CONFERENCE PROCEEDINGS

2nd ICSTR London – International Conference on Science & Technology Research, 12-13 September 2019

12-13 September 2019

CONFERENCE VENUE

Canada Water Theatre and Library, 21 Surrey Quays Road, London, UK

Email: convener@eurasiaresearch.info

https://eurasiaresearch.org

https://straweb.org/

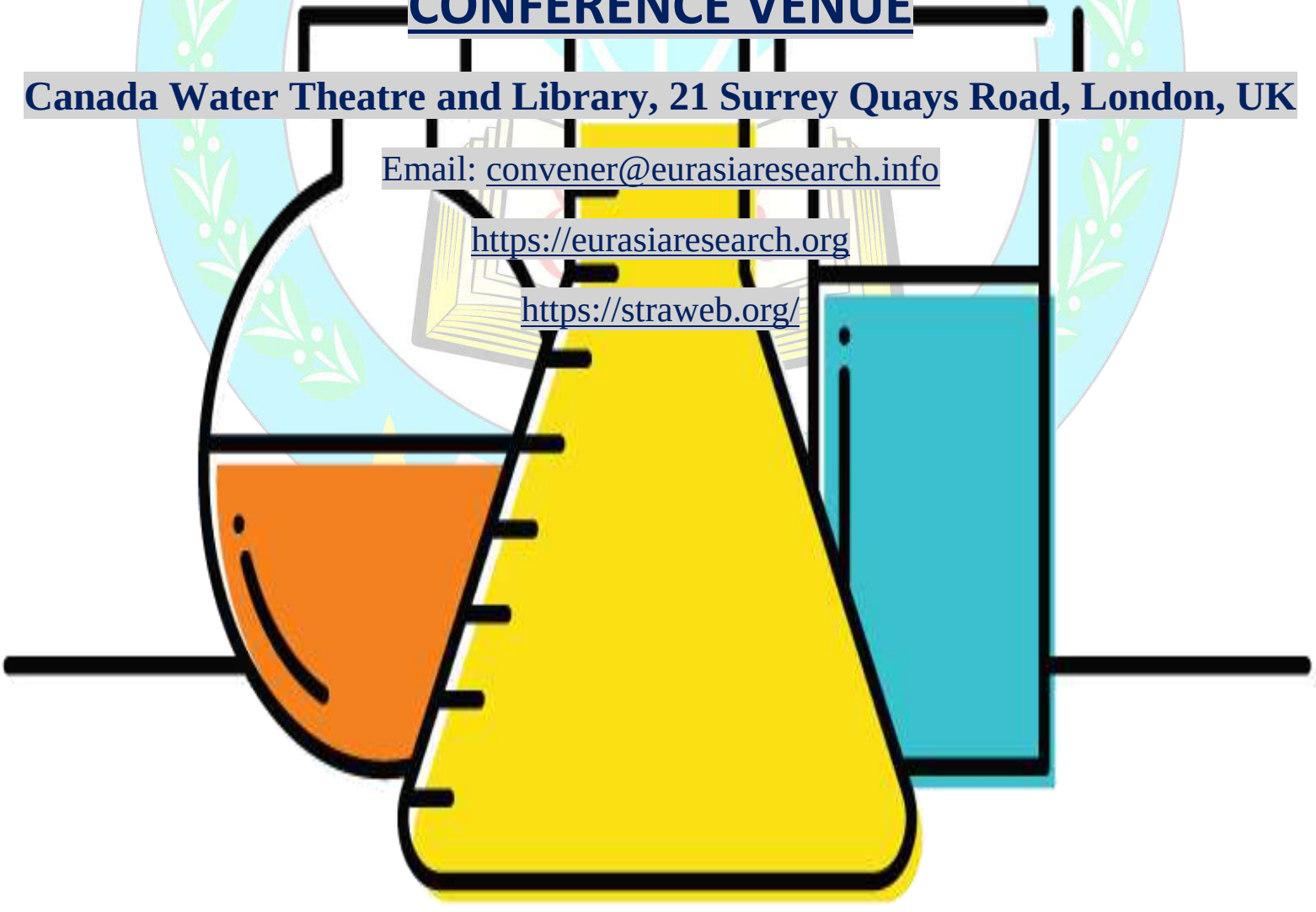

Table of Content:

Preface:

Scientific & Technical Research Association (STRA) is a conglomeration of academia and professionals for promotion of research and innovation, creating a global footprint. STRA aims to bring together worldwide researchers and professionals, encourage intellectual development and providing opportunities for networking and collaboration. These objectives are achieved through academic networking, meetings, conferences, workshops, projects, research publications, academic awards and scholarships. STRA strives to enrich from its diverse group of advisory members. Scholars, Researchers, Professionals are invited to freely join STRA and become a part of a diverse academic community, working for benefit of academia and society through research and innovation.

For this conference around 65 Participants from around 11 different countries have submitted their entries for review and presentation.

STRA has now grown to 3055 followers and 1562 members from 42 countries.

Membership in our scholarly association STRA is completely free of cost.

List of members: https://straweb.org/membership/list-of-members/

Membership Application form link: https://straweb.org/membership/

Proceedings is a book of abstracts, all the abstracts are published in our conference proceedings a day prior to the conference.

You can get our conference proceedings at: https://straweb.org/conference/proceedings/

We hope to have an everlasting and long term friendly relation with you in the future.

In this context we would like to share our social media web links:
https://www.facebook.com/wasrti/

You will be able to freely communicate your queries with us, collaborate and interact with our previous participants, share and browse the conference pictures on the above link.

