**ICONN-2021 PROGRAMME SCHEDULE (Virtual Conference)**
February 1-3, 2021, SRM INSTITUTE OF SCIENCE AND TECHNOLOGY (SRM IST), CHENNAI, INDIA

| Indian Standard Time | 01-02-2021 Monday (Login/Join at 08:30 AM IST) |
|---|---|
| 09.00 –10:00 | **INAUGURAL FUNCTION** |
| 10:00-10:45 | **KEYNOTE LECTURE 1** Observation of room temperature polar Skyrmions **Prof. Ramamoorthy Ramesh, University of California, Berkeley, CA [20:30 PST] 31st January 2021** |
| 10:45-11:30 | **KEYNOTE LECTURE 2** Recent progress in transparent oxide semiconductors, **Prof. Hideo Hosono, Tokyo Institute of Technology, Japan [14:15 JST]** |
| 11:30-12:15 | **KEYNOTE LECTURE 3** Semiconductor Nanowires for Optoelectronics Applications, **Prof. Chennupati Jagadish, The Australian National University, Canberra, Australia [17:00 AEDT]** |
| 12:15-13:00 | **KEYNOTE LECTURE 4** Spintronics Nanodevice - From SMALL to SMART - **Prof. Hideo Ohno,Tohoku University, Japan [15:45 JST]** |
| 13.00 -13:10 | **Greetings by Prof. Yasuto Shirai, Shizuoka University, Japan [16:30 JST]** and **Dr. John V Kennedy, GNS Science, New Zealand [20:30 NZDT]** |
| 13.10 -13:35 | **BREAKE** |

| Time (IST) | Session-1A | Session-1B | Session-1C | Session-1D | Session-1E | Session-1F | Session-1G |
|---|---|---|---|---|---|---|---|
| | **Nanotribology** | **Sensors, actuators and NEMS/MEMS** | **ACCMS Symposium on Computational materials, methods and numerical techniques** | **Complex and Meta-Nanophotonics: Classical to Quantum** | **Low-dimensional and 2D materials, Surfaces, interfaces and thin films/ Nanocomposites and catalysts** | **Manipulation and characterization of materials at nanoscale/atomic scale** | **Molecular and Nanoelectronics** |
| **13:35-14:05** | **IL1** Rheology Meets Tribology: Updated "Stribeck Curve" for the Lubrication between Smooth Surfaces **Prof. Shinji YAMADA, Kao Corporation, Japan [17:05 JST]** | **13:35-14:05** **IL3** Interdisciplinary research of organic transistors: microfluidics, molecular recognition chemistry, and chemical sensing **Prof. Tsuyoshi Minami The University of Tokyo, Japan [17:05 JST]** | **13:35-14:10** **TL01** Is Materials Informatics Useful to Predict New Useful Materials? **Prof. Yoshiyuki Kawazoe, Tohoku University, Japan [17:05 JST]** | **13:35-14:10** **TL02** Artificial muscles and smart photonic materials **Prof. Diederik Wiersma, LENS, University of Florence, Italy[09.05 JST]** | **13:35-14:05** **IL7 Cross sectional AFM analysis of thin films Prof. Naonori Sakamoto, Shizuoka University, Japan[17:05 JST]** | **13:35-14:05** **IL9** High Resolution Imaging of Ion-Distribution with Electron Beam Excitation **Prof. Yoshimasa Kawata, Shizuoka University Japan [17:05 JST]** | **13:35-14:05** **IL10** Band-to-Band Tunneling in Highly-Doped Silicon-on-Insulator Nanoscale Esaki Diodes **Prof. Daniel Moraru Shizuoka University, Japan [17:05 JST]** |
