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LEGAL PROVISIONS ON LAYTIME AND DEMURRAGE IN CHARTERPARTIES

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ABSTRACT

The article presents the main forms of calculating laytime and legal conditions for their suspension, contractual provisions on demurrage or, in the absence of express provisions in the charterparty for demurrage, conditions for damages for detention to become payable.

Keywords: *laytime; demurrage; damages for detention; charterparties;*

STANDARD CLAUSES OF VOYAGE CHARTER SHIFTING RISK OF DELAY AND READINESS

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ABSTRACT

The article aims to describe the main features of the standard clauses of voyage charterparties that transfer risk of delay. Use of the clauses relating either to a port or a specific berth determines the moment when laytime will begin to run. These clauses are an exception to the usually rule which states that the moment laytime starts to run is the moment notice of readiness is given.

Keywords: *clauses requiring charterer to nominate a reachable berth; clause time lost waiting for a berth; time to count weather in berth or not/ time to count weather in port or not clauses; clauses designed for specific ports; notice of readiness.*

LEGAL IMPLICATIONS OF THE VOYAGE CHARTERPARTY PERFORMANCE

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ABSTRACT

This Article aims at present the role of the master as agent of necessity for the shipowner. Based on jurisprudential decisions it also presents the division of responsibility in case of discharging operations and reallocation of risk by agreement which transfers responsibility for loading, stowage and discharge operations from the shipowners to shippers, charterers or consignees.

In practice, problems result for the charterer where he delivers the goods to another person than one entitled or when he confronts the situation of the absence of any consignee ready to receive the cargo. Last but not least, problems arise where goods with similar condition, destined for different consignees, are shipped together and lose their identity during the voyage due to the obliteration of leading marks or becoming irretrievably intermixed with other cargo.

Keywords: *agent of necessity; division of responsibility; delivery of goods.*

BEHIND THE THEORY OF SAFETY AGAINST CAPSIZING AND ASSESSING SHIP STABILITY

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ABSTRACT

The paper presents considerations about the mathematical modelling and the use in assessment of ship stability. Stability criterion is defined in the context of an expression. The connection between that stability criteria and the safety

against capsizing is expressed as ordinal measures. The paper proposed a classification of stability criteria according with their possibility of dissimilarity.

Keywords: *safety, capsizing, stability, criteria.*

ROMANIAN NAVAL AUTHORITY AND THE MARINE ENVIRONMENT PROTECTION

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ABSTRACT

The article presented is intended to highlight the activity and efforts developed by the Romanian Naval Authority (RNA) in order to fulfil the obligations assumed by Romania and required by the IMO Conventions and EU Directives. The organizational structure reveals that RNA is complying with the new requirements and recommendations regarding the pollution prevention and pollution response. It is stressed the good cooperation with the International Maritime Organization (IMO) and the European Maritime Safety Agency (EMSA) and the important achievements concerning the application and the enforcement of the MARPOL requirements in the area of jurisdiction has been brought. The new equipment and advantages of the CleanSeaNet System is described. A real case of marine pollution shows how MCC is functioning by applying the satellite image information in order to suppress any form of violation in respect with national and international legislation for marine pollution prevention

Keywords: *CleanSeaNet System, pollution, marine environment protection, action plan, maritime*

DEVELOPMENT OF THE COMPUTER-BASED QUALITY CONTROL SYSTEM USED FOR TRAINING SPECIALISTS IN NAVIGATION

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ABSTRACT

The paper presents the analysis of the objective computer-based quality control system intended for training specialists in marine navigation. This system of quality control has been applied at the Navigation and Ship Handling Department of Kyiv State Maritime Academy (KSMA) in the process of training the students of 2 - 4 proficiency levels. The informational and methodological computer-based assessment tool package for the students trained for Bachelor, Specialists and Master Degrees has been developed on the basis of the following constituents:

a) the system of control,
b) three e-textbooks on basic theoretical subjects,
c) built-in matrix for self-assessment to verify the testing results.

Both experimental and current implementation of the computer-based quality control system proved to be a reliable and objective assessment tool used for quality evaluation of training on basic theoretical subjects included into the curriculum during the whole course of studies. Saving time and reducing financial resources spent for carrying out control sessions are significant. The main advantage of the system has been its efficiency which currently demonstrates the serious increase of the competency level of the students in Navigation.

Keywords: *navigation, computer-based quality control system, efficiency of testing*

CONTRIBUTIONS AT QUAY CRANES EXPLOITATION OPTIMIZATION

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ABSTRACT

Quay cranes play an important role in cargo operations in ports and are considered leaders of the port operators' technological process. This paper presents calculations of determination grab's efforts and there are proposed changes in grab's structure for optimizing the exploitation of quay cranes.

Keywords: *quay crane, grab, exploitation, port,cargo*

THE ANALYSIS OF INTACT SHIP STABILITY REGULATIONS

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ABSTRACT

The present paper presents the history and the problems of the intact ship stability regulations entered into force over the years. The problems involving ships stability loss as well as ships capsize concerned the maritime community from the first beginning, this type of problems being always a part of maritime safety. Maritime casualties related to loss of ship intact stability continue to be present despite the fact that ships comply with stability criteria. The necessity of new generation of stability criteria is to be taken into account using additional factors involved.

Keywords: *ship stability, stability criteria, weather criterion, righting moments, metacentric height, lever arm curves, capsize.*

RISK MANAGEMENT IN HIGHER EDUCATION

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ABSTRACT

Risk management is "the formal process by which an organization establishes its risk management goals and objectives, identifies and analyzes its risks, and selects and implements measures to address its risks in an organized fashion". Today's risk management process encompasses more than just insurance, work safety and health and legal liability management. It also includes an ongoing and complex process of evaluating and minimizing inherent, enduring organizational risks-in this case, those of the academic institution, students, community agencies, community members, and others involved in the service-learning experience. To avoid health and legal liability, risk management procedures need to be considered before starting any service-learning experience. This fact sheet provides background information and describes a systematic approach to establishing a safe, minimal risk environment for all participants: students, faculty, supervisors, transporters, community agency representatives, and others.

Keywords: *risk management, students, process, objectives, components*

THE BENEFITS OF THE IMPLEMENTATION MECHANISMS FOR THE INTEGRATED SYSTEM IN SMES

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ABSTRACT

To survive and achieve to develop their activities in an increasingly competitive environment, small and medium sized enterprises have to increase their competitiveness and, progressively, reduce their operational cost.

It is necessary to develop a flexible and unique management system for these enterprises to use to integrate all management systems or activities related to quality, safety and environmental issues and improve their overall business performance and also to get prepared for certification according to the relevant international standards.

The output of this paper is a route map of activities for the implementation of the integrated management system, incorporating tools addressing specific management areas using quality, safety and environmental issues to focus them. The route-map has the potential to integrate the overall management activities of an organization. The tools of the route map were partially implemented to two SMEs, giving positive validation of the concepts.

Key words: *standard, SMEs, route map, safety, quality*.

