

9. Materials Science

January 04, 2020

Sectional President		Dr. S. Srikantaswamy Director, College Development Council, Co-ordinator, CMST, University of Mysore, Mysuru – 570 006
Sectional Secretary		Prof. Puttaswamy Professor, Dept. of Chemistry, Central College Campus, Bangalore University, Bangalore -560001
Sectional Recorder		Prof. Guduru Prasad Professor, Department of Physics, Osmania University, Hyderabad, Telangana 500 007
02:00 – 06:00 PM		
Venue	:	Cluster II – College of Agriculture, South Block : Hall 17
Presidential Address	:	S. Srikantaswamy Director, College Development Council, Co-ordinator, CMST, University of Mysore, Mysuru – 570 006 <i>Synthesis, Characterization, Enhanced Photocatalytic Activity and Toxicity studies of Nanomaterial composites</i>
Platinum Jubilee Lecture	:	Ashok M. Raichur Professor, Department of Materials Engineering, Indian Institute of Science, Bangalore - 560 012 <i>Materials in Medicine: A Perspective on Nanomaterials for Improving Efficacy and Bioavailability of drugs</i>
Young Scientist Award Presentations	:	Ambrish Kumar Srivastava Department of Physics, Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur – 273 009. Satyanarayan Patel Department of Mechanical Engineering, Malaviya National Institute of Technology Jaipur, Jaipur, Rajasthan – 302 017. Jayesh S Department of Mechanical Engineering, School of Engineering, Cochin University of Science and Technology, Kochi, Kerala – 682 022. Abhilash M. R Department of Studies in Environmental Science, University of Mysore, Mysuru – 570 006. Sudipta Biswas

	<p>Department of Physics, Indian Institute of Technology Kharagpur, Kharagpur – 721 302.</p> <p>Utkarsh Kumar Nanomaterials and Sensors Research Laboratory, Department of Physics, Babasaheb Bhimrao Ambedkar University, Lucknow – 226 025.</p>
SECTIONAL COMMITTEE ELECTION	

January 05, 2020

02:00-06:00 PM	
Venue	Cluster II-College of Agriculture, South Block : Hall 17
Symposium	
Materials Science and Technology for Rural Development – Environment, Health and Energy	
Keynote Talk:	<p>: Gopinathan Sankar Department of Chemistry, University College London, 20 Gordon Street, London, WC1H 0AJ.</p> <p><i>Nano Porous Materials and their wide range of applications</i></p>
	<p>: Kohei SOGA Department of Mater. Sci. and Tech., Tokyo Univ. of Sci., Katsushika, Tokyo, JAPAN</p> <p><i>Materials Design and Processing for Near Infrared Biomedical Photonics with Transparency</i></p>
Invited Lectures	<p>: B. Neppolian Energy & Environmental Remediation Lab., SRM Research Institute, SRM Institute of Science and Technology, Kattankulathur, Chennai - 603 203</p> <p><i>Ultrasound Assisted Synthesis of Nano Materials for Energy and Environmental Remediation</i></p>
	<p>: R. Jayavel Centre for Nanoscience and Technology & Crystal Growth Centre, Anna University, Chennai - 600 025</p> <p><i>Hierarchically Structured Two Dimensional Nanocomposite Materials for Energy Storage Applications</i></p>
Oral Presentations	
	<p>: N. Shanthi <i>Band Structure Study of Half Heusler Alloy ZrNiSn And Effect of Pd Doping</i></p>
	<p>: M. B. Deore <i>Reparation and Characterization of Cdo Thin Films By Spray Pyrolysis Technique</i></p>

	:	Harish K. Dubey <i>Superconducting Traits Exhibited By Sbsi Crystals</i>
	:	Soma Mukherjee <i>Structural Characterization And Electrical Transport Properties of $X\text{LaMnO}_3$ Doped $\text{YV}_2\text{O}_5-(100-\text{Y})\text{P}_2\text{O}_5$ Glass And Glass-Ceramic Nanocomposites</i>
	:	D. N. Mahato <i>Effect of Electron - Phonon Interaction on the Superconductivity in Metals, Alloys and Polymers</i>
	:	Sunil Magan More <i>Tri-Hybrid Energy Generation Method of Microbial Fuel Cell, Solar and Wind Energy</i>
	:	R. P. Patil <i>Lanthanum Doped Barium Titanate As NH_3 Gas Sensor at Room Temperature</i>
	:	Lakshmidevi V <i>Absorption Spectra of DBSA Doped Polyaniline in Different Organic Solvents</i>
	:	R. K. Shukla <i>DFT Analysis of Interaction Between A Carbon Nanotubes and Anti-Cancer Drugs</i>
	:	Mohd. Faheem Khan <i>Plant Sensors: Matter Sensing Plants</i>
	:	Apurba Kumar Nayek <i>Ferromagnetic Property of Cu Doped ZnO: Theoretical Approach</i>
	:	Ashish Kumar <i>Nanotechnology for Remediation of Agra Water Supply</i>

BEST POSTER AWARD PRESENTATION

Concurrent Poster Session –I (PP – 01 TO PP - 35)

January 06, 2020

02:00 -06:00 PM	
Venue	Cluster II – College of Agriculture, South Block : Hall 17
Keynote Talk	<p>: Ganapati D. Yadav Vice-Chancellor and R.T. Mody Distinguished Professor, Tata Chemicals Darbari Seth Distinguished Professor of Leadership and Innovation, J.C. Bose National Fellow, Institute of Chemical Technology, Mumbai- 400 019</p> <p><i>Novel Catalytic Selectivity Engineering in Valorisation Of Biomass, CO₂ And Water into Chemicals, Materials and Energy</i></p>
	<p>: Ashok K. Ganguli Department of Chemistry, Indian Institute of Technology, Delhi, New Delhi 110 016</p> <p><i>Design of Nanostructures for Photoelectrochemical Applications</i></p>
Invited Lectures	<p>: Ranjani Viswanatha Jawaharlal Nehru Centre for Advanced Scientific Research, Jakkur, Bangalore, India</p> <p><i>Nanomaterials: The Journey from Laboratory to Industry</i></p>
	<p>: Masakazu Umezawa Department of Mater. Sci. and Tech., Tokyo Univ. of Sci., Katsushika, Tokyo, Japan</p> <p><i>Functional Bio imaging for Deep Tissues using Over-1000-Nm Near-Infrared Fluorescent Materials</i></p>
	<p>: Kyohei Okubo Department of Mater. Sci. and Tech., Tokyo Univ. of Sci., Katsushika, Tokyo, Japan</p> <p><i>Quantitative Visualization of Lipid Distribution in Mouse Livers by using Near-Infrared Hyperspectral Imaging</i></p>
Oral Presentations	
	<p>: S. K. S. Parashar <i>BZT-BCT Lead Free Piezoelectric Nanomaterial for Microwave Device Application</i></p>
	<p>: S. R. Wadgane <i>Structural and Magnetic Characteristics of Cr – Zn Substitution In Cobalt Ferrite With Ferroelectric Na_{0.5}Bi_{0.5}TiO₃ Composite</i></p>
	<p>: Jancy Ayyaswamy <i>Technology Roadmap on Materials: Technology Vision 2035</i></p>
	<p>: N. Dhananjaya <i>Environmental Friendly Synthesis and Characterization of Chonemorphafragrans Leaf Extract Mediated ZnO/Ag Nanostructures for Luminescence Applications</i></p>
	<p>: Naorem Santakrus Singh <i>Flexible ZnO/PANI Heterojunction Diode</i></p>
	<p>: B. Vijaya kumar</p>

		<i>Electron Transport Studies in CuO Doped Borophosphate Glasses</i>
	:	Sumitra Phanjoubam <i>Effect of Sintering Temperature on the Properties of Cobalt Substituted Lithium Ferrites</i>
	:	S. K. Nomita Devi <i>Enhanced Photocatalytic Activity of Doped ZnO Nanoparticle</i>
	:	U. Sasikala <i>Effect of Low Molecular Weight Plasticizer (PEG) on PEO+PVP Based Polymer Blend Electrolyte Films</i>
		Parvathi Patil <i>Fluorescent Conjugated Polymer Sensors for the Revealing of Nitroaromatics</i>
		Madhavrao K. Deore <i>Studies on Physical, Electrical and Gas Sensing Performance of Cu- Doped ZnO Thick Film</i>
		A. S. Manjunatha <i>Synthesis of SnO₂-WO₃ Nanocomposite Using and its Application for Photocatalyst: A Green Approach</i>
		Nirmala Vaz <i>Exploration of OSO₄ And RuCl₃ Catalysis on Oxidation-Kinetics of Theophylline Drug with Alkaline Chloramine-B: A Mechanistic Study</i>
		P. P. Swain <i>A Comparative Study of Crystallographic and Thermal Behavior of Green SPANI Composites and Green Spani Nanocomposites Prepared from Natural Fibers of Musa Sapientum and Saw Dust</i>
		Nandkishor B <i>Synergistic Effects of TiO₂ Nanocomposite Starch-Based Biodegradable Copolymer as Plant Growth Regulator</i>
		Suman Chatterjee <i>Sensor Elements Made From ZnO Nanorods for Determination of Quality of Made Tea</i>
		Ashok G. Matani <i>Graphene and Aluminium Batteries and Nanomaterials in Electric Vehicles : Potentialities and Prospects in Indian Automobile Industries</i>
Concurrent Poster Session –I (PP – 36 TO PP - 70)		

January 07, 2020

02:00 – 03:00 PM		
Venue		Cluster II – College of Agriculture, South Block : Hall 17
Invited Lectures		
Invited Lectures	:	B. N. Chandrashekar Southern University of Science and Technology, Shenzhen, CHINA <i>Green Transfer Method of CVD Grown Graphene for Transparent and Flexible Electrodes</i>
	:	Madala Suguna Department of chemistry, Vemu Institute of Technology, Kothakota, Chittoor, Andra Pradesh <i>Sorption of Chlorophenol from Aqueous Medium using Agricultural Waste Material</i>
Oral Presentations		
	:	Kalla Ramamohan <i>Electrical and Thermal Studies of Plasticized Polymer Blend Electrolyte Films</i>
	:	Ranjit Thapa <i>Carbon Allotropes as Anode Material for Lithium-Ion Batteries</i>
	:	Mahesh Kumar Ravva <i>Theoretical Design and Development of Non-Fullerene Acceptors for Organic Solar Cells Applications</i>
General Discussion and Recommendation		