| **14:05-14:35** | **IL2** Resistive Switching, Photoabsorption and DNA Biocompatibility for Ion irradiated TiO2 (110) **Prof. Shikha Varma Institute of Physics, Bhubaneswar India** | **14:05-14:35** **IL4** Preparation and property of thin film gas sensor for combustive gases **Prof. Naoki Wakiya Shizuoka University, Japan[17:35 JST]** | **14:10-14:40** **IL5** Nano-defects formed under neutron irradiation in fusion reactors: First-principles based modelling and experimental validation **Prof. Nyugen-Manh Duc, Culham Centre for Fusion Energy, United Kingdom [08.40 JST]** | **14:10-14:40** **IL6** Plug-and-play and scalable single-photon sources based on quantum dots **Dr. Leonardo Midolo, Niels Bohr Institute, Copenhagen, Denmark [09:40 JST]** | **14:05-14:35** **IL8** Property control of 2D layered nanostructures via tailoring of its orientation and composition **Dr. Ivan Merenkov, Skoltech, Novosibirsk, Russia [11:35 (MSK]** | **14:05-14:40** **TL03** 2D materials and composites for wastewater treatment and recycling of batteries **Prof. Satheesh Krishnamurthy, The Open University, UK [8:35 GMT]** | **14:05-14:35** **IL.11** Printed Flexible Electronics and Potential Applications **Dr. Yi-Fei Wang, Yamagata University Japan [17:35 JST]** |
| **14:35-15:05** | **CL 1-CL3 (Abstr. No. (252, 604, 1044)** | **14:35-15:05** **CL 4-CL6 Abstr. No. (31, 285, 356)** | **14:40-15:10** **CL 7-CL9 Abstr. No. (480 & 602)** | **14:40-15:10** **CL10-CL12 Abstr. No. (431, 451, 114)** | **14:35-15:05** **CL13- CL15 Abstr. No. (18, 41, 89)** | **14:40-15:10** **CL16-CL18 Abstr. No. (34, 47, 1120)** | **14:35-15:05 CL19-CL21 Abstr. No. (142, 633, 1190)** |
| **15:10-15:55** | **KEYNOTE LECTURE 5** Versatility of metallic phases of 2D transition metal dichalcogenides (TMDs), **Prof. Manish Chhowalla, University of Cambridge, UK [9:40 GMT]** | | | | | | |
| **15:55-16:40** | **KEYNOTE LECTURE 6** Functional device design with layered van der Waals heterostructures, **Prof. Arindam Ghosh, Indian Institute of Science, Bangalore, India** | | | | | | |
| **16:40-17:25** | **KEYNOTE LECTURE 7** Nano – Accelerate your Research with our AI-powered Nature Research Solution, **Dr. Pranoti Kshirsagar, Database Group, Nanoscience & Technology, Springer Nature, Heidelberg, Germany [12:10 CET]** | | | | | | |

| | Session-2A | Session-2B | Session-2C | Session-2D | Session-2E | Session-2F | Session-2G |
|---|---|---|---|---|---|---|---|
| | **Nanobiotechnology, nanotoxicology and nanomedicine** | **Sensors, actuators and NEMS/MEMS** | **ACCMS Symposium on Computational materials, methods and numerical techniques** | **Complex and Meta-Nanophotonics: Classical to Quantum** | **Manipulation and characterization of materials at nanoscale/atomic scale, Environmental nanotechnology** | **Nanotechnology for energy harnessing, transport and storage** | **Molecular and Nanoelectronics/ Industrial nanotechnology** |