COCONET – PUTTING TOGETHER SEAS WITH ROMANIA AS WORK PACKAGE LEADER FOR BLACK SEA PILOT PROJECT

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ABSTRACT

CoCoNet is the abbreviation for a research project called in full as "Towards COast to COast NETworks of marine protected areas, coupled with sea-based wind energy potential" funded under the OCEAN.2011-4 theme of the European Union's Seventh Framework Programme (better known as FP-7 project). This collaborative project comprises 39 partner institutions from 22 countries, including Romania. Environmental policies focus on protecting habitats that are considered valuable because of the biodiversity they encompass. Such policies also aim at producing energy in cleaner ways. The establishment of Marine Protected Area (MPA) networks and installation of Offshore Wind Farms (OWF) are important ways to achieve these goals. The scope of this paper is to highlight work packages (WP) established within CoCoNet Project – on one hand and, on the other hand, pointing out Romanian partnership to CoCoNet Project.

Keywords: *CoCoNet Project, Black Sea, Mediterranean Sea, marine protected areas, work package*.

COLLISIONS RISK ANALYSIS

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ABSTRACT

The review on shipping accident analysis indicates that the current approaches have only targeted certain perspectives. However, the occurrence of shipping accidents commonly depends upon various shortfalls in different segments of safety barriers. The principal focus of this paper is to provide an analysis, which aims at clarifying the probability and importance of the various factors leading to a shipping accident.

Keywords: *accidental loads, collision, fault tree, navigational area, human factor.*

A CONSEQUENCE OF THE SECOND WORLD WAR: THE BELGRADE AGREEMENT (AUGUST, 18, 1948) AND ITS CONSEQUENCES UPON THE NAVIGATION ON THE DANUBE

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ABSTRACT

Today, Belgrade Agreement (August, 18, 1948) is, with minor revisions, the official document that regulates the navigation on the Danube. The Convention is not unfavorable to small Danube riparian states, but the undiplomatic and unceremonial treatment applied to the great Western powers (especially Great Britain, France and the United States) when the text was drafted and voted had serious consequences on trade and navigation on the Danube. The economic spoliation of the small Danubian communist countries by their Soviet “comrade”, and the manner in which Stalin circumvented the principles of the Belgrade Convention along with his conflict with the Jugoslavian leader, Tito, managed to negatively affect the navigation on the Danube. The Danube’s “Thaw”, occurred after Stalin’s death (after 1953), managed to partially correct the wrong that had been committed – the Danube’s removal from the great international commercial routes.

Keywords: *the Danube, the Belgrade Conference (July 30 to August 18, 1948), the Belgrade Agreement (August, 18, 1948), the Stalinist period, the Tito-Stalin conflict.*

MAIN GOVERNING EQUATIONS FOR A SHIP INVOLVED IN A SOFT GROUNDING EVENT

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ABSTRACT

Ship structures cover a range of constructions varying from fast vessels built of front edge technology materials to very large commercial ships built according to traditional procedures and of conventional constructional steels. With collision, grounding and fire as accidental loads, it is clear that the field of Rational Design of Ship Structures for Accidental Loads could focus on highly varying topics. Many problems within the field of accidental loads in marine engineering are still unsolved and it is true that even if many resources are allocated to the field, it will take years, may be even decades, before the marine community can claim to have a fully rational design basis with respect to accidental loads. The purpose of the present paper is to contribute to the understanding of ship grounding events and thus to try to minimize the damages induced to the marine environment as a result of a grounding event.

Keywords: *ship, soft grounding, governing equations.*

THE DEVELOPEMENT OF FORUM NON CONVENIENSAND LIS ALIBI PENDENS' DOCTRINES IN THE INTERNATIONAL MARITIME LAW

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ABSTRACT

Forum non conveniens doctrine, referred by prominent authors as the choice of foreign jurisdiction by a court, is generally considered as a constructive development in the jurisdictional system of the English courts. *Lis alibi pendens* is referred to as a case where a legal action concerning the same parties and the same matter is adjudicated simultaneously in two diverse jurisdictions. The authors of this study, take the view that a significant relationship seems to exist between *forum non conveniens* and *lis alibi pendens,* since the later is considered a supplementary factor relevant to the determination of the natural forum in *forum non conveniens* cases; both doctrines operate basically under the same legal principles and; they are in search of the same objective i.e. to render better justice in legal disputes, particularly in maritime disputes considering the international nature that this domain reflects. Despite the negative opinions surrounding the doctrine, *forum non conveniens* is regarded as an improvement in the rule of jurisdiction since it assists the litigants to consider advantages of diverse legal systems and to be adjudicated according to 'the most appropriate forum'; promoting thus better fairness and justice in the dispute resolution in maritime affairs.

Keywords: *Maritime law, international law, forum non conveniens, lis alibi pendens, legal disputes, maritime disputes, natural forum, law of the sea, English maritime law.*

CLAMSHELL BUCKET - DIGITAL MODELING METHOD

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ABSTRACT

I've realized the whole modeling using NX 7.5 software. This method has the advantage that can change the design (even "Freeform" geometry) and works with information from other CAD systems, leading to increased design productivity.

A bibliographic study on the current status of various types of construction equipment solutions to load clamshell type was necessary for clamshell type aggregate 3D modeling.

Keywords*: equipment, clamshell buckets, 3D modelling, software*

INFLUENCE OF NOISE ON THE PHYSIOLOGICAL ACTIVITY OF THE BLUE MUSSEL *(MYTILUS GALLOPROVINCIALIS)* FROM THE BLACK SEA

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ABSTRACT

In the last period, the ecosystem of the Black Sea has been highly changed and disturbed: extensive pollution, coastal development, disturbance caused by extensive vessel traffic, over-fishing, etc. , were several of the causes . In this paper we present the influence of vibration (as a source of noise) on the physiological activity of the Black Sea blue mussels (*Mytilus galloprovincialis*, Lamarck, 1819). Marine organisms are forced to implement their own strategy of defence against stress factors. Along their evolution, under the influence of environmental factors, mussels put in place anti-oxidant enzyme - systems and non-enzymatic defence systems against the action of harmful free radicals resulting from metabolic processes of organic xenobiotics. We can consider that in the Black Sea shallow waters, where, on rocky substrata the dominant species is the blue mussel, noises or vibrations with high frequency are harmful for the ecosystem.

Keywords: *Mytilus galloprovincialis, oxidative stress, noise, spectrogram, physiological activity,* ,Black Sea

CONTACT STRESS ANALYSIS IN ROLLING BODIES BY FINITE ELEMENT METHOD

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ABSTRACT

Analysis of contact stress in rail and wheel is very important in mechanical and railway engineering. In this research is presented the contact stress for two rolling bodies by the use of the finite element method (FEM). The model considers the wheel and the rail as elastic deformable bodies and it is solved using numerical methods. Next, critical area in rail and wheel are determined, based on the results of the stress numerical analysis. Prediction of critical points uses this numerical method and its results. To analyse the pressure of contact between the wheel and the rail, elliptical, rectangular and circular contact surfaces are assumed for this study. Based on these assumptions, according results are achieved. The rail fracture, failure and analysis of stress should be studied to prevent rail fracture and accidents. The analysis of contact stress is performed by FEM and the results are compared with respect to the shape of the contact surface initially assumed. Moreover, the results are valuable for analysing the crack creation in critical points and surfaces. Comparing the results of the finite element study with the results of analytical studies for the determination of the contact stress in rolling bodies, one can notice the convergence of these results.

