

## (27) Materials for Bio-medical Applications

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### DETAILED PROGRAMME

Monday, 16-12-2013

#### Session I : 10.15 – 11.15

10.15 - 10.45 Invited Talk (1)	<u>Prabha D Nair</u>	<b>ABS - Email - ICA</b> Biosignal embraced Scaffolds for tissue regeneration
10.45 - 11.00 Oral (1)	<u>K.V. Hari Krishnan</u> A. Kedharnath G. Arulkumar and S. Kalaiselvam	<b>ABS - 948 - ICA</b> Investigation of structural, compositional and anti-microbial properties of Copper Nano thin film using dc magnetron sputtering for surgical instruments
11.00 - 11.15 Oral (2)	<u>B. Baruwati</u> R. Sawana and J. Daniel	<b>ABS - 1273 - ICA</b> A novel copper-aluminium composite material for biocidal applications

#### Session II : 16.00 – 18.00

16.00 - 16.30 Invited Talk (2)	<u>N. Horiuchi</u> , K. Nozaki, M. Nakamura, A. Nagai and K. Yamashita	<b>ABS - 1620 - ICA</b> Electric characterization in hydroxyapatite for understanding biointerfaces
16.30 - 16.45 Oral (3)	<u>Min Ho</u> Lee I, Dong Joo Yoon Byung Il, Kim	<b>ABS - 1491 - ICA</b> Relative biocompatibility evaluation of anodized titanium alloy (Ti-6Al-4V) specimens in mouse abdominal connective tissue
16.45 - 17.00 Oral (5)	<u>G. Suresh Kumar</u> A. Thamizhavel E.K. Girija	<b>ABS - 1170 - ICA</b> <i>In situ</i> fabrication, characterization and <i>in vitro</i> studies of ciprofloxacin loaded hydroxyapatite nanoparticles for the treatment of osteomyelitis
17.00 - 17.15 Oral (5)	<u>Anindita Mukhopadhyay</u> Nidhi Joshi, Sujit Basak, Goutam De and Krishnananda Chattopadhyay	<b>ABS - 247 - ICA</b> Cell meets Nanoparticles: bare nanoparticles damage cellular proteins, whereas surface-coated ones do not
17.15 - 17.30 Oral (6)	<u>Indu Bajpai</u> Kantesh Balani and Bikramjit Basu	<b>ABS - 1324 - ICA</b> Synergistic Effect of Static Magnetic Field and HA-Fe <sub>3</sub> O <sub>4</sub> Magnetic Composites on Viability of <i>S.aureus</i> and <i>E.coli</i> Bacteria
17.30 - 17.45 Oral (7)	<u>Ansar. E.B</u> Fernandez.F.B Krishna Surendra.M Annie John M.S. Ramachandra Rao Harikrishna Varma P R	<b>ABS - 186 - ICA</b> The evaluation of hyperthermia effect to cancerous cells by biocompatible inorganic matrix modified magnetic nanocrystals in the presence of RF induction alternating magnetic field.
17.45 - 18.00 Oral (8)	Younghwan Kim York R. Smith Mano Misra and <u>Swomitra Mohanty</u>	<b>ABS - 290 - ICA</b> Point-of-Care Detection of Volatile Organic Compound Biomarkers from <i>Mycobacterium tuberculosis</i> by Breath Analysis Using Self-Organizing Titania Nanotube Arrays

**Tuesday, 17-12-2013**

**Session III : 10.15 – 11.15**

10.15 - 10.45 Invited Talk (1)	<u>Min Wang</u>	<b>ABS - 1581 - ICA</b> Novel Tissue Engineering Scaffolds and their Interactions with Cells
10.45 - 11.00 Oral (9)	<u>Bhuvanasree S.R</u> Rama Rajaram and Rajaram .A	<b>ABS - 1607 - ICA</b> Cytotoxicity studies of <i>Cissus quadrangularis</i> extract reduced gold nanoparticles in breast cancer cell line
11.00 - 11.15 Oral (10)	<u>Midhun Ben Thomas</u> Mahalakshmi Vaidyanathan Krishna Radhakrishnan and Ashok Raichur	<b>ABS - 276 - ICA</b> Enhanced viability of Probiotic <i>Saccharomyces boulardii</i> encapsulated by layer-by-layer approach in pH responsive Chitosan – Dextran sulfate polyelectrolytes.

