

(22) Scanning Probe Microscopy and Electron Microscopy

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(22) Scanning Probe Microscopy and Electron Microscopy

DETAILED PROGRAMME

Day: Wednesday 14-12-2016

Session I: 10:15 - 11:45Hrs.

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| 10:15-10:45 Invited Talk -1 | <u>Taka-aki Yano</u> Masahiko Hara | ABS-Email-ICYRAM Tip-enhanced Raman spectroscopy for nano-analysis and nano-imaging |
| 10:45-11:15 Invited Talk -2 | <u>AlpanaNayak</u> Takeo Ohno Tsuyoshi Hasegawa Masakazu Aono | ABS-Email-ICYRAM Short- and long-term memories of atomic switch studied using a scanning Tunneling microscope |
| 11:15-11:30 Oral-1 | <u>H N Gayathri</u> K A Suresh | ABS-445-ICYRAM Charge transport in Langmuir-Blodgett films of nonyl and decylcyanobiphenyls using current sensing atomic force microscope |
| 11:30-11:45 Oral-2 | <u>C N Tharamani</u> | ABS-417-ICYRAM Application of Scanning Electrochemical Microscopy towards Fuel Cells and Electrochemical Biosensors |

Day : Wednesday 14-12-2016

Session II: 12:00-13:15 Hrs.

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| 12:00-12:30 Invited-3 | <u>K. Ganesan</u> , S. R. Polaki, P.K. Ajikumar, S Ilango, M Kamruddin | ABS-Email-ICYRAM Effect of structural disorder on elastic modulus of diamond and diamond-like carbonfilms: An atomic force acoustic microscopy investigation |
| 12:30- 12:45 Oral -3 | <u>Vinoadh Kumar</u> <u>KrishnanKumaran</u> SinnaeruvadiShailendra Kumar VermaKarthikeyan Subramanian | ABS-480-ICYRAM Phase-Separation Phenomenon in Field Assisted Sintered Oxide Dispersed V-4Cr-4Ti Alloys |
| 12:45-13:00 Oral-4 | <u>Y Kamei</u> K. Wakayama, T. Kishi T. Yano, N. Matsushita | ABS-774-ICYRAM Magnetic Domain Configuration of Fe _{3-x} O ₄ Nanoplates with High-Aspect-Ratio |
| 13:00-13:15 Oral -5 | <u>Mahesh Davanageri</u> S Narendranath RavikiranKadoli | ABS-122-ICYRAM Effect of Embrittlement on wear behavior of super duplex stainless steel |

Day: Thursday 15-12-2016

Session III: 14:15 –15:45 Hrs.

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| 14:15-14:45 Invited -4 | <u>Puneet Mishra</u> , Zhi Kun Qi1, Hirofumi Oka, Kohji Nakamura, Tadahirom Komeda | ABS-Email-ICYRAM Nanoscale magnetometry of cobalt islands on Au(111) |
| 14:45- 15:15 Invited -6 | <u>Goutam Sheet</u> , Leena Aggarwal, Sirshendu Gayen, Shekhar Das, Ritesh Kumar, Vicky SuB, Chandra Shekhar, Claudia Felser | ABS-Email-ICYRAM Tip-induced Superconductivity on the Weyl Semimetal TaAs |
| 15:15-15:30 Oral -7 | <u>Jonathan P Hill</u> Yongshu Xie, Yutaka Wakayama, Puneet Mishra Takashi Uchihashi Katsuhiko Ariga | ABS-625-ICYRAM Porphyrin Clamp, Tripod and Rotor in Surface Assemblies |
| 15:30-15:45 Oral-8 | <u>Dinesh Kumar</u> S. B. Singh | ABS-768-ICYRAM Phase Transformation study on Medium carbon TWIP steel through dilatometer test |

Poster Session:

Thursday: 15-12-2016, Time: 14:15- 18:00 Hrs.

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| 22-Poster -01 | Prithwidip Saha Shibin Chacko Anijamol T Philip Ramesh Ramapanicker Thiruvancheril G Gopakumar | ABS-64-ICYRAM Self-Assembly of Ferrocene Derivatives on Crystalline Surface: a Scanning Probe Microscopy Investigation |
| 22-Poster -02 | Khushboo Yadav Thiruvancheril G Gopakumar | ABS-65-ICYRAM Controlling Self-assembly of switchable azobenzene derivatives on Highly Oriented Pyrolytic Graphite |
| 22-Poster -03 | Trupti T Ghogare Aafaq Ahmad Tantray, Santosh S Terdale Moses J Kartha, Subhash D Kendre Habib M Pathan | ABS-302-ICYRAM Co-sensitization TiO ₂ Photoanode by using RB+EY dye: Fabrication and Application to Dye-Sensitized Solar Cells |

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| 22-Poster -04 | Srikantha. Roy Vishwanath. S. Managuli | ABS-Email-ICYRAM Uncertainties and Errors Involved in Atomic Force MicroscopyBased Mechanical Characterization of Biological Cells |
| 22-Poster -05 | Nitin M. Batra Pedro M. F. J. Costa | ABS-134-ICYRAM Exploring the volume expansion and failure mechanism of a graphite intercalation compound using ex-situ and in-situ microscopy studies |
| 22-Poster -06 | N. Chandran, L. Kolakieva, R. Kakanakov, E. K. Polychroniadis | ABS-374-ICYRAM The role of the Ti and Mo barrier layer in Ti/Al metallization to AlGaN/GaNheterostructures at identical process condition: A structural and chemical characterization |
| 22-Poster -07 | J.R. Deepak , V.K. Bupesh Raja MittapalliJanardhanGupthaPalaparthi Hari Durga Prasad | ABS-489-ICYRAM Surface characterization and mechanical property evaluation of Corten A588 steel used for construction applications |
| 22-Poster -08 | G. Balakrishnan , A. Raja K. Thanigai Arul | ABS-591-ICYRAM RF Magnetron sputtered TaN Coatings on High speed steel (HSS) substrates for Cutting tool Applications |