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

Marek Matejun

Associate Professor, Department of Management, Vice-Dean of Science and International Cooperation at the Faculty of Management and Production Engineering, Lodz University of Technology, Poland

Topic: Difficulties in using advanced technologies in the implementation of projects: empirical study

Marek Matejun is an Associate Professor in the Department of Management and also holds the position of Vice-Dean of Science and International Cooperation at the Faculty of Management and Production Engineering, Lodz University of Technology, Poland. He received his Ph.D. from Lodz University of Technology (2006) and D.Sc. (Habilitation) from the University of Lodz, Poland (2016), both scientific degrees in management sciences. His research interests focus on entrepreneurship and small business management, modern concepts and methods of management, strategic management as well as a research methodology in management sciences. He specializes in exploiting the entrepreneurial opportunities and potential of the environment in managing the development of SME sector companies, taking up business activity and entrepreneurial education. Currently, he is the supervisor of research project "Opportunity based approach to innovation management in small and medium-sized enterprises", financed from National Science Center, Poland and conducted in scientific cooperation with the College of Entrepreneurship and Law (Czech Republic). He is the author or co-author of over 170 scientific publications. He has participated in many research projects and also in research fellowships at universities in China (2017), the United Kingdom (2016), Belgium (2013) and the Czech Republic (2013). He is an associate editor in the World Journal of Management (Australia), PEOPLE: International Journal of Social Sciences (India) and Economic Sciences Review (Poland). He closely cooperates with Eurasia Research and holds the position of the Honorary President of Social Science and Humanities Research Association (SSHRA). He is also a member of the Academy of Management (USA) and the Polish Economic Society (Poland). He gave keynote speeches at international conferences in Paris (2017) and London (2018). He lectures and holds academic tutorials on the fundamentals of management, small business management and research methodology at Lodz University of Technology. He is also the supervisor of the "People – Business – Technologies" students' research society. For his research activity he has earned many Polish and international scientific awards.

Profile Links:

Website: www.matejun.com

Research gate: https://www.researchgate.net/profile/Marek_Matejun

ORCID: https://orcid.org/0000-0003-4885-2344

PRESENTERS

Iyas Abdullah **ERCICSTR1918052**	**Inspection Human Temperature Using Neuro-Fuzzy** **Iyas Abdullah** **Computer Science and Information Technology, Jerash University, Jerash, Jordan** **Abstract** **This paper deals with design intelligent temperature sensor to measure core body temperature by intelligent system, to reduce infection that happens by using thermometer that is used now and to improve the accuracy for it. The main target group for this study is children who are less than four years and we thought about something should be more comfortable for them, when the common methods (oral, Axillary, Ear, Rectal …) are not. The second challenge we are faced is type of sensor where contact or noncontact sensors are measure surface temperature but we need to measure the core temperature that mean we need to find a relationship between surface temperature and core temperature to get more accurate results, and that make us to focus on the contact sensor; because there is relationship among core temperature, heat flux and surface temperature.**
 **Shafiq Ur Rehman** **ERCICSTR1918053**	**The Pakistan World First Hybrid Energy Based Mobile** **Shafiq Ur Rehman** **Sir Syed University of Engineering & Technology, Pakistan, Abstract** **Abstract** **In this examination worked, We presented a world incredible movement structure for the most reasonable getting methodology for centrality from the average light and phony hugeness. This is the primary experienced in the area of science and progression. We displayed cream centrality based cooler in the race of the impelled world. In this article, we uplifting first contraption on the planet which would be rub through the breeze energy.it is the most moderate mobile in the area of science and headway of the world. The best procedure for the movement in the race of the bleeding edge world is made. We have built up this gadget as a first time world. It may be joined as a patent. With the help of this patent mobile charge automatically without any problems.** **Keywords: Hybrid Energy, Inverter, Solar Energy, Wind Energy, Mobile**
Shanaia Margareth Sia. Argueza **ERCICSTR1918056**	**The Interplay between Arts and Waste Management: A Phenomenological Study** **Goldame Oblero. Yapit** **Lorma Colleges Basic Education Schools, Urbiztondo San Juan La Union, Philippines** **Alonzo Andrei Go. Rimando** **Lorma Colleges Basic Education Schools, Urbiztondo San Juan La Union, Philippines** **Vincent Miguel Datahan. Marron** **Lorma Colleges Basic Education Schools, Urbiztondo San Juan La Union, Philippines** **Jio Carlo Opena. Tavares** **Lorma Colleges Basic Education Schools, Urbiztondo San Juan La Union, Philippines** **Shanaia Margareth Sia. Argueza** **Lorma Colleges Basic Education Schools, Urbiztondo San Juan La Union, Philippines** **Christian Ian De Guzman. Aban** **Lorma Colleges Basic Education Schools, Urbiztondo San Juan La Union, Philippines** **Abstract** **Many economically developing countries produced more waste for as a country develops, the level of consumption also increases which causes the diminution of proper waste control because of the continuous production of wastes. Waste management liabilities stated that waste management practices, knowledge and awareness differs by sex, class, and age of the students. In general, the**