Keywords: *contact stress, rolling bodies, FEA results, analytic study results, convergence of results*

FINITE ELEMENT MODELLING OF CONTACT INTERACTION BETWEEN WHEEL AND RAIL

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ABSTRACT

The development of contact theories and numerical solutions for various applications is a field which expands rapidly. Although railway system is a transportation system with a long tradition, still a large number of unsolved problems exist. One of these problems is the assessment of the stress and strain status of the rail and the wheel under rolling contact conditions. The assessment requires the investigation of the mechanically originated damage of wheel and rail, as cracklike damage, prediction of wear and fatigue as well as change of material properties. Since the mechanical problem is of high complexity because of the contact condition and the material behavior, only a numerical approach seems to be appropriate. This paper presents a method which has the advantage that the structural analyst is allowed to solve both the contact problem and material nonlinearity using an unique simulation model.

Keywords: *finite element, mesh, nonlinearity, contact.*

SCIENCE BASED DECISIONS IN COMPLEX EMERGENCY SITUATIONS

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ABSTRACT

Because of the complex and dynamic nowadays conditions, the paper proposes a general frame of a decision making process based on scientific information. There are analyzed the main classes of information to be used, the location of the headquarters together with the appropriate equipment, the advanced graphic facilities which can be used and the complex models employed to support the decision process. A later development of the concept must take into consideration the partial access to the information and a fuzzy logic employed to suggest the best options to be chosen. Experienced and scientific-based minds are the most important human resources for the decision making process in emergency situations.

Keywords: *knowledge management, advanced graphical facilities, complex models, science-based decisions*

A NEW INNOVATIVE DIRECT DISTRIBUTED INJECTION SYSTEM OF FUEL FOR INTERNAL COMBUSTION ENGINES

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ABSTRACT

This paperwork is proving via numerical simulation using the renowned software Fluent that the proposed Invention Patent is feasible as a viable solution to improve the combustion conditions inside the combustion chambers of the internal combustion Engines. The Romanian Invention Patent Number 123482 is protected according the International Laws. Fuel injection is a system for admitting fuel into an internal combustion engine. It has become the primary fuel delivery system used in automotive engines, having replaced carburetors during the 1980s and 1990s. A variety of injection systems have existed since the earliest usage of the internal combustion engine. The Authors are proposing a new concept of a new Direct Distributed Injection System of Fuel for Combustion Engines. The fuel injection systems that exist and are deployed in practice have an essential shortcoming: the fuel is injected inside the cylinder using a single injector that disregarding the complexity, being placed in a central position, it cannot fill completely the combustion chamber and the mixture rates between fuel-air, due to the fact that the fuel droplets are leaving from a single central point, cannot collide one against other, so that the said fuel-air mixing rates are lower since the dimensions of the fuel droplets are relatively rough. The Invention is proposing a shift of the injection paradigm, instead of using one central injector to have in place an injection system which is leading to better colliding conditions of fuel droplets against each-other, with the end of a finer diameter of the resulting fuel droplets which in turn will lead to better combustion conditions.

Keywords: *Fuel Injection; Internal combustion Engines; Direct Distributed Injection System; Injection Plate; Numerical Simulation; Invention Patent*

STUDY ON THE EFFECT OF NOISE ON THE PHYSIOLOGICAL ACTIVITY OF THE ROUND GOBY FROM THE BLACK SEA

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ABSTRACT

The Romanian coastal area of the Black Sea presents all types of artificial noise sources (ranging from naval activities, to military applications, construction activities, drilling platforms etc.,) with strong effect on acoustic sensitivity of hydrobionts**.** In this paper we present the influence of antropogenic sound on the physiological activity of the Round goby (*Apollonia* (*Neogobius*) *melanostomus,* Pallas, 1814) kept in cages. The analysis of some biochemical indicators for the oxidative stress (superoxid dismutase, catalase, reduced glutathione and malonildialdehide) performed

on liver tissue of the round goby from the Black Sea exposed to different qualities of antropogenic noise, indicated that in shallow waters parts of the Black Sea, where goby fishes (with different species, characteristic for each biotope) are the dominant fish species, noises/vibrations with high intensity are harmful for the ecosystem.

Keywords: *Apollonia (Neogobius) melanostomus, oxidative stress, noise, spectrogram, physiological activity, goby fishes, Black Sea*

CHEMICAL WATERPROOFING OF THE INTERIOR WALLS AND BUILDINGS FRONT SIDES

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ABSTRACT

Chemical waterproof presents an efficient solution and easy to apply. We can see specific consumptions of different waterproof agents, regarding of waterproof efficiency which is conditioned by products nature and chemical composition.

Keywords *: silicons, exterior insulation, R radical, waterproofing, film creating*

THE STUDY OF NAVAL POWER PLANT: EXPENSES INCURRED BY THE SHIP AFTER VOYAGES MADE

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ABSTRACT

This paper presents the analysis of transport costs for oil tanker at various operating regimes.

Are determined annual maintenance and exploitation for a ship.

During a voyage, the ship is navigational several situations and main engine and auxiliary machinery does not always work the same load.

Keywords: *engine power, oil-tanker, cost of transport, ballast, full load.*

APPROXIMATIONS IN STRUCTURAL ANALYTICAL STUDIES

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ABSTRACT

The paper unveils the nature of the theoretical approaches, both analytic and numeric, which are based on hypotheses, which means accurate or less-accurate approximations. The study is structured on theory-level approximations, method-level approximation and ideas to improve the accuracy of the models. The conclusion is that the 'unity in diversity' principle applied for the scientific instruments, the difference between their natures, enriches the knowledge growth.

Keywords: *approximation, hypothesis, theory, method, accuracy improvements.*

STUDY OF SOLAR ABSORPTION REFRIGERATION SYSTEM

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ABSTRACT

Solar energy is a relatively inexpensive source for freezing. We need cold even during periods when solar radiation is more intense. The purpose of the paper is to emphasize the importance of the solar energy used in absorption refrigerators installations.

Keywords: *Solar, installation, refrigeration, absorption, energy balance*.

DOMESTIC SOLAR WATER HEATING POTENTIAL IN THE SOUTH- EASTERN REGION OF ROMANIA

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ABSTRACT

One of the most effective methods to include ecological technology in a house is the use of solar systems for water heating. This paper determined solar water heating potential (SWH) for the South - Eastern region of Romania. It resulted that the use of solar energy covers approximately 35-50 % of the thermal energy needs for water heating from January to April and from October to December and 80-100 % from May to September.

This solar system reduces by up to two thirds the need to use traditional methods for water heating and minimizes costs for electricity or for fuel used in heating water, thus reducing the environmental impact.

