vienna, AUSTRIA

Conference Sponsors: Danube Adria Assoc Automat & Mfg Int Vienna, Vienna Univ Technol, Univ Appl Sci Technikum Vienna, Austrian Soc Engineers & Architects

Author Keywords: interpolation; numerical analysis; computer models

Publisher: DAAAM INT VIENNA

Publisher Address: VIENNA UNIV TECHNOLOGY, KARLSPLATZ 13, WIEN, A-1040, AUSTRIA

Web of Science Categories: Automation & Control Systems; Engineering, Manufacturing

Research Areas: Automation & Control Systems; Engineering

IDS Number: BRC23

ISSN: 1726-9679

ISBN: 978-3-901509-70-4

29-char Source Abbrev.: ANN DAAAM

Source Item Page Count: 2

Output Date: 2019-06-12

Record 49 of 50

Title: COMPUTER CODE FOR COMBUSTION MODELLING IN DIESEL ENGINES

Author(s): Sabau, A (Sabau, Adrian); Dumitrache, C (Dumitrache, Constantin); Barhalescu, M (Barhalescu, Mihaela); Oanta, E (Oanta, Emil)

Edited by: Katalinic B

Source: ANNALS OF DAAAM FOR 2009 & PROCEEDINGS OF THE 20TH INTERNATIONAL DAAAM SYMPOSIUM **Book Series:** Annals of DAAAM and Proceedings **Volume:** 20 **Pages:** 617-618 **Published:** 2009

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 0

Cited References: Law Chung K, 2006, COMBUSTION PHYS

Oanta E, 2007, THESIS ACAD EC STUDI

OANTA E, 2007, ID1223 CNC SIS SCI RE

Poinsot T, 2005, THEORETICAL NUMERICA

Sabau A., 2006, ANN MARITIME U CONST, V9, P82

Sabau A., 2007, THESIS TRANSILVANIA

STIESCH G, 2003, MODELING ENGINE SPRA

Cited Reference Count: 7

Abstract: This paper presents an original computer code which solves the equations of transient multicomponent chemically reactive fluid dynamics, together with the equations which describe the dynamics of an evaporating liquid spray. Code is a time-marching finite-difference that uses an ICE-ALE partially implicit numerical scheme with spatial differences for a generalized two-dimensional mesh of arbitrary quadrilaterals.

Accession Number: WOS:000282335600309

Language: English

Document Type: Proceedings Paper

Conference Title: 20th International Danube-Adria-Association-for-Automation-and-Manufacturing Symposium

Conference Date: NOV 25-28, 2009

Conference Location: Vienna, AUSTRIA

Conference Sponsors: Danube Adria Assoc Automat & Mfg Int Vienna, Vienna Univ Technol, Univ Appl Sci Technikum Vienna, Austrian Soc Engineers & Architects

Author Keywords: spray; kinetic; equilibrium; turbulent; stochastic

Author Identifiers:

Author	Web of Science ResearcherID	ORCID Number
Dumitrache, Constantin L	D-4823-2009	

Publisher: DAAAM INT VIENNA

Publisher Address: VIENNA UNIV TECHNOLOGY, KARLSPLATZ 13, WIEN, A-1040, AUSTRIA

Web of Science Categories: Automation & Control Systems; Engineering, Manufacturing

Research Areas: Automation & Control Systems; Engineering

IDS Number: BRC23

ISSN: 1726-9679

ISBN: 978-3-901509-70-4

29-char Source Abbrev.: ANN DAAAM

Source Item Page Count: 2

Output Date: 2019-06-12

Record 50 of 50

Title: DATA STRUCTURE EMPLOYED IN MECHANICAL ENGINEERING SOFTWARE INSTRUMENTS

Author(s): Oanta, E (Oanta, Emil); Dumitrache, C (Dumitrache, Constantin); Barhalescu, M (Barhalescu, Mihaela); Sabau, A (Sabau, Adrian)

Edited by: Katalinic B

Source: ANNALS OF DAAAM FOR 2009 & PROCEEDINGS OF THE 20TH INTERNATIONAL DAAAM SYMPOSIUM **Book Series:** Annals of DAAAM and Proceedings **Volume:** 20 **Pages:** 625-626 **Published:** 2009

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 0

Cited References: Barhalescu M., 2007, THESIS U IASI

DUMITRACHE C, 2000, THESIS U IASI

Oanta E, 2007, THESIS ACAD EC STUDI

OANTA E, 2007, ID1223 CNC SIS NAT U

Oanta E, 2004, P 5 INT C QUAL REL M, P265

Oanta E., 2001, THESIS U BUCHAREST

OANTA E, 2007, 11 WORLD MULT SYST C, P384

OANTA E, 1999, 1999 ASME DES ENG TE

OANTA E, 2007, P 12 INT C INT MAR A, V2, P1095

Sabau A., 2007, THESIS U BRASOV

Susan M, 2008, J OPTOELECTRON ADV M, V10, P1425

Cited Reference Count: 11

Abstract: The paper is based on the long run concern of the authors regarding the interdisciplinary modeling, the original contributions consisting of concepts, analyses, methods, models, libraries of software, computer based models in several disciplines and domains of science. The results of the studies which used these original software instruments were confirmed by the experiments and by the recognition of the scientific international environment. Last but not least, in this control vs. chaos actual struggle, new intelligent instruments are required in order to understand, to manage and to predict the phenomena, our accomplishments being dedicated to this direction of development.

Accession Number: WOS:000282335600313

Language: English

Document Type: Proceedings Paper

Conference Title: 20th International Danube-Adria-Association-for-Automation-and-Manufacturing Symposium

Conference Date: NOV 25-28, 2009

Conference Location: Vienna, AUSTRIA

Conference Sponsors: Danube Adria Assoc Automat & Mfg Int Vienna, Vienna Univ Technol, Univ Appl Sci Technikum Vienna, Austrian Soc Engineers & Architects

Author Keywords: computer; method; model; knowledge; integration

Author Identifiers:

Author	Web of Science ResearcherID	ORCID Number
Dumitrache, Constantin L	D-4823-2009	

Publisher: DAAAM INT VIENNA

Publisher Address: VIENNA UNIV TECHNOLOGY, KARLSPLATZ 13, WIEN, A-1040, AUSTRIA

Web of Science Categories: Automation & Control Systems; Engineering, Manufacturing