	cooperation of communities and government is really important to minimize the effects of poor waste management of our community which encouraged the government implementing rules which creates creating necessary institutional mechanisms and incentives, declaring certain acts prohibited and providing penalties and appropriating funds. Our main research problem is; What are the challenges in the implementation of proper waste management. This research is a phenomenological research. Our participants are the artists of the Ililikha Artist village. Baguio experienced waste management problems because some people did not cooperate with the laws because of use of technology and their level of participation. People can contribute in creating a sustainable environment by creating advocacies that can help minimize waste or by understanding the concept of upcycling. The artists of the said village recycled waste to create something more beautiful that could lessen wastes. Our research could serve as a basis for the future researches so that they would not have much trouble in understanding waste management. It could also give the future researchers a head start on what to do and serve as a convenient guide. It could give them a clearer comprehension of Waste Management. **Key Words: Waste, Education, Liability, Upcycling, Utilization**
 **Areta Nur Salsabila Jati** **ERCICSTR1918061**	**The Efficiency of Eco-cooler Application as Homeless Shelter to Reduce Plastic Bottle Waste** **Areta Nur Salsabila Jati** **Environmental Engineering Student of Islamic University of Indonesia** **Abstract** **Plastic waste is a common issue in the world since its existence spread everywhere, hard to decompose and even worse it ends up lying stagnant in landfills, leaching dangerous chemicals into the ground, or infiltrate streets as litter. At the same time, most of developed countries are struggling to deal and reach solution over homeless people case which is this problem demand to be repair by something useful, durable and low cost. To help both the both matters, Eco-cooler Shelter is a suitable attempt to provide zero electricity air conditioning shelter sized 2x3m for the homeless and is built from a common waste item: multiplex, board and empty plastic bottles, which means give an absolute solution to reduce plastic bottle waste in large quantities at one blow. To construct this eco cooler shelter, plastic bottles are cut in half and installed into a grid sized holes through the bottleneck. The grid can be sited over two sides of the window with the major part of the bottles facing outwards. When the wind blows into the bottles, hot air gets pressured as it passes through the neck and releases cooler air. The parameter used are temperature and humidity, also variables measured are the medium as surface wall made by board to multiplex; and the bottle sized 600mL to 1500mL. This measurement results 4 different shelters with each data; Multiplex600mL, Multiplex1500mL, Board600mL, and Board1500mL. In accordance with the wind and the pressure produced by airflow, the Eco-Cooler with Multiplex600mL decreases the most temperature by 0.3 degree Celsius and Board600mL increases the most humidity by 0.67%.** **Keywords: Eco-Cooler, Shelter, Surface Medium, Bottle Size, Temperature Drop, Humidity Rise**
Sumonthip KongtunJunphuk **ERCICSTR1918062**	**Antibacterial Activity of Plant Extract and Their Marker Compounds** **Sumonthip KongtunJunphuk** **Department of Biotechnology, King Mongkut's University of Technology North Bangkok, Bangkok, Thailand** **Abstract** **The antibacterial activity of three medicinal plants (Phyllanthus emblica, Garcinia mangostana, and Syzygium aromaticum), two Thai traditional medicine (Trikatuk and Chatuplatika), and their marker compounds were studied. Trikatuk consisted of 3 medicinal plants which were Zingiber officinale, Piper nigrum and Piper longum, and Chatuplatika consisted of 4 medicinal plants which were Phyllanthus emblica, Terminalia chebula, Terminalia bellirica (Geartn.)Roxb. and Terminalia arjuna. The marker compounds in this study were gallic acid for Phyllanthus emblica extract and Chatuplatika, alpha-mangostin for Garcinia mangostana extract, piperine for Trikatuk, and high-concentration of eugenol in clove bud oil for Syzygium aromaticum extract. Anti-bacterial activity of all samples were tested against seven bacteria such as Escherichia coli, Salmonella typhimurium, Pseudomonas aeruginosa, Staphylococcus aureus, Staphylococcus epidermidis, Bacillus subtilis and Propionibacterium acnes. The results showed that the antibacterial activities of Garcinia mangostana peel extract, Syzygium aromaticum was impressed inhibitory values and can be useful for product development.** **Index Terms— Eugenol, Mangostin, Plant Extract, Antibacterial Activity**

Abdelmadjid Atif
ERCICSTR1918063

Flow Field Analysis and Performance Assessment Inside A Vaned Diffuser of A Laboratory-Type Centrifugal Pump

Abdelmadjid Atif
Faculty of Mechanical and Process Engineering, University of Science and Technology Usthb, Algiers, Algeria

Abstract
The paper refers to the analysis of flow fields inside a vaned diffuser and performance assessment of a laboratory-type centrifugal pump operating with air. The study deals with numerical simulation of the flow at design flow rate, with focus on velocity and pressure distributions across a diffuser passage. The aim is to highlight the flow structure how it leaves the impeller and evolves through the diffuser to understand the mechanism of pressure recovery. The performance assessment consists of evaluating diffuser effectiveness. The numerical results are compared to experimental measurements. The comparison showed similar profiles and close performance.
Keywords: Flow simulation - Centrifugal pump -Vaned Diffuser - Pressure Recovery - Diffuser Effectiveness

Hambali Dauda
ERCICSTR1918065

Particulate Matter, Major Sources, Impacts And The Control (A Review)

Hambali Dauda
Department of Science Laboratory Technology College of Science and Technology Jigawa State Polytechnic, Dutse, Nigeria

Abstracts
Nowadays environment is always wanted to be made sustainable. The PM causes irritation of the eyes, nose, and throat, wheezing, coughing, chest tightness, and breathing difficulties, worsening of existing lung and heart problems, such as asthma and increased risk of heart attack and the destruction of the infrastructures. The PM are classified into PM10 (coarse), PM2.5 (fine) and PM0.5 (ultrafine) and mostly are from the mechanical disruptions, combustion of wood, unpaved roads, mining sites, fossil fuels and volcanic eruptions. The hamattan dusts (haze) which often carries with it very fine dust, originates from the Sahara Desert. This dust affects visibility, personal comfort and general dryness of skin, throats and lips. The haze was found to contains zirconium, hafnium and rare earth elements, clay minerals, quartz, carbon monoxide, nitrogen oxides and ozone. PM are real and have sources, impacts on the Environment and Human Health, thus recommended that Monitoring techniques should be provided especially in Africa to aids researches, public enlightenment on pollution causes, green technologies should be introduced, constructing of tar roads and further researches are indeed needed, strong laws and strategies should be enacted on PM pollution. Thus, mitigation of the PM will pave way to freeing the future from the Environmental and Health impacts.
Key words: Air Pollution, Particulate Matter, Wind-Blown Desert Dusts, Hamattan Dusts, Wild Forest