Keywords: *solar water heating, solar radiation, energy consumption*

ANALYSIS OF RESIDENTIAL PHOTOVOLTAIC ENERGY SYSTEMS

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ABSTRACT

Solar photovoltaic system is one of renewable energy system which uses PV modules to convert sunlight into electricity. Recent fossil fuel energy price escalation and likely future carbon dioxide emission cap-and-trade programs will substantially improved the cost-effectiveness of investment in energy conservation and renewable energy resources.

Solar PV system is very reliable and clean source of electricity that can suit a wide range of applications. In this paper, a technical study about implementation of photovoltaic (PV) module which can be installed on the rooftop of the house to be used as clean energy source was done. The system's mathematical model is developed in MATLAB.

Keywords: *photovoltaic system, solar radiation, energy demand.*

CONTRIBUTIONS TO KNOWING THE ZOOPLANKTON ON SEVERAL LAKES OF SOUTH-WEST DOBROGEA

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ABSTRACT

Zooplankton populations is considered an important compartment of aquatic ecosystems for the role in the trophic equilibrium and is considered a good indicator of changes in water quality because the community is strongly influenced and has a fast response to changes in environmental conditions.

The study presents the results of comparative analysis of zooplankton community in several lakes of south-west Dobrogea (Oltina, Bugeac şi Dunăreni) were was identified a number of 52 species and varieties. The numerical dominance is ensured by copepods and rotifers and the gravimetric dominance is ensured by cladocers.

Keywords: *zooplankton, lakes of south-west Dobrogea*

NEW APPROACHES FOR THE MATHEMATICAL MODEL OF INJECTION TECHNOLOGY PROCESSES

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ABSTRACT

This paper proposes a preliminary study of the governing equations of the injection molding. A challenge is to optimize the mold design which leads to the most homogeneous filling. In addition to these three conservation equations, there may also be one or more constitutive equations that describe material properties, shear thinning

behavior. Since these equations may also be coupled together, temperature dependent viscosity, the solution can become even more complex. The goal of the modeler is to take a physical problem, apply these mathematical equations and solve them to predict the flow phenomena.

Keywords: *mathematical model, injection molding, polymeric material.*

STATIC ANALYSIS OF CYLINDER LINERS FROM DIESEL ENEGINES USING FEM

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ABSTRACT

Current compression ignition engines are characterized by increasing level of demand based on increase boost pressure and speed, reducing mass and gauges [6].

Because of this, certain organs, such as the cylinder liners because of the intense damage washed cooling water and the inner surface in contact with the piston and combustion gases lead to the removal MAC of cylinder liner wear running outside cause its replacement before eating life, established mainly in relation to inner wear [1].

It is very important to know which is the optimal composition of the material, how different concentrations affect constituents and how is the optimal degree of participation in alloys used in the manufacture of cylinder liners from internal combustion engines.

Mechanical vibrations that occur in the motor mechanism, especially in the cylinder liners, is a principal factor of wear with implications for the functioning of the various components of internal combustion engines used in motor, rail and marine transport. Therefore, to design engines it is necessary to perform a static analysis for cylinder liners to see what is the degree of deformation, so that does not result displacements and mechanical vibrations. These values must be correlated with nodal displacements of the allowed values of engine construction standards or naval classification registry.

Internal tension state has an important influence on the wear behavior of cylinder liners. This tension state is generated by mechanical vibrations which cylinder liners is subjected and cavitation bubbles collapse and through its surface [2].

This paper presents an exemple for the static finite element analysis performed using the FEMAP software for cylinder liners made of two materials most commonly used in their construction and for four thicknesses.

Keywords: *finite element analysis, static analysis, deplacement, damages, wear, vibration, diesel engine, cylinder liner.*

AN APPROACH TO EVALUATE THE OPERATIONAL STATUS OF A TECHNICAL SYSTEM

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ABSTRACT

The operational capability-the functionality- represent the definning feature of an instalation.The goal of this subject is to establish a manner of evaluating from a quality and quantity perspective the operational status of a technical equipment under exploitment.The quantification of this size consists on one hand to estimate the functionality status of a system based on the estimations of a group of experts and on the other hand, to associate to these opinions a probability related to the operational status of the technical equipment.Thereby, it is obtained an conjunctiv couple of operational status „AND" reliability, intended to offer to the manager a more reliable image concerning the level of the operational performances of the equipment subject to technical investigations..

Keywords: *Fuzzy scale, Fuzzy operators, Ranks correlation factors, Experton, Mathematical expectation of the experton, Hamming distance, Ranks correlation factor, Logical conjuctions and disjunctions.*

CVT ELECTRICAL CHARACTERISTICS DURING LINEAR AND NONLINEAR LOADING

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ABSTRACT

The objective of this application was to characterize the CVT as a load while the CVT supplied a simple linear load and while it supplied a complex nonlinear load [11]. In the following tests, the CVT was connected first to a simple linear load and then to a complex nonlinear load. An electric-service supply source with an average total harmonic distortion in the voltage of 3% supplied power to the CVT during all tests.

Keywords: *resistive linear load, nonlinear load, power factor.*

APPLICATIONS OF MONOLITHIC BRIDGE DRIVERS

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ABSTRACT

High power monolithic bridge drivers are for discrete transistors and half bridges in applications such as DC motor or stepper motor driving. The device contains four push-pull power drivers which can be used independently or as two full bridges. The driver is controlled by a TTL-level logic input and the drivers are equipped with an enable input which controls a whole bridge. Short circuits to ground can be protected against by the circuit and the upper transistor of the output stage is thus turned off, interrupting the short circuit current. When the short is removed the circuit recovers automatically.

For DC Motor Driving in application where rotation is always in the same sense a single driver can be used to drive a small DC motor. The motor may be connected either to supply or to ground.

Keywords: *current flow, DC motor, bridge, dynamically during, the motors rotational.*

HARMONIC DISTORTION OF 6 AND 12 PULSES CONVERTERS

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ABSTRACT

The harmonic distortion level may be significant in electric propulsion systems, as the main loads usually are variable speed propulsion/thruster drives with frequency converters.

It is therefore necessary to be able to predict harmonic distortion, evaluate the effects, and perform the proper means to manage the voltage distortion, without functional faults over the life time of the installation.

Keywords: *harmonic distortion, periodic waveform, current converters, voltage converters.*

QUANTIFYING HARMONIC DISTORTION

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ABSTRACT

It is *necessary to be able in predicting harmonic distortion,* evaluate the effects, and perform the proper means to manage the voltage distortion, without functional faults over the life time of the installation.

There are two types of simulation tools available: time domain simulation and the more commonly applied, which calculates in frequency domain. The benefit of the frequency domain calculation tools is that the time and work for modeling and calculation of large systems is much shorter than for a time domain simulation. However, the accuracy will normally be lower, since one has to decide the harmonic content of the load current, which in reality is dependent on the network configuration and can only be determined by time domain simulation or by equivalent figures from

similar systems. Special considerations should be made for PWM type of controllers and use of passive filters, where time domain simulations are strongly recommended in order to obtain results that are necessary for correct design and dimensioning

Keywords: *harmonic distortion, periodic waveform.*

THE SPECTRUM OF THE IMPULSE SIGNAL

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ABSTRACT

The paper proposes another point of view on problems regarding the spectrum of the impulse signal or a dissidence among signals. The numerical calculation, applied in an absolutely identical manner and with positive results to any other kind of signal known under the form of discrete numerical function $f_i(t_i), i = 1,2,3\cdots$, for which $\delta t = t_i \quad t_{i\ 1}$, regardless of the fact that it may have discontinuities here and there, cannot be applied to the impulse signal. This has determined me to change, only now, and in a radical manner, the software processing the signals, which included the impulse type signals.

