Conference Proceedings

ICSTR Athens – International Conference on Science & Technology Research, 19-20 July, 2018

19-20 July, 2018

Conference Venue

The American College of Greece, Athens, Greece

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Preface:

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Our mission is to make continuous efforts in transforming the lives of people around the world through education, application of research & innovative ideas.

KEYNOTE SPEAKER

Dr. Swati Dabral
Researcher at the Max Planck Institute for Heart and Lung Research, Bad Nauheim, Germany

Dr. Swati Dabral is a researcher at the Max Planck Institute for Heart and Lung Research, Bad Nauheim. Dr. Dabral received her undergraduate degree from Delhi University, and Master of Science in Biotechnology from Indian Institute of Technology, Roorkee, India. After finishing her PhD work at Justus Liebig University in Giessen Germany, she is working as a researcher with Dr. Soni Savai Pulamsetti. Dr. Dabral published in well-renowned scientific journals such as European respiratory Journal, Atherosclerosis Thrombosis and Vascular Biology, ATVB and EMBO molecular Medicine. She has received awards such as Best publication of the year 2016′ from German Cardiology Society, Start-up grant from University of Giessen Marburg Lung Centre, Young investigator award from European Respiratory Society. She is doing her research work in the field of Pulmonary hypertension and fibrosis.

Prof. Syed Zafar Abbas
ERCICSTR1801051

Woman Cultural Education in Rural Areas of Pakistan.

Prof. Syed Zafar Abbas
Education Department,Aliz Educational Institutions,Pakistan

Abstract

Both the progress and prosperity of a country depend upon the education. Cultural Education makes people civilized, cultured and law abiding. Our present political and religious chaos in the country is the direct result of lack of education especially woman education.

Education and especially cultural economic Education is an equal right of women. If they are educated, they will surely raise the flag of prosperity, dignity and progress. The percentage of education in our country is hardly 25%. It is very low as compared to that of other countries of the world. And shockingly female percentage is 08%. We are lacking the girls' educational institutions and nobody is paying attention to it.

If the women are educated, they can prove better mothers and wives and better. Now in every field of life woman are struggling but due to antagonism, they are forcefully putting behind.

Pakistan is a developing country. We need more and more skilled workers, doctors, nurses, and teachers. This gape can surely be filled if few we educate our women. In cities women are struggling and succeeded in getting jobs but rural women are far behind in getting education. Education is considering a taboo in the rural areas.

Religious and political Lords are actively creating hurdles in this regard. They take it insulting to send girls to school for education. They want to keep them backward and ignorant so that they can easily get aims.

My team and I are trying to provide free education to the girls of rural areas. For this we are giving our sometime to educate the different age groups.

Key Words: i- Progress and prosperity. ii- Right of Education. iii- Educated women. iv- Role of Religious and Political Lords. v- Our Efforts.

Md jalal Uddin
ERCICSTR1801052

Use Of Plasti Waste In Civil Constructions And Innovative Decorative Material (Eco- Friendly)

Md jalal Uddin
Civil Engineering,Osmania University,Hyderabad, India

Abstract

The project elucidates about the use of plastic in civil construction. The components used include everything from plastic screws and hangers to bigger plastic parts that are used in decoration, electric wiring, flooring, wall covering and waterproofing.

Plastic use in road construction that have shown same hope in terms of using plastic waste in road construction.i.e..,plastic roads. Plastic roads mainly use plastic carry bags, disposable cups and PET bottles that are collected from garbage dumps as important ingredients of the construction materials.

By using plastic waste as modifier, we can reduce the quantity of cement and sand by their weight, hence decreasing the overall cost of construction. At 5% optimum modifier content, strength of modified concrete we found to see the times greater than the plain cement concrete.

Using plastic poisons our food chain under the plastic affects human health. By the disposable plastics is the main source of plastic. For these plastic pollution is not only the ocean also in desert.

Plastic will increase the melting point of the bitumen. Rain water will not seep through because of the plastic in the tar. So, this technology will result in lesser road repairs.