Research Areas: Automation & Control Systems; Engineering

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Record 1 of 15

Title: IMPROVING CORROSION RESISTANCE OF METALLIC MATERIALS BY ELECTRICAL DISCHARGES IN IMPULSES**Author(s):** Barhalescu, M (Barhalescu, Mihaela); Dumitrache, C (Dumitrache, Constantin); Oanta, E (Oanta, Emil); Sabau, A (Sabau, Adrian)**Edited by:** Katalinic B**Source:** ANNALS OF DAAAM FOR 2009 & PROCEEDINGS OF THE 20TH INTERNATIONAL DAAAM SYMPOSIUM **Book Series:** Annals of DAAAM and Proceedings **Volume:** 20 **Pages:** 675-676 **Published:** 2009**Times Cited in Web of Science Core Collection:** 0**Total Times Cited:** 0**Usage Count (Last 180 days):** 0**Usage Count (Since 2013):** 0**Cited References:** Barhalescu M., 2007, PROT COAT THIN FILMS

Barhalescu M. L., 2007, THESIS JASSY

Marcus P, 2002, CORROSION MECH THEOR

OANTA E, 2007, COMPUTER AIDED ADV S

POP D, 1999, B I POLITEHNIC, P95

1991, USTANOVSKA ELITRON 2

Cited Reference Count: 6**Abstract:** The paper presents the research done by the authors in order to cover with superficial metallic layers, some OL37 carbon steel mechanical parts, by the use of some electrodes made of a corrosion resistant material (Cu). The corrosion resistance of the experimental layers was obtained using the polarization curves method. The superficial layers subjected to electrochemical corrosion were analyzed by the use of an atomic force microscope. The investigations proved an improvement of the superficial layers quality in regard to the thermodynamics corrosion probability.**Accession Number:** WOS:000282335600338**Language:** English**Document Type:** Proceedings Paper**Conference Title:** 20th International Danube-Adria-Association-for-Automation-and-Manufacturing Symposium**Conference Date:** NOV 25-28, 2009**Conference Location:** Vienna, AUSTRIA**Conference Sponsors:** Danube Adria Assoc Automat & Mfg Int Vienna, Vienna Univ Technol, Univ Appl Sci Technikum Vienna, Austrian Soc Engineers & Architects**Author Keywords:** superficial layers; corrosion; structural analysis**Author Identifiers:**

Author	Web of Science ResearcherID	ORCID Number
Dumitrache, Constantin L	D-4823-2009	

Publisher: DAAAM INT VIENNA**Publisher Address:** VIENNA UNIV TECHNOLOGY, KARLSPLATZ 13, WIEN, A-1040, AUSTRIA**Web of Science Categories:** Automation & Control Systems; Engineering, Manufacturing**Research Areas:** Automation & Control Systems; Engineering**IDS Number:** BRC23**ISSN:** 1726-9679**ISBN:** 978-3-901509-70-4**29-char Source Abbrev.:** ANN DAAAM**Source Item Page Count:** 2**Output Date:** 2019-06-12

Record 2 of 15

Title: APPLICATION OF A VERSATILE DATA STRUCTURE IN COMPUTATIONAL FLUID DYNAMICS**Author(s):** Oanta, E (Oanta, Emil); Barhalescu, M (Barhalescu, Mihaela); Sabau, A (Sabau, Adrian); Dumitrache, C (Dumitrache, Constantin)**Edited by:** Katalinic B**Source:** ANNALS OF DAAAM FOR 2009 & PROCEEDINGS OF THE 20TH INTERNATIONAL DAAAM SYMPOSIUM **Book Series:** Annals of DAAAM and Proceedings **Volume:** 20 **Pages:** 759-760 **Published:** 2009**Times Cited in Web of Science Core Collection:** 1**Total Times Cited:** 1**Usage Count (Last 180 days):** 0**Usage Count (Since 2013):** 3**Cited References:** BARHALESU M, 2007, THESIS GHEORGHE ASAC

DINESCU C, 1998, INT S MAR TECHN MAN, V2, P75

DINESCU C, 1999, B APPL COMPUTER MATH

DUMITRACHE C, 2000, THESIS GHEORGHE ASAC

NICOLESCU B, 1999, 1999 INT MECH ENG C

OANTA A, 2007, 2 INT MULT IN PRESS

Oanta E, 2007, THESIS ACAD EC STUDI

Oanta E, 2004, P 5 INT C QUAL REL M, P265

OANTA E, 2007, 11 WORLD MULT SYST C, P384

OANTA E, 2001, THESIS POLITEHNICA U

OANTA E, 1999, 1999 ASME DES ENG TE

OANTA E, 2007, COMPUTER AIDED STUDI

OANTA E, 2007, P 12 INT C INT MAR A, V2, P1095

Sabau A., 2007, THESIS TRANSILVANIA

Cited Reference Count: 14

Abstract: The paper presents applications of the matrix data structure in the computational fluid dynamics field. This data structure was conceived in order to have an instrument which integrates the matrix based approaches in science and to overcome some information technology constraints. Several libraries were developed in order to solve general problems, such as: numerical methods, graphical representations, interfaces between programming languages, etc. The numerical method employed to solve the computational fluid dynamics problems was the finite difference method, based on the aforementioned matrix data processing technique. Several CFD problems were solved and the original software applications were important instruments to understand, to study and to experiment the numerical aspects in this field of science.

Accession Number: WOS:000282335600380

Language: English

Document Type: Proceedings Paper

Conference Title: 20th International Danube-Adria-Association-for-Automation-and-Manufacturing Symposium

Conference Date: NOV 25-28, 2009

Conference Location: Vienna, AUSTRIA

Conference Sponsors: Danube Adria Assoc Automat & Mfg Int Vienna, Vienna Univ Technol, Univ Appl Sci Technikum Vienna, Austrian Soc Engineers & Architects

Author Keywords: data structure; software architecture; CFD

Author Identifiers:

Author	Web of Science ResearcherID	ORCID Number
Dumitrache, Constantin L	D-4823-2009	

Publisher: DAAAM INT VIENNA

Publisher Address: VIENNA UNIV TECHNOLOGY, KARLSPLATZ 13, WIEN, A-1040, AUSTRIA

Web of Science Categories: Automation & Control Systems; Engineering, Manufacturing

Research Areas: Automation & Control Systems; Engineering

IDS Number: BRC23

ISSN: 1726-9679

ISBN: 978-3-901509-70-4

29-char Source Abbrev.: ANN DAAAM

Source Item Page Count: 2

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Record 3 of 15

Title: SIMPLIFIED MODEL FOR COMBUSTION REACTIONS IN DIESEL ENGINE

Author(s): Sabau, A (Sabau, Adrian); Barhalescu, M (Barhalescu, Mihaela); Oanta, E (Oanta, Emil); Dumitrache, C (Dumitrache, Constantin)

