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SECTION I
NAVIGATION AND MARITIME TRANSPORT

1. CATHODIC PROTECTION BY SACRIFICIAL ANODES OR IMPRESSED CURRENT, COMPARATIVE ANALYSIS

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ABSTRACT

Cathodic protection represents a widely spread method for controlling the corrosion of metallic structures in contact with various environments containing enough ions to conduct electricity such as soils and seawater. The principle of cathodic protection consists in controlling the corrosion rate of a metallic structure by reducing its corrosion potential, bringing the metal closer to an immune state. This could be achieved by two main ways: using sacrificial anode or using an impressed current. The main difference between the two methods is that the impressed current cathodic protection uses an external power source with inert anodes while the sacrificial anodes cathodic protection uses the naturally occurring electrochemical potential difference between different metallic elements to provide protection.

The paper's aim is to realize a comparative analysis of these methods with regard to their benefits, features and also to the economic point of view. Another aspect presented is the way how the cathodic protection system differs for the commercial ships to the special purpose vessels - Floating Production Storage and Offloading which, regardless of their shape that still looks like a ship, have special requirements regarding the corrosion protection.

Keywords: *cathodic protection, sacrificial anodes, impressed current.*

2. STEPS TOWARDS THE ENERGY EFFICIENT SHIP

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ABSTRACT

It is well known that air pollution is a serious and actual problem that affects our society. The maritime transport is responsible for a part of that pollution, approximately for 10% of the greenhouse gases emissions of the transport sector.

In order to reduce greenhouse gas emission from international shipping, the Marine Environment Protection Committee (MEPC) from the International Maritime Organization developed technical and operational measures, helping to improve in the same time the fuel efficiency too. The measures have been reviewed by the Committee in a number of sessions and the results were the concepts of Energy Efficiency Design Index (EEDI), Energy Efficiency Operational Index (EEOI) and Ship Energy Efficiency Management Plan (SEEMP). They have also elaborated a model course comprising the main factors that should be well known and adjusted for an energy efficient ship.

The aims of this study are to offer an overview of the proposed measures, to emphasize their technical implications and also the operational requirements that have been set in maritime field regarding the marine environment.

Keywords: *energy efficient ship, greenhouse gas, marine pollution.*

3. THE INFLUENCE OF LIQUID FREE SURFACE ON SHIP STABILITY

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ABSTRACT

Safety is the most commonly discussed feature of maritime transport and the stability is one of the most critical features of seagoing ships. In nowadays, the assessment and calculation of ship's intact stability is based on stability criteria where the righting lever curve should be corrected for the effect of free surfaces of liquids in tanks. This method, consider only the static attitude towards the sloshing phenomenon and do not take into consideration the dynamic attitude and his influence. The paper examines the effect of fluid free surfaces in slack tanks on ship's transverse stability and presents considerations on the influence of tank filling level, by analysing the heeling moment

caused by sloshing generated by a liquid with free surface and has the purpose of demonstrating the liquid free surface dynamics influence on ship's stability.

Keywords: *liquid, free surface effect, safety, sloshing, stability, heeling moment, .*

4. ENHANCING MANAGEMENT CAPACITY OF THE MARITIME INDUSTRY PERSONNEL

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ABSTRACT

Safety was and still is the most important aspect of activities onboard ships. In time, due to development of new threats against sea transport, security becomes the same importance with safety. Achieving of the present standards regarding ship, personnel, passengers and environment safety and security can be realized through a specific training. Taking in consideration actual requirements related to maritime transport safety and security, in particular at management level, Constanta Maritime University, in cooperation with Varna Naval Academy, have decided to initiate and develop a Master degree programme dedicated to training in these matters. This project is possible with the support of International Association of Maritime University (IAMU) and The Nippon Foundation in Japan. In the present paper is intended to present the objectives and goals of the project entitled "MAREM – Enhancing management capacity of the maritime industry personnel".

Keywords: *Safety, security, cooperation, master degree programme, IAMU research project*

5. EXTREME WEATHER CONDITIONS DUE TO EX-TROPICAL CYCLONE OSWALD

BOSTINA ALINA-LUCIA - *Constanta Maritime University, Romania*

ABSTRACT

In January 2013, ex-Tropical Cyclone Oswald and associated monsoon trough passed over parts of Queensland and New South Wales, Australia over a number of days, causing widespread impact including severe storms, flooding, and tornadoes. Coastal regions of Queensland were the most impacted with Mundubbera and Bundaberg in the Wide Bay-Burnett hit severely. In the wake of Oswald, torrential rain and record breaking winds, tidal surges, and even tornados rushed over the East Coast. In many places the rainfall total for January set new records. Across the affected region, damage from severe weather and flooding amounted to at least 2.5 billion$

Keywords: *ex-tropical cyclone, Queensland, hazard, flooding, damages, storm surges r.*

6. MODELATION OF THE OSCILLATORY MOTIONS OF THE SHIP FOR THE MEDITERRANEAN SEA NAVIGATION CONDITIONS, USING THE OCTOPUS SOFTWARE

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ABSTRACT

The paper presents a complex study about oscillatory motions of a ship for offshore industry in the Mediterranean Sea conditions of navigation. Geometrical, constructive and hydrodynamic particularities of these special vessels make interesting and also necessary – for safety of the navigation and operation of the ship – this study for the ships movements, considered as a rigid body with six degree of freedom. The study provides information regarding RAO (Response Amplitude Operator) operator of the ship for the displacement of gravity centre of the ship, related with the incident wave systems in the Mediterranean Sea, interpreted by the Jonswap energy spectrum, and other several conclusions. For the study, are used features offered by OCTOPUS as a tool for modelling and simulation – software that allows the study of the computerized behaviour of the ship on the waves in the real sailing conditions. Program

library was used for both the vessel itself and navigation modelling environment (for regular waves as well for the irregular waves which was modelled using Jonswap energy spectrum).

Keywords: *roll, pitch and heave motion; wave energy spectrum; RAO.*

7. STANDARD MARITIME VOCABULARY PHRASES

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ABSTRACT

The choice of English language training is critical: as the majority of seafarers now work in mixed nationality crews, effective English language training should focus on developing spoken fluency; understanding English spoken with a range of international accents.

Keywords: *SMCP, IMO, STCW, IHO*

8. ANALYSIS OF THE OPERATING REGIMES OF POWER PLANTS FOR DIFFERENT SITUATIONS NAVAL NAVIGATION

LUPCHIAN MARIANA - *"Dunarea de Jos" University of Galati, Romania*

ABSTRACT

This paper presents an analysis of exploitation parameters for naval propulsion plant at different operating regimes.

The resistance of progress is calculated in two situations the navigation (ballast and full load). For regimes analyzed is determined propeller efficiency.