Emmanuel B. O. Olotu
ERCICSTR1918066

Design and Development of Model Manipulative Robots for Small-Scale Industrial Applications In Developing Countries (E.G. Nigeria): Problems and Prospects

Emmanuel B. O. Olotu
Benue State Polytechnic, Ugbokolo, Nigeria

Seng K. Chong
De Montfort University, Leicester, UK

Abstract
This report features all the steps undertaken in the design and development of a model manipulative robot for small scale industrial application in a developing country like Nigeria. The historical and developmental background of robots in general was explored from which this kind of robot was identified. It is to be used for customised industrial applications, or pilot processing operations like pick-and-place, cutting or other processing, sorting/inspection, packaging/assembly, and other automated material handling operations. A desktop-sized (230mm-high or 705mm-long) articulated, revolute, jointed-arm or anthropomorphous pick-and-place robotic arm was selected, designed and fabricated. It consisted of mechanical, electrical, and electronic parts capable of transferring 1.13kg load of materials at 2m/s in an assembly line. The robot's control was achieved via a PIC 18F4680 microcontroller which allows easy interface with the control architecture. Joints were moved using

	stepper motors coordinated by Darlington drivers. The entire operation of the robot was achieved through a set of control software or programme written in the assembly language of MPLAB IDE and PROTUES VSM. The design, development, and assembly process of these composing units were done in line with acceptable engineering standards and conventions. The emerging model was analyzed in tests and simulations to ascertain its compliance with specifications, and it was discovered that, despite teething problems of difficulty in customisation, software development, material selection, and lack of advanced AI knowledge; it performed well according to specifications with rooms for further improvement. **Keywords: Assembly Language, Manipulative Robot, Pick-And-Place Robot, Microcontroller, Pilot Processing Plant, Modeling, Stepper Motors**
Amina Chidouh **ERCICSTR1918067**	**Determination of the Chemical Composition of Pectic Fractions of Myrtle (Myrtus Communis L.) Fruits** **Amina Chidouh** **Département des Sciences Naturelles. Ecole Normale Supérieure de l'Enseignement Technologique de Skikda, Algérie** **Saoudi Aouadi** **Laboratoire de Biochimie et Microbiologie Appliquée (LBMA), Département de Biochimie, Faculté des Sciences, Université Badji Mokhtar, Annaba, Algeria** **Alain Heyraud** **Centre de Recherches sur les Macromolécules Végétales (CERMAV-CNRS), Grenoble cedex 9, Fance1** **Abstract** **The myrtle fruits (Myrtus communis L.), an edible species used for food, industrial and medicinal purposes were harvested in the Annaba region (north-east Algeria).** **After treatment in 85% ethanol, the ethanolic insoluble obtained is treated successively with water at 80 °C (WSP), then with a solution of EDTA at 60 °C (CSP) and finally with 80% HCl (ASP).** **After acid hydrolysis (H2SO4 2N), the analysis of the overall composition of monosaccharides by the high performance anion exchange chromatography technique with pulsed amperometric detection (HPAEC-PAD) showed that the WSP fraction consists of 27,705% (w /w) neutral sugars, 3,33% (w /w) galacturonic acid, while in the CSP fraction, the percentage of neutral sugars was 2,075% (w /w), 1,27% (w/w) of galacturonic acid.** **The residue III is composed of 9,81% (w /w) neutral sugars, 0,075% (w /w) of galacturonic acid and 11,76% (w /w) of neutral sugars after hydrolysis with TFA 2 N and H2SO4 2 N respectively. Analysis by 1H NMR spectroscopy showed that CSP and ASP are pectic substances.** **Keywords: Myrtle, Myrtus Communis, HPAEC-PAD, 1H NMR, Neutral sugars, Galacturonic Acid, Pectin**
Vladimir Valle **ERCICSTR1918068**	**Adhesive Based upon Polyvinyl Alcohol and Chemical Modified Oca (Oxalis Tuberosa) Starch** **Vladimir Valle** **Faculty of Chemical Engineering, National Polytechnic School,Quito, Ecuador** **Samantha Borja** **Faculty of Chemical Engineering, National Polytechnic School,Quito, Ecuador** **Pamela Molina** **Faculty of Chemical Engineering, National Polytechnic School,Quito, Ecuador** **Abstract** **The preparation of adhesive for lignocellulosic substrate was studied using polyvinyl alcohol (PVA) and native oca (Oxalis tuberosa) starch as raw materials. At first, native starch was chemically modified by means of acid hydrolysis and a subsequent urea treatment. Afterward, adhesive preparation was conducted with native and modified starch, separately, according to three PVA: starch ratios (1,0:0,3; 1,0:1,0 and 1,0:1,7). Characterization was performed in terms of Fourier transform infrared spectroscopy (FTIR), instantaneous viscosity and shear strength. An analysis of the results within a functional groups context permits to corroborate the presence of starch carbamates as a product of the chemical modification processes. On the other hand, FTIR analysis of adhesive**