Keywords: *Dirac function, periodic signal, Fourier transform, spectrum.*

TELEMEDICINE AND ETHICS

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ABSTRACT

The technological insertion in medicine in the last past years dramatically changed the medical practice. Based on the medical team reaction time optimization need and on the request for better medical information management, under continuous expansion with the technological advance, the telemedicine concept is taken into account and implemented more and more. The obvious advantages such as the power of patient and illness management, availability at any time and scalability of the information and better access to medical care, lower medical services cost, are balanced by side effects such as the vulnerability of the confidentiality concept, additional harm put on the patient and even the health services quality, the doctor patient relationship. The question we are asking here is if the side effects such as the mentioned ones should worry us. In this paper we address this question, underlining the ethical aspects related to the implementation of the telemedicine in the current medical practice.

Keywords: *telemedicine, patient, bioethics.*

IMPROVEMENTS OF THE DIRECT TORQUE CONTROLLED INDUCTION MOTOR DRIVES

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ABSTRACT

This paper presents two methods for reducing the torque ripple of the conventional Direct Torque Control (DTC) of induction motor drives. The methods were implemented on a Digital Signal Controller, their effectiveness was evaluated for a set of motor operating points and the experimental results are comparatively presented.

Keywords: *Direct torque control, torque ripple, pulse width modulation, space vector modulation*

CLOUD CONTENT DISTRIBUTION NETWORKS FOR DVB APPLICATIONS

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ABSTRACT

In this paper we present the integration of Digital Video Broadcasting (DVB) applications and Cloud Content Delivery Networks (CDN). DVB works reasonably well in the sens that the system is very scalable and can sustain very high request rates. But it also has its limitations and lack of geographic replication is one of them in the context of CDN use. So offering a true solution to getting video and audio web content rapidly to browsers across the world is most welcome. With SlapOS, the proposed open source distributed cloud system, we implement a testbed for content distribution service that caches content at different locations based on the access patterns of the individual users. We demonstrate that by using distributed cloud computing our platform is more scalable and resilient than many other DVB to IP gateway systems, and much easier to handle when it comes to offering access to different types of fixed and mobile IP terminals.

Keywords: *DVB, cloud computing, DTT, broadcasting, content delivery network.*

FUZZY CONTROL OF A NONLINEAR PROCESS BELONGING TO THE NUCLEAR POWER PLANT WITH A CANDU 600 REACTOR

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ABSTRACT

The present paper is set on presenting a highly intelligent configuration, capable of controlling, without the need of the human factor, a complete nuclear power plant type of system, giving it the status of an autonomous system. The urge for such a controlling system is justified by the amount of drawbacks that appear in real life as disadvantages, loses and sometimes even inefficiency in the current controlling and comanding systems of the nuclear reactors. The application stands in the comand sent from the auxiliary feedwater flow control valves to the steam generators.

As an environment fit for development I chose Matlab Simulink to simulate the behaviour of the process and the adjusted system. Comparing the results obtained after the fuzzy regulation with those obtained after the classical regulation, we can demonstrate the necessity of implementing artificial intelligence techniques in nuclear power plants and we can agree to the advantages of being able to control everything automatically.

Keywords: *Distributed Control System (DCS), smart control, simulation, artificial intelligence, fuzzy controller*

PARAMETERS THAT INFLUENCE THE TRANSMISSION IN DVB-T2

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ABSTRACT

This paper proposes to analyze the opportunity of introducing Digital Terrestrial Television (DTT) in Romania by using directly the DVB-T2 standard instead of DVB-T. To this end we propose a testbed for performing measurements related to the functioning of the DVB-T, DVB-T2 and DVB-H networks. We also try to search for an appropriate configuration for sending video or data streams from a DVB-T2 transmitter equipment to a receiver. And for this the parameters at the transmission will be modified to simulate the "in-field" requirements. Results show that no configuration is better than another because in different environments we may have different error sources or different conditions that may need special tuning of each and every parameter of the transmitter.

Keywords: *Digital TV, Digital video broadcasting, Test equipment, Modulation, Code Rate.*

SEASONAL VARIATIONS OF THE TRANSMISSION LOSS AT THE MOUTH OF THE DANUBE DELTA

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ABSTRACT

Underwater communication devices, such as underwater acoustic modems (UAM) are designed using the passive sonar equation. At the beginning of the design phase we must know very well the parameters that compose this equation, if we want the modem operation to depend as little as possible on the variability of the transmission channel.

The only parameter that is not known a priori is the transmission loss (TL). The measurement of this parameter is fairly expensive because it involves at least one marine research platform, trained personnel and numerous devices. Therefore we need to estimate this parameter and an inexpensive solution is to simulate the underwater acoustic channel (UAC) in the region where we want to deploy the underwater acoustic modem.

Using conductivity, temperature and depth (CTD) information taken from the NOOA's database, information about the wind speed at the surface and information about the geoacustical properties of the sea floor, we modeled the underwater acoustic channel at the mouth of the Danube Delta. With the help of the AcTUP simulation software we were able to estimate the seasonal variations of the transmission loss in the region of interest using a frequency dependent simulation method. These results will be used later to adapt the underwater acoustic modem to the transmission channel.

Keywords: *Transmission loss, passive sonar equation, underwater acoustic channel, underwater acoustic modem, frequency dependent simulation, channel modeling, channel simulation.*

ENERGY-EFFICIENT TRANSMISSION METHOD FOR UNDERWATER ACOUSTIC MODEMS

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ABSTRACT

In this article we present a transmission method that minimizes the energy used by an underwater acoustic modem (UAM) to send the acquired data from the environment to another UAM or to the surface. This underwater communication device could be placed on the seafloor to monitor the aquatic environment. The energy used to transmit the acquired data is finite because the modem is powered by batteries. Using this finite energy-efficient will enable the modem to monitor a longer time.

If the method described in this article will be used to design an underwater acoustic modem, it can reduce the energy used for transmission and the modem will be adapted to the underwater acoustic channel. Another advantage of this method is that the design and technical maintenance cost will be reduced which will determine a reduction in the total production cost of an UAM.

Keywords: *transmission method, underwater acoustic modem, passive sonar equation.*

ADAPTIVE CONTROL OF HYPER-CHAOTIC YUJUN SYSTEM

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ABSTRACT

This paper deals with the adaptive control of the uncertain hyper-chaotic Yujun system with unknown parameters. We determine adaptive control laws to stabilize the Yujun system to one of its unstable equilibrium points and we derived update laws for the estimation of system parameters. To validate and demonstrate the effectiveness of the adaptive control scheme derived in the paper numerical simulations are presented.