Keywords: *energetic plant, the ship, deadweight, ballas, full load*

9. THE GENERALIZATION OF THE QUADRANTAL ZENITH ANGLE COUNTING RULE

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ABSTRACT

Calculating the azimuth of a star can be achieved by using spherical trigonometry formulas „$\sin Z_C$", „$\mathrm{ctg} Z_S$" or with A.B.C. tables using D.H-90 tables or Norrie's Nautical Tables. The quadrantal zenith angle counting rule can be achieved only for the positive heights of a star. In this paper the authors developed the generalized quadrantal zenith angle counting rule for the cases in which the heights are negative.

Keywords: *spherical triangle, azimuth, cotangent formula, quadrantal zenith angle.*

10. SHIPS NEW BUILDINGS, REPAIRS & CONVERSIONS OUTLOOK 2009-2012. 2013 TRENDS

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ABSTRACT

Shipbuilding is known as one of the competitive markets in the world.

Shipbuilding is the sector worst affected by the financial and economic crisis, the current global crisis hitting severely this industry. It can have the most painful impact on many shipbuilding countries of the world due to the

biggest overcapacity of shipyards ever seen and far greater supply of fleet than required by the market. Analysis shows that world shipbuilding order book is shrinking fast because of decreasing of new orders and cancellations.

The global competitive position of the European industry is under severe pressure due to the difficult market environment. European industry has to advance in superior products regarding ship safety, efficiency and marine environment protection as well as in innovative processes intended to increase production productivity.

Keywords: *international seaborne trade, freight rates, shipbuilders market, ship repairs & conversions market.*

11. IMPROVED THE MARITIME ONLINE TEACHING BY USING THE KNOWLEDGE MANAGEMENT CONCEPT

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ABSTRACT

Many activity fields including maritime area involve the concept of Knowledge Management. These programs are typically tied to organizational objectives such as improved performance, competitive advantage, innovation, developmental processes, lessons learnt transfer and the general development of collaborative practices. The paper present the applied online teaching system used by our university, designed to offer easy access to information for teachers and students, but also available for former students, now officers onboard ships, in order to be able to update latest information's about technical development in maritime field necessary in their duty activities. The international work to improve maritime education and training has identified lack of access to quality learning material and tutors in many countries. It is assumed that increased use of information and communication technologies will be one major component for future quality improvement of maritime education and training.

Keywords: *Knowledge Management, Maritime Education Training, Technology, Economic performance.*

12. AN ASPECT REGARDING THE NAVAL HISTORY OF THE HELLENISTIC WORLD: THE FLEETS OF AGATHOCLES

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ABSTRACT

The naval military history of the Hellenistic World constantly brings to light famous characters like Demetrius Poliorcetes and Ptolemy I Soter or the Carthaginian fleets that sailed towards Sicily to fight against the Greeks on the island. As regards Agathocles, modern researches concentrate mainly on his political achievements and his terrestrial military campaigns. This study aims at evaluating the part played by the Syracusan fleet in the wars that Agathocles waged against Carthage and in the military operations in the Southern regions of Italy. The presence of the Syracusan warships is attested in the operations that took place in 310 B.C., 307 B.C. or 306 B.C., in the context of Agathocles' expansion in the Italic area and in organizing the war against Carthage, in 289 B.C.

Keywords: *Agathocles, Aspis, Bruttium, Carthage, Croton, Hipponium, Hippo Acra, North Africa, Syracuse, Utica.*

SECTION II
MECHANICAL ENGINEERING AND ENVIRONMENT

13. THE CONTRIBUTION OF MAINTENANCE ACTIVITIES TO THE OPERATIONAL STATUS OF A TECHNICAL EQUIPMENT

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ABSTRACT

The service period of a technical equipment is greatly influenced by a multitude of maintenance activities:
-interventions that take place at scheduled time-intervals, having the purpose to reduce the effect of atrition on the structure of the functional modules that form the technical entity;

-solving the „out of service" situations occurred as a consequence of the impairment of the operational conditions caused by the deviations from the recommended exploitation conditions (disregarding the exploitation conditions, unsuitable profesionalism of human resource, distructive natural phenomena). Anticipated determination of the remedial intervention moments can be achieved by observing the time behaviour of that specific installation, a defining element in the substantiation of a preemptive-remedial maintenance schedule for the „in service" technical equipment or for those to be brought to service. This paper considers analyzing the evolution of the contribution of maintenance activities on the operational status of an equipment, activity that is undertaken by a group of experts, whose opinions – marks, estimations- , are given in a non-numerical manner, using an arbitrarily proposed, hierarchical scale.

Keywords: *Fuzzy hierarchical scale, Semantics, Level, Step, Regression equation, Regression coefficients, Correlation factor.*

14. AN THE ASSESMENT OF THE MEAN OF OPERATIONAL TIME-INTERVALS FOR A TECHNICAL EQUIPMENT DESCRIBED BY A WEIBULL TEMPORAL EVOLUTION

[1]BUS CAMELIA GABRIELA, [2]BOCANETE PAUL, [3]COSTEA MARIUS AUREL, [4]CARLAN MILTIADE - *[1]Ministry of Transport, [2]Maritime University of Constanta, [3]The University of South- East Europe Lumina, Romania, [4]S.C. Formenerg S.A., Romania*

ABSTRACT

The mean of the operational time-intervals, MTBF (Mean Time Between Failures) is one of the most important parameters in „The theory concerning the reliability of systems". It is a quantity described by the opposite value of the failure intensity of a retrievable system and it indicates the mean time-interval between two consecutive failure situations of a one entity. The assesment of this quantity, when assuming the case of a Weibull distribution, is different compared to the exponential model version. This paper analyzes a „case study" where two technical equipments – water heaters – have a different time evolution: one of them is described by an exponential distribution of the operational time-intervals whereas the other is described by a Weibull operational behaviour.

Keywords: *Normal distribution assesment test, Weibull distribution assesment test, Calculation quantile, Test quantile, Likelihood threshold, Standard deviation, Variation coefficient.*

15. THE MAINTENANCE TEAM. STATISTICAL AND CYBERNETICAL ANALYSIS

[1]BUS CAMELIA GABRIELA , [2]COSTEA MARIUS AUREL , [3]BOCĂNETE PAUL, [4]CÂRLAN MILTIADE - *[1]Ministry of Transport, [2]The University of South- East Europe Lumina, Romania, [3]Maritime University of Constanța, [4]S.C. Formenerg S.A.*

ABSTRACT

The paper present an approach of structuring the work group - the team- in order to perform maintenance activities. Optimum selection of staff requires the decisional factor to conduct a thorough analysis concerning: professional training of team members, efficient use of work time, achievment of full congruence between the work complexity and the skills of workers, diminishment of time interval allotted to tecnical support when the features of work activities exceed the operational potential of the group, avoidance of wasting human resources that have higher qualifications compared to the profile of the activity and also achieving a sinergistic performance level concerning work cooperation of executing group.