| **17:30-18.00** | **CL22-CL24 Abstr. No. (861, 242, 729)** | **17:30-18.00** **IL13** Graphene based Electronic and Sensor Devices – Applications and Manufacturing **Prof. Daniel Neumaier, Wuppertal, Germany [13:00 CET]** | **17:30-18.00** **IL14** Probing Potential Energy Surfaces of Molecular Systems via Vibrational Spectroscopy **Dr. Jer-Lai Kuo Institute of Atomic and Molecular Science, Academia Sinica, Taiwan [20:00 CST]** | **17:30-18.00** **IL15** Unscrambling Entanglement through a Complex Medium **Dr. Mehul Malik, Heriot Watt University, Edinburgh, UK [12:00 GMT]** | **17:30-18.00** **CL34-CL36 Abstr. No. (1216, 1361, 1413)** | **17:30-18.00** **IL17** Spray Drying of Phosphate based Cathode Materials for Na-ion and K-ion Batteries with Advanced Electrochemical Performance **Dr. Abdelfattah Mahmoud , The University of Liège, Belgium [13:00 CET]** | **17:30-18.00** **IL18** Print-in-place electronics using mixed-dimensional nanomaterials **Prof. Aaron D. Franklin, Duke University, Durham, North Carolina, USA [7:00 EST]** |
| **18:00-18.30** | **IL12** Is **the biological nutrient cycle possible for electronics? Prof. Clara Santato, University of Montréal, Canada [7:30 EST]** | **18:00-18.30** **CL25-CL27 Abstr. No. (377, 507, 896)** | **18:00-18.30** **CL28-CL30 Abstr. No. (774, 251, 836)** | **18:00-18.30** **CL31-CL33 Abstr. No. (344, 625, 1221)** | **18:00-18.30** **IL16** Materials analysis and modifications at the micro-nano scale using energetic ion beams **Dr. Bibhudutta Rout University of North Texas, Denton, USA [06:30 CST]** | **18:00-18.30** **CL37-CL39 Abstr. No. (26, 49, 90)** | **18:00-18.30 CL40-CL42 Abstr. No. (1338, 1348, 1356)** |

| | | | |
|---|---|---|---|
| | **POSTER SESSION –Day- I (01-02-2021)** | | |
| | **For Poster Presentation and Interaction please join the SLACK workspace through the invitation link sent to your E mail ID registered with ICONN2021 as per the poster session timings** | | |
| **CP1-CP1200** | | | |
| **13:30 -15:00** | **Postertrack1-ICONN21<br>CP1-CP200** | **Postertrack2-ICONN21<br>CP201-CP400** | **Postertrack3-ICONN21<br>CP401-CP600** |
| **17:30 - 19:00** | **Postertrack4-ICONN21<br>CP601-CP800** | **Postertrack5-ICONN21<br>CP801-CP1000** | **Postertrack6-ICONN21<br>CP1001-CP1200** |

**KL: KENOTE LECTURE (45 MIN); TL: THEME LECTURE (35 MIN); IL: INVITED LECTURE; CL: CONTRIBUTORY LECTURE (10 MIN); CP: CONTRIBUTORY POSTER**

**IRAP: Innovation Research Award Presentation; YRAP: Young Researcher Award Presentation, WRAP: Woman Researcher Award Presentation**

| ICONN-2021 PROGRAMME SCHEDULE (DAY-2)<br>02-02-2021 Tuesday (Login/Join at 08:10 AM IST) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **08:30-9:15** | **KEYNOTE LECTURE 8** | Combinatorial Experimentation and Machine Learning for Materials Discovery, **Prof. Ichiro Takeuchi, University of Maryland, USA [22:00 EST] 1st Feb 2021** | | | | | | | | | | | |
| **9:15-10:00** | **KEYNOTE LECTURE 9** | Metaphotonics and Metasurfaces, **Prof. Yuri Kivshar, Australian National University, Canberra, Australia [14:45 AEDT]** | | | | | | | | | | | |
| **10:00-10.45** | **KEYNOTE LECTURE 10** | Liquid metal for catalysis and CO2 conversion, **Prof. Kourosh Kalantar-zadeh, University of New South Wales (UNSW), Sydney, Australia [15:30 AEDT]** | | | | | | | | | | | |
| **10:45-10.55** | **Greetings by Prof. Kiyoshi Ishii, Shizuoka University, Japan [14:15 JST] and Prof. Suresh Bhargava, RMIT, Melbourne VIC, Australia [16:15 AEDT]** | | | | | | | | | | | | |
| **Time (IST)** | **Session-3A** | | **Session-3B** | | **Session-3C** | | **Session-3D** | | **Session-3E** | | **Session-3F** | | **Session-3G** |