	showed a significant intensity variation in the band associated to alkanes group at around 2900 cm-1. Moreover, viscosity and mechanical results exhibit similar trends concerning not only to raw materials but also to native and modified starch compositions. Lowest values of viscosity and shear strength were observed at 1,0:1,0 ratio which suggest that the crosslinking in adhesive structure seems to be reduced with equal proportions of PVA and starch. From a visco−mechanical perspective, both adhesive with high concentrations of native starch and those with low composition of modified starch exhibit similar results. **Keywords: PVA, Carbamate-Starch, Viscosity, Shear Strength, FTIR**
Hassan Raza **ERCICSTR1918074**	**Can Cryptocurrencies Provide Hedging Opportunity: A Volatility Spillover Study** **Hassan Raza** **Management Sciences Department,National University of Modern Languages,Islamabad, Pakistan** **Abstract** **This study provide an empirical investigation to explore the hedging opportunities of bitcoin by applying GARCH methodology. The study used different assets for this purpose e.g. GSPC-Index, MSCI-Global Index, MSCI-Currency Index, COMEX closing Gold Price and OPEC Crude oil Prices. The results indicate that any shock appeared in bitcoin is significantly decrease the volatility of all selected assets except MSCI-Global Index returns. The study conclude that cryptocurrencies may offer diversification benefits to investors.** **Keywords: Cryptocurrencies, bitcoin, Garch in mean, Volatility spillovers**
 **Tamiru Mengst** **ERCICSTR1918082**	**Process and Material Related Waste In Addis Ababa Building Construction Projects: A Case Study According to Lean Management** **Tamiru Mengst** **Construction, Technology and Management,University of Gondar,Ethiopia** **Abstract** **The construction industry is characterized by challenges such as low productivity, lack of skilled labor, time and cost overruns, etc. These are associated with considerable waste present in the construction sites. Waste can affect the success of a construction project significantly. More specifically, it has a major impact on construction cost, construction time, productivity and sustainability aspects.** **Waste elimination is one of the key concepts in Lean Production philosophy. Waste is seen as activities and processes that consume resources yet do not add value, thus, any known value-added activity or process is considered as waste. The elimination of waste has been largely used as a driver for improvement in the manufacturing industry. By contrast, it has not been strongly emphasized in construction projects. An important step towards the elimination of waste is to understand and measure the amount of waste actually present in construction sites. The study intended to assess the extent of occurrence and impact of the eight types of wastes identified from literature in building construction projects in Addis Ababa. The observation focus on process and material related wastes consist of overproduction, waiting time, transportation, over-processing, inventories, unnecessary movements (motion), making the defective product (rework), and human potential wastes. The result of the study could be used to help researchers and building construction companies in the Ethiopian construction industry to focus their attention and resources on the significant issues which are crucial to know the most dominant wastes and its impact in terms of cost of the project.** **Keywords: Process, Material, Waste, Lean Managemnt, Lean Construction, Building, Projects, Addis Ababa**
 **Arzoo Mustafi** **ERCICSTR1918089**	**A Statistical Study on Population Ageing of India** **Arzoo Mustafi** **Research Scholar, Faculty of Statistics, Patna Science College, Patna University, India** **Abstract** **Many countries worldwide has been experiencing demographic transition since many decades and the population size and growth has been main catalyst behind this transition. However, what made the social scientists across the world to study deeply on the trends in the demographic transition is the sudden fluctuations in the elderly population which is growing much faster in the developing countries than the developed countries. And the consequence of such trends lead the growth in the ageing population in most developing countries and India is one such country experiencing such a transition**

	today. Demographically, India has transformed itself from a "demographic transitional" to a "post-transitional" society, where life expectancy has reached new heights, fertility has declined gradually, and rapid population ageing is on the horizon. According to the UN data on population projection, the population cohort aged 60 years and above was 7 per cent in 2009 which is expected to increase to 20 per cent by the year 2050. The paper seeks to analyse the demographic profile of elderly population of India using the 2001 census data and the 2011 UN Projection Report for the year 2026 and explores its consequences on the country. Even though an increase in the old cohort reflects a positive sign towards the development in the health sector of an economy, however, it can also reflect a negative sign. Such shifting trends has important implications for the country as well as for their families as working cohort will have all the burdens to support the more numbers of elders in a family. The paper aims to highlight the importance of Population Ageing in India and whether India will be able to balance its social and economic development together with this recent demographic transition. The result shows that India has the potential to overcome this challenge conditioned on the presence of good policies and institutions. **Keywords: Census, Population Ageing and Population Projection**
Suparman **ERCICSTR1918054**	**Reversible Jump MCMC to Estimate A Piecewise Constant Model with Gamma Multiplicative Noise** **Suparman** **University of Ahmad Dahlan, Yogyakarta, Indonesia** **Abstract** **Piecewise constant is a mathematical model that is often used to model data in various fields. Gamma multiplicative noise or gamma additive noise can be added in a constant piecewise model. This study aims to estimate a constant piecewise model that has gamma multiplicative noise. The estimation of the constant piecewise model is carried out in the Bayesian framework. The prior distribution for the number of constant models, the location of the change in the constant model, the height of the constant model, and the noise variance selected. This prior distribution is combined with the probability function of the data to get the posterior distribution. The Bayes estimator for the number of constant models, the location of the change in the constant model, the height of the constant model, and the noise variance are estimated based on the posterior distribution. The Bayes estimator cannot be formulated explicitly because the number of constant models is a parameter. The reversible jump method of the Monte Carlo Markov Chain (MCMC) is proposed to determine the Bayes estimator. This study resulted in estimating the parameters of a constant piecewise model with gamma multiplicative noise. This method can be used to estimate a constant piecewise model that has gamma multiplicative noise even though the number of constant models is unknown.** **Keywords: Bayes Estimation, Piecewise Constant Model, Reversible Jump MCMC**
Sirinthorn Thongsang **ERCICSTR1918057**	**Comparison of Filler Types In Polylactic Acid Composites for 3d Printing Applications** **Sirinthorn Thongsang** **Department of Tool and Materials Engineering,** **King Mongkut's University of Technology Thonburi, Bangkok, Thailand,** **Somchoke Sontikaew** **Department of Tool and Materials Engineering,** **King Mongkut's University of Technology Thonburi, Bangkok, Thailand** **Kantisa Kachapol** **Department of Tool and Materials Engineering,** **King Mongkut's University of Technology Thonburi, Bangkok, Thailand,** **Thanitra Kaewkate** **Department of Tool and Materials Engineering,** **King Mongkut's University of Technology Thonburi, Bangkok, Thailand,** **Wongsakorn Aunchanlung** **Department of Tool and Materials Engineering,** **King Mongkut's University of Technology Thonburi, Bangkok, Thailand** **Abstract**