Keywords: *Service factor, Regression equation, Correlation ratio, Degrees of freedom, Quantile, Markov chain, Carson-Laplace transform, Transfer function, Reverse transform.*

16. SEISMIC LOADS NUMERIC CALCULATION FOR A NUCLEAR CLASS 2 PIPING SYSTEM

[1]CALIMANESCU IOAN, [2]STAN LIVIU-CONSTANTIN - *[1,2]Constanta Maritime University, Romania*

ABSTRACT

Due to its location, seismic activity is common in Romania and earthquake engineering is a well known subject. Earthquake risks maps have been constructed to predict the ground acceleration in different parts of the country. All structures, including pipeline systems, are designed according to a particular design code. In particular for NPP of

Cernavoda, the ASME Sect.III design code (App. N) may be used in structural earthquake design. Significant increased cost is involved in the design, making and installation of structures where seismic loading is taken into account. In particular, the supports for piping systems are made bigger and stiffer to withstand the loading.

Therefore, it is of utmost importance to have a simple standard procedure for seismic design/verification of piping systems. The focus here is on the seismic loads calculation for a Nuclear Class 2 piping system. The proposed FE model was developed inside the Piping Module of ANSYS, with 197 elements and 214 nodes, the pipe runs and the valve were modeled using Pipe 16 element type, the elbows with Pipe 18 Element type and the Snubbers and Spring hangers with Combin 14. The computed model showed good results and behaviour as far as the static loads are concerned but failed to pass the Seismic response analysis.

Keywords: *Finite Elements, Nuclear Class 2, Piping System, Spectrum Analysis.*

17. DOES THE "AVERAGED RESPONSE" OF A CHAOTIC SYSTEM. EXHIBIT NEAR-PERIODICITY?

DELEANU DUMITRU - *Constanta Maritime University. Romania*

ABSTRACT

Chaotic motion of a harmonically excited square prism modelled as a Duffing oscillator and kept in fluid flow is considered. The fluid dynamic forces contribute additional non-linear terms to the inherent non-linearity of the system. As the flow velocity is increased, the nature of motion is changed from a periodic motion to a chaotic one. This paper wants to demonstrate the periodicities embedded in the averaged responses of this chaotic system. By discretizing the initial conditions on a chosen domain and averaging the corresponding responses, on finds that the averaged response exhibit near-periodicities with primary frequency components at excitation frequency, multiples or half multiples of excitation frequency. Numerical simulations confirm those results.

Keywords: *Chaotic and periodic motion, Duffing oscillator, averaged response*

18. CHAOS SYNCHRONIZATION OF SPROTT K AND ACT SYSTEMS USING BACKSTEPPING DESIGN

[1]DELEANU DUMITRU, [2]PANITESCU VIOREL - *[1,2]Constanta Maritime University, Romania*

ABSTRACT

This paper examines the synchronization performance of a widely used chaos synchronization scheme, called the back-stepping method. It consists in a recursive procedure that interlaces the choice of a Lyapunov function with the control. Because it needs only one controller to realize synchronization it is very attainable in engineering applications. In the paper, we have applied back-stepping design for the global chaos synchronization of two identical Sprott K systems and two identical Act systems. Numerical simulations are shown to validate and demonstrate the effectiveness of the scheme.

Keywords: *Back-stepping design, chaos, synchronization, Sprott K system, Act system*

19. IMPACT EVALUATION OF A LARGE PELAMIS BASED ENERGY FARM ON THE WAVE FIELD IN THE ROMANIAN NEARSHORE AREA

[1]DIACONU SORIN, [2]RUSU EUGEN - *[1,2]Dunarea de Jos University of Galati, Romania*

ABSTRACT

The present work describes a study related to the influence on the shoreline dynamics of a large WEC array consisting of Pelamis devices. The target area is located in a coastal environment in the western side of the Black Sea. Various simulations based on the wave climate from this area have been made with SWAN spectral phase averaged wave model. Two situations have been considered in order to evaluate the impact of the wave energy farm: model simulations without any wave energy converter and simulations considering included in the computational domain of a system consisting 30 Pelamis devices. More analysis have been carried out in both geographical and spectral spaces. The results show that a significant influence appears in the area analyzed and is gradually decreasing to the coast line level.

Keywords: *Black Sea, SWAN, Pelamis,WEC, nearshore waves, coastal impact.*

20. MODAL ANALYSIS OF NATURAL FREQUENCIES AND MASS PARTICIPATION COEFFICIENTS OF SIMPLY SUPPORTED THIN PLATES WITH DAMAGES

[1]HATIEGAN CORNEL, [2]NEDELONI MARIAN-DUMITRU, [3]TUFOI MARIUS, [4]PROTOCSIL CARLA, [5]RADUCA MIHAELA - [1,2,3,4,5]*„Eftimie Murgu" University of Resita, Romania*

ABSTRACT

This paper presents the results regarding the determination of natural frequency and mass participation coefficients of a simply supported plates types with 2 and 3 defects. The simulation was made by modal analysis through SolidWorks software. Interpretation of the results is embodied in table form and graphical form.

Keywords: *natural frequencies, mass participation coefficients, simply supported.*

21. MODAL ANALYSIS THROUGH SOLIDWORKS SOFTWARE OF CLAMPED THIN PLATES WITH DAMAGES

[1]HATIEGAN CORNEL, [2]TUFOI MARIUS, [3]RADUCA EUGEN, [4]PROTOCSIL CARLA, [5]MITULETU CORNEL - [1,2,3,4,5]*„Eftimie Murgu" University of Resita, Romania*

ABSTRACT

This paper presents the results obtained by modal analysis through SolidWorks software for determining natural frequency of some types of clamped thin plates with 2 and 3 damages on longitudinal axis and on the laterally side/ center. Interpretation of results obtained from simulation for a total of 20 vibration modes is shown by comparison in tabular form and in graphical form.

Keywords: *modal analysis, clamped thin plates, damages.*

22. THE INFLUENCE OF SHELL'S SHAPE IN SHIP DESIGN

[1]NECHITA MANUELA, [2]MOCANU COSTEL-IULIAN, [3]POPESCU GABRIEL - [1,2,3]*"Dunarea de Jos" University of Galati, Romania*

ABSTRACT

The paper presents a study on shell-metal casing in order to improve the ship design process for respecting the International Maritime Organization (IMO) regulation. A ship, as a multifunctional marine structure on the sea, has structural vibration that may affect both the comfort of the crew and the life of the environment's fauna. An experimental modal analysis is made. The results from diagrams show that the decreasing of curvature is favourable in increasing natural frequency of the shell metal plate. This phenomenon allows avoiding the resonance of the shell during the machine running.

