

ICONN-2019 PROGRAMME SCHEDULE
JANUARY 28-30, 2019, SRM INSTITUTE OF SCIENCE AND TECHNOLOGY (SRM IST), CHENNAI, INDIA, VENUE: Dr. T.P. GANESAN AUDITORIUM

28-01-2019 MONDAY

07:15 – 10:00REGISTRATION- MAIN HALL

10:00 – 11:00 INAUGURAL FUNCTION- MAIN HALL

11:00 – 11:30 TEA/COFFEE

Session-1 MAIN HALL

KEYNOTE TALK

Photo-physics at Nanoscale using time-resolved Ultrafast Spectroscopy
Prof. Ajay K Sood, Indian Institute of Science, Bangalore, India

PL1 30 Years of Nanostructured Materials

Prof. Richard W. Siegel, Rensselaer Polytechnic Institute, USA

PL2 Advanced Nanoporous Architectures for Energy and Environmental Applications

Prof. AjayanVinu, The University of Newcastle, Australia

13:10 – 14:10 LUNCH

Session-2A- MAIN HALL
Nanostructured Materials and Thin Films

Session-2B-MINI HALL-I
Nanoelectronics,Nanosensors and NEMS

Session-2C MBA - 004
Computational Nanotechnology-ACCMS Symposium

Session-2D- MBA-PROF. PETER DRUCKER HALL
Nanophotonics and Plasmonics

Session-2E- MINI HALL-II
Nanomagnetism and Spintronics/Nanocatalysts and Nanocomposites

14:10-14:40
PL3Nanomaterials for Electric Vehicle charging
 Prof. John Kennedy, GNS Science .New Zealand

14:40-15:05
PL4 An FEG (Ferroelectric charge trap gate stack) E-mode GaN HEMT for power switching applications
 Prof. Edward Chang, National Chiao Tung University, Taiwan

14:40-15:05
PL5First principles design of Carbon Nanostructures for energy applications
 Prof. G. P. Das, IIT Kharagpur, India

14:40-15:05
PL6 Nonlinear optical behaviour of nanomaterials
 Prof. Reji Philip, Raman Research Institute Bangalore, India

14:10-14:35
IL9 Complex Magnetic Ordering in Few Inverse-Spinel Cobaltites
 Dr. T. Subhash, IIT Guwahati, India

14:40-15:05
IL1New Tricks for an Established Technique: Detecting In Situ Microstructural Change with Transient Grating Spectroscopy
 Prof. Michael P. Short, Massachusetts Institute of Technology, USA.

14:40-15:05
IL3 Chiral sensors based on porphyrinsupramolecular aggregates
 Prof. Roberto Paolesse, University of Rome Tor Vergata, Italy

14:40-15:05
IL5 Green's function modeling of the spin transfer torque in non-collinear magnetic tunnel junctions exhibiting quasiparticle bands
 Dr. S. Mathi Jaya, IGCAR, Kalpakkam, India

14:40-15:05
IL7 Enhanced photon transmission in disordered arrays of sub-wavelength plasmonic resonators
 Dr. SushilMujumdar, Tata Institute of Fundamental Research, Mumbai, India

14:35-15:00
IL10 Origin of the magnetic effects in supercapacitors – Contribution from electrode materials to electrolytes
 Dr. Amresh Chandra, Indian Institute of Technology,Kharagpur, India

15:05-15:30
IL2 Highly aligned P(VDF/TrFE) nanofibers fabricated by electrospinning
 Prof. Hidenori Mimura, Shizuoka University, Japan

15:05-15:30
IL4 Nanodevicesfor Photodetection Applications
 Prof. Hiroshi Inokawa, Shizuoka University, Japan

15:05-15:30
IL6 Computational Study on 2D Dirac Materials
 Dr. V. Subramanian, CSIR-Central Leather Research Institute, Chennai, India

15:05-15:30
IL8Harnessing optical nonlinearity to control trapping dynamics of dielectric and plasmonic nanoparticles
 Dr. Arijit Kumar De, IISER, Mohali, India

15:00-16:00
CL13-CL18(6)

15:30-16:00
CL1-CL3(3)

15:30-16:00
CL4-CL6 (3)

15:30-16:00
CL7-CL9 (3)

15:30-16:00
CL10-CL12 (3)

16:00-16:15 TEA/ COFFEE

Session-3A- MAIN HALL
Nanostructured Materials and Thin Films

Session-3B-MINI HALL-I
Nanoelectronics,Nanosensors and NEMS

Session-3C MBA-004
Computational Nanotechnology- ACCMS Symposium

Session-3D MBA-PROF. PETER DRUCKER HALL
Nanotechnology for Harnessing Energy, Transport and Storage