	Keywords; - M2O plain cement concrete, waste plastic.
Hadeel Fathy El Naggar **ERCICSTR1801055**	**Potential Of Virtual Reality In Special Needs Higher Education** **Shahira Sharaf Eldin** **Assoc. Prof., Architectural Department, Tanta University; Egypt** **Hadeel Fathy El Naggar** **PhD student, Architecture department, Faculty of fine arts, Alexandria University, Egypt** **Abstract** **The use of virtual environments for special needs is as diverse as the field of Special Education itself and the individuals it serves. Virtual environments encourage interactive learning and provide a variety of opportunities for the learner to have control over the learning process. Virtual reality technology is an exciting tool that involves a safe and supportive environment to transfer knowledge between virtual and real worlds. However, lack of engagement of disabled students can be one of the main motivations for this paper and exploring VR techniques that can suits the student's engagement. [1]** **This paper presents a systematic literature review of different college courses that focusing on social interventions in VEs involving physical, sensorial and cognitive disable students. This extensive analysis across different courses was guided by operational terms related to intervention type. The experimental search generated a very narrow body of literature on the use of VRs as social skill interventions for special needs students. Three case study examples of experiments exploring the use of VRs and students are presented to illustrate possible applications of this technology.** **Keywords: education, Virtual reality, special needs and tools**
Jianping Gao **ERCICSTR1801056**	**Magnetic Recyclable Catalyst For Reducing Pollute P-Nitrophenol** **Jingkuo Zhou** **School of Science, Tianjin University, Tianjin** **Chunjuan Gao** **Institude of Tianjin Seawater Desalination and Multipurpose Utilization, State Oceanic Administration, Tianjin 300192, P R China** **Jianping Gao** **School of Science, Tianjin University, Tianjin** **Abstract** **P-nitrophenol is a common organic pollutant, which is widely present in industrial wastewater. So far, many methods to remove p-nitrophenol have been develop, but the most environmentally friendly method is the direct catalytic reduction of p-nitrophenol to p-nminophenol that has wide applications in industry such as an important intermediate for the manufacture of many antipyretic and analgesic drugs. In the present work, an excellent catalyst Bi/Bi25FeO40 for the reduction of p-nitrophenol was fabricated via a facile one-step hydrothermal route using a "green" reductant. The structure of the as-prepared catalyst was analyzed with different modern analytic methods. Its catalytic activity for the reduction of p-nitrophenol was tracked and evaluated by a UV-visible spectrophotometer. The results demonstrated that Bi/Bi25FeO40 exhibits high catalytic activity in the p-nitrophenol reduction and also facile magnetic recyclability. The activity factor is even higher than some noble metal catalysts. In addition, the catalytic activity is dramatically depended on the pH value during the preparation of**

	the Bi/Bi25FeO40. High catalytic activity and easy recovery make Bi/Bi25FeO40 has potential application in the catalytic reactions as a catalyst. **Key Words: p-nitrophenol; reduction; catalytic activity**
Opeyemi Ayodele **ERCICSTR1801058**	**Icstr Athens -International Conference On Researches In Science And Technology 19-20 July, 2018 Optical Fiber And Wireless Internet Connectivity In Nigerian Telecommunication System** **Ajayi, Opeyemi Ayodele** **Alumnus Of Federal University Of Technology Akure, Nigeria** **Abstract** **The information age has made technology, particularly information and communication technology, indispensable. Nigeria is often identified as the faster moving economy and one of the most advanced ICT market sectors in the Africa (BBC Report, 2006).It has the largest population in Africa, also making it an attractive and big market.** **Telecommunication infrastructure remains one of the major issues affecting technology development required for growth and development in Nigeria.** **There has however been growth and development in infrastructure over the past few years. Nigeria has certainly left the telecom state where there were only a few dial-up-e-mails provides and Internet Service Providers (ISPs) as well as when Nigerian Telecommunication Limited (NITEL) was the only Telecommunications operators. It was a dark era characterized by slow internet links, poor service, high cost, lack of infrastructure and an unprogressive telecoms monopoly. Things have certainly changed.** **Deregulation of the telecommunication sector led to emergence of major global system of mobile communication operators in the country. Government had earlier provided the impetus for liberalization by setting up the Nigeria Communications Commission (NCC).** **Nigeria fiber optic network is massive and very enterprising. The country presently has active submarine fiber optic cables connecting the country to the world.** **Consequently, the Internet and its connectivity has gradually become a household concern. The connection to the Internet requires physical transfer of signal (data/information) from one point to another. This can either be through physical medium (wire) or through the air (wireless).** **This study therefore investigates the growth, development and the economic impact of optical fiber and wireless internet connectivity in Nigerian telecommunications system, focusing on the current transmission technologies employed and data transmission speed. It also highlights the future prospects and challenges facing Telecom Technology across the Nation and seeked to identify which of the two technologies is better for signal transmission in terms of bandwidth utilization, performance, reliability, cost effectiveness, resilience, and security. This research also examined the optical fiber and wireless classifications, its applications in communication, structure and construction of optical fiber and wireless technologies.** **The study adopted the use of secondary sources for the sourcing of materials. A lot of journal articles, research publications, textbooks, white papers and many more were critically studies and comparatively analyzed. It was clear that both media have hitches and challenges. The study showed that although initial cost of acquisition is an inhibitive factor for fiber optic connection, unlimited bandwidth delivery and high Quality of Service (QoS) placed Fiber optics above wireless connectivity in their overall performance.** **It is finally concluded that the tremendous advancement in optical fiber and wireless internet connectivity as well as the resultant radical changes and advances in the techniques of data and information processing, storage,**