Edited by: Katalinic B

Source: ANNALS OF DAAAM FOR 2009 & PROCEEDINGS OF THE 20TH INTERNATIONAL DAAAM SYMPOSIUM **Book Series:** Annals of DAAAM and Proceedings **Volume:** 20 **Pages:** 811-812 **Published:** 2009

Times Cited in Web of Science Core Collection: 2

Total Times Cited: 2

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 5

Cited References: Law Chung K, 2006, COMBUSTION PHYS

OANTA E, 2007, COMPUTER AIDED ADV S

Oanta E., 2007, THESIS ACAD ECONOMIC

Poinsot T, 2005, THEORETICAL NUMERICA

Sabau A., 2007, THESIS TRANSILVANIA

STIESCH G, 2003, MODELING ENGINE SPRA

Cited Reference Count: 6

Abstract: This paper presents an advanced version of the original software (Sabau, 2007) developed in order to simulate the combustion in the Diesel engines, focusing on the formation of the NOx. The most important feature of the software is the model derived by systematic reduction of multi-step chemistry which is used for the evaluation of main combustion products, dissociation product and the formation of the nitric oxide. Twelve species in ten equations are taken into account. Reduction is based on the partial equilibrium assumption of the considered elementary reactions using the extended Zeldovich mechanism which models the thermal formation of the nitric oxide.

Accession Number: WOS:000282335600406

Language: English

Document Type: Proceedings Paper

Conference Title: 20th International Danube-Adria-Association-for-Automation-and-Manufacturing Symposium

Conference Date: NOV 25-28, 2009

Conference Location: Vienna, AUSTRIA

Conference Sponsors: Danube Adria Assoc Automat & Mfg Int Vienna, Vienna Univ Technol, Univ Appl Sci Technikum Vienna, Austrian Soc Engineers & Architects

Author Keywords: kinetic; equilibrium; dissociation; NO

Author Identifiers:

Author	Web of Science ResearcherID	ORCID Number
Dumitrache, Constantin L	D-4823-2009	

Publisher: DAAAM INT VIENNA

Publisher Address: VIENNA UNIV TECHNOLOGY, KARLSPLATZ 13, WIEN, A-1040, AUSTRIA

Web of Science Categories: Automation & Control Systems; Engineering, Manufacturing

Research Areas: Automation & Control Systems; Engineering

IDS Number: BRC23

ISSN: 1726-9679

ISBN: 978-3-901509-70-4

29-char Source Abbrev.: ANN DAAAM

Source Item Page Count: 2

Output Date: 2019-06-12

Record 4 of 15

Title: RESIDUAL STRESSES MEASUREMENTS AT ULTRASONIC SUBMERGED ARC WELDED JOINTS

Author(s): Dumitrache, C (Dumitrache, Constantin); Sabau, A (Sabau, Adrian); Barhalescu, M (Barhalescu, Mihaela); Oanta, E (Oanta, Emil)

Edited by: Katalinic B

Source: ANNALS OF DAAAM FOR 2009 & PROCEEDINGS OF THE 20TH INTERNATIONAL DAAAM SYMPOSIUM **Book Series:** Annals of DAAAM and Proceedings **Volume:** 20 **Pages:** 819-820 **Published:** 2009

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 1

Usage Count (Since 2013): 4

Cited References: DUMITRACHE C, 2000, THESIS GHEORGE ASACH

DUMITRACHE C, 2002, P EE AE 2002 INT SCI, P127

OANTA E, 2007, COMPUTER AIDED ADV S

Rendler N. J., 1966, EXP MECH, V6, P577, DOI [10.1007/BF02326825, DOI 10.1007/BF02326825]

Susan M, 2008, J OPTOELECTRON ADV M, V10, P1425

WAYNE E, 1984, WELD INDUCED RESIDUA

1992, E837 ASTM

Cited Reference Count: 7

Abstract: The hole-drilling strain gage residual stress investigation reported in this paper was initiated to determine residual stress field in proximity to weld beads. The study was conducted on an ultrasonic welded joints prepared from Romanian "A" type naval steel plate samples. Experimental data demonstrates a step stress gradient in the vicinity of the weld bead. Residual stresses from the vicinity of weld bead are compressive because all the thin plates have low stiffness.

Accession Number: WOS:000282335600410

Language: English

Document Type: Proceedings Paper

Conference Title: 20th International Danube-Adria-Association-for-Automation-and-Manufacturing Symposium

Conference Date: NOV 25-28, 2009

Conference Location: Vienna, AUSTRIA

Conference Sponsors: Danube Adria Assoc Automat & Mfg Int Vienna, Vienna Univ Technol, Univ Appl Sci Technikum Vienna, Austrian Soc Engineers & Architects

Author Keywords: residual stresses; submerged arc welding device; ultrasonic welding; strain gage rosettes hottinger

Author Identifiers:

Author	Web of Science ResearcherID	ORCID Number
Dumitrache, Constantin L	D-4823-2009	

Publisher: DAAAM INT VIENNA

Publisher Address: VIENNA UNIV TECHNOLOGY, KARLSPLATZ 13, WIEN, A-1040, AUSTRIA

Web of Science Categories: Automation & Control Systems; Engineering, Manufacturing

Research Areas: Automation & Control Systems; Engineering

IDS Number: BRC23

ISSN: 1726-9679

ISBN: 978-3-901509-70-4

29-char Source Abbrev.: ANN DAAAM

Source Item Page Count: 2

Output Date: 2019-06-12

Record 5 of 15

Title: ULTRASONIC INFLUENCE ON MECHANICAL CHARACTERISTICS AND METALLOGRAPHY FOR NAVAL WELDED STEEL

Author(s): Dumitrache, C (Dumitrache, Constantin); Barhalescu, M (Barhalescu, Mihaela); Oanta, E (Oanta, Emil); Sabau, A (Sabau, Adrian)

Edited by: Katalinic B

Source: ANNALS OF DAAAM FOR 2009 & PROCEEDINGS OF THE 20TH INTERNATIONAL DAAAM SYMPOSIUM **Book Series:** Annals of DAAAM and Proceedings **Volume:** 20 **Pages:** 821-822 **Published:** 2009

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 0

Cited References: DUMITRACHE C, 2000, THESIS GHEORGE ASACH

DUMITRACHE C, 2002, P EE AE 2002 INT SCI, P127

MITELEA I, 1992, MAT HEAT TREATMENTS, P408

OANTA E, 2007, COMPUTER AIDED ADV S

SALAGEAN T, 1986, REV METALURGIA

Susan M, 2008, J OPTOELECTRON ADV M, V10, P1425

2006, 650712006 SR EN ISO

2002, 1000212002 SR EN

Cited Reference Count: 8

Abstract: The paper is based on the research studies, starting with residual stresses measurements and continuing with the ultrasonic influence on mechanical characteristics and metallography for Romanian naval welded steel. The purpose of this paper is to investigate ultrasonic welding (UW) at heat affected zone (HAZ). After classical welding (NW) this steel presents a uniform field of hardness, because it is a low-alloyed steel with a low carbon percentage. The alloying elements can produce carbides and nitrides which may cause problems. The comparison between NW and UW methods relieves essential changes of yield stress (R(p0.2)), ultimate elongation (A(5)), tensile strength (R(m)), bending impact energy (KV).