Session-3E-MINI HALL-II
Nanomagnetism and Spintronics/Nanocatalysts and Nanocomposites

16:15-16:40
IL11 High Resolution Bio-imaging of Non-Stained Cells with Electron Beam Excitation
 Prof. YoshimasaKawata, Shizuoka University, Japan

16:15-16:40
IL14 Towards greener electronics
 Prof. Clara Santato, Polytechnique Montreal Engineering Physics Department, Canada

16:15-16:40
IL17Charge localization in doped carbon based structures: 1D and 2D fullerene crystals, graphene, and pentagraphene
 Prof. Vladimir Belosludov , Russian Academy of Sciences, Russia

16:15-16:40
IL20 Materials Design and Their Applications for Li-ion Batteries
 Prof. Chang Woo LEE, Kyung Hee University, South Korea

16:15-16:40
IL23 Iron Based Magnetic Nanocomposites with Graphene Derivatives for Electromagnetic Interference Shielding
 Prof. S. Balakumar, University of Madras, Guindy Campus, Chennai, India

16:40-17:05
IL12 Electrical Reliability of Gate Dielectric in GaN MIS-HEMT Power Device
 Prof. Stone Cheng, Nation al Chiao Tung University, Taiwan

16:40-17:05
IL15 Charge pumping EDMR on silicon MOSFETs
 Prof. Masahiro Hori , Shizuoka University, Japan

16:40-17:05
IL18 2D Vander waal Interaction Based Structure as Solar Cell Materials
 Dr. Ranjit Thapa, Research Institute, SRM IST, Kattankulathur, India

16:40-17:05
IL21 Recent advances in organic nano-structured solar cells: Materials and device optimization
 Prof. G.D.Sharma, The LNMIIT, Jaipur, India

16:40-17:05
IL24Electrical and Magnetic Properties of Manganite Thin Films
 Prof. S. Ravi , Indian Institute of Technology Guwahati, India

17:05-17:30
IL 13 Low-pressure CVD and characterization of hexagonal boron nitride thin films
 Prof. Kazuhiko Hara, Shizuoka University, Japan

17:05-17:30
IL16Improvement of Light Extraction Efficiency for Deep UV-LEDs Application
 Prof. Ray-HuaHorng, National Chiao Tung University, Taiwan

17:05-17:30
IL19 Alternate Routes to Create Spin-polarized Two-dimensional Electron Gas in Oxide Heterostructures
 Dr. B. Ranjit Kumar Nanda IITM, India

17:05-17:30
IL22TiO₂ Nanorod Thermoelectric Film for Self-Powered Smart Window Application
 Prof. MohdFaiz Bin MohdSalleh, University of Malaya, Malaysia

17:05-18:00
CL31-CL35(5)

17:30-18:00
CL19-CL21(3)

17:30-18:00
CL22- CL24(3)

17:30-18:00
CL25- L27(3)

17:30-18:00
CL28-CL30(3)

Session-4APoster Session

Session-4BPoster Session

18:00-19:30 **CONTRIBUTORY POSTERS (CP) CP1 –CP241** Venue:Dr. T.P. GANESAN AUDITORIUM

18:00-19:30 **CONTRIBUTORY POSTERS (CP) CP242 –CP593** Venue:DENTAL COLLEGE & HOSPITAL-EXAMINATIONHALL-4TH FLOOR

29-01-2019 TUESDAY

Session-5MAIN HALL

09:00-09:30 **PL7 Materials Informatics based on Reliable Materials Database**, Prof. Yoshiyuki Kawazoe, Tohoku University, Japan
 09:30-10:00 **PL8 Innovative products form Collagen Nano Fibres**, Prof. Johan Potgieter, Massey University, New Zealand
 10:00-10:30 **PL9 Super-ion Inspired Perovskites for Energy Harvesting and Storage**, Prof. Puru Jena, Virginia Commonwealth University, USA

