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CORROSION BEHAVIOR OF ELECTRODEPOSITED COMPOSITES

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This paper presents experimental data regarding corrosion resistance of composite coatings with Zn-Fe(1-3%), Zn-Sn (20-25%), Zn-Ni(7-15%) metallic matrix and PTFE particles. Deposits were obtained using neutral and alkaline electrolytes. The effect of PTFE particles on corrosion resistance was studied. Characterization of corrosion resistance was studied using salt spray tests according ASTM B 117 and electrochemical corrosion tests in NaCl 5% solution.

CERCETĂRI PRIVIND FUNCȚIONAREA PROTOTIPULUI INSTALAȚIEI DE GAZIFICARE DEȘEURI DE ANVELOPE CU COEFICIENȚI MICI DE EXCES DE AER/ RESEARCH ON THE FUNCTIONING OF GASIFICATION PROTOTYPE SYSTEM FOR WASTE TIRES WITH SMALL EXCESS AIR COEFFICIENTS

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The paper presents research done in ENER-PLAST project, which has proposed the achievement of a new reactor for gasification of waste tires which solves the main technical barriers in the development of reactors.

The reactor development is based on the use of pulse jet devices for high power reactor supply raw material, for pneumatic transport of sand used to remove ash from the reactor, heat exchange surfaces for cleaning and filtering the tars from thermochemical process for increasing reactions in active area.

LABORATORY TESTS REGARDING DIFFERENT INDUSTRIAL AND MEDICAL APPLICATIONS FOR THE TECHNOLOGICAL SPECIFIC PARAMETERS FOR THE HVOF PROCEDURE

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The paper has as main objective the determination of the necessary technological parameters for metallization of some workpieces, including some laboratory tests. The performed tests were used to determine the values of technological parameters to be taken into account in the design of the prototype.

APPLICATIONS OF THERMAL SPRAYING

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The article has as main objective the presentation of the working principle of the HVOF procedure, of some domains for using the thermal spraying procedure, of the types of installations used and also of the main advantages which can be obtained by solving of some practical problems from the industry and the production of medical equipments.

MODELE STRATEGICE PRIVIND SISTEMELE DE ENERGIE CARE VOR ASIGURA ENERGIE CURATĂ PENTRU CONSUMATORI/ STRATEGIC MODELS OF ENERGY SYSTEMS THAT WILL PROVIDE CLEAN ENERGY TO CONSUMERS

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The main topics approached conceptually in the present communication are the following:

- strategic models of designing and developing the future safe energy technological structures able to meet the requirements (A.A.A.A. – Accessibility, Availability, Acceptability, Accountability) at the level of the management of all clean resources;

- the concept of intelligent networks (SMART-GRIDS) that will ensure working states without risks starting with designing the new future energy structures and ending with rendering efficient the energy market, the designing of the archemo-systemic management in the operational researches meant for optimizing the entire stock of material, human, informational resources so that in the future energy systems one should call for virtual, agile and fractal efficient processes allowing the cut of the prices of clean energy delivered to eligible consumers.

RECYCLING AND RECOVERY OF WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

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Waste Electric and Electronic Equipment (WEEE) represent waste flows with the fastest growth both nationally and internationally. The uncontrolled disposal of waste is a public health problem of our planet. Treating WEEE must be made only in specialized and authorized centers. The inadequate recycling procedures waste precious metals and recyclable plastic matters, generating energy consumption and damage of the environment as a result of the production of pure matters.

MODELE ALE SISTEMELOR STRATEGICE DE RECONFIGURARE A STRUCTURILOR CIBERNETICE ÎN CONCEPȚIE ROBOTICĂ/ STRATEGIC SYSTEMS MODELS FOR CYBERNETICS STRUCTURES RECONFIGURATION IN ROBOTIC DESIGN

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The main idea of starting work is: researching the creative process involves the practical application of methods and techniques energetiei global clean an attempt to bring solutions to the difficult situation in which the Romanian energy industry.

One of the main objectives of global energy policy is the development of renewable energy as global energy and clean resource that aims in the context of sustainable development, reducing energy consumption, increasing energy security of supply, environmental protection and the development of sustainable energy technologies .

ETUDES THEORIQUES POUR LE COMPORTEMENT DES CAPTEURS DE PRESSION / THEORETICAL STUDIES FOR THE BEHAVIOUR OF PRESSURE SENSORS

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Today, thanks to the evolution of computers, we can achieve theoretical experiments (simulations) in place of practical experience to reduce financial costs and time. This article represents a synthesis of the research on simulations for the encapsulation pressure sensors. Micro-electro-mechanical systems are presented, starting with their definition, their importance in the present life and ending with the process of manufacturing a MEMS. In the end, the paper presents the numerical simulations performed using Comsol Multiphysics software and the conclusions due to the numerical results obtained.