Accession Number: WOS:000282335600411

Language: English

Document Type: Proceedings Paper

Conference Title: 20th International Danube-Adria-Association-for-Automation-and-Manufacturing Symposium

Conference Date: NOV 25-28, 2009

Conference Location: Vienna, AUSTRIA

Conference Sponsors: Danube Adria Assoc Automat & Mfg Int Vienna, Vienna Univ Technol, Univ Appl Sci Technikum Vienna, Austrian Soc Engineers & Architects

Author Keywords: welding; cracks; microhardness; yield stress; tensile strength; metallography

Author Identifiers:

Author	Web of Science ResearcherID	ORCID Number
Dumitrache, Constantin L	D-4823-2009	

Publisher: DAAAM INT VIENNA

Publisher Address: VIENNA UNIV TECHNOLOGY, KARLSPLATZ 13, WIEN, A-1040, AUSTRIA

Web of Science Categories: Automation & Control Systems; Engineering, Manufacturing

Research Areas: Automation & Control Systems; Engineering

IDS Number: BRC23

ISSN: 1726-9679

ISBN: 978-3-901509-70-4

29-char Source Abbrev.: ANN DAAAM

Source Item Page Count: 2

Output Date: 2019-06-12

Record 6 of 15

Title: INTERNAL STRESS IN SUPERFICIAL LAYERS ON CARBON STEELS

Author(s): Barhalescu, M (Barhalescu, Mihaela); Oanta, E (Oanta, Emil); Sabau, A (Sabau, Adrian); Dumitrache, C (Dumitrache, Constantin)

Edited by: Katalinic B

Source: ANNALS OF DAAAM FOR 2009 & PROCEEDINGS OF THE 20TH INTERNATIONAL DAAAM SYMPOSIUM Book Series: Annals of DAAAM and Proceedings Volume: 20 Pages: 845-846 Published: 2009

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 0

Cited References: Chatterjee SK, 2008, SPRINGER SER MATER S, V113, P1

Ladd M. F. C., 1985, STRUCTURE DETERMINAT

OANTA E, 2007, COMPUTER AIDED ADV S

PAULEAU Y, 1994, MAT PROCESSES SURFAC

1991, USTANOVSKA ELITRON 2

Cited Reference Count: 5

Abstract: The deposition of Ti15Co6 and WCo8 with electrical discharge method on carbon steel is easy to be done with small expenses. Internal stress and mosaic blocks dimensions determination, are measured in superficial layer microstructure using X-ray diffraction. Purpose of the paper is to analyze issues related to structural changes that occur in the formation of superficial layers by a electric discharge. Exact knowledge of the factors influencing the formation of surface layers and their influence is very important. Determining and analyzed how to act these factors can be modified by technological requirements, both the structure and properties of the new superficial layers. The analysis of the internal second rank stresses in superficial layers resulted by the use of the electrical discharge method has demonstrated that the increase of the working conditions leads to greater values of the internal stresses.

Accession Number: WOS:000282335600423

Language: English

Document Type: Proceedings Paper

Conference Title: 20th International Danube-Adria-Association-for-Automation-and-Manufacturing Symposium

Conference Date: NOV 25-28, 2009

Conference Location: Vienna, AUSTRIA

Conference Sponsors: Danube Adria Assoc Automat & Mfg Int Vienna, Vienna Univ Technol, Univ Appl Sci Technikum Vienna, Austrian Soc Engineers & Architects

Author Keywords: layer; diffraction; micro-stress; blocks

Author Identifiers:

Author	Web of Science ResearcherID	ORCID Number
Dumitrache, Constantin L	D-4823-2009	

Publisher: DAAAM INT VIENNA

Publisher Address: VIENNA UNIV TECHNOLOGY, KARLSPLATZ 13, WIEN, A-1040, AUSTRIA

Web of Science Categories: Automation & Control Systems; Engineering, Manufacturing

Research Areas: Automation & Control Systems; Engineering

IDS Number: BRC23

ISSN: 1726-9679

ISBN: 978-3-901509-70-4

29-char Source Abbrev.: ANN DAAAM

Source Item Page Count: 2

Output Date: 2019-06-12

Record 7 of 15

Title: INNOVATIVE ENGINEERING BASED ON VISUAL INFORMATION

Author(s): Oanta, E (Oanta, Emil); Dinu, S (Dinu, Simona); Tamas, I (Tamas, Ilie); Odagescu, I (Odagescu, Ioan)

Edited by: Oprean C; Grunwald N; Kifor CV

Source: BALKAN REGIONAL CONFERENCE ON ENGINEERING AND BUSINESS EDUCATION & ICEBE, VOLS I AND II, CONFERENCE PROCEEDINGS **Pages:**

174-177 **Published:** 2009

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 3

Cited References: ANTONACCI D, EFFECTIVE TEACHING P

Graham C, 7 PRINCIPLES EFFECTI

OANTA E, 2009, P 9 INT C INF EC ED, P711

Oanta E, 2007, THESIS ACAD EC STUDI

OANTA E, 2009, 2 INT MULT ENG TECHN

OANTA E, 2001, THESIS POLITECHNICA

OANTA E, 2008, INT MAR LECT ASS 16, P479

OANTA E, 2007, 11 WORLD MULT SYST C, P384

OANTA E, 2007, COMPUTER AIDED ADV S

OANTA E, 2007, P 12 INT C INT MAR A, V2, P1095

Cited Reference Count: 10

Abstract: According to the actual main trends identified by us, globalization and extensive use of visual/symbolic communication, education technologies should be enhanced in order to take advantage of the minds of the students which are prepared to acquire the information in a new way, which is the visual channel of communication. One can notice the several classes of visual information in engineering, which is useful from several points of view, details presented in the paper. There aren't yet theories regarding the optimization of the learning process by the use of the visual information, the reference being considered the Pimsleur method. Innovative engineering relies today on the creativity of the students that can be stimulated using visual information and visual communication, which should be extensively used in teaching.