10:30 – 10:45 TEA/ COFFEE

	Session-6A- MAIN HALL Nanostructured Materials and Thin Films	Session-6B-MINI HALL-I Nanoelectronics,Nanosensors and NEMS	Session-6C MINI HALL-II Nanotechnology for Harnessing Energy, Transport and Storage	Session-6D MBA-004 Computational Nanotechnology- ACCMS Symposium	Session-6EMBA-PROF. PETER DRUCKER HALL Industrial Nanotechnology: commercialization and Product
10:45-11:15	PL10 Molecular-tailored inorganic nanomaterials and interfaces with multifold enhanced properties for applications Prof. GanpatiRamanath, Rensselaer Polytechnic Institute, USA	10:45-11:10 IL27 Development of an inverter system for a gallium nitride power module Prof. Wei HuaChiang, National Chiao Tung University, Taiwan	IL30 Phonon-drag effect on thermoelectric characteristics of Si micro/nanowires Prof. Hiroya Ikeda, Shizuoka University, Japan	IL33 Spinor Dynamics in Pristine and Mn 2+ Doped CsPbBr ₃ NC: Role of Spin-Orbit Coupling in Ground and Excited State Dynamics Prof. Talgatnerbaev, Gumilyov Eurasian National University, Russian Academy of Science, Kazakhstan	IL36 Plasma Engineering of Materials for Energy storage, harvesting and water treatment Prof. Satheesh Krishnamurthy, School of Engineering and Innovation, The Open University, UK
11:15-11:40	IL25 Atomic layer deposition for the synthesis and integration of 2D materials Prof. AgeethBol, Eindhoven University of Technology,Netherlands	11:10-11:35 IL28 Resistive switching in amorphous SiC thin films Prof. M. Ghanashyam Krishna Hyderabad Central University, Hyderabad, India	IL31 Nanomaterials for Solar to Fuel Generation Dr. SudhagarPitchaimuthu,Swansea University (Bay Campus) , UK	IL34 Design of a Novel Artificial Solid Electrolyte Interface and Anode Material for Lithium Metal Batteries Dr. Deepika, Korea Institute of Science and Technology, South Korea	IL37 Molecular Dynamics and Computational Fluid Dynamics Simulation for the Nano-Scale SolutalMarangoni Convections Prof. Yasunori Okano, Osaka University, Japan
11:40-12:05	IL26 Controlled interfacial engineering in "Giant" core/shell colloidal quantum dots Dr. Gurpreet Singh Selopal, Institut National de la RechercheScientifique, Canada	11:35-12:00 IL29 The relationship between the wall permeability and the flow resistance in a wall-bounded turbulent flow Prof. Satoshi Yokojima, Shizuoka University, Japan	IL32 Nano-materials For Energy Storage and Bio-Sensing Applications Dr. BrahmanandaChakraborty , Bhabha Atomic Research Centre, Mumbai, India	IL35 Recent Advances in Ab Initio Materials Informatics Prof. Kenta Hongo, Japan Advanced Institute of Science and Technology (JAIST), Japan	IL38 Accelerate Your Research Using Nature Research Group's Artificial Intelligence Powered Nanotechnology Platform Dr. Raghv GaneshSpringerNature, New York (45 min)
12:05-13:00	CL36-CL40 (5)	CL41-CL46 (6)	CL47-CL52(6)	CL53-CL58(6)	CL59-CL62(4)

13:00 – 14:00 LUNCH

	Session-7A- MAIN HALL Nanostructured Materials and Thin Films	Session-7B-MINI HALL-I Nanoelectronics,Nanosensors and NEMS	Session-7C MINI HALL-II Nanotechnology for Harnessing Energy, Transport and Storage	Session-7D MBA-004 Nanobiotechnology,Nanotoxicology, and Nanomedicine	Session-7EMBA-PROF. PETER DRUCKER HALL Nanocatalysts and Nanocomposites/ Industrial Nanotechnology: commercialization and Product
14:00-14:25	IL39 Solution derived low temperature synthesis of cage structured 12CaO•7Al ₂ O ₃ particles Prof. Naonori Sakamoto, Shizuoka University, Japan	IL42 Nanoimprint Lithography for highly efficient photonic devices Prof. Heon Lee, Korea University, Seoul, Korea	IL45 Role of oxygen species towards chemical sensing by nanocrystalline semiconducting oxides Dr. V. Jayaraman, IGCAR, Kalpakkam, India	IL48 Synthesis of photo sensitive nanoparticles for Bio-imaging and theranostic application Prof. Yasuhiro Hayakawa, Shizuoka University, Japan	IL51 Production of eco-friendly nanotube composite materials and their applications Prof. TetsuMieno, Shizuoka University, Japan
14:25-14:50	IL40 Polycrystalline GeSn Layer Formed on Self-assembled SnNanodots Prof. Yohsuke Shimura, Shizuoka University, Japan	IL43 Yarn like carbon nanotube fibres and their electrical properties Dr. AdarshKaniyoor, University of Cambridge, UK	IL46 Hydrothermal synthesis and electrochemical properties of Fe _{1.19} (PO ₄)(OH)0.57(H ₂ O)0.43/C cathode material for Li-ion batteries Dr. Abdelfattah Mahmoud , University of Liège, Belgium	IL49 Biomimetic behaviour of synthetic micron/nano motors Dr. Snigdha Thakur, Indian Institute of Science Education and Research Bhopal, India	IL52 High Yielding Single Step Synthesis of functionalized Graphene by Electrochemical method for Nano ink application, Md. Naushad Ali , BTCORP GERERIQUE NANO PRIVATE LIMITED
14:50-15:15	IL41 Chemical vapor deposition of two-dimensional layered materials for heterostructure device applications Dr. KALITA Golap, Nagoya Institute of Technology, Japan	IL44 Electron-electron scattering in nano-scaled Si MOS transistors Prof. Yukinori Ono, Shizuoka University, Japan	IL47 Ionic Liquid Based Thermoelectrochemical Cell for Power Generation Prof. MohdFaizul Bin MohdSabri, University of Malaya, Malaysia	IL50 Egg albumin as nanomaterial for biomedical application GVN Rathna, National Chemical Laboratory, Pune, India	14:50-16:00
15:15-16:00	CL63-CL66(4)	CL67-CL70(4)	CL71-CL74(4)	CL75-CL78(4)	CL79-CL85(7)