	retrieval and dissemination in Nigeria within a decade is, no doubt, a revolution. **Keywords: Internet Connectivity, Optical Fiber, Quality of Service, Wireless Technology, Nigerian telecommunications Limited (NITEL).**
 **Jihene Sdiri** **ERCICSTR1801059**	**Multi-Objective Assembly Line Solving With Programming 0-1** **Jihene Sdiri** **University of Tunis El Manar, National School of Engineers of Tunis, mechanical engineering department , BP 37, Belvedere, 1002 Tunis, Tunisia** **Abstract** **This work addresses the assembly line balancing type I problem (SALBP-1). The aim is to minimize the number of stations given by the lower bound of the number of stations and to minimize the total cost stations under the constraints of a given the cycle time and the precedence of the tasks. On the one hand, we consider the SALBP-1 with determinist tasks times; this model is based on the method of the lower bound of the number of stations and the determination of the earliest possible workstation for task and the latest possible workstation for task. Moreover, we make a compares between this multi-criteria model to model without cost parameter. Therefore, we notice the importance of this parameter, such as minimizing the number of stations is performed.** **Keywords:** **Assembly line balancing problem determinist, earliest possible workstation for task, latest possible workstation for task, lower bound, optimization of the number of stations is performed.**
Kyungha Ryu **ERCICSTR1801060**	**Equipment Survivability in Severe Accident Condition of Nuclear Power Plants** **Kyungha Ryu** **Korea Institute of Machinery and Materials, Daejeon, Republic of Korea** **Taehyun Lee** **Korea Institute of Machinery and Materials, Daejeon, Republic of Korea** **Inyoung Song** **Ulsan National Institute of Science and Technology, Ulsan, Republic of Korea** **Abstract** **The materials of non-metallic components widely used in class 1E equipment are relatively vulnerable to severe environments such as high temperature and radiation environment during the severe accident (SA) of nuclear power plants (NPPs). Therefore, to ensure the integrity and performance of the safety-related equipment, degradation effect of SA on polymer must be investigated. To evaluate the equipment survivability (ES) of the polymer used in sealing materials, Viton, effect of thermal degradation under SA environment in NPPs was investigated.** **To evaluate the degradation effect of radiation and heat during normal operating condition and SA environment, hardness measurement and tensile test were carried out. And FT-IR analysis was conducted to investigate the molecular structure and bonds. The mechanical properties were not changed significantly in pre-aging, normal operating condition. But radiation of SA environment significantly affects the mechanical properties of fluoroelastomer and molecular structure, such as C=O formation.** **Keywords (Font-12 Bold)** **F Severe Accident, Non-metallic component, Polymer Material, Equipment**