	This research is a comparison of the addition of different fillers in polylactic acid (PLA) affecting the three-dimensional printing technique and their properties. The fillers consist of Wood flour (WF), Talc (TC), Calcium Carbonate (CaCO3), Microballoon (MB) and Silicon Dioxide (SiO2). The 5%wt fillers were added into PLA to fabricate the filaments by single screw extruder. The specimens were fabricated by Fuse Deposition Modeling (FDM) technique. The effects of fillers on the physical, mechanical, flow, thermal and morphological properties of polymers were of interest. It was found that the 3D printed parts were completely in shape during fabrication. The 3D printed parts of PLA composites were a difference in color and texture, and exhibited a lower tensile strength than those with the neat PLA, except for the PLA/WF. The glass microballoons mixed-PLA composites gave the higher Young's modulus compared to those with composites. The 3D printed parts of PLA/TC composites had greater flexural strength than that of neat PLA and PLA composites. The impact strength and melt flow rate of PLA/MB composites were higher than that of neat PLA and PLA composites. The Vicat softening point of PLA/MB was similar to neat PLA, while PLA/CaCO3, PLA/WF, PLA/TC and PLA/SiO2 was lower compared with neat PLA. **Keywords: Polylactic Acid, Composites, Fuse Deposition Modeling, 3D Printing**
Huda O Bakodah **ERCICSTR1918058**	**Application of Decomposition Method For Solving Chen-Lee-Liu Equation** **H. O. Bakoda** **Department Of Mathematics; Faculty Of Science- Jeddah University, Jeddah; Saudi Arabia** **ASHF.Mohammed** **Department Of Mathematics; Faculty Of Science- Jeddah University, Jeddah, Saudi Arabia** **M. A. Banaja** **Department Of Mathematics; Faculty Of Science- Jeddah University, Jeddah; Saudi Arabia** **Abstract** **The Chen-Lee-Liu (CLL) Equation Has Three Cases Of Bright Soliton Solutions In This Research Presents Some Numerical Results And Analyses For This Equation By Adomian Decomposition Method. Also Discusses The Error Analyses Of The Algorithm.**
Nasser Drareni **ERCICSTR1918059**	**Using Geographic Information System in Identifying Risk Factors of Cardiovascular Diseases : An Experience from Algiers, Algeria** **Nasser Drareni** **Canada Water Theatre and Library, 21 Surrey Quays Road, London, UK** **Abstract** **Cardiovascular disease (CVD) is the leading cause of morbidity and mortality in the world, including in Algeria. The main aim of this study was to explore the temporal trends and spatial patterns of risk factors for CVD in Algiers, Algeria using techniques developed for spatial analysis, among them geographical information systems and spatial statistics, such as cluster detection and spatial correlation, are useful for the study of the determinants and distribution of the risk factors for CVDs. Geographical Information Systems (GIS) and spatial analysis provide unique tools to determine where and when a particular CVD disease has occurred and could resurface in the future. These techniques facilitate our understanding on the role that the physical, environmental, economical and social environment may play on CVD. GIS mapping may also be an important tool while planning future centers for medication distribution in areas that lack proper public health care. There are multiple risk factors that contribute to the development of CVD diseases, such as high blood pressure, high blood cholesterol, smoking, stress, level of education, level of environment and obesity. Geographic information system technology is useful in identification of spatial clustering and disease hotspots for designing preventive strategies targeting CVD. In the spatial determinants and distribution of CVD, the socioeconomic level, the level of urbanity and education of the population have an important influence. These variables determine the level of access and link to health services. Environmental variables, such as temperature, noise, humidity and contamination also determine the distribution of CVD. In this way, the application of spatial study helps to recognize particularly vulnerable areas where intervention can take place facilitating the allocation of health resources and/or applying prevention policies for these CVD diseases. The findings of this study can serve as a basis for determinants and distribution of health-care resources, preventive measures and exploration of etiological risk factors for CVD.** **Keywords : Risk Factors , Cardiovascular Diseases, Spatial Analysis, Disease Clusters , Geographic**