16:00-16:15 TEA/ COFFEE

	Session-8A - MAIN HALL Nanostructured Materials and Thin Films	Session-8B -MINI HALL-I Nanoelectronics, Nanosensors and NEMS	Session-8C -MINI HALL-II Nanotechnology for Harnessing Energy, Transport and Storage	Session-8D MBA-004 Nanophotonics and Plasmonics	Session-8E MBA-PROF. PETER DRUCKER HALL Nanocatalysts and Nanocomposites
16:15-16:40	IL53 Design of electronic materials – from molecular structure to applications Prof. SuhanaBintiMohd Said,University of Malaya, Malaysia	IL55 High voltage integrated RF devices and circuits: Opportunities and Challenges Dr. Ankur Gupta, Indian Institute of Technology Delhi, India	IL58 Flexible Free-standing Solid State Supercapitors using Graphene-Metal Oxide based Nanocomposites Prof. R. Jayavel, Director research Anna University Chennai, India	IL60 Plasmon in Nanoscale Semiconductor and Heterostructure Prof. Subodh Kumar De, Indian Association for the Cultivation of Science, Kolkata, India	IL62 Hierarchical Nanostructures Formed via Self-Assembly in Block Copolymer/Nanoparticle Mixtures Dr. BhanuNandan, Indian Institute of Technology, HauzKhas, New Delhi
16:40-17:05	IL54 Importance of nanoceramics in microwave applications Prof. D. Pamu, IIT Guwahati, India	16:40-17:05 IL56 Fabrication of quartz crystal microbalance sensor based on graphene oxide / TiO ₂ composite for the detection of chemical vapors at room temperature Prof. Masaru Shimomura, Shizuoka University, Japan	IL59 Pseudocapacitive Energy Storage Performance of Nanocarbon-Transition Metal Oxides/Chalcogenides Hybrids with Insight from Density Functional Theory Investigations Prof. Chandra Sekhar Rout , Jain University, India	IL61 Development of Economical Plasmonic Sensing Platforms for Label-Free Biological Sensing Applications Prof. Rakesh S Moirangthem, IIT Dhanbad, India	IL63 Negative electrocatalytic effect of metal nanoclusters – Jellium model studies and experimental validation for Hydrogen Evolution Reaction Dr. S. Harinipriya, SRM Institute of Science and Technology, Chennai, India
17:05-18:00	CL86-CL90a (6)	17:05-17:30 IL57 Transparent, flexible silicon nanowire networks with seamless junctions for high performance photodetector Dr.K D M Rao, Indian Association for the Cultivation of Science, Kolkata	17:05-18:00 CL94- CL99(6)	17:05-18:00 CL100- CL104(5)	17:05-18:00 CL105- CL109(5)

18:00-19:30Session-9A Poster Session

CONTRIBUTORY POSTERS (CP) CP594 –CP829 Venue:Dr. T.P. GANESAN AUDITORIUM

CONTRIBUTORY POSTERS (CP)CP830 –CP1537

Session-9B Poster Session

Venue: DENTAL COLLEGE & HOSPITAL-EXAMINATION HALL-4TH FLOOR

30-01-2019 WEDNESDAY

Session – 10 MAIN HALL

09:00-09:30	PL11 In-vivo and in.vitro metabolomics with porphyrins based chemical sensors, Prof. Corrado Di Natale, University of Rome Tor Vergata , Italy
09:30-10:00	PL12 CMOS Friendly Silicon-based Micro Thermoelectric Generator, Prof. Takanobu Watanabe, Waseda University, Japan
10.00-10.30	PL13 The effect bimetallic nano-composite on the performance of thin film organic solar cells, Prof. GeneTessemaMola, University of KwaZulu-Natal, South Africa