Accession Number: WOS:000273607900037

Language: English

Document Type: Proceedings Paper

Conference Title: 5th Balkan Region Conference on Engineering and Business Education/2nd International Conference on Engineering and Business Education

Conference Date: OCT 15-17, 2009

Conference Location: Lucian Blaga Univ, Sibiu, ROMANIA

Conference Sponsors: Hochschule Wismar, Univ Technol, Business & Design

Conference Host: Lucian Blaga Univ

E-mail Addresses: eoanta@yahoo.com; ilie.tamas@gmail.com

Publisher: LUCIAN BLAGA UNIV SIBIU, ROMANIA

Publisher Address: FAC ECON SCI, STR CALEA DUMBRAVII NO 17, SIBIU, 00000, ROMANIA

Web of Science Categories: Business; Economics; Education & Educational Research; Education, Scientific Disciplines; Engineering, Electrical & Electronic; Management

Research Areas: Business & Economics; Education & Educational Research; Engineering

IDS Number: BMU59

ISBN: 978-973-739-848-2

Source Item Page Count: 4

Output Date: 2019-06-12

Record 8 of 15

Title: ORIGINAL COMPUTER-BASED INSTRUMENTS IN MANAGEMENT

Author(s): Oanta, E (Oanta, Emil); Dinu, S (Dinu, Simona); Tamas, I (Tamas, Ilie); Odagescu, I (Odagescu, Ioan)

Book Group Author(s): Lucian Blaga Univ Sibiu, Fac Econ Sci

Source: INDUSTRIAL REVOLUTIONS, FROM THE GLOBALIZATION AND POST-GLOBALIZATION PERSPECTIVE, VOL V: ECONOMIC INFORMATION TECHNOLOGY IN THE AVANT-GARDE OF CHANGE **Pages:** 166-174 **Published:** 2009

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 1

Usage Count (Since 2013): 4

Cited References: DINU S, 2008, REV MANAGEMENT EC EN, V7

OANTA E, 2006, SCI B TRANSILVANIA U, P343

Oanta E, 2007, THESIS ACAD EC STUDI

OANTA E, 2007, P 12 INT C INT MAR A, P1095

OANTA E, 2001, THESIS POLITECHNICA

Oanta E, 2004, P 5 INT C QUAL REL M, P265

OANTA E, 2006, ICBE2006 INT C BUS E, P302

OANTA E, 2007, COMPUTER AIDED ADV S

OANTA E, 1999, SCI REV OVIDIUS U CO, V1, P253

OANTA E, 2007, CAS STUD 11 WORLD MU

OANTA E, 1999, 1999 ASME DES ENG TE

Oanta E, 2006, BUSINESS EXCELLENCE, P296

VUCINIC D, 2005, FINAL REPORT LASCOT

Cited Reference Count: 13

Abstract: The paper is the result of more than 25 years of computer modeling in different domains of the science, the results consisting of more than 120 000 computer code lines in several software applications.

The complex actual world requires intelligent instruments in order to understand, to manage and to predict the phenomena. Science offered, so far, instruments to explore the world but the actual dynamic conditions employ original multidisciplinary approaches based on mathematical methods and algorithms.

The most complex models take into consideration the sustainable development level connected to the lower levels consisting of economic and engineering fields. There are also other approaches which connect economics to engineering and other domains that are apparently completely different.

The development of a common platform employed to create models in different fields of science is a long run concern of the authors. Mathematics and

computer science are the basic layers of the study which was developed according to the requirements of several doctoral studies in different fields of science. The solution was to create a matrix-based library which includes numerical methods modules, graphical facilities and interfaces which allows a model designer to create a new application in a fast and facile way. This original solution was used along the time with significant results, in different fields of science, as well as in multidisciplinary approaches. Latest models are used to solve complex problems, such as: crisis management, probabilistic models and automatic design.

Last but not least, the libraries already developed are used to offer a new youth to classic technical disciplines because of the computer-based approach which is the main instrument to create the according analytical model. Based on these original contributions managers can use complex instruments in the decision making process.

Accession Number: WOS:000287984500023

Language: English

Document Type: Proceedings Paper

Conference Title: 16th International Economic Conference - IECS 2009

Conference Date: MAY 07-08, 2009

Conference Location: Sibiu, ROMANIA

Author Keywords: computer; method; model; multidisciplinary; inter-domain approaches

Addresses: [Oanta, Emil; Dinu, Simona] Constanta Maritime Univ, Constanta, Romania.

E-mail Addresses: eoanta@yahoo.com; sedinu@yahoo.com; ilie.tamas@gmail.com; ioan.odagescu@ie.ase.ro

Publisher: LUCIAN BLAGA UNIV SIBIU, ROMANIA

Publisher Address: FAC ECON SCI, STR CALEA DUMBRAVII NO 17, SIBIU, 00000, ROMANIA

Web of Science Categories: Economics

Research Areas: Business & Economics

IDS Number: BTS72

ISBN: 978-973-739-775-1

Source Item Page Count: 9

Output Date: 2019-06-12

Record 9 of 15

Title: Virtual reality original instrument employed in crises management

Author(s): Oanta, E (Oanta, E.)

Edited by: Soares CG; Kolev PN

Source: MARITIME INDUSTRY, OCEAN ENGINEERING AND COASTAL RESOURCES, VOLS 1 AND 2 **Book Series:** Proceedings and Monographs in Engineering Water and Earth Sciences **Volume:** 1-2 **Pages:** 1095-1102 **Published:** 2008

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 1

Usage Count (Since 2013): 8

Cited References: OANTA E, 2006, ROCHI2006 3 NAT C HU, P141

VUCINIC D, 2005, LASCOT FINAL REPORT

*YUM INC, XJ3D TOOLK

Cited Reference Count: 3

Abstract: Our modern society must deal with several types of threats. Therefore, there were developed different strategies regarding the management of risks, emergencies and crises. The strategies expressed as directives and laws state that the prevention is the best way to avoid or minimize the effects of the crises. The use of the modern technologies in this field is a consequence of this "Security through Science" idea.

The paper presents an original concept-application consisting of more than 12000 computer code lines, which uses the virtual reality facilities as a support for the decision making process in crisis situations, for an oilspill scenario. Some of the results presented in the paper are the outcome of the "LASCOT - Large Scale Collaborative decision support Technology" project, which is an ITEA - Information Technology for European Advancement project.

Accession Number: WOS:000251918000138

Language: English

Document Type: Proceedings Paper

Conference Title: 12th International Congress of the International-Maritime-Association-of-the-Mediterranean

Conference Date: SEP 02-06, 2007

Conference Location: Varna, BULGARIA

Conference Sponsors: Int Maritime Assoc Mediterranean

Addresses: Constanta Maritime Univ, Constanta, Romania.

Reprint Address: Oanta, E (reprint author), Constanta Maritime Univ, Constanta, Romania.