| **Nanostructured solar cells and thermoelectrics, Sensors, actuators and NEMS/MEMS** | | | **Manipulation and characterization of materials at nanoscale/atomic scale, Nanobiotechnology, nanotoxicology and nanomedicine** | | **ACCMS Symposium on Computational materials, methods and numerical techniques** | | **Complex and Meta-Nanophotonics: Classical to Quantum** | | **Nanocomposites and catalysts, Molecular and Nanoelectronics/ Environmental nanotechnology** | | **Industrial nanotechnology: products and commercialization** | | **Surfaces, interfaces and thin films , Low-dimensional and 2D materials** |
| **10:55-11:30** | **TL04** Defects mediated high Seebeck coefficient and power factor in transparent thermoelectric thin films<br>**Dr John V Kennedy, GNS Science, Lower Hutt, New Zealand [18:25 NZDT]** | | **10:55-11:25** | **IL21** Establishment of steroid binding assay for membrane progesterone receptor alpha (PAQR7) by using graphene quantum dots (GQDs)<br>**Md. Maisum Sarwar Jyoti, Shizuoka University, Japan [14:25 JST]** | **10:55-11:30** | **TL05** Recent Development on 2DMatPedia: 2D Alloys<br>**Prof. Yuan Ping Feng National University of Singapore, Singapore[13:25 SGT]** | **10:55-11:30** | **TL06** Anderson localization of light in two-dimensional disordered photonic crystals<br>**Prof. Sushil Mujumdar, TIFR, Mumbai** | **10:55-11:30** | **TL07** Synthesis and characterization of nanocomposites and their photocatalytic activity<br>**Prof. Yasuhiro Hayakawa, Shizuoka University, Japan [14:25 JST]** | **10:55-11:25** | **IL27** Research Promotion and Social Contribution through Industry-Academia Cooperation Activities<br>**Prof. Masakazu Kimura, Shizuoka University, Japan [14:25 JST]** | **10:55-11:25**<br>**IL29** Chemical vapor deposition of hexagonal boron nitride thin films on a Si substrate<br>**Prof. Kazuhiko Hara, Shizuoka University, Japan [14:25 JST]** |
| **11:30-12:00** | **IL19** Application of Nanoscience-fused Nanotechnology on Infectious Virus Detection<br>**Prof. Enoch Y.Park, Shizuoka University, Japan[15:00 JST]** | | **11:25-11:55** | **IL22** Photon-Charge counting type X-ray imager<br>**Prof. Toru Aoki Shizuoka University, Japan [14:55 JST]** | **11:30-12:00** | **IL24** Theoretical Analysis of Oxygen Transport in Doped Ceria: Effect of Vacancy Trapping<br>**Prof. Kwang Ryeol Lee KIST, South Korea[15:00 KST]** | **11:30-12:00** | **IL25** Epitaxial Graphene Coated Silicon Carbide Nanowires for Mid Infrared Nanophotonics<br>**Dr. Arti Agarwal University of Technology , Sydney, Australia [17:00 AEDT]** | **11:30-12:00** | **IL26** Stretchable oxide thin film based electronic and optical devices<br>**Dr. Madhu Bhaskaran, RMIT University, Melbourne, Australia[17:00 AEDT]** | **11:25-11:55** | **IL28** X-ray Generation Using Pyroelectric Crystals Excited by Laser Light<br>**Prof. Hidenori Mimura, Shizuoka University, Japan [14:55 JST]** | **11:25-11:55**<br>**IL30** Formation and Characterization of Polycrystalline SiGeSn<br>**Yosuke Shimura Shizuoka University, Japan [14:55 JST]** |