Keywords: *Adaptive control, hyper-chaos, stabilization.*

THE EVALUATION OF GRAVITATIONAL PERTURBATION CCELERATION ACTIONS ON GPS SATELLITES

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ABSTRACT

The precision to determine various points on the Earth's surface, on sea or in the air using GPS receivers suffers not only due to the precision of determining the satellite position on it's orbit but also to the technique that measures the distance between the satellite and the receiver. The orbital errors of the satellites are caused mainly by the gravitational and non-gravitational perturbations of satellites. This article proposes to evaluate the main gravitational perturbations that act upon a GPS satellites.

Keywords: *GPS satellite, kepler orbit, Runge-Kuta method, gravitational perturbation.*

THE EFFECTS CAUSED BY NON-GRAVITATIONAL PERTURBATIONS: THE ANISOTROPIC THERMAL EMISSION AND ANTENNAS EMISSION ON GPS SATELLITES

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ABSTRACT

From the non-gravitational perturbations category acting on Earth's artificial satellites, the most important is the solar radiation pressure. The mode of action of these perturbations is performed directly and indirectly. The indirect mode of action of solar radiation pressure is manifested by the albedo phenomenon, anisotropic thermal emission, antennas emission and eclipses. This article proposes to evaluate the orbital errors causes by the indirect effects of the solar radiation pressure: anisotropic thermal emission and antennas emission acting on the GPS satellites.

Keywords: *GPS satellites, indirect solar radiation pressure, orbital elements.*

WHEN NEW TEACHING METHODS MEET THE OLD ONES

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ABSTRACT

It is well known that the new generation of "digital natives" needs new teaching-learning strategies complementary or opposed to the old/traditional ones that permit learners to communicate and collaborate, and even switch the role with their teacher, sometimes. E-learning is the common frame of this new type of transmitting-acquiring information, providing an open and transparent environment for learners, ensuring also an authentic audience when they are to display the results of their work. Web-based learning and computer-learning showed that new technologies make a difference in education when properly used.

Keywords: *e-learning, speaking skill, web site, informative speech, essay, writing skill.*

THE INTERVIEW - A COMMUNICATIVE TESTING TECHNIQUE

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ABSTRACT

The present paper is focused on the importance of applying the appropriate evaluating approach to a rather relative human interaction. As in the case of many controversial matters, theoreticians have attempted to set some guidelines, weigh the pros and cons of a communication interview while establishing the boundaries of language skills, competences and abilities.

Keywords: *interview, testing, teaching methods, competences*

TEACHING ELEMENTS OF COMMUNICATION FOR BUSINESS ENGLISH

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ABSTRACT

If tackling Business English vocabulary and various corresponding grammar structures is often discussed within the epistemic community, the particularities of teaching specific communicational elements to students in economics tend to be less presented. This study undertakes to bring up the matter regarding conversational structures as quite straightforward and unproblematic and to emphasize the need of attentive consideration to the approaches of teaching such material so that quality education can be provided.

Keywords: *Business English, elements of communication, teaching language, didactic method.*

MARITIME ENGLISH PRACTICE ON SIMULATORS

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ABSTRACT

Maritime universities all over the world consider future Deck Officers' training to be a sensible issue. Since the International Maritime Organization (IMO) introduced training on simulators as an integrated educational part for future seafarers, training future Deck Officers on simulators became a very important component of the maritime education process. Over the past decades, the education of professional officers has undergone many evolutions. Today's maritime universities, academies and faculties using advanced methods of teaching, modern simulators with communication in Maritime English and other sophisticated equipment have not to forget that practical training on board a ship still plays an invaluable role in officers' education. Still, it must be acknowledged that a proper training on simulators is a good start for a theoretical training that could eventually be used onboard. In this paper we are trying to point out the fact that without the use of simulators combined with a proper knowledge of Maritime English, University graduates would face real troubles when trying to apply for a job at the crewing and shipping companies.

Keywords: *Deck Officer, simulator, university, training, maritime education*

CREATIVE THINKING ACTIVITIES IN FOREIGN LANGUAGE TEACHING

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ABSTRACT

The purpose of this paper is to suggest activities through which teachers can help students bridge the gap between the mastery of linguistic structures and the use of language to communicate meanings in real situations. Classroom activities pave the way to communication in the foreign language through various types of communicative activities and exercises. The value of the activities described in this paper resides in the opportunity to analyze the students' performance and to explain deficiencies and suggest improvements in their use of the language, meant to contribute to their communicative skills

Keywords: *creative thinking, foreign language classes, communicative activities, oral communication*

TRANSLATING MARITIME IDIOMS

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ABSTRACT

The historical significance of the sea cannot be left behind by a translator working into a foreign language like English. The translator may come across a myriad of nautical words and expressions that must be carefully handled in translation. As it is generally known, English and Romanian use different linguistic forms and these forms represent

only one of the aspects of the difference between the two language systems. The most challenging are the cultural meanings that are intricately woven into the texture of the language, and it is the translator's task to catch and render them appropriately. Thus, the differences between the source language culture (SLC) and the target language culture (TLC) make the translating process in general and the translation of maritime idioms in particular, a real challenge. In this case, translation strategies and techniques are of paramount importance. Since maritime idioms represent the special cultural image, the translator should ideally be bilingual, and most importantly, bicultural.

Keywords: *maritime idioms, translation strategy, equivalence*

INDICATORS FOR THE PERFORMANCE AND FOR THE EFFORT IN TRANSPORT

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ABSTRACT

The cooperation and integration of several types of transport need special and dedicated indicators. If their definition surprises the specificity of the transport, they could be used for the benchmark of different systems of transport and also for the measurement of their relative influence into the market. Same of specific indicators for informational concepts are transformed and adapted for transport activities. This paper presents a way to generate better and more adequate indicators for getting a representation of the transport activities.

Keywords: *inter-modality, multimodality, entropic level, equivocation, trans-information, informational factor.*

MEASURING MARKET CONCENTRATION ACCORDING TO EUROPEAN COMPETITION POLICY

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ABSTRACT

For European Commission, the measurement of market concentration is important because it lies at the heart of decisions about whether to approve mergers and acquisitions that might pose a potentially harmful impact on consumers. The most commonly utilized measure of market concentration is the Herfindahl Hirschman Index (HHI), and the change in the HHI from pre-merger to post-merger ("delta").

In first part of the paper I focused on the definition of concentration as it appears in European legislation and on the relevant market by identifying those substitute products or services which provide an effective constraint on the competitive behavior of the products or services being offered in the market by the parties under investigation.

In the second part of the paper, I took an example using the HHI index to see how a merger affects the degree of market concentration. Further, I brought to light several issues regarding the measurement of market concentration and analysis of results as they are addressed by the european competition policy. As a result of this paper, I reached the conclusion that HHI index is more complete and elaborate than other market indicators and I find that a concentration operation (acquisition or merger) between two companies may have an important impact on the degree of market concentration and can lead to anti-competitive effects, requiring detailed analysis of the European Commission.