**Session IV : 11.45 – 13.15**

11.45 - 12.00 Oral (11)	<u>S. Sathya</u> P. Sriyutha Murthy Arindam Das V. Pandiyan R. Pandiyan V. P. Venugopalan M. Doble	<b>ABS - 1090 - ICA</b> Antifouling Properties of Metal Oxide Incorporated Polymethylmethacrylate (PMMA) Nanocomposites
12.00 - 12.15 Oral (12)	Si-Yue Li Qin-Wen Guan <u>Min Wang</u>	<b>ABS - 1581 - ICA</b> Interactions between Cells and New Theranostics
12.15 - 12.30 Oral (13)	<u>P. A. Palod</u> A. Bilgaiyan K. Bhargava T. Dixit and V. Singh	<b>ABS - 187 - ICA</b> Template based electrochemical growth of polypyrrole nanostructures for Biosensing application
12.30 - 12.45 Oral (14)	Hemkusha Thakur <u>Nirmal Prabhakar</u>	<b>ABS - 1499 - ICA</b> Nucleic acid Biosensor for <i>Salmonella Typhimurium</i> detection
12.45 - 13.00 Oral (15)	<u>A. Sukhanazerin</u> P. Biji and T. Lazar Mathew	<b>ABS - 1682 - ICA</b> Fabrication of NH <sub>3</sub> Gas Sensors Based on Highly Oriented Langmuir Monolayers of Pani/MWCNTs for Clinical Breath Analyzer Applications

**Session V : 16.00 – 18.00**

16.00 - 16.15 Oral (16)	<u>Rajasegaran Elumalai</u> Ranjitha Tatinani Ranajoy Mullick Saumitra Das and Ashok M Raichur	<b>ABS - 214 - ICA</b> Nanotransporters for Nanomedicine: A Potential Tool for Gene Therapy in Modern Clinical Diseases
16.15 - 16.30 Oral (17)	<u>P Abdul Rasheed</u> N Sandhyarani	<b>ABS - 419 - ICA</b> DNA functionalized gold nanoparticle based Biosensor for femtomolar detection of specific DNA sequences

16.30 - 16.45 Oral (18)	<u>Sourav Mishra</u> Srabani Ghosh and Rupa Mukhopadhyay	<b>ABS - 454 - ICA</b> Maximizing 'On-Surface' Nanoscale Mismatch Discrimination by LNA Sensor Probes
16.45 - 17.00 Oral (19)	<u>Tom Mathews</u> Rachna Dave Preethi Jayaraj P. K. Ajikumar, H. Joshi, V. P. Venugopalan, S. Dash1 and A.K. Tyagi	<b>ABS - 432 - ICA</b> Polycaprolactone based electrospun matrices for controlled and sustained drug release
17.00 - 17.15 Oral (20)	<u>Vijay Bhooshan Kumar</u> Koushi Kumar Yitzhak Mastai Aharon Gedanken Pradip Paik	<b>ABS - 594 - ICA</b> SiOZO-plex for Gene Delivery
17.15 - 17.30 Oral (21)	<u>J. M. Jandosov</u> Z. A. Mansurov A. T. Orazbekov A. Zh. Baimenov C. A. Howell S. R. Sandeman S.V. Mikhalovsky	<b>ABS - 862 - ICA</b> Removal of Protein Bound Uraemic Toxins By Carbon Nanoadsorbents Derived From Biomass
17.30 - 17.45 Oral (22)	<u>Neena Aloysious</u> Prabha D. Nair	<b>ABS - 1175 - ICA</b> Coculture of endothelial cells and stem cell differentiated islet like clusters on a natural biodegradable scaffold in the development of a tissue engineered pancreas
17.45 - 18.00 Oral (23)	<u>V. Rajiu</u> , P. Balaji T. S. Sheena M. A. Akbarsha and K. Jeganathan	<b>ABS - 1337 - ICA</b> Design of Doxorubicin Tethered Curcumin Nanoparticles and its Anti-cancer Effects in Human Liver Cancer Cells

