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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.

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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

Malini Nair

Co-Curriculum Chair for the Quality Program in the Business Division at Sharjah Women’s Campus, UAE

Topic: The Future of Quality

Malini Nair is a Business Faculty at the Higher Colleges of Technology. She teaches classes in Quality, Auditing, Management and Leadership as well as Economics. She is interested in the use of interventions, technologies, and tools that facilitate group/team processes and lead to better task outcomes through Quality standards. She has developed and taught several innovative courses related to Quality, HR, Marketing and Economics to both MBA and undergraduate students. She is currently the Co-Curriculum Chair for Quality at the university level. She is a Doctoral candidate pursuing her Ph.D. in Business and Management. She has written several research papers and continues to do so. She has received a SEED grant for one of her research papers. She is actively involved in community projects and her forte is mentoring and encouraging her students to actively participate in these initiatives.

Prior to her appointment as a faculty, she has an immense amount of industry experience especially in the retail sector in the UAE. She studied Economics Honours and attended the prestigious Birla Institute of Technology (BIT) in India where she obtained her Master’s degree in Business Administration. She went on to work as a Group HR Manager and continued to teach as she believes in sharing the knowledge gained through the industry. Her initiatives at the college level have been highly commended.
PRESENTERS

Giriraj Tailor
ERCICSTR1921051

Synthesis and Microscopic Analysis of Silver Nanoparticles Prepared by Polymer Resin

Giriraj Tailor
Polymer Science, University College of Science, M.L.S. UNIVERSITY, Udaipur, Rajasthan, India

Jyoti Chaudhary

Abstract

In the present study, silver nanoparticles were synthesized from thermosetting polymer by using chemical precipitation method. The synthesized silver nanoparticles were obtained by the decomposition at the 9000°C. The chemical composition and crystallographic structure of silver nanoparticles were confirmed by XRD. Surface imaging studies were performed using AFM for estimating surface morphology and particles size distribution by investigation of the spherical shape of metal ion at the surface of silver nanoparticles. The white spots are observed in the presence of silver metal ions in spherical forms and the particles size of silver nanoparticles were 32.56 which confirmed through XRD.

Keywords: Nanoparticles, SEM, TEM, AFM and Silver

Aarfah Majid
ERCICSTR1921052

An Efficient Synthesis of Some 4-Chloro-Phenyl-4-Fluoro-Benzyl Substituted Pyrimidine Derivatives and Diverse Pharmacological Activities

Aarfah Majid
Synthesis Organic & Medicinal Chemistry lab, Department of Chemistry, Mewar University, Gangrar, India

Ajit Joshi
V.N.Rajasekharan Pillai

Abstract

In our study a series of pyrimidine based heterocyclic entities 6-Benzy1-2-(4-chloro-phenyl)-3(4-fluoro-benzyl)-5-phenyl-2, 3-dihydro-[1,3]oxazin-4-one were designed, which was further treated with various primary amine derivatives to produce some 4-chloro-phenyl-4-fluoro-benzyl substituted pyrimidine derivatives. All the synthesized compounds were characterized by FTIR, 1HNMR, MS spectroscopy and Elemental analysis.

Keywords: Piperazine, Methyl Pierazine, Phenyl piperazine, 1H-benzimidazol-2-amine

Mehad Mustafa Adam
ERCICSTR1921053

Phytochemical Screening and Anti-Oxidant Activity of Solenostemma Argel Leaf Extracts

Mehad Mustafa Adam
Synthesis Organic & Medicinal Chemistry lab, Department of Chemistry, Mewar University, Gangrar, India

Prakash Choudhry

Abstract

The present study was mainly concerned with the identification of the therapeutic properties of leaf extract of Solenostemma argel. The ethanolic extract of Solenostemma argel Leaves was used for its anti-oxidant and Phytochemical stuides. Solenostemma argel leaves has very well anti-oxidant property.