Keywords: Green Policy, hull design, impact, modal analysis, shape

23. RESEARCH REGARDING THE CAVITATION EROSION RESISTANCE OF THE STAINLESS STEEL WITH 13% Cr AND 4% Ni USED TO MANUFACTURE THE COMPONENTS OF KAPLAN, FRANCIS AND PELTON HYDRAULIC TURBINES

[1]NEDELONI MARIAN-DUMITRU, [2]NEDELCU DORIAN, [3]CAMPIAN VIOREL-CONSTANTIN, [4]CHIRUS DANIEL, [5]AVASILOAIE RAOUL-CRISTIAN,[6] DANUT FLOREA - [1,2,3,4,5,6]*„Eftimie Murgu" University of Resita, Romania*

ABSTRACT

The paper presents the experimental results on testing the cavitation erosion resistance of 2 batch types of the X3CrNi13-4 martensitic stainless steel used to manufacture the components of hydraulic turbines. The experimental research was performed through the stationary specimen method on the cavitation stand of CCHAPT research center

from „Eftimie Murgu” University of Resita. The experimental obtained results are shown in tables and graphs regarding the reproduction of the mass loss and cavitation erosion rate function of time curves.

Keywords: *cavitation erosion, martensitic stainless steel, micro-/macrostructure.*

24. THE TEMPERATURE FIELD OF THE EXHAUST VALVE AT A SLOW SHIP'S ENGINE

OMOCEA ION - *Constanta Maritime University, Romania*

ABSTRACT

This paper is made to determine the temperature field in the exhaust's valve periodical action of burnt gases and to the contact with the valve seat.

The exhaust valve of a slow ship's engine with parallel flow ablution is submitted to variable thermal applications, as during an engine cycle, it heats up from the burning gases and it cools through the contact with the valve seat. The valve seat gives in at it's turn the heat of the water from the cooling circuit of the engine.

In order to determine the deformations to which the exhaust valve is subjected, deformations that may influence the tightness of the burning room, it is necessary for us to determine the temperature distribution.

Knowing the temperature distribution, depending on the known parameters, we can determine the thermal state of the valve in different functioning regimes of the ship's engine.

The equations that describe the temperature field in the valve are the differential non-linear equations with partial derivative.

Keywords: *heat transfer, conductivity, ship, engine, burning room.*

25. THE MODELING OF THE CYCLE OF THE COMPRESSION IGNITION ENGINE ON THE GROUNDS OF THE EXERGETIC METHOD OF THERMODYNAMIC ANALISYS

OMOCEA ION - *Constanta Maritime University, Romania*

ABSTRACT

The actual development stage of the know how has imposed the necessity to use new methods of investigation to determine with a higher accuracy the factors that lead to the optimal solutions. In this context, the actual text is dealing with the study of the cycle of functioning of an engine on the ground of thermodynamic analysis of the causes, things, gravities, and effects of the functional processes irreversibility, in particular, of the compression ignition engine.

Keywords: *engine, compression, irreversibility, processes, exergy.*

26. EVALUATION OF THE ENVIRONMENTAL CONDITIONS IN THE VICINITY OF THE ROMANIAN PORTS AT THE BLACK SEA

[1]ONEA FLORIN, [2]DIACONU SORIN, [3]RUSU EUGEN - *[1,2,3]Dunarea de Jos University of Galati, Romania*

ABSTRACT

Starting from the fact that the coastal environment in the vicinity of the main ports is subjected to the highest risks of accidents, especially due to the intense navigation traffic taking place in these areas, the objective of the present work is to evaluate the environmental conditions in the neighborhood of the Romanian harbors at the Black Sea. These are Mangalia, Constanta and Midia-Navodari. Additionally the conditions in the coastal environment at the mouth of the Danube River, close to the Sulina harbor are also assessed. The environmental parameters analyzed are waves, wind and currents and the main data source is represented by the satellite measurements. Additionally, wind model data provided by the European Centre for Medium-range Weather Forecasts and current fields from the web site of the Romanian National Institute for Marine Research and Development are also considered. The results of the analysis are structured on total and winter time, respectively and they provide valuable information concerning the navigation risks in the vicinity of the Romanian harbors at the Black Sea.

Keywords: *Black Sea, Romanian ports, environmental conditions, navigation risks.*

27. STUDY REGARDING THE INFLUENCE OF TRIBOLOGYCAL FACTORS ON THE SUPERFICIAL LAYERS OF STEELS TREATED WITH PLASMA NITRIDING

PAPADATU CARMEN- PENELOPI - *"Dunarea de Jos" University of Galati, Romania*

ABSTRACT

We have hereby considered some 42MoCr11 (SAE 4142) steel grade samples. This material was subjected to the plasma nitriding treatments regimes. The structural and diffractometrical aspects of the superficial layers of the steel are studied after the wear tests by friction, using an Amsler type machine, taking two sliding degrees at different contact pressures and testing time. The tests were performed to detect the evolution of the superficial layer through different tests and to establish the influence of the tribological factors (operating parameters) on the superficial layers.

The tests were done to detect the sustainability of this material.

Keywords: *plasma nitriding process, wear process, tribological parameters*

28. NUMERICAL MODELING OF DOUBLE BOTTOM PANEL IN THE CENTER OF THE VESSEL

[1]PAVEL ADRIAN, [2]CRISTEA ANIŞOARA-GABRIELA - *[1,2]"Dunarea de Jos" University of Galati, Faculty of Naval Architecture, Romania*

ABSTRACT

This paper presents the steps for manufacturing a double bottom panel for a bulk carrier ship, using Femap finite element program based on data obtained from sampling the ship in Poseidon and description of ship nomenclature in AutoCAD.

Keywords: *mechanical structures, numerical modelling, stress calculation.*

29. "COMARNA" ORTHOSIS – CALCULATION OF THE SHEAR RIVETS AND MATERIALS USED

[1] RANCEA ADY, [2] MACUTA SILVIU - *[1]"Gheorghe Asachi" Technical University of Iaşi, Romania, [2]University Dunarea de jos of Galati, Romania*

ABSTRACT

If the Achilles tendon stalks, the emergency surgery involves the ligation and the recovering of the tendon of interest. The interest in physical therapy is for a model that would allow adjustment dorsiflexed stages, the number of degrees, and the final stage the same orthosis to submit a joint motion for free care. The Comarna orthosis solution is for these stages, a cut in the leg support in making a dynamic orthosis to assist. The paper addresses the leg in terms of biomechanical and choosing the right type of mechanism.

Keywords: *biomechanics, rivets, orthosis, tendon.*

30. STUDY OF INJECTION INFLUENCE ON DIESEL ENGINE COMBUSTION

SABAU ADRIAN - *Constanta Maritime University, Romania*

ABSTRACT

Computational simulation for the combustion process in a DI diesel engine was performed through a code made by the author [4]. Two conditions of different injection pressure were examined in the simulation. The injection pressures are 1500 bars and 500 bars. The combustion phenomenon was modeled as a combined process of formation of a combustible mixture and a chemical reaction. The rate of mixture formation was assumed to be dependent on the turbulence characteristics and the concentration of species in each computational cell. The rate of chemical reaction is described as an Arrhenius equation. The result of the simulation agrees with the experimental result qualitatively, and the effect of injection pressure on the combustion process is well predicted.