| **12:00-12:30** | **IL20** All solid Thin Film Batteries: Perspective, Issues and Challenges<br>**Dr. K. Kamala Bharathi, SRM IST, Chennai, India** | | **11:55-12:25** | **IL23** Detection of Viral RNA by Fluorometric Nanoprobe with DSN Enzyme Assistance<br>**Prof. Ankan Dutta Chowdhury, Shizuoka University, Japan [15:25 JST]** | **12:00-12:30** | **CL43—CL45**<br>**Abstr. No. (773, 959, 974)** | **12:00-12:30** | **CL46—CL48**<br>**Abstr. No. (1462, 1936, 2329)** | **12:00-12:30** | **CL49—CL51**<br>**Abstr. No. (1106, 1189, 1201)** | **11:55-12:25** | **CL52—CL54**<br>**Abstr. No. (17* & 158)**<br>***YRAP2** | **11:55-12:25**<br>**CL55—CL57**<br>**Abstr. No. (116, 171, 213)** |
| **12:30-13:15** | **KEYNOTE LECTURE 11** | Development of photocatalysts and solar hydrogen production system for a large scale application, **Prof. Kazunari Domen, University of Tokyo, Japan [16:00 JST]** | | | | | | | | | | | |
| **13:15-13:25** | **Greetings by Prof. Corrado Di Natale, University of Rome Tor Vergata, Rome, Italy [08:45 CET] and Prof. Edward Yi Chang, National Chiao Tung University, Taiwan [15:45 CST]** | | | | | | | | | | | | |
| **13:25-13:45** | **BREAK** | | | | | | | | | | | | |
| **13:45-14:30** | **KEYNOTE LECTURE 12** | Large-size nanoelectronics for The Internet of Everything, **Prof. Thomas Anthopoulos, KAUST, Saudi Arabia [11:15 AST]** | | | | | | | | | | | |
| **14.00–16.30** | **"SEEDING NANOSCIENCE IN YOUNG MINDS: LIVE INTERACTION WITH NANOSCIENTISTS"** –<br>An Exclusive Program for a selective group of **YOUNG STUDENTS** (age group between 14-19) | **(Hosted by SRM-ICONN 2021 and Co-hosted by Indian Science Congress Association (ISCA) – Chennai Chapter in celebration of Department of Science and Technology (DST), Govt. of India's Golden Jubilee Year (2021))**<br>**14.00-14:10 – About the Program – Dr. Kiran Mangalampalli, Department of Physics and Nanotechnology, SRMIST, Kattankulathur, Chennai**<br>**Welcome Note - Prof. Kashmir Raja, Convener, ISCA Chennai Chapter**<br>**14:10-14:15 – Presidential Address- Dr. (Mrs.) Vijay Laxmi Saxena, General President 2020-2021, Indian Science Congress Association, Kolkata**<br>**14:15-14:35 – Inaugural Address - Prof. B. S. Murthy, Director, IIT Hyderabad, India**<br>**14:35-16:20 – Young students' interaction with Scientists begins.**<br>**Prof. Chennupati Jagadish AC, The Australian National University, Canberra, Australia**<br>**Prof. Radha Boya, The University of Manchester, UK**<br>**'Nano' in Cosmetics Industry:**<br>**Prof. Shinji YAMADA, Kao Corporation, Japan**<br>**16:20- 16:25 ISCA-Chennai Chapter sponsored ICONN 2021 Best Young Students Awards Announcement**<br>**16:25-16: 30 Votes of thanks by Dr. A. Alagiriswamy, Treasurer, ISCA Chennai Chapter** | | | | | | | | | | | |
| **14:30-15:15** | **KEYNOTE LECTURE 13** | Nanostructured Thermoelectric Energy Conversion, **Prof. Kanishka Biswas, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India** | | | | | | | | | | | |
| **15:15-16:00** | **KEYNOTE LECTURE 14** | Ultrafast spin transfer in layered magnetic heterostructures, **Prof. Wolfgang Kuch, Fachbereich Physik, Institut für Experimentalphysik, Berlin, Germany [10:45 CET]** | | | | | | | | | | | |