	Information System
Rajat Bagga ERCICSTR1918079	**Higher Education In India : Challenges and Opportunities** **Rajat Bagga** **Associate Professor, Higher Education Commission, Govt. P.G. College, Ambala Cantt, Haryana (INDIA)** **Abstract** **Higher education in India has expanded rapidly over the past two decades. This growth has been mainly driven by private sector initiatives. There are genuine concerns about many of them being substandard and exploitative. Due to the government's ambivalence on the role of private sector in higher education, the growth has been chaotic and unplanned. The regulatory system has failed to maintain standards or check exploitation instead, it resulted in erecting formidable entry barriers that have generated underside results. Voluntary accreditation seems to have no takers from amongst private providers and apparently serves little purpose for any of its stakeholders. The higher education system in India grew rapidly after independence. [1] By 1980, there were 132 universities and 4738 colleges in the country enrolling around five percent of the eligible age group in higher education. Today, while in terms enrolment, India is the third largest higher education system in the world (after China and the USA) with 17973 institutions (348 universities and 17625 colleges) and is the largest higher education system in the world in terms of number of institutions. [2] There are different types of universities and colleges in the higher education system in the country. They vary terms of their academic, administrative and financial arrangements. Universities can either be established by an Act of Parliament or by the state legislatures. Those established by the Act of Parliament are the central universities and the ones set up by the state legislatures are state universities. Some higher education institutions are granted the 'deemed university' status by the central government through gazette notifications. A few institutions are established by the Parliament / state legislatures as institutions of national importance. Universities, deemed universities and institutions of national importance are degree-granting institutions. The expansion of higher education system in India has been chaotic and unplanned. The drive to make higher education socially inclusive has led to a sudden and dramatic increase in numbers of institutions without a proportionate increase in material and intellectual resources. As a result, academic standards have been jeopardized. There are many basic problems facing higher education in India today. These include inadequate infrastructure and facilities, large vacancies in faculty positions and poor faculty outmoded teaching methods, declining research standards, unmotivated students, overcrowded classrooms and widespread geographic, income, gender and ethnic imbalances. There is an inadequate and diminishing financial support for higher education from the government and from society. Many colleges established in rural areas are non-viable, are under enrolled and have extremely poor infrastructure and facilities with just a few teachers. Apart from these, the system of higher education has met several setbacks with regard to its regulatory framework, finding and frances and the much debated and controversial move of privatization of higher educational institutions. These underlying issues will be identified and addressed in the paper.**
 Xueer Wang ERCICSTR1918070	**A review of Alzheimer's Disease Formation, Diagnosis and Treatment** **Xueer Wang** **Cardiff Sixth Form College, Cardiff, United Kingdom** **Abstract** **Alzheimer's disease is one prevalent form of dementia associated with ageing, which is affecting approximately 1.3% of the UK population. Although the exact cause of Alz-heimer's disease remains unknown, it is widely accepted that the abnormal aggregation of proteins in the nervous system could be the primary cause resulting in this disease by damaging brain cells, and other risk factors also exist to increase the chances of having this disease such as ageing and a low education level. There are three possible distinct clinical phases in individuals with Alzheimer's disease pathology: asymptomatic, mild cognitive impairment and Alzheimer's disease. The symptoms of Alzheimer's disease progression worsen gradually over several years which generally involve memory loss, motor coordination problems and inability to perform routine daily tasks. Because Alz-heimer's disease has a negative impact on not only the diagnosed patients but also their family members and the whole society, it is clear that treatment of this disease is required urgently. However, there is no current cure for Alzheimer's disease but the symptoms can be managed and even moderated by a cohort of drugs as**

	well as some protective factors. For example, aiming at various pathological symptoms of Alzheimer's disease, different drugs have been investigated to resolve specific problems, thus help to control and alle-viate the symptoms such as memory loss. There are also studies that discover numerous protective factors, which can reduce the risk of developing Alzheimer's disease like a high education level and regular physical activities. Despite all the research and findings, the progress on Alzheimer's disease is slow, and the prevention method is yet to be found, which means more attention and effort is needed to find an effective cure for this disease.
Adams Oluwadamilola Kemi YRSICSTR1918051	**Assessment of Agricultural Production and Vulnerability to Conflict among Rural Households in North Central, Nigeria** **Adams Oluwadamilola Kemi** **Department of Science and Technology, National Defence College, Abuja, Nigeria** **Abstract** **Conflict has been regarded as one of the major constraints to agricultural production in Nigeria. Farmers and cattle herdsmen conflict is one of the major conflicts that is predominant and it affect rural households in Nasarawa State. This study was therefore designed to identify the conflict experiences of farmers; examine the vulnerability of rural households to conflict; assess the impact of rural households' vulnerability to conflict on agricultural production; and determine coping strategies to conflict situation among farmers.** **Data used for this study were obtained from a total of 179 households through a three-stage sampling technique. The first stage was the purposive selection of 10 crisis prone local government areas. Second stage was the selection of one village each from each crises prone local government areas. The third stage was random selection of 25 households. Major tools of analysis for this study included descriptive statistics, vulnerability index, correlation analysis, likert-type scale and step wise regression.** **Majority of the rural households have agriculture as their major source of income (96.09%). All the rural households have experienced conflict at one point in time during the time frame of the study. Farmer/herdsmen conflict was experienced by 94.41% of the households. Ethnoreligious was experienced by 36.31% of the respondent while communal clashes was experienced by 3.35% of the respondent thereby revealing that the mostly experienced conflict is the farmer/herdsmen conflict which occurred on an average of 3 times over a period of five years. Farming households have conflict vulnerability index of between 58 and 63%. Farming households had a loss of 2467.25 Kg (grain eq.) which constitutes 36% of total output per annum to conflict, the coping strategies adopted by the rural household during conflict included relying on less preferred food as first and borrowing of food as fifth. Correlation analysis also revealed that 100% increase in output will lead to 16% increase in vulnerability to conflict among rural households.** **It can therefore be concluded that rural households in Nasarawa State are vulnerable to conflict. It is therefore recommended that farmers should be trained and supported on the use of improved varieties to increase yield without increasing the size of land so as to avoid vulnerability to conflict. Besides, there is the need for herdsmen to adopt better ways of livestock management.** **Keywords: Agricultural Production, Vulnerability, Conflict, Rural Households**