Keywords: *spray, turbulence, injection, heat release, injection pressure.*

31. USING PROFESSIONAL SOFTWARE TO CALCULATE THE DRAG

[1]TICU RODICA-IONELA, [2]BOCANETE PAUL - *[1,2]Constanta Maritime University, Romania*

ABSTRACT

For differential equations with derivatives, the possible ways of discretization are not unique, although it is assumed that all will offer the same solution. The most popular discretization methods are: the finite element method and respectively, the finite differences method. Although the finite element has the advantage of using unstructured networks that give more flexibility in mapping irregular and complicated fields, some particular problems reduce its progress in hydrodynamics by comparison to solid mechanics. The most important issue concerns the nature of the flow.

Keywords: *the finite element, the finite differences, pressure-velocity, velocity components, boundary*

32. NUMERICAL SIMULATIONS OF THE CURRENT FIELD IN THE BLACK SEA BASIN

[1]TODERASCU ROBERT, [2]RUSU EUGEN - *[1,2"]Dunarea de Jos" University of Galati, Romania*

ABSTRACT

The objective of this work is to present the implementation of a circulation modeling system for the entire basin of the Black Sea. In this regard, two simulations using Mohid water modeling system were performed for the months of February and August 2010. The input data considered for the current simulations are salinity and temperature fields, obtained from the Black Sea Forecast System, coastlines, bathymetry from ETOPO2 website and wind forcing provided by the European Centre for Medium Range Weather Forecasts (ECMWF). Model validations were performed considering satellite data. Moreover, the simulation results were compared to an implementation of the Princeton Ocean Model (POM) realized by the National Institute for Marine Research and Development "Grigore Antipa".

Keywords: *current velocity, Black Sea, circulation, Mohid, satellite data, comparisons*

33. VERTICAL STRUCTURE OF THE CURRENTS IN THE BLACK SEA BASIN

[1]TODERASCU ROBERT, [2]RUSU EUGEN - *Dunarea de Jos University of Galati, Romania*

ABSTRACT

The present work is focused on the investigation of the vertical structure of the currents in the Black Sea basin. In order to accomplish this objective, relevant information concerning the vertical current fields was acquired from the Black Sea Physical Forecasting System. The above data contain horizontal and vertical current fields, up to 2100 meters in depth. The present analysis was carried out considering 18 points that cover the entire Black Sea basin. The depth variations of the current velocities were analyzed in the present work with a detailed analysis for 6 reference points.

Keywords: *Black Sea, current fields, vertical profiles, circulation patterns.*

34. LINEAR OSCILLATING SYSTEM WITH IMPULSE EXCITATION IN CASE OF NAVAL AND MARITIME SPECIAL PRODUCTS

VLADU GABRIEL-LIVIU - *Constanta Maritime University, Romania*

ABSTRACT

This paper aims to address some aspects of linear oscillating system with impulse excitation in the case of special naval and maritime products based on the analysis in terms of the relationship between disturbance applied to their and response represented by vibratory motion.

Experimental measurements were carried out during shooting experiments with a special naval and maritime product.

Keywords: *motion analysis, linear oscillating system, motion impulse, naval weapons.*

SECTION III
ELECTRONICS, ELECTRONICAL ENGINEERING AND COMPUTER SCIENCE

35. NOTES REGARDING ALGEBRAIC ANALYSIS OF P-TIMED PETRI NETS

[1]BORDEA GHEORGHE, [2]DINU SIMONA - *[1,2]Constanta Maritime University, Romania*

ABSTRACT

In this paper we present a modeling method for the P-timed Petri nets that can be applied only if each timing of the studied network can be expressed as a multiple of a basic unit of time. For such a network, an equivalent T-synchronized network shall be drawn. This can be studied using linear algebra, i.e. fundamental equation and incidence matrix based methods ([1], [2]).

Keywords: *Discrete Event System, Modeling, Petri Nets*

36. APPLICATION CONSIDERATIONS — CVT ELECTRICAL CHARACTERISTICS DURING LINEAR AND NONLINEAR LOADING

[1]CIUCUR VIOLETA-VALI, [2]KULIMANOVA MARZHANGUL - *[1]Constanta Maritime University, Romania [2]Caspian State University of Technologies and Engineering named after Shahmardan Esenovici Esenov, Kazakhstan*

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: *low loading, load-current distortion, electric-service supply.*

37. HARMONIC FREQUENCIES MANAGEMENT

[1]DORDEA STEFAN, [2]ZBURLEA ELENA - *[1,2]Constanta Maritime University, Romania*

ABSTRACT

Harmonic effects must be considered, and managed, in order to avoid deterioration and malfunction of equipment, and to meet the rules and regulations' requirement for harmonic distortion levels. There are certain engineering aspects that may be used to obtain these objectives, discussed in the following.

Keywords: *harmonic effects, Frequency Converter*

38. LOWER HARMONIC DISTORTIONS BY USING TUNED FILTERS

[1]DORDEA STEFAN, [2]ZBURLEA ELENA - *[1,2]Constanta Maritime University, Romania*

ABSTRACT

Adding filters to the network will alter the load current waveforms of the converters, and the filter design will always be an iterative approach before finding the final design.

Keywords: *passive filter, Frequency Converter*

39. ANTENNA ANALYSER

[1]GRIGORESCU LUIZA, [2]DIACONESCU IOANA - *[1,2]Engineering Faculty of Braila, [1,2]"Dunarea de Jos" University of Galati, Romania*

ABSTRACT

The paper's aim is to allow a complete analysis of an antenna. In the same time we propose the calculus an also the way which allow to precisely determinate an antenna's impedance active and reactive components and in the same time the resonance frequency.

Keywords: *Antenna, frequencies, calibration.*

40. CONTRIBUTION TO TREATMENT SYSTEM DEFORMED HIGHLIGHTED A NETWORK CONNECTION POINT OF MEDIUM AND HIGH VOLTAGE

MARZHANGUL RAKHASHOVNA KULIMANOVA - *Caspian State University of Technology and Engineering named after Sh.Yessenov, Aktau, Republic of Kazakhstan*

ABSTRACT

Always considered directly, an indicator of nonsinusoidal load, deforming residue is used to determine the periodic wave distortion, harmonic. Is normal for certain types of equipment, it is natural to be considered however as a separate indicator.

Keywords:. order of harmonics, Fourier series, parameters of distortion.