10:30-10:45 TEA/COFFEE

	Session-11A- MAIN HALL Nanostructured Materials and Thin Films/Industrial Nanotechnology: commercialization and Product	Session-11B-MINI HALL-I Nanoelectronics/Nanosensors and NEMS /Nanotechnology for Air & Water purification	Session-11C Session-11B- MBA -004 Nanobiotechnology, Nanotoxicology, and Nanomedicine/ Nanotribology// Green Nanotechnology	Session-11D Session-8E- MINI HALL-II Nanocatalysts&Nanocomposites	Session-11E MBA-PROF. PETER DRUCKER HALL Nanotechnology for Harnessing Energy, Transport and Storage
10:45-11:10	IL64 Direct CVD growth of Mono-Layer MoS ₂ on TiO ₂ Nanostructure for Superior Optoelectronics and Energy Applications Prof. P. K. Giri, IIT Guwahati	IL66 Flexible TFTs – Applications and Mechanical Aspects Dr. Ashutosh Tripathi, IIT Kanpur, India	IL69 Enhanced detection of infectious viruses using nanohybrid materials Prof. Enoch Enomotto, Shizuoka University, Japan	IL72 Study of TiO ₂ nanofibers prepared by electrospinning technique Prof. N. Victor Jaya, Anna University, Chennai, India	IL75 Nano-structured Materials: Potential Applications for Energy and Environment Dr. R.V. MANGALARAJA, University of Concepcion, CHILE
11:10-11:35	IL65 Improved X-ray Photoelectron Spectroscopy Analysis Using the PHI's VersaProbe III Dr. Rohan Fernandes Icon Analytical Equipment Pvt. Ltd, INDIA	IL67 Liquid-Phase Sensor Using Shear Horizontal Surface Acoustic Wave Devices Prof. Jun Kondoh, Shizuoka University, Japan	IL70 Computational Approach to Dysfunctions in the Brain Prof. Kazushi Ikeda, Nara Institute of Science and Technology, Japan	IL73 Optical and Structural Stability of Co3O4 nanorods for Photocatalytic Applications Dr. Douglas Letsholathebe, University of Botswana, Botswana	IL76 Development of Electrode Materials towards High-energy Density Lithium-ion Batteries and Challenges Prof. Manickam Sasidharan, SRM Research Institute, SRM Institute of Science & Technology, India
	11:35-13:05 CL110-CL117a (9)	11:35-12:00 IL68 Effect of fillers in water transport through protective polymer coating – A molecular simulation study Sudharsan Pandiyan, Schrödinger GMBH, Bangalore.	IL71 Wearable and Implantable Electronics for Health and Clinical Care Prof. Toshitaka Yamakawa, Kumamoto University, Japan	IL74 Nanostructured Materials for Catalytic and Biomedical Applications Dr. Nandan Erathodiyil, Agency for Science Technology and Research, Singapore	11:35- 13:00 CL136-CL143 (8)
		12:00-13:00 CL118-CL123 (6)	12:00-13:00 CL124-129 (6)	12:00- 13:00 CL130-CL135(6)	

13:00 – 14:00 LUNCH

	Session-12A- MAIN HALL Nanostructured Materials and Thin Films/Nanoelectronics, Nanosensors and NEMS	Session-12B-MINI HALL-I Nanotechnology for Harnessing Energy, Transport and Storage	Session-12C - MINI HALL-II Nanophotonics and Plasmonics /Nanocatalysts&Nanocomposites/Nanobiotechnology/ Nanotribology
14:00-14:25	IL77 Photon counting X-ray Imager for energy discriminated imaging Prof. Toru Aoki, Shizuoka University, Japan	L78 Interface engineering of Organic/perovskite photovoltaic devices Dr. Jegadesan Subbiah, University of Melbourne, Australia	IL79 Advances in Nanophotonics Prof. C. Vijayan, IIT Madras, India
14:25-15:00	CL144-CL146 (3)	CL147-CL149 (3)	CL150-CL152 (3)

MAIN HALL

Awards for Best Contributory Lectures, Best Contributory Posters and Best Innovative Young Researchers
Valedictory function

15:00-16:00	
16:00-16:30	Certificate Distribution / High Tea