Publisher: TAYLOR & FRANCIS LTD

Publisher Address: 11 NEW FETTER LANE, LONDON EC4P 4EE, ENGLAND

Web of Science Categories: Engineering, Industrial; Engineering, Marine; Engineering, Ocean

Research Areas: Engineering

IDS Number: BHA54

ISBN: 978-0-415-45523-7

29-char Source Abbrev.: PROC MONOGR ENG WATE

Source Item Page Count: 8

Output Date: 2019-06-12

Record 10 of 15

Title: Distributed 3D information visualization - Towards integration of the dynamic 3D graphics and web services

Author(s): Vucinic, D (Vucinic, Dean); Deen, D (Deen, Danny); Oanta, E (Oanta, Emil); Batarilo, Z (Batarilo, Zvonimir); Lacor, C (Lacor, Chris)

Edited by: Braz J; Ranchordas A; Araujo H; Jorge J

Source: ADVANCES IN COMPUTER GRAPHICS AND COMPUTER VISION **Book Series:** Communications in Computer and Information Science **Volume:** 4 **Pages:** 155-+ **Published:** 2007

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 0

Cited References: BLAIS C, 2002, P 2002 SUMM COMP SIM
DAASSI C, 2000, P 16 J BAS DONN AV B
HIBBARD W, 2000, PREPR C INT INF PROC
KISS S, 2003, P EUR 2003 MOD REAL
Vucinic D., 1992, AIAA 30 AER SCI M RE
Vucinic D., 2001, J VISUALIZATION, V4
VUCINIC D, 1991, VKI LECT SERIES COMP
VUORENMAA M, 2000, THESIS U TAMPERE FIN

Cited Reference Count: 8

Abstract: This paper focuses on visualization and manipulation of graphical content in distributed network environments. The developed graphical middleware and 3D desktop prototypes were specialized for situational awareness. This research was done in the LArge Scale COllaborative decision support Technology (LASCOT) project, which explored and combined software technologies to support human-centred decision support system for crisis management (earthquake, tsunami, flooding, airplane or oil-tanker incidents, chemical, radio-active or other pollutants spreading, etc.). The performed state-of-the-art review did not identify any publicly available large scale distributed application of this kind. Existing proprietary solutions rely on the conventional technologies and 2D representations. Our challenge was to apply the "latest" available technologies, such Java3D, X3D and SOAP, compatible with average computer graphics hardware. The selected technologies are integrated and we demonstrate: the flow of data, which originates from heterogeneous data sources; interoperability across different operating systems and 3D visual representations to enhance the end-users interactions.

Accession Number: WOS:000252603300010

Language: English

Document Type: Proceedings Paper

Conference Title: 1st Joint International Conference on Computer Vision Theory and Applications/Computer Graphics Theory and Applications

Conference Date: FEB 25-28, 2006

Conference Location: Setubal, PORTUGAL

Author Keywords: X3D graphics; distributed 3D content

Addresses: [Vucinic, Dean; Deen, Danny; Oanta, Emil; Batarilo, Zvonimir; Lacor, Chris] Vrije Univ Brussel, Fac Engn, Dept Mech Engn, Fluid Mech & Thermodynam Res Grp, Pl Laan 2, B-1050 Brussels, Belgium.

Reprint Address: Vucinic, D (reprint author), Vrije Univ Brussel, Fac Engn, Dept Mech Engn, Fluid Mech & Thermodynam Res Grp, Pl Laan 2, B-1050 Brussels, Belgium.

E-mail Addresses: dean@stro.vub.ac.be; danny@stro.vub.ac.be

Publisher: SPRINGER-VERLAG BERLIN

Publisher Address: HEIDELBERGER PLATZ 3, D-14197 BERLIN, GERMANY

Web of Science Categories: Computer Science, Artificial Intelligence; Imaging Science & Photographic Technology

Research Areas: Computer Science; Imaging Science & Photographic Technology

IDS Number: BHF10

ISSN: 1865-0929

ISBN: 978-3-540-75272-1

29-char Source Abbrev.: COMM COM INF SC

Source Item Page Count: 3

Funding:

Funding Agency	Grant Number
European ITEA program for enabling the LASCOT	
Belgium national authorities (IWT)	

We would like to thank the European ITEA program for enabling the LASCOT project and the Belgium national authorities (IWT) for financing it, as without their direct support this work could not be accomplished. In addition, we thank the LASCOT Consortium: Bull, THALES, XT-i, Capvidia, MULTITEL, IT-OPTICS and ACIC, because without them this project would not have existed.

We would also like to thank Tomasz Luniewski for putting forward the 3D dashboard concept and Jef Vanbockryck for the Webservice expertise.

Output Date: 2019-06-12

Record 11 of 15

Title: Management instruments which use probabilistic approaches. Case studies

Author(s): Oanta, E (Oanta, Emil); Odagescu, I (Odagescu, Ioan); Tamas, I (Tamas, Ilie)

Edited by: Callaos N; Lesso W; Zinn CD; Tominaga D; Hashimoto S; Huang SH; Truta M

Source: WMSCI 2007: 11TH WORLD MULTI-CONFERENCE ON SYSTEMICS, CYBERNETICS AND INFORMATICS, VOL IV, PROCEEDINGS **Pages:** 384-+ **Published:** 2007

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 4

Cited References: ERMAKOV SM, 1976, MONTE CARLO METHOD S
GEORGESCU H, 2002, INTRO JAVA UNIVERSE
Knuth D.E., 2002, ART COMPUTER PROGRAM, V2
OANTA E, 2004, MINIMIZATION ERRORS
OANTA E, 2006, ANN CONSTANTA MARITI, V9, P175
OANTA E, 2006, 12 INT C EC CYB SUST, P480
OANTA E, 2006, ANN CONSTANTA MARITI, V9, P181
OANTA E, 2004, PROBABILISTIC ALGORI
ODAGESCU I, 1980, ALGORITHMS OPTIMZATI
TAMAS I, 2003, DATABASE SYSTEMS VIS

Cited Reference Count: 10

Abstract: An actual concept in management is "Knowledge Based Business". It consists of management issues, and it is used to create reports which synthesize the rigor of academic analysis, the practical know-how of experienced managers and the inspiration of original thinkers. These reports, similar to the customized agendas for the board of directors, are designed to be a valuable resource to be used by senior managers, project managers and all members

of a management team. To create such accurate, easy to understand and instant generated reports there must be used instruments of analysis consisting of modules of customized software which solve a given problem, these programs being installed in the actual software system of the company. There is a wide range of problems which may be solved using probabilistic approaches. To have accurate results there must be studied which are the most appropriate pseudorandom numbers generators and the according randomness tests. Several original applications were created to study the problem of the pseudorandom numbers which is the basic level of this approach. In the paper are also presented two studies which use the Monte Carlo simulation method for two distinct problems:

evaluation of the performance of the actual equipment of the company;

evaluation of the coefficient of fidelity for a given product.