41. BACKUP COMMUNICATION SYSTEM FOR EMERGENCY SITUATIONS IN ELECTRICAL ENERGY DISTRIBUTION NETWORKS

[1]SUSNEA IOAN, [2]VASILIU GRIGORE - *[1,2]University "Dunarea de Jos" of Galati, Romania*

ABSTRACT

The most common solution for remote monitoring and control of the protection relays used in modern electrical energy distribution systems relies on GSM/GPRS communication. In practice, however, the emergency situations in energy distribution systems usually occur in special weather conditions (storms, massive snowfalls, etc.), or in crisis situations (natural disasters, armed conflicts, etc.), when the GSM communication system is also disrupted. Thus, the fault localization and repair is often delayed, which results in significant losses for the electricity companies, and major discomfort for thousands of subscribers.

This paper explores the technical feasibility of creating an alternative communication system, based on the Wireless Sensor Networks (WSN) technology, able to substitute the GSM communication for monitoring the reclosers deployed along the energy distribution lines. This preliminary study suggests that the existing WSN devices and protocols allow the implementation of an emergency communication system capable to route relatively small amounts of data over wide geographic areas. Such a system is, in principle, capable to ensure backup communication for emergency fault diagnosis in electrical energy distribution systems.

Keywords: *Wireless Sensor Networks, Communication protocols, Energy distribution systems, Emergency situations*

SECTION IV
MATHEMATICAL SCIENCES AND PHYSICS

42. OPTIMIZED DETECTION OF AMPHETAMINES BASED ON PRINCIPAL COMPONENT ANALYSIS

[1]CIOCHINA STEFANUT, [2]PRAISLER MIRELA - *[1,2]"Dunarea de Jos" University of Galati, Department of Chemistry, Physics and Environment, Romania*

ABSTRACT

In this paper we are presenting the results of a multivariate analysis applied in order to optimize the automated detection of illicit amphetamines. The study was conducted based on Principal Component Analysis (PCA). We have used as input for this unsupervised pattern recognition method a spectral database containing the GC-FTIR spectra of the main prohibited amphetamines, their precursors or derivatives. The spectra were preprocessed by using a function that is selectively amplifying the absorptions found as important from the point of view of the modeling and of the discrimination power. The results show that amphetamine analogues form distinct clusters according to their biological activity and associated toxic (stimulant or hallucinogenic) effects. The use of the selective amplifier leads to a significant improvement of the efficiency of the class identity assignment to unknown compounds.

Keywords: *amphetamine, principal component analysis, detection optimization.*

43. SELECTIVE AMPLIFIER USED FOR THE EFFICIENT DETECTION OF AMPHETAMINES

[1]PRAISLER MIRELA, [2]CIOCHINA STEFANUT - *[1,2]"Dunarea de Jos" University of Galati, Department of Chemistry, Physics and Environment, Romania*

ABSTRACT

In this article we are presenting the optimization of the selectivity of a multivariate system designed to detect the illicit amphetamines. The input database consists of the GC-FTIR spectra of a selection of relevant compounds, which were preprocessed with a function that selectively amplifies the absorptions with high discrimination and / or modeling power. The analysis of variable loadings determined by Principal Component Analysis (PCA) enabled the identification of the infrared absorptions responsible for the discrimination of well defined clusters and the detection of a large variety of forensic compounds according to their biological (stimulant and / or hallucinogenic) effect. The improvement of the detection results generated by the use of the selective amplifier is discussed in detail.

Keywords: *Principal Component Analysis, selective amplifier, amphetamines, loading plots.*

SECTION V
ENGLISH FOR SPECIFIC PURPOSES

44. INSIGHTS INTO SPECIALIZED TRANSLATION. THE CASE OF MARITIME TEXTS

COJOCARU OLGA - *University of Galati, Romania*

ABSTRACT

The paper intends to raise awareness on the important role played by globalization in our production and perception of language, as well as the changes brought to the status of English as an international *lingua franca*. The emergence of the new branch of Translation Studies, namely LSP translation, draws attention towards an imminent search for standardization of terminology and for this purpose, the corpus-based approach suggested in the paper attempts to highlight the recurrent problems encountered at a lexical and terminological level in different stages of a translation project involving an institutional text.

Keywords: *Globalization, Language for Special Purposes, Specialized Translation.*

45. ANTAGONISTIC TERMS FOUND ON LAND AND OFFSHORE

GEORGESCU MIRCEA - *Constanta Maritime University, Romania*

ABSTRACT

There are words and phrases that contradict themselves. In other words, by some freak of language evolution**,** they are their own antonyms, or homonyms with opposite meanings, or antonyms with the same lexical form (or phonetic). The English language has its generous share of words, although some think "they are not a ton of them" [3; 1], that can mean the opposite of themselves, and sometimes they are included in 'let's have fun with words' chapter. And yet, studying a language is not a joke and these contradictory terms should be given more consideration. And even more so when we meet them in a metalanguage such as maritime English (from now on named offshore words and phrases).

The contronyms are divided into words, phrasal verbs, and expressions that meet the definition, and a lot of the most difficult are followed by examples to throw more light on them, i.e. to make them more user friendly.

I also tried to identify a number of words used in the seafaring adventure as they have never been mentioned in the literature.

Keywords: *contronyms,paradoxes, context, on- and off-shore use,*

46. CHARACTERISTICS OF THE LANGUAGE USED IN NAVAL ARCHITECTURE ADVERTISING

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ABSTRACT

Nowadays advertising in naval architecture is meant to persuade a client to purchase products, ideas, services etc. The main function of advertisements is to create desires, emotions, feelings, values, attitudes towards the products in its viewers (possible customers). This paper gives an overall analysis of the advertisement in naval architecture from the aspects of language levels (graphological, lexical, syntactic, grammatical, and semantic) and textual analysis (the layout and the paragraph).This paper can help readers better understand and appreciate the language of naval architecture advertisements.

Keywords: *advertising, naval architecture; lexical, syntactic, grammatical, semantic features*

47. ON NOMINALIZATION IN MARITIME DISCOURSE

VISAN IOANA RALUCA - *Constanta Maritime University, Romania*

ABSTRACT

A very common syntactic phenomenon of specialized discourse is nominalization. Reliance on nominalization can be explained as a search for greater conciseness of expression, the information conveyed in a concise, direct, condensed form having a greater impact upon the reader. Thus, in maritime discourse a great amount of semantic and syntactic information is compressed into a highly compact form, i.e. nominal compounds, compound nominal phrases or complex nominal groups. The purpose of the present approach is to enlarge upon the concept of nominalization and its productivity in maritime discourse.

Keywords: *nominal compounds**,** translation, lexical density, maritime texts*

SECTION VI
TRANSPORT ECONOMICS

48. THE STRATEGIC ISSUES – STRUCTURAL ELEMENTS OF STRATEGIC MANAGEMENT

BALTA CORNELIU - *Wales University, Romania*

ABSTRACT

The paper presents the most important concepts related to strategic management and the connection with strategic results as they are obtained after the main steps in strategic management are followed. The dynamics of the relationship between strategic issues and objectives is included.