Keywords: Solenostemma Argel, Antioxidant Activity, Phytochemical Screening, Extraction, Purreification
Goldame Yapit
ERCICSTR1921055

The Interplay Between Arts and Waste Management: A Phenomenological Study

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Lorma Colleges Basic Education Schools, Urbizondo San Juan, La union Philippines

Mr. Alonzo Andrei Go. Rimando
Mr. Vincent Miguel Datahan. Marron
Mr. Jio Carlo Opena. Tavares
Ms. Shanaia Margareth Sia. Argueza
Mr. Christian Ian De Guzman. Aban

Abstract

Many economically developing countries produced more waste 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 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 Ilikha 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

Benamira Nadir
ERCICSTR1921056

Three Phase Induction Motor Investigation under Unbalanced Supply Voltages

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Electromechanical Systems Laboratory, Department of Electromechanical Engineering, Badji Mokhtar University, Annaba, Algeria

Saad Salah
Electromechanical Systems Laboratory, Department of Electromechanical Engineering, Badji Mokhtar University, Annaba, Algeria

Ouada Mehdi
Electromechanical Systems Laboratory, Department of Electromechanical Engineering, Badji Mokhtar University, Annaba, Algeria

Abstract

In the present paper, series of simulation tests of voltage unbalances are performed on triphase asynchronous motor. These unbalances could cause many problems, such as mechanical oscillations and excessive losses. The detection of this unhealthy situation of the motor has been investigated, by using the enhanced Park’s vector approach (EPVA). The 2nd harmonic component signature obtained by this method under this abnormal condition, is often considered as a direct indicator of a stator winding fault in other researches. So, this resemblance leads to uncertainty in the detection of faults. Therefore, it is required to specify the fault in a certain way by a complementary diagnosis tool to overcome this issue. The motor current signature analysis (MCSA) and torque harmonic analysis (THA) techniques are considered as ideal tools for this purpose because of their suitability for the
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<td>Olawoyin Bisi Salimon</td>
<td>Makerspaces as Centers of Innovation: an Assessment of the Impact of Technology Incubation Centers in Nigeria</td>
<td>The idea of knowledge sharing facilitated by the internet and complemented by a collaborative offline process in form of shared workshops called Makerspaces has become an attractive economic development agenda worldwide. Towards this end, Nigeria has established a number of Technology Incubation Centers (TICs) across the country with a view to using them as institutional mechanisms for commercializing Research and Development results; thus helping to promote venture creation and economic development. This study thus examines the impact of the nurturing by the TICs, on the performance of selected incubated enterprises that have grown into medium scale businesses in different sectors of the economy. The objective is to determine the extent to which the process of incubation has contributed to their growth in relation to similar businesses that developed outside the TICs. Six enterprises nurtured by TICs and six others outside these were selected for study. Data were collected in respect of the twelve enterprises covering their first five years of operation. Performances in terms of annual turnover, market share and product range were analysed by scatter diagram plotted to show these variables against time and on comparative basis between TIC and non-TIC enterprises. Results showed an initial decline in performance for most of the incubatees in the first two years due to sluggish adjustment to withdrawal of subsidies enjoyed at the TICs. However, four of them were able to catch up with improved performance and surpass their non – TIC counterparts consistently from the third year. Analysis of year on year performance also showed average growth rate of 7% and 5 % respectively for TIC and non – TIC enterprises. The study therefore concludes that TICs have great role to play in nurturing new, innovative businesses but sees the need for government to address the provision of critical facilities especially electricity and utilities that constitute critical cost components for businesses. It must also address the issue of investment grants, loans including the development of technology/industrial parks that will serve to boost business survival.</td>
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<td>Enoch Suleiman</td>
<td>On Homomorphisms of Wreath Product of Groups</td>
<td>In this work, we established homomorphisms of the base group of wreath product and also established some properties of homomorphism. We also deduced the existence of certain “E-subgroups” in wreath products and functors from the category of groups. We gave two propositions on an isomorphism of wreath products with two examples using GAP package to established it.</td>
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<td>Lamess Abdulqadir</td>
<td>The Affection of Concrete Recycling Technology and Achieving Sustainability in Construction</td>
<td>Because of the global impacts of environmental issues, there is a general orientation for sustainable development to overcome these issues in all sectors around the world. It is common knowledge that</td>
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construction is not environmentally friendly, so the recycling of building waste is very effective in improving this problem and it offers many advantages:
A. Reduced demand for new resources.
B. Reduction of associated transport and production expenses.
C. Reducing the area of landfills.
The waste resulting from the construction and demolition processes represents 10 to 15 percent of the total waste in the developed countries. [1], Waste from construction and demolition includes concrete, bricks, wood, glass, insulating materials, ceilings, wires, pipes, gravel and dust. Concrete is the most common waste and constitutes about 50 percent of the total waste [2]. In this research the possibility of recycling the concrete will be explored.
Keywords: Concrete, Recycling concrete, Recycling Technology, Construction Sustainability, Environmental Friendly

In-silico Molecular dynamics of Vitamin-D receptor in Polyunsaturated Fatty acids Allosteric Modulation

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Abstract
Vitamin D deficiency is a global concern. A plethora of evidences report that selective long chain polyunsaturated fatty acids (PUFA) including eicosapentanoic acid (EPA), docosahexaenoic acid (DHA) and arachidonic acid (AA) bind with low affinity to the ligand binding domain of vitamin-D receptor (VDR) and lead to transcriptional activation. We therefore hypothesize that PUFA would modulate the dynamics and kinetics of VDRs, irrespective of Vitamin-D binding. The spatial arrangement of PUFA in VDR active site was examined by docking with crystalline structure of VDR. The docking studies shows PUFA have fatty acid structure-specific binding affinity towards VDR. The calculated EPA, DHA & AA Cdocker energy as shows lesser with comparing to the vitamin-D3 molecule. The PUFA (EPA, DHA &AA) is bound to amino acid residue Tyr143 of VDR Ligand binding domain (LBD) through nonbonding interaction (Hydrogen and Hydrophobic). EPA and VDR-LBD complex makes two hydrogen bond (His 301, His393) with bond distance below 2.4 Å and three hydrophobic interactions (Tyr143, Tyr147 and Phe150) with bond distance of below 5.0 Å. AA and VDR-LBD complex shows one hydrogen bond (Ala227) with the distance of 2.5 Å and two hydrophobic bonds (Typ143, Tyr147) with the distance below 5.3Å, The complex of DHA and VDR shows the five hydrogen bond (ASP144, Arg270, Asp144 and Tyr143) with the distance below 3.3 Å. Our docking study revealed that selected PUFA modulate VDR at LBD with distinct binding energies and interactions. These findings suggest the unique roles of PUFA in VDR activation and may offer alternate strategy to circumvent vitamin D deficiency.
Keywords: Eicosapentanoic Acid, Decosapentanoic Acid, Arachidonic Acid, Vitamin-D deficiency, Ligand Binding Domain, Polyunsaturated Fatty acids

Assessment of Sullage Chemical Properties Treated with Activated Carbon from Selected Agro wastes

Chidimma Adamma Nduka
Biotechnology, Federal University of Technology, Owerri, Nigeria

Abstract
Sullage was treated with selected carbonized Agro-wastes (rice husk, corn cob and coconut husk). The Agro-wastes were first carbonized at 600°C and chemically activated using phosphoric acid (H3PO4). They were then used as adsorbents for the removal of chemical compounds: pH, Chemical Oxygen Demand (COD), Biochemical Oxygen Demand (BOD), nitrate (NO3-), phosphate (PO4-), chloride (Cl-) and sulphate (SO42-) from sullage using titration and spectrophotometer methods. Initial concentration of the chemical parameters of sullage samples showed COD to be 486.2±87 mg/l; BOD: 175.0±3.1 mg/l; pH: 7.33±0.1; Cl-: 31.0±5.5 mg/l; NO3-: 28.6±24 ppm; PO4-: 7.08±3.2 ppm and SO42-
MATTER: International Journal of Science and Technology
ISSN 2454-5880

4th ICSTR Dubai – International Conference on Science & Technology Research, 09-10 October 2019
Flora Grand Hotel, Near Al Rigga Metro Station, Deira, Dubai, United Arab Emirates
Upcoming Conferences

https://eurasiaresearch.org/stra

- 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
- 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
- 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
- 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