For each study there was created an original software which process the data and offers friendly output data: reports and graphs. These applications were used to evaluate the convergence of the results in different conditions: different sizes of sets of pseudorandom numbers resulted from different generators. Using these instruments there were identified some of the problems to be solved in order to define the strategy of a given computer aided probabilistic approach.

Accession Number: WOS:000254644200075

Language: English

Document Type: Proceedings Paper

Conference Title: 11th World Multi-Conference on Systemics, Cybernetics and Informatics/13th International Conference on Information Systems Analysis and Synthesis

Conference Date: JUL 08-11, 2007

Conference Location: Orlando, FL

Conference Sponsors: Int Inst Informat & System

Author Keywords: random number generators; randomness tests; Monte Carlo simulation method; case studies; original applications

Addresses: [Oanta, Emil] Constanta Maritime Univ, Marine Engr Dept, Constanta 900663, Romania.

[Odagescu, Ioan] Acad Econ Studies Bucharest, Econ Informat Dept, Bucharest 010552, Romania.

[Tamas, Ilie] Acad Econ Studies Bucharest, Informat Management Dept, Bucharest 010374, Romania.

Reprint Address: Oanta, E (reprint author), Constanta Maritime Univ, Marine Engr Dept, Constanta 900663, Romania.

Publisher: INT INST INFORMATICS & SYSTEMICS

Publisher Address: 14269 LORD BARCLAY DR, ORLANDO, FL 32837 USA

Web of Science Categories: Computer Science, Cybernetics; Computer Science, Information Systems; Mathematical & Computational Biology; Management; Operations Research & Management Science; Mathematics, Applied

Research Areas: Computer Science; Mathematical & Computational Biology; Business & Economics; Operations Research & Management Science; Mathematics

IDS Number: BHN85

ISBN: 978-1-934272-18-3

Source Item Page Count: 2

Output Date: 2019-06-12

Record 12 of 15

Title: AN ORIGINAL SOFTWARE FOR THE DECISION MAKING PROCESS

Author(s): Oanta, E (Oanta, Emil); Odagescu, I (Odagescu, Ioan); Tamas, I (Tamas, Ilie)

Edited by: Bratianu C; Lixandroi D; Pop NA

Source: BUSINESS EXCELLENCE **Pages:** 296-301 **Published:** 2006

Times Cited in Web of Science Core Collection: 1

Total Times Cited: 1

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 4

Cited References: Alexandru I., 1997, ALEGEREA SI UTILIZAR

CALCIU M, 1987, DECIZIA COMERT EXTER

DINESCU C, 1986, METODE MATEMATICE PE

KUMBETLIAN G, 1992, PROGRAM PENTRU REZOL, P22

OANTA E, 1988, PROIECTAREA UNUI AUT

OANTA E, 1975, 8 INT C IMAM IMAM 97

OANTA E, 2000, ANAL I MARINA CIVILA, V1, P47

RATIUSUCIU C, 2001, MODELAREA SI SIMULAR

STROE G, 1987, SISTEME INFORM SI AN

Cited Reference Count: 9

Abstract: The nowadays economy dynamic conditions require fast and effective decisions which must be based on objective conclusions resulted from computer aided analysis. In the paper is presented an original software employed to elaborate a decision in a certainty scenario model which is used in most of the practical cases. The set of criteria used to solve the multiple criteria decisional problem must be carefully chosen taking into account the principle of independence of the criteria one to the other. In the analysis there must be considered only the most relevant criteria because a large number of criteria lead to inconclusive results. Several lists of criteria should be used in order to have several suggestions offered by the hierarchies which result from the study. The program can be interfaced with different other applications using the 'matrix file' data structure already developed and tested. A relevant case study is also presented. There must be remarked that a computer code used in the decision making process cannot replace the human decision but it is an important instrument which can offer interesting suggestions, acting as a data processor.

Accession Number: WOS:000263952600049

Language: English

Document Type: Proceedings Paper

Conference Title: International Conference on Business Excellence

Conference Date: OCT 27-28, 2006

Conference Location: Brasov, ROMANIA

Conference Sponsors: Minist Educ & Res, Acad Econ Studies, Transilvania Univ Brasov, Pro Ideas srl

Author Keywords: variants of action; criteria; properties; option list; hierarchy

Publisher: EDITURA ASE

Publisher Address: PIATA ROMANA NR 6, SECTOR 1, BUCURESTI, 701631, ROMANIA

Web of Science Categories: Area Studies; Business; Economics

Research Areas: Area Studies; Business & Economics

IDS Number: BIZ40

ISBN: 978-973-594-847-4

Source Item Page Count: 6

Output Date: 2019-06-12

Record 13 of 15

Title: STUDY OF THE SENSITIVITY OF THE SOLUTION FOR A GIVEN PROBABILISTIC MODEL

Author(s): Odagescu, I (Odagescu, Ioan); Oanta, E (Oanta, Emil); Tamas, I (Tamas, Ilie)

Edited by: Bratianu C; Lixandroi D; Pop NA

Source: BUSINESS EXCELLENCE **Pages:** 302-307 **Published:** 2006

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 4

Cited References: Knuth D.E., 2002, ART COMPUTER PROGRAM, V2

OANTA E, 2004, MINIMIZATION ERRORS

OANTA E, 2006, ANN CONSTANTA MARITI, V9, P175

OANTA E, 2006, ANN CONSTANTA MARITI, V9, P181

OANTA E, 2004, PROBABILISTIC ALGORI

OANTA E, 2006, 12 INT C EC CYB SUST

Cited Reference Count: 6

Abstract: Monte Carlo models are reliable and general instruments but the solution depends on the number of "random" values employed in the study as well as the "quality" of the pseudorandom numbers. An accurate and rapid solution may be designed if a study of the pseudorandom numbers is performed and of the way how they influence the model. Being a large range of models, each study is customized for a certain problem or, at most, class of problems. A study like this is based on the variation of the solution for different random numbers input and it employs several investigating methods. Some of them are dedicated to the random numbers and others to the model itself. The final results are used to conceive and design accurate and fast software instruments for management.

Accession Number: WOS:000263952600050

Language: English

Document Type: Proceedings Paper

Conference Title: International Conference on Business Excellence

Conference Date: OCT 27-28, 2006

Conference Location: Brasov, ROMANIA

Conference Sponsors: Minist Educ & Res, Acad Econ Studies, Transilvania Univ Brasov, Pro Ideas srl

Author Keywords: random numbers; randomness tests; solution sensitivity; optimum solution

Addresses: [Odagescu, Ioan; Tamas, Ilie] Acad Econ Studies Bucharest, Bucharest, Romania.