LISTENERS

Musam Mohamed **Training of Journalists on Understanding the Mandates of the Audit Service Sierra Leone and the Audit Process, Ayv, Media Empire, Sierra Leone** **ERCICSTR1918055**
Muhammed Muye Abubakar **Nigeria Security and Civil Defence Corps, Nigeria** **ERCICSTR1918069**
Funmilola Rachael Adebayo **Nigeria Security and Civil Defence Corps, Nigeria** **ERCICSTR1918071**
Khoubeib Chakir

Faculty of Sciences of Monastir, University of Monastir, Tunisia **ERCICSTR1918072**
Gurinderpreet singh **Lawyer, District Courts Sangrur, Punjab, India** **ERCICSTR1918073**
Yusupha Jabbi **Institute of Professional Administration and Management (IPAM),Computer Science, Serrekunda, The Gambia** **ERCICSTR1918074**
Professor Solomon Okunuga **Registrar, CEO Office, Joint Universities Preliminary Examinations Board, Lagos, Nigeria** **ERCICSTR1918076**
Smaran Barua **Faculty of Buddhism, Mahamakut Buddhist University Sirindhorn Campus, Nakhon Pathom, Thailand** **ERCICSTR1918077**
Sumana Sree Sraman **Department of Planning and Coordination Team, Mahamandal Welfare Organization MWO, Chittagong, Bangladesh** **ERCICSTR1918078**
Ruth Wacheke Thungu **Ministry of Transport, Infrastructure, Housing & Urban Development, Government of Kenya, Nairobi, Kenya** **ERCICSTR1918080**
Samad Heidari **Power Electrical Engineering, Kurdistan University, Sanandaj, Iran** **ERCICSTR1918081**
Bashko Mustafa **Faculty of ScienceChemistry Department, Pioneer Company for pharmaceutical Industries, Iraq, Sulaymaniyah** **ERCICSTR1918083**
Nazla Sulaiman Ahmed **College of Pharmacy, University of Duhok, Duhok, Iraq** **ERCICSTR1918084**
Ahmed Ghedifa **Electronics Engineer, Entreprise Des Batiments ET Travaux Publics in M'SILA, Algeria** **ERCICSTR1918085**
Sombodhi Bhikkhu Barua **Pali, Wat Thai Gayanaviriya Geyanalankar Buddhist Sangha, Kolkata, India** **ERCICSTR1918088**
Mitra Bhikkhu Barua **Pali, Sribardan Buddhist Temple, Kolkata, India** **ERCICSTR1918087**
Sujan Barua Pali **Pali, International Theravada Buddhist missionary University, Yangon, Myanmar** **ERCICSTR1918086**
Nurudeen Tunde Adegbite **Department of Physics, Faculty of Science, Lagos State University, Lagos, Nigeria** **ERCICSTR1918064**
Labib mazen Allogami **B. Tech, Petroleum Engineering, NIMS University, Jaipur, India** **ERCICSTR1918090**
Adebukola Onashoga **Department of Computer Science, Federal University of Agriculture, Abeokuta, Abeokita, Nigeria** **ERCICSTR1918092**
Peter Frank Odion **Extron Investments Ltd, Lagos, Nigeria** **ERCICSTR1918093**

Upcoming Conferences

https://eurasiaresearch.org/stra

- 2nd ICSTR Jakarta – International Conference on Science & Technology Research, 19-20 September 2019
- ICSTR Hong Kong – International Conference on Science & Technology Research, 26-27 September 2019
- 4th ICSTR Dubai – International Conference on Science & Technology Research, 09-10 October 2019
- 2nd ICSTR Prague – International Conference on Science & Technology Research, 17-18 October 2019
- 4th ICSTR Bangkok – International Conference on Science & Technology Research, 17-18 October 2019
- 4th ICSTR Singapore – International Conference on Science & Technology Research, 15-16 November 2019
- 5th ICSTR Dubai – International Conference on Science & Technology Research, 11-12 December 2019
- ICSTR Sydney – International Conference on Science & Technology Research, 12-13 December 2019
- 3rd ICSTR Bali – International Conference on Science & Technology Research, 21-22 December 2019
- 5th ICSTR Bangkok – International Conference on Science & Technology Research, 23-24 December 2019
- 3rd ICSTR Malaysia – International Conference on Science & Technology Research, 29-30 December 2019
- 6th ICSTR Dubai – International Conference on Science & Technology Research, 19-20 February 2020

- ICSTR Melbourne – International Conference on Science & Technology Research, 05-06 March 2020
- 5th ICSTR Singapore – International Conference on Science & Technology Research, 27-28 March 2020
- ICSTR Tokyo – International Conference on Science & Technology Research, 03-04 April 2020
- 3rd ICSTR London – International Conference on Science & Technology Research, 16-17 April 2020
- ICSTR Berlin – International Conference on Science & Technology Research, 14-15 May 2020
- 4th ICSTR Kuala Lumpur – International Conference on Science & Technology Research, 14-15 May 2020
- ICSTR Seoul – International Conference on Science & Technology Research, 22-23 May 2020
- 3rd ICSTR Prague – International Conference on Science & Technology Research, 04-05 June 2020
- 6th ICSTR Singapore – International Conference on Science & Technology Research, 11-12 June 2020
- ICSTR Paris – International Conference on Science & Technology Research, 10-11 June 2020