| **16:00-16:45** | **KEYNOTE LECTURE 15** | Local Excitons in Si/Ge Inverted Quantum Huts (IQHs) embedded Si, **Prof. Kalobaran Maiti, TIFR, India** | | | | | | | | | | | |
| | **Session-4A** | | **Session-4B** | | **Session-4C** | | **Session-4D** | | **Session-4E** | | **Session-4F** | | **Session-4G** |
| **Surfaces, interfaces and thin films** | | | **Sensors, actuators and NEMS/MEMS** | | **ACCMS Symposium on Computational materials, methods and numerical techniques** | | **Complex and Meta-Nanophotonics: Classical to Quantum** | | **Nanobiotechnology, nanotoxicology and nanomedicine** | | **Nanostructured solar cells and thermoelectrics** | | **Nanotechnology for energy harnessing, transport and storage** |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **16:50-17:20** | **IL31** Optical characterization of nanomaterials and interface processes<br>**Prof. Peter PETRIK, Hungarian Academy of Sciences, Hungary [12:20 CET]** | **16:50-17:20** | **IL32** Porphyrins Through the Looking Glass: The Long Track for the Development of Chiral Sensors<br>**Prof. Roberto Paolesse, University of Rome Tor Vergata Rome, Italy [12:20 CET]** | **16:50-17:20** | **IL33** ML Assisted Discovery of Novel Materials with Targeted Properties<br>**Prof. Abhishek K. Singh IISc Bangalore, India** | **16:50-17:20** | **IL34** Scattering of spatially entangled photons<br>**Dr. Yaron Bromberg, The Hebrew University of Jerusalem, Israel [13:20 IST]** | **16:50-17:20** | **IL35** Multifunctional Nanostructured Bioactive Materials based composites Towards Biomedical Applications<br>**Prof. S.Balakumar, University of Madras, Chennai, India** | **16:50-17:20** | **YRAP1 (IL36)** Layered thermoelectric materials and devices<br>**Dr. M. Navaneethan SRM IST, Chennai, India** | **16:50-17:20**<br>**IL37** X-ray imaging using room temperature semiconductor detectors by charge counting method<br>**Dr. Katsuyuki Takagi, Shizuoka University, Japan [20:20 JST]** |
| **17:20-17:50** | **CL58-CL60**<br>**Abstr. No. (226, 385, 404)** | **17:20-17:50** | **CL61-CL63**<br>**Abstr. No. (927, 1126, 1127)** | **17:20-17:50** | **CL64-CL66 Abstr. No. (992, 1093, 1281)** | **17:20-17:50** | **CL67-CL69**<br>**Abstr. No. (2329, 2230, 2331)** | **17:20-17:50** | **CL70-CL72 Abstr. No. (1013, 1118, 1273)** | **17:20-17:50** | **CL73-CL75 Abstr. No. (1029, 1032, 1234)** | **17:20-17:50 CL76-CL78 Abstr. No. (225, 275, 322)** |
| | **Session-5A** | **Session-5B** | | **Session-5C** | | **Session-5D** | | **Session-5E** | | **Session-5F** | | **Session-5G** |
| | **Low-dimensional and 2D materials, Surfaces, interfaces and thin films** | **Sensors, actuators and NEMS/MEMS** | | **Nanocomposites and catalysts/ Environmental nanotechnology** | | **Complex and Meta-Nanophotonics: Classical to Quantum** | | **Nanobiotechnology, nanotoxicology and nanomedicine** | | **Manipulation and characterization of materials at nanoscale/atomic scale** | | **Industrial nanotechnology: products and commercialization, Nanocomposites and catalysts** |