Publisher: EDITURA ASE

Publisher Address: PIATA ROMANA NR 6, SECTOR 1, BUCURESTI, 701631, ROMANIA

Web of Science Categories: Area Studies; Business; Economics

Research Areas: Area Studies; Business & Economics

IDS Number: BIZ40

ISBN: 978-973-594-847-4

Source Item Page Count: 6

Output Date: 2019-06-12

Record 14 of 15

Title: Distributed 3D information visualization - Towards integration of the dynamic 3D graphics and web services

Author(s): Vucinic, D (Vucinic, Dean); Deen, D (Deen, Danny); Oanta, E (Oanta, Emil); Batarilo, Z (Batarilo, Zvonimir); Lacor, C (Lacor, Chris)

Book Group Author(s): INSTICC

Source: GRAPP 2006: PROCEEDINGS OF THE FIRST INTERNATIONAL CONFERENCE ON COMPUTER GRAPHICS THEORY AND APPLICATIONS **Pages:** 251-+ **Published:** 2006

Times Cited in Web of Science Core Collection: 0

Total Times Cited: 0

Usage Count (Last 180 days): 1

Usage Count (Since 2013): 1

Cited References: BLAIS C, 2002, P 2002 SUMM COMP SIM

DAASSI C, 2000, P 16 JOURN BAS DONN

HIBBARD W, 2000, C INT INF PROC SYST

KISS S, 2003, P EUR 2003 MOD REAL

Vucinic D., 1992, AIAA 30 AER SCI M RE

Vucinic D., 2001, J VISUALIZATION, V4

VUCINIC D, 1991, VKI LECT SERIES COMP

VUORENMAA M, 2000, THESIS U TAMPERE FIN

Cited Reference Count: 8

Abstract: This paper focuses on visualization and manipulation of graphical content in distributed network environments. The developed graphical middleware and 3D desktop prototypes were specialized for situational awareness. This research was done in the LArge Scale COllaborative decision support Technology (LASCOT) project, which explored and combined software technologies to support human-centred decision support system for crisis management (earthquake, tsunami, flooding, airplane or oil-tanker incidents, chemical, radio-active or other pollutants spreading, etc.). The performed state-of-the-art review did not identify any publicly available large scale distributed application of this kind. Existing proprietary solutions rely on the conventional technologies and 2D representations. Our challenge was to apply the "latest" available technologies, such Java3D, X3D and SOAP, compatible with average computer graphics hardware. The selected technologies are integrated and we demonstrate: the flow of data, which originates from heterogeneous data sources; interoperability across different operating systems and 3D visual representations to enhance the end-users interactions.

Accession Number: WOS:000241894900035

Language: English

Document Type: Proceedings Paper

Conference Title: 1st International Conference on Computer Graphics Theory and Applications (GRAPP 2006)

Conference Date: FEB 25-28, 2006

Conference Location: Setubal, PORTUGAL

Conference Sponsors: Inst Syst & Technologies Informat, Control & Commun, Setubal Polytechn Inst, Polytech Inst Setubal, Business Sch, Eurog & Portuguese Grp Comp Graph

Author Keywords: X3D graphics; distributed 3D content

Addresses: [Vucinic, Dean; Deen, Danny; Oanta, Emil; Batarilo, Zvonimir; Lacor, Chris] Vrije Univ Brussels, Fac Engr, Dept Mech Engr, Fluid Mech & Thermodynam Res Grp, Pleinlaan 2, B-1050 Brussels, Belgium.

Reprint Address: Vucinic, D (reprint author), Vrije Univ Brussels, Fac Engr, Dept Mech Engr, Fluid Mech & Thermodynam Res Grp, Pleinlaan 2, B-1050 Brussels, Belgium.

E-mail Addresses: dean@stro.vub.ac.be; danny@stro.vub.ac.be

Publisher: INSTICC-INST SYST TECHNOLOGIES INFORMATION CONTROL & COMMUNICATION

Publisher Address: AVENIDA D MANUEL L, 27A 2 ESQUERDO, SETUBAL, 2910-595, PORTUGAL

Web of Science Categories: Computer Science, Software Engineering

Research Areas: Computer Science

IDS Number: BFH73

ISBN: 972-8865-39-2

Source Item Page Count: 2

Output Date: 2019-06-12

Record 15 of 15

Title: Computer-aided approaches - a path to the information of synthesis in engineering

Author(s): Oanta, E (Oanta, E); Nicolescu, B (Nicolescu, B)

Edited by: McNulty GJ

Source: QUALITY, RELIABILITY, AND MAINTENANCE **Pages:** 265-268 **Published:** 2004

Times Cited in Web of Science Core Collection: 5

Total Times Cited: 5

Usage Count (Last 180 days): 0

Usage Count (Since 2013): 0

Cited References: OANTA E, 2002, ESDA2002 APM 024 6 B

OANTA E, 2003, SCI B CONSTANTA MARI, V3, P53

OANTA E, 1994, REZMAT ED S MARCH 05, P36

Cited Reference Count: 3

Abstract: The paper is an original point of view regarding the use of the computer in several domains: research, design, education. The ideas presented in the paper are the result of the experience acquired in the past 15 years during which the computer approaches were a constant concern of the authors. There is concluded that in this age of the machine the computer perspective must be a constant and serious concern to all the people involved in the upper hierarchy of the engineers, researchers, professors including in the re-design of the so-called classic disciplines.

Accession Number: WOS:000221524300062

Language: English

Document Type: Proceedings Paper

Conference Title: 5th International Conference on Quality, Reliability and Maintenance

Conference Date: APR 01-02, 2004

Conference Location: Univ Oxford, St Edmund Hall, Oxford, ENGLAND

Conference Sponsors: Inst Mech Engineers

Conference Host: Univ Oxford, St Edmund Hall

Addresses: Constanta Maritime Univ, Fac Marine Electromech, Constanta, Romania.

Reprint Address: Oanta, E (reprint author), Constanta Maritime Univ, Fac Marine Electromech, Constanta, Romania.

Publisher: PROFESSIONAL ENGINEERING PUBLISHING LTD

Publisher Address: 1 BIRDCAGE WALK, WESTMINSTER SW1H 9JJ, ENGLAND

Web of Science Categories: Engineering, Multidisciplinary

Research Areas: Engineering

IDS Number: BAC38

ISBN: 1-86058-440-3

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Page 1 (Records 1 -- 15)

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