Keywords: *strategic management, vision, mission, leadership.*

49. QUALITY ASSESSMENT OF STRATEGIC MANAGEMENT IN ORGANIZATIONS – A MATURITY MODEL

BALTA CORNELIU, ROSIORU NICOLETA DIANA - *Wales University, Romania*

ABSTRACT

The paper presents the actual main concepts related to assessment of quality management in organizations. Strategic management is analyzed taking into consideration the most important dimensions including leadership, culture and values, process improvement, etc. The five levels of maturity model of strategic management are described showing the connection with organizational development.

Keywords: *quality assessment, maturity model, performance measurement*

50. IMPORTANCE OF STUDYING CHRONOLOGICAL SERIES FOR THE ANALYSIS OF TRANSPORT ACTIVITY

BRANZA GRATIELA - *Constanta Maritime University, Romania*

ABSTRACT

The knowledge of socio-economic phenomena on different time periods are based on the interpretation of time series. The purpose of the statistical analysis of time series is to determine the objective trend of a phenomenon development in the past, but also in present, extrapolating the past and present data to the future in order to determine the values of the forecast. This paper presents the possibilities of analysis and interpretation of a time series of data on transported goods in Romania in the period 2005-2010, with its specific system indicators. It combines theoretical issues with the applicative ones, highlighting the importance of statistical analysis of time series to capture objectively the evolution of the economic phenomenon that is the research subject in this paper.

Keywords: *chronological series, time series, indicators system, absolute indicators, relative indicators, average indicators, mode of transport, transported goods*

51. SUSTAINABLE TRANSPORT' S INDICATORS. COMPARATIVE STUDY: EU-27 AND ROMANIA

[1]BRANZA GRATIELA, [2]CRISTEA VIORELA-GEORGIANA - [1,2]*Constanta Maritime University, Romania*

ABSTRACT

Sustainable development is one of the most important target of the European Union. Between EU Sustainable Development Strategy's challenges, sustainable transport represents an essential aim. According to EU statements, "to ensure that our transport systems meet society's economic, social and environmental needs whilst minimizing their undesirable impacts on the economy, society and the environment". Our work is a comparative study between EU-27

and one of its member country (Romania) regarding the set of sustainable transport's indicators, as a statistical overview of progress towards the accomplishment of EU sustainable development strategy's goals in this sector of activity. As a result of our statistical analysis, we present some measures that can be taken to increase the sustainability of european transport, focusing on reducing the adverse effects of transport activities on the environment and promoting solutions in order to minimise the vehicle's emissions and costs and thus, to meet the sustainability objectives and to contribute to a sustainable quality of life.

Keywords: *sustainable transport, indicators, sustainable development, transport mode, EU-27, Romania, environment*

52. ASSESSMENT OF STRUCTURAL INSTRUMENTS IMPACT UPON SUSTAINABLE DEVELOPMENT

CIOBANU CARMEN-LILIANA - *„Alexandru Ioan Cuza" University of Iasi, Romania*

ABSTRACT

In assessing the impact of pooling structural funds, macroeconomic models have great advantages in testing versions of financial resources allocation and in the opportunity of analyzing the trends that the economy follows and domains of interest.

The models offer perspective of estimation on long time horizons to justify political, economic or social decisions allowing the quantification of pertinent macro-economic impacts, from the analysis of a functional economic model, is simulated through projections the functioning of national economies.

Keywords: *cash flow, funding sources, impact.*

53. THE PRICE SYSTEM IN ROMANIAN MARKET ECONOMY

DRAGAN CRISTIAN - *Constanta Maritime University, Romania*

ABSTRACT

The liberalization of the price in our country led in most cases to price increases because of significant causes: the supply is far bellow the demand, competition among producers can not manifest because of lack of supply and economic agents, companies do not work to production capacity, productivity is low and the costs are high. Obsolescence of technologies didn't allow a high production, price reduction of raw materials and energy at the world price level and subvention elimination.

Keywords: *price system, supply, demand, price analysis.*

54. THE TAX SYSTEM IN ROMANIA

DRAGAN CRISTIAN - *Constanta Maritime University, Romania*

ABSTRACT

Tax system as a set of principles, rules and method of organization is materialized in laws or regulations having the force of law. In Romania, the task of creating a tax system and fiscal strategy lays upon the legislature (Parliament) and the executive (the Government).

Keywords: *tax system, fiscal procedure code, profit tax, income tax.*

55. COMPUTER MANAGEMENT SYSTEMS IN MARITAIM ORGANIZATION

[1]GEORGESCU STEFAN; [2]MUNTEANU VALENTİNA - *[1]Constanta Maritime University, Romania; [2]Andrei Saguna University, Constanta, Romania*

ABSTRACT

Increasingly rapid changes in business environment and increase the complexity of activities within a shipping company needs to continuously adapt in a fast rithm that often challenging exercise capacity and human factor analysis. ERP systems (Enterprise Resource Planning) was created as the solution to these challenges, being able to process a high volume of data and aggregated information to optimize processes and efficiency.

The use of IT management solutions within an organization can optimize resources for multiple projects, you can remove failures created by the lack of centralized coordination of projects, can make project portfolio analysis to assess their performance and profitability An ERP is a complex multi-modular software application that integrates with the organization of economic processes to optimize and increase their efficiency.

In terms of functionality, an ERP software covers the following areas of interest of the organization: planning, procurement management, inventory management, interaction with suppliers, customer relationship management, order tracking, financial management, human resource management.

Starting from the premise of that the whole is greater than the sum of the parties, conducted an ERP integration organization and synchronization functions. It is an excellent means of integrating and ordering information, streamlining the exchange of data between departments.

Keywords: *Management, Enterprise Resource Planning, Organization, Software, Computer systems.*

56. COMMUNICATION'S MANAGEMENT IN CRISIS AND CONFLICT SITUATIONS. APPLICATION OF COMMUNICATION'S SKILLS IN MARITIME INDUSTRY

[1]IMASHOVA ZHULDZ, [2]KARZHAUBAYEVA ONAICHAN, [3]FELICIA SURUGIU, [4]SIMONA MINA -
[1,2]Caspian State University of Technologies and Engineering, Kazahstan, [3]Maritime University of Constanta, [3]University Ovidius of Constanta, Romania

ABSTRACT

Which are the purposes for Communication courses regarding the professional training in maritime industry? As such, here there are some certain hypotheses and objectives regarding the needs of communication skills in maritime domain.

Why do we need communication's skills?

One of the main objectives is to know our interlocutor: we need to relate in order to know our interlocutor within the first 5 minutes of relating. Eric Berne in "What do say after we say Good Afternoon (Hello), considers that the process finding out requires an analysis:

- Of the first 20 words (through the dynamic elements of expression: volume, tonality, rhythmus)
- The first 20 steps (walking is an expressive non-verbal element-we walk in certain manner when we are enthusiastic and in a different manner when we are under the pressure of the negative emotional stimuli: stress, anxiety, pain).
- The first 20 breaths (the control of breathing is a fundamental non-verbal communication's element in managing stress and anxiety; the success of our tasks, which involve crisis or unforeseen situations, is determined by this control)
- The first 20 looks: glances and looking are fundamental communication's vectors.