	Survivability
 **M. Alper Sofuoğlu** **YRSICSTR1801051**	**A Fuzzy Approach For The Behavioral Topsis Model** **M. Alper Sofuoğlu** **Eskisehir Osmangazi University, Mechanical Engineering Department, Eskisehir, Turkey** **Abstract** **In this research, a novel fuzzy MCDM approach is proposed for the newly developed behavioral TOPSIS model. In this context, two different studies (material and manufacturing method selection problems) are used from the literature. Sensitivity analysis is performed according to the behavioral TOPSIS model parameter (λ) for the studies. There are minor changes in the ranking results according to different λ values. Generally, as the λ value increases, the ranking results change according to the classical TOPSIS models. The results of the study will be an essential step for decision support systems to be developed for material and manufacturing method selection problems in the future.** **Keywords: Behavioral TOPSIS, Fuzzy logic, Material selection, Manufacturing method selection**
 **Kerim Emre Öksüz** **ERCICSTR1801076**	**Structural Evolution and Dielectric Properties of Ba(Ti1-x Zrx)O3 Perovskite Ceramics** **Kerim Emre Öksüz** **Sivas Cumhuriyet University, Department of Metallurgical & Materials Engineering, 58140, Sivas, Turkey** **Şaduman Şen** **Sakarya University, Department of Metallurgical & Materials Engineering, 54187, Sakarya, Turkey** **Uğur Şen** **Sakarya University, Department of Metallurgical & Materials Engineering, 54187, Sakarya, Turkey** **Abstract** **Zirconium doped barium titanate Ba(Ti1-xZrx)O3, lead-free ceramics were synthesized using the solid-state reaction method by adopting the ball milling technique. The influence of the substitution content on crystallographic structure, phase transition, microstructure, electrical properties and sintering behavior of BT and BZT ceramics were investigated. Raman spectroscopy and X-ray diffraction studies at room temperature revealed a structural transformation with enhancement of ZrO2 content in the BaTiO3 matrix. The scanning electron microscope and energy-dispersive X-ray spectroscopy were used to investigate the microstructures and surface morphologies of the sintered samples. Scanning electron microscope observations revealed that enhanced microstructural uniformity and retarded grain growth with increasing ZrO2 content. All synthesized ceramic samples exhibited dielectric dispersion at low frequencies and significant differences in dielectric properties and sintering behavior were observed due to extreme ZrO2 addition in Ba(Ti1-xZrx)O3 ceramics.** **Keywords** **Ferroelectrics, BaTiO3 solid solutions, Zr-doped barium titanates, dielectric.**
Siddharthkumar B Panchal **ERCICSTR1801077**	**A Review study on Application of Nano fluids for Solar Thermal Collectors in Recent Times.**

Siddharthkumar B Panchal
Department of Mechanical Engineering,Pandit Deendayal Petroleum University,India

Dr. Jatin R Patel
Department of Mechanical Engineering,Pandit Deendayal Petroleum University,India

Abstract

New generation of heat transfer fluid such as Nano fluid is proven to have good possibility to be used in the solar collector. An efficient solar thermal collector must be coupled with fluids which possess superior thermal and optical properties. Nano fluids are potential heat transfer fluids with enhanced thermal and physical properties and heat transfer performance can be applied in solar thermal systems for better performances. In this paper, an experimental study of Nano fluids which were used in different types of solar thermal collectors in recent times are reviewed and compared to conventional fluids like water, ethylene glycol, thermic fluid, etc. Moreover, preparation methods, stability, properties, limitations and future scope of Nano fluid also discussed. Finding of this review study emphasis on performance improvement in terms of thermal efficiency, thermal conductivity, maximum outlet temperature, etc. The final conclusion of this paper clearly indicates that thermal efficiency, most efficient Nano fluid, thermal conductivity, the parameter of absorbed energy (FR ($\tau\alpha$)) and the heat loss parameter (FRUL) increased with increase in volume fraction and flow rates along with obtained maximum outlet temperature. Whereas the heat loss parameter (FRUL) decreased with increase in flowrates.

Keywords: Nano fluids, solar thermal collectors, heat transfer enhancement

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Upcoming Conferences

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- ICSTR Barcelona – International Conference on Science & Technology Research, 03-04 Sep 2018
- ICSTR Budapest – International Conference on Science & Technology Research, 29-30 September, 2018
- ICSTR Dubai – International Conference on Science & Technology Research, 03-04 October, 2018

- ICSTR Malaysia – International Conference on Science & Technology Research, 12-13 October, 2018
- ICSTR Singapore – International Conference on Science & Technology Research, 16-17 November, 2018
- ICSTR Jakarta – International Conference on Science & Technology Research, 23-24 November, 2018
- ICSTR Mauritius – International Conference on Science & Technology Research, 17-18 December 2018
- ICSTR Bangkok – International Conference on Science & Technology Research, 21-22 December, 2018
- 2nd ICSTR Dubai – International Conference on Science & Technology Research, 26-27 December 2018
- ICSTR Bali – International Conference on Science & Technology Research, 29-30 December 2018
- 3rd ICSTR Dubai – International Conference on Science & Technology Research, 26-27 February 2019