| **17:50-18:20** | **IL38** Two-dimensional voids and their unusual properties<br>**Prof. Radha Boya, The University of Manchester, UK [12:20 GMT]** | **17:50-18:25** | **TL08** Organic-Inorganic nano structured hybrid materials for gas sensors<br>**Prof. Corrado Di Natale University of Rome Tor Vergata, Rome, Italy [13:20 CET]** | **17:50-18:20** | **IL39** Materials Design by Molecular & Atomic Layer Deposition; Hybrid thin films as precursors for Photocatalytic Metal Oxides<br>**Prof. Roie Yerushalmi, The Hebrew University of Jerusalem, Israel [14:20 IST]** | **17:50-18:20** | **IL40** Photonics and Plasmonics assisted Nanospectroscopy<br>**Prof. Sandip Dhara, IGCAR, Kalpakkam, India** | **17:50-18:20** | **CL91-CL93**<br>**Abstr. No. (1414, 656, 613)** | **17:50-18:20** | **CL94-CL96**<br>**Abstr. No. (685, 761, 814)** | **17:50-18:20**<br>**CL97-CL99**<br>**Abstr. No. (819, 831, 952)** |
| **18:20-18:50** | **CL79-CL81**<br>**Abstr. No. (435, 438, 467)** | **18:25-18:55** | **CL82-CL84**<br>**Abstr. No. (1342, 1347, 355)** | **18:20-18:50** | **CL85-CL87**<br>**Abstr. No. (1207, 1245, 1332)** | **18:20-18:50** | **CL88-CL90**<br>**Abstr. No. (589, 1217, 1300)** | **18:20-18:50** | **IL41** Nanomaterials and Microscale Technologies to Engineer Muscle Tissues<br>**Dr. Samad Ahadian, Terasaki Institute for Biomedical Innovation, Los Angeles, California, USA [4:50 PST]** | **18:20-18:50** | **IL42** Measuring Material Damage with Stored Energy - Applications from Nuclear Reactors to Non-Proliferation<br>**Prof. Micheal Short, MIT, USA [7:50 EST]** | **18:20-18:50**<br>**IL43** Recent advances on Materials for Energy storage and Materials recovery<br>**Dr. M.V. Reddy Institute of Research Hydro-Québec, Canada [07:50 EST]** |
| | **POSTER SESSION -DAY II (02-02-2021)** | | | | | | | | | | | |
| | **For Poster Presentation and Interaction please join the SLACK workspace through the invitation link sent to your E mail ID registered with ICONN2021 as per the poster session timings** | | | | | | | | | | | |
| | **CP1201-CP2200** | | | | | | | | | | | |
| **11:00-12:30** | **Postertrack7-ICONN21 (CP1201-CP1400)** | | | **Postertrack8-ICONN21 (CP1401-CP1600)** | | | | **Postertrack9-ICONN21 (CP1601-CP1800)** | | | | |
| **17:00-18:30** | **Postertrack10-ICONN21 (CP1801-CP2000)** | | | **Postertrack11-ICONN21 (CP2001-CP2200)** | | | | **---** | | | | |

**ICONN-2021 PROGRAMME SCHEDULE (DAY-3)**
**03-02-2021 Wednesday (Login/Join at 08:10 AM IST)**

| | | |
|---|---|---|
| **08:30-09:15** | **KEYNOTE LECTURE 16** | Electronic Properties of 2D Carbide and Carbonitride MXenes**, Prof. Yury Gogotsi, Drexel University, Philadelphia, USA[22.00 EST] 2nd Feb 2021** |
| **09:15-10:00** | **KEYNOTE LECTURE 17** | Elucidating the Mechanisms for Atomic Layer Growth through In Situ Studies, **Dr. Jeffrey W. Elam, Argonne National Laboratory , IL, USA [21:45 CST] 2nd Feb 2021** |
| **10:00-10:45** | **KEYNOTE LECTURE 18** | Advanced Nanoporous Materials for Clean Energy Generation, **Prof. Ajayan Vinu, The University of Newcastle, Callaghan, Australia [15:30 AEDT]** |

| | **Session-6A** | **Session-6B** | | **Session-6C** | | **Session-6D** | | **Session-6E** | | **Session-6F** | | **