Up to the interpersonal communication's skills improving, the main objective of the paper is to establish correct labor and employee relations, within the shipping domain. The relations between managers and their employees must be handled legally and effectively. Employer and employee rights must be addressed. It is important to develop, communicate and update human resources policies and procedures so that managers and employees know what is expected of them.

Keywords: *managing, conflicts, communication skills, maritime industry.*

57. SUPPLY CHAIN MANAGEMENT IN SHIPPING

[1]IORDANOAIA FLORIN, [2]IMASHOVA ZHULDUZ, [3]KARZHAUBAYEVA ONAIKHAN - *[1]Constanta Maritime University, Romania,[2,3]Caspian State University of Technologies and Engineering, Kazakhstan*

ABSTRACT

Supply chain management strategies began to be used in shipping for a short time. They will change the traditional concepts of liner or tramp, which are limited only to transport goods and less on what kind of opportunities they represent. The transition to this new concept will not be easy because the maritime market has a certain specific; the shipping companies are more interested in the price of a larger transport, in the cost reduction of the ships than in the direct affiliation to a supply chain. Some shipping companies are part of supply chains, even without involving in the strategies of the partners in the chain, having only transportation contractual relationship. In this paper, it will be presented and analyzed a number of situations in which the maritime shipping companies are. It will be presented a

number of solutions for integrating maritime shipping companies in international organizations that require the existence of supply chains.

***Key words**: maritime transport, ship, costs, logistics, supply chain. JEL Classification: F23, L91.*

58. THE PEOPLE'S IPO - THE MODERN TREND OF STRENGTHENING OF KAZAKHSTAN'S BUSINESS

KARZHAUBAYEVA O.ZH. - *Caspian State University of Technologies and Engineering Named after Sh.Esenov, Aktau city, Kazakhstan*

ABSTRACT

In 2012, Kazakhstan initiated the first wave of People's Initial Public Offerings (IPOs), in which some of the largest and most profitable corporations in the country went on the market. The aims of the programme are ambitious. Upon completion of the People's IPO campaign, it is expected that Kazakhstan will have attracted unprecedented domestic investment into the Kazakhstan Stock Exchange (KSE) in Almaty. This will make the country the most dominant investment and stock trading center for all of Central Asia.

The programme is also designed to share the wealth of the nation and significantly expand the middle-class sector of society.

Keywords: *People's Initial Public Offerings (IPOs), investors, shareholders, cooperation*

59. TECHNOLOGY OF TEACHER AND STUDENT "PORTFOLIO" IN PRIMARY SCHOOL AS EDUCATIONAL INNOVATION

KARZHAUBAYEVA O.ZH., KOKSHEEVA Z.T. - *Caspian State University of Technologies and Engineering Named after Sh. Esenov, Aktau city, Kazakhstan.*

ABSTRACT

If pedagogical innovation implies the understanding of some idea, method, tool, technology or system, the innovation of this system will be the process of implementation and development of an innovative approach. An illustrative example in this respect is the portfolio which is a form of organization and the technology process of the products of cognitive student activity are intended to demonstrate the analysis and evaluation for the development of reflection, in order to understand and evaluate the results of their activities, and understand their own subject position.

Keywords: *innovation, novelty, approach, creative thinking, culture, educational paradigm*

60. THE IMPACT OF THE ECONOMIC CRISIS ON PORT DEVELOPMENT

NECHITA DANIELA - *"Dunarea de Jos" University of Galati, Romania*

ABSTRACT

In order to meet the European and global standards in the maritime industry, extensive efforts are required that aim at re-arranging all system components in a logic vision, upgrading the existing infrastructure to an efficient level, protecting the environment, providing security to passengers, stimulating the private initiative, restructuring transport capacities, reshaping cultural awareness of institutions that operate in this sector. Moreover, European transport integration is an issue related to the integration of large dynamic systems that rely on changing the national systems in order to meet the requirements of the European ones, and based on harmonizing the existing infrastructure networks, standards, rules and regulations. At the same time, the strategies that should be adopted require the avoidance of the risk related to the less developed transport systems that may orbit around the developed ones, providing solutions to the issues regarding authority and power in integrate power in integrated logistics systems.

Keywords: *globalization; integration; port industry; port activities; economic development; maritime industry*.

61. FUTURE DEVELOPMENT OF EUROPEAN MARITIME REGIONS

[1]PANAIT CORNEL, [2]STANCA COSTEL, [3]BUZU GEORGIANA - *[1,2,3]Constanta Maritime University, Romania*

ABSTRACT

The *European Seas and Territorial Development, Opportunities and Risks (ESaTDOR)* project, financed by ESPON, was intended to analyze the current state of maritime regions, opportunities and risks for territorial development, as well as their effects on maritime regions under different scenarios until 2050. The paper aims to present the results of the project highlighting the most probable scenarios for future development of European coastal areas.

Keywords: *European maritime regions, territorial development.*

62. PERFORMANCE INDICATORS FOR SMEs ACCESING EU FUNDS

POPA ADINA-SIMONA - *University "Eftime Murgu" of Resita, Romania*

ABSTRACT

Being the best supporters of national economies Small and Medium Sized Enterprises are actively searching alternative sources of finance for sustaining their goals and their performances. European Union is sustaining the SMEs access to finance by direct funding: grants from the European Commission and indirect funding: financial intermediaries in the SMEs origin country. Considering the importance of SMEs for national and European economy we will analyze the relationship between the EU funding and performance of SMEs that applied for and received non-refundable EU funds.

Keywords: *business performance, SMEs, EU funds.*

63. INTERNATIONAL IMPLICATIONS CONCERNING THE LEGAL REGIME AND POLICY OF SHIP REGISTRATION

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ABSTRACT

The legal concept of the nationality and registration of ships has been controversial throughout its existence. This ambiguous legal situation in the maritime realm appears to prevail even in nowadays. Furthermore, open registration regime has been criticized based on numerous important issues such as the legislative framework, safety, security, and employment. On the other hand, close registries, which implement stringent regulations concerning ownership, manning, management and administration and involve a genuine connection by virtue of national, economical and social ties among the ship-owner and its State, generally are considered effective. In light of these considerations, the authors will discuss the ship's nationality and registration from the legal perspective as well as the possible safety implications that close and open registries may cause, which in turn could contribute towards substandard shipping. The authors argue that there are legal issues currently vis-a-vis ship's registration and nationality, and that several open and close registry States are being efficient in legal and safety aspects while other States have shown deficiencies in this respect.

Keywords: *Maritime law, international law, ship nationality, registration of ships, opens registries, close registries, safety at sea.*