## Poster Session

**Monday, 16-12-2013, 14.00-15.30**

27 - Poster - 01	Balasaheb B. Chandanshive and Deepa Khushalani	Biocompatible Hydroxyapatite Nanotubes	<b>ABS - 189 - ICA</b>
27 - Poster - 02	Lokesh Pathak Yadvendra Agrawal	Self-Assembled Lecithin-Chitosan Nanoparticles Loaded with Curcumin For the Treatment of Oral Candiadiasis	<b>ABS - 254 - ICA</b>
27 - Poster - 03	Rajesh P Nimmy Mohan, Harikrishna Varma	Drug Eluting Titanium Implant Having TiO <sub>2</sub> Nanotube Reservoirs And Their <i>In Vitro</i> Behaviour	<b>ABS - 342 - ICA</b>
27 - Poster - 04	Manish Kumar Singh Jay Singh and B. D. Malhotra	Metal Nanoparticles based Electrochemical Biosensors for Cholesterol Detection	<b>ABS - 364 - ICA</b>

27 - Poster - 05	Indranee Das Samar Kumar Medda Goutam De Susanne Fagerlund Leena Hupa Mervi Puska and Pekka K. Vallittu	Bioactive glass–nanosphere/nanofibre based composite coatings useful as excellent scaffolds for the generation and growth of apatite	<b>ABS - 414 - ICA</b>
27 - Poster - 06	Sabyasachi Mukhopadhyay Debora Marchak Wenjie Li Mordechai Sheves and David Cahen	Bacteriorhodopsin: Building-block for Solid-state Opto-(bio)electronic Devices	<b>ABS - 479 - ICA</b>
27 - Poster - 07	T. Rajesh Kumar Dora and V Sampath	Corrosion Study of Cu-based shape memory alloys for biomedical application	<b>ABS - 517 - ICA</b>
27 - Poster - 08	V. Lakshmi Prasanna N. Padmavathy and R. Vijayaraghavan	Synthesis, Characterization and Antibacterial activity of Na <sup>+</sup> doped ZnO	<b>ABS - 538 - ICA</b>
27 - Poster - 09	Padmavathy. N Prachi Kabra and Meghna S	Protein Binding Studies of Tryptophan capped Cupric and Cuprous oxide Nanoparticles	<b>ABS - 548 - ICA</b>
27 - Poster - 10	Zhubanova A. Azhar Digel E. Ilya Akimbekov Sh. Nuraly Savitskaya S. Irina Mansurov, A. Zulhair	Adsorption activity of the carbonized rice husk in relation to microbial cells and endotoxins	<b>ABS - 587 - ICA</b>
27 - Poster - 11	Himadri Medhi Chandar A Koushi Kumar Pradip Paik	Porous Surface Functionalized Polymers Nanocapsules for Drug Delivery	<b>ABS - 594 - ICA</b>
27 - Poster - 12	Chander Amgoth Koushi Kumar Himadri Medhi Pradip Paik	Amino Acid based Surfactant Free Porous Block-copolymer Micro and Nanocarriers for Drug Delivery	<b>ABS - 594a - ICA</b>
27 - Poster - 13	S. Sandhya S. Sureshbabu H. K. Varma and M. Komath	Development of a Versatile Drug Eluting Bioactive Bone Filler Cement	<b>ABS - 631 - ICA</b>
27 - Poster - 14	G. Abilash Y. Manikanta, B. Santosh Ch. Janardhana	A Novel and Facile Gold Nanoparticles Based Optical Assay for Antioxidant and Pro-oxidant Activity	<b>ABS - 641 - ICA</b>
27 - Poster - 15	A. Rajendra Prasad Giri B. Mrinmay K Mukhopadhyay	Structural Study of Polymer-Supported Lipid Membranes	<b>ABS - 759 - ICA</b>
27 - Poster - 16	A. T. Raghavender Nguyen Hoa Hong Yin Hua Zhang	Toxicity due to aging affect of the magnetic nanoparticles and its significant role on the biomedical applications	<b>ABS - 776 - ICA</b>