Keywords: *Herfindahl Hirschman Index; mergers; market concentration; market share*

QUALITY STRATEGIES IN THE MARKET PROCESS

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ABSTRACT

In order to resist the competitive environment in the market or to consolidate its leading position in the field, organizations are increasingly interested in implementing a quality management system and adopt quality-oriented strategies of the market processes. Also, in order to increase customer satisfaction, organization management is always interested in improving the effectiveness and efficiency of processes, products and services, through the implementation of continuous improvement programs, including preventive and corrective actions that are necessary. In this article, we try to plead for the necessity of adopting quality improvement strategies with direct impact on the market performance of the organization.

Keywords: *quality improvement, competitivity*

MANAGEMENT FUNCTION CONCERNING RISK MANAGEMENT IN PUBLIC ORGANIZATOINS

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ABSTRACT

Handling the risk management helps fulfilling the basic objectives of an organization by implementing strategies, policies and specific methodologies that were developed to keep under control the risk limit that a public entity can bear.

Keywords: *risk management, public organizations*

IMPLEMENTING LEAN IN A HIGHER EDUCATION UNIVERSITY

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ABSTRACT

Lean means creating more value for customers with fewer resources, by minimizing waste. Although traditionally this concept is applied in manufacturing, the Lean management improvement principles can be also applied in the case of educational institutions. This paper presents three case studies of implementing Lean in UK and USA universities that can be useful examples for implementing Lean in any university environment.

Keywords: *Lean, Lean management, Lean thinking*

THE IMPORTANCE OF RELATIONS BETWEEN GEORGIA AND ROMANIA FOR THE PROGRESS OF ENERGY PROJECTS

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ABSTRACT

Romania and Georgia have developed close relations during the past two decades. They have excellent bilateral relations, collaborating in a wide range of fields. Georgia is an important partner of Romania in the wider Black Sea area, while Romania is the most active European partner of Georgia, one of the strongest supporters of Georgia's Euro-Atlantic integration. As part of the Southern Energy Corridor, both countries are very interested in the delivery of Caspian energy resources to Europe through projects that include them as transit countries. Although Nabucco has been for a long time the most important project for them, now-a-days, the realization of AGRI became the most important goal. The relations between these two countries are thus vital for the development of this energetic project.

Keywords: *energy project, hydrocarbons, energy corridor, Nabucco, AGRI, South Stream, North Stream, liquefied petroleum gas, Southern Caucasus*

POSITIONS OF THE STATES INVOLVED IN ENERGY PROJECTS IN THE SOUTH CAUCASUS

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ABSTRACT

South Caucasus (also referred to as Transcaucasus), is a region situated to the south of the Greater Caucasus Mountain Range, composed of Georgia, Azerbaijan and Armenia. Due to the rich oil reserves of the Caspian Sea basin and geostrategic importance of the Caucasus as a crossroad between Europe and Asia, this region has always constituted a pole of attraction for the great powers of the world after the collapse of USSR. Not only neighboring countries like Russia, Iran, Turkey and Central Asian states (Kazakhstan and Turkmenistan), but also the United States, European Union and China are becoming actively involved in this region.

Thus, while Armenia has been allied with Russia and Iran, considering these two powers as a counterweight to Turkey - its main enemy in the region, Azerbaijan and Georgia have developed geostrategic alliance with Turkey, and the United States by promoting cooperation with NATO member countries. Moreover, the conflict in Nagorno-Karabakh had deprived Armenia of the possibility of cooperation with other South Caucasian states. Armenia, which bases itself mainly on the relationship with Russia, believes that maintaining good relations with Iran is vital in terms of its national security, therefore, Armenia encourages active presence of Iran in the region. Meanwhile, Azerbaijan and Georgia, which have developed geo-economic relations between them in course of time and expanded strategic partnership with Western democracies, particularly through the NATO alliance, put forth their best efforts in order to leave the sphere of influence of Russia.

Keywords: *South Caucasus, energy project, energy corridor, Caspian Sea, strategic interests, economic interests, Caspian energy, oil, energy security*

MARKETING INTELIGENCE SYSTEM A "SMART TOOL" FOR THE CAMPANIES

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ABSTRACT

Marketing Intelligence Systems are tools that allow organizations to conduct a new business, a new integrative vision that includes the customers' needs, requirements and desires. The activity of the organization should focus on achieving them. The marketing knowledge and information held by the organization about customers, market, competition, suppliers, distribution channels, generally about the environment in which it operates, can be easily processed using those technologies specific to the computerized systems which support the marketing decision. Thus, there is created a strategic advantage for solving, in real time, the problems of the organization. Certainly, *Marketing Intelligence Systems* - implemented and operated with the efficiency of expert systems, satisfy the desire of every marketing man/woman to have a "smart tool" that emulates human thinking for activities specific to its area of expertise.

Keywords: *Marketing Intelligence, Market Intelligence, Business Intelligence. Marketing Intelligence Systems,*

CONTROLLING - A USEFULL TOOL FOR TOP MANAGEMENT

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ABSTRACT

Controlling outlines business policy of an enterprise, the term derives from an English word - to control - control, managing, setting rules and directing. The controller's duty is to serve the management as an economic navigator and to ensure that the company's ship reaches its profit targets. The controller has to be sure that he or she has an organizational support from the top management. It was suggested to establish the controlling department which can be applied to the systems of economy and which would be directed to recognizing and forecasting the future. Nowadays, a modern enterprise can successfully fight with the competition and crisis only if it puts efficient controlling processing into practice. The goal of controlling is to recognize and solve problems or suggest measures for solving them and all that, in order to avoid such problems in the future.

Keywords: *controlling, controlling system, controller, operational controlling*

REPUTATION BUILD ON THE COMPANIES' VALUES

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ABSTRACT

While self esteem is important for reputation, the main goal of reputation is not "the organization to be enjoyable for others" but to set it apart from competitors. Reputation precedes faith. Values are the basis of reputation, since they determine organizational decisions. Reputation may be the most important asset entrusted to the top management of the institution. As an intangible asset, it can help define and meet the needs, interests and expectations of collaborators and the public, being a differentiating factor in the competition. It is an asset which can hardly be restored as it is based on perceptions and expectations (confirmed or not).

Keywords: *Reputation, Mission, Visual brand identity, High visibility, Vision, Values, Competitive advantage.*

THE ROMANIAN CENTRALIZED ORGANIZATIONS' RESISTANCE TO CHANGE

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ABSTRACT

We are in a period of significant change in our organizations and our communities. The need for focused leadership is critical and challenging for all. Some particular objectives of this study are to determine that: leadership and change are inextricably linked and their effectiveness in achieving beneficial outcomes for stakeholders is linked to their underlying ethical values; the importance of some approaches to change are more likely to lead to ethical outcomes than others; the need for greater ethical clarity when evaluating approaches to leadership and change; the study's objective is to demonstrate that the Romanian organization oppose change and are not adequately decentralized. There are fundamental differences between these two characteristics. Promoting the autocratic type, in combination with the bureaucratic compulsive type, determines a major gap between the executive managerial level and the operational one. The inadequate union activity is also responsible for the centralism within the organizations and the toxic influence it has on change. This paper presents the conclusions of a study regarding the Romanian union leader's perception.

Keywords: *leadership, centralism, decentralization of human resources, change, ethics.*

ECONOMICAL AND ENVIRONMENTAL COORDINATES OF BLACK SEA REGION

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ABSTRACT

This paper represents a short analysis of a number of key points that relate to the geographical, socio-economic, institutional and to the ecological conditions of the Black Sea region and the Black Sea Basin. The Black Sea region is steeped in history and culture and forms a vital trading area linking Europe with Asia. It is the world's largest locked internal sea with a surface area of 423,000 km^2 and a unique marine environment. Anthropogenic pressures, associated with the economic situation of the Black Sea countries, has decreased during the last decade, allowing some improvement in the state and biodiversity of the ecosystem. The abundances of several native species have increased. However, mediterranization - the invasion by species from the adjacent basin and beyond-has continued. The conclusion is grounded, that biodiversity is not only inter- and intra-species diversity but also spatial-temporal variability, abundance and productivity dynamics, differences of the metabolic strategies providing sustainable existence in the changing environment. Biodiversity at the intraspecies level expresses itself in spatial and temporal variations of the Black Sea biota. It has been shown, that preservation of the Black Sea ecosystem's biodiversity must be based on the measures which should be undertaken in national and social spheres, and be directed to the recreation, stabilization and conservation of this unique sea basin.

Key words: *Black Sea region, geography, socio-economical conditions, biodiversity, environmental conditions*

PRICE STABILITY

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ABSTRACT

We can talk about price stability when not seen as inflation or deflation phenomena. Thus the European Central Bank defines price stability as an increase of up to 2% per annum of the harmonized index of consumer prices. The lowest inflation rates were recorded in countries such as Greece and Sweden, and the highest in Hungary, followed by Romania, according to recent data provided in November 2012 by the European Central Bank. Overall, most countries faced with low and relatively stable levels of inflation, explained that although individual prices of products in some sectors have seen a substantial increase in overall they were compensate of price reductions in other sectors and finally reached a relatively stable general price level.

Keywords: *stability of prices, HICP, deflation, inflation.*

CAPITAL REQUIREMENT FOR OPERATIONAL RISK

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ABSTRACT

Over time it was concluded that the risk associated is a vital component of all economic activities, which can not only manage the fight, considering that if they do not assume any risk you may lose opportunities to win, which means that the risk assumed under established can bring value to the institution, representing a process of risk management becomes competitive advantage. Increased operational risk in recent years has been enhanced by the creation of products and services ever more complex financial innovations, increased competition, etc.. That required an adequate operational risk management and included in the internal capital estimation and allocation. Due to its novelty and importance of operational risk treatment I chose this theme, showing how to calculate the capital requirement needed to cover operational risk for a institution in Romania using both simple methods and advanced methods, in order to highlight the approach best.

Keywords: *Operational Risk, BIA, SA, AMA, LDA, EL, UL*

OPERATIONAL RISK MANAGEMENT

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ABSTRACT

Associated risk is a vital economic activities undertaken under well established and can bring value to represent a process of risk management becomes competitive advantage ("art" to make decisions and act on the basis of insufficient data). Basel Committee on Banking Supervision has developed rules and regulations which recognized the impact of operational risk (emphasizing that the implementation of proper management of risks is vital for the existence of a financial institution). This paper aims to establish the optimal method for determining capital requirements for institution analyzed.

Keywords: *Operational risk, Operational risk management, expected loss, PE, LGE, unexpected loss, provisions, capital.*

INFLUENCE OF TRANSPORTS ON ENVIRONMENT QUALITY

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ABSTRACT

As a result of the negative effects of polluting processes, as well as the products and services that affect the environment either during of their use or in the post-consumption, the national and international bodies have manifested concerns to develop new regulations on environmental protection.The interest for environmental issues has increased significantly compared to the situation in 1986, when an explosion occurred at the Chernobyl nuclear reactor, Ukraine, was considered an environmental disaster of large proportions.

Key words: *environmental quality, eco-friendly vehicles, transport, pollution.*

TRENDS ANALYSIS IN MANAGING MARITIME E-LEARNING TECHNOLOGIES

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ABSTRACT

During time few trends are fulfilled with current technology level. New technology achieved a high grade of interactivity since multiprocessing technology development. A large scale maritime 3D simulators and interactive users are now possible. eLearners will plan what, when, where and for how long at a time they will learn. With their input, the e-Learning system will organize the material they will learn and the way they will learn it based upon an assessment of their skills and their preferred learning modes. The roles and time required of classroom trainers and lecturers, and tutors will be greatly reduced.

Keywords: *LMS, maritime e-learning, lifelong learning, computer assisted learning.*

DAMAGES TO CARGO AND SHIPS – GENERAL AND PARTICULAR AVERAGES

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ABSTRACT

Due to the complexity of activities which can generate cargo surveys in respect of transport, maritime ships can be in such situations that will not allow carrying out activities onboard under normal conditions, leading to damages to the ships or carried cargo, thus entailing litigations between participants in such transport. Damages approach have had a spectacular evolution, so that the currently requested survey reports for the construction and settlement of such litigations became far-reaching and specialized. This paper will point out elements of damages going under concepts of general and particular averages.

Keywords: *Damage, cargo, survey, litigation, general average, particular average.*

TEMPERATURE AND HUMIDITY – TWO MAJOR CLIMATIC RISK FACTORS AFFECTING THE QUALITY OF CARGOES CARRIED BY SEA

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ABSTRACT

Every day, millions of tons of temperature sensitive goods are produced, transported, stored or distributed worldwide. For all these products the control of temperature and consequently the control of humidity is essential, mostly when it is about transportation of the goods by sea. The quality of these products might be changed rapidly when inadequate temperature and relative humidity conditions are not preserved during transport and storage. Temperature variations can occur in warehousing, handling and transportation. Recent studies show temperature-controlled shipments rise above the specified temperature in 30% of trips from the supplier to the distribution centre, and in 15% of trips from the distribution centre to the store. Lower-than required temperatures occur in 19% of trips from supplier to distribution centre and in 36% of trips from the distribution centre to the store (White, 2007). It is the scope of this paper to highlight the impact of air temperature and atmosphere humidity on the quality of goods carried by sea onboard maritime ships.

Keywords: *Temperature, humidity, air circulation velocity, cargo, maritime transport.*

GOODS, SHIPS AND PORTS – INTEGRATED CONCEPTUAL APPROACH FOR THE INTERNATIONAL MARITIME TRANSPORT

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ABSTRACT

Maritime transport is an important factor of economic development of every maritime country. Its basic task is providing shipping services, meaning that they may as well be considered as the product of the shipping economic activity. Regarding the current international shipping crisis, the key to success of every shipping organization, region and maritime country lies in efficiency and safety of its maritime shipping services – on one hand, and on the other hand, is about having an integrated conceptual approach as regards the key elements i.e. goods, ships and ports. It is the aim of this paper to broadly emphasize the particularities of each key element contributing.

Keywords: *maritime transport, goods, ships, ports, transshipment.*