27 - Poster - 17	Bindu P. Nair and Prabha D. Nair	Nano Silica-Pluronic Hybrid Vesicles for Targeted Anti-cancer Drug-delivery Applications	<b>ABS - 824 - ICA</b>
27 - Poster - 18	Dhanesh Vaikkath Bindu P. Nair and Prabha D. Nair	Co-Electrospun Membrane of PCL and Polymer Vesicles for Controlled Delivery Applications in Tissue Engineering	<b>ABS - 836 - ICA</b>
27 - Poster - 19	Mahesh S. Agharkar Sachin Kochrekar and Dr. Balaprasad Ankamwar	Use of green synthesized colloidal gold nanoparticles for detection of glucose in urine	<b>ABS - 852 - ICA</b>
27 - Poster - 20	Jalaja K and Nirmala R James	Fabrication of Chitosan Nanofibers using Gelatin as a Core Template by Coaxial Electrospinning	<b>ABS - 63 - ICA</b>
27 - Poster - 21	Nimmy Mohan Rajesh P, Gayathri V Mohanan PV Harikrishna Varma	Hydrothermally Generated Porous Hydroxyapatite Scaffolds With Enhanced Cellular Activity	<b>ABS - 341 - ICA</b>
27 - Poster - 22	Shikha Prakash	Statistical theory for individual base-pair opening in DNA	<b>ABS - 373 - ICA</b>
27 - Poster - 23	A. Shreya Ghosh B. Piyali Basak and C. D.N Tibarewala	Synthesis and Characterization of Polyvinyl Alcohol Scaffolds for Tissue Engineering	<b>ABS - 439 - ICA</b>
27 - Poster - 24	Kishore Badra and Deenan Santhiya	Bio-inspired Synthesis of Nano Patterned Bio active Glass Ceramic using PAMAM Dendrimer	<b>ABS - 970 - ICA</b>
27 - Poster - 25	Adarsh Ravi Suman Gupta and Navakanta Bhat	Reduction of neural electrode impedance by lead-free Platinum black and reverse electroplating of Platinum	<b>ABS - 1001 - ICA</b>
27 - Poster - 26	Mohd Qasim Braj R. Singh Khushnuma Asghar A. H. Naqvi and D. Das	Synthesis and antifungal activity against <i>Candida albicans</i> of Ag nanoparticles embedded mesoporous SiO <sub>2</sub> nanosphere	<b>ABS - 1051 - ICA</b>
27 - Poster - 27	Parvathy R Chandran Aswathi P and N Sandhyarani	Chitosan Gold Nanocomposite for pH Sensitive Delivery of 5-Fluorouracil	<b>ABS - 1082 - ICA</b>
27 - Poster - 28	G. Gomathi Sankar P. Sriyutha Murthy Arindam Das V.Pandiyan, R.Pandiyan V. P. Venugopalan and M. Doble	Nanofillers Enhance the Antifouling Property of Polydimethylsiloxane (PDMS) against Marine Microalgae	<b>ABS - 1089 - ICA</b>
27 - Poster - 29	R.Sriramprabha P. Manivel D. Mangalaraj N. Ponpandian A.Balamurugan, R.T. Rajendra Kumar C.Viswanathan	Non-enzymatic chemical sensor based on nanocrystalline SnO <sub>2</sub> /Graphene nanocomposite modified electrode	<b>ABS - 1171 - ICA</b>

27 - Poster - 30	Aashit Kumar Jaiswal R. R. Yadav and Giridhar Mishra	Acoustical Spectroscopy of Bimetallic Nanoparticles and their Biomedical Applications	<b>ABS - 1206 - ICA</b>
27 - Poster - 31	D. Durgalakshmi C. Priyadharshini and S. Balakumar	<i>In vitro</i> immersion studies of strontium substituted Bioglass by microwave assisted method	<b>ABS - 1297 - ICA</b>
27 - Poster - 32	Raj Kumar and Prem Felix Siril	Simple Approach for nanoformulation of Poorly Water Soluble Drugs	<b>ABS - 1497 - ICA</b>
27 - Poster - 33	Durga Prasad C.R.Girija T.V. Venkatesha B.M. Nagabhushana	Evaluation of Mycobacterial DNA Extraction Protocol Using Nano particles for Real Time Polymerase Chain Reaction	<b>ABS - 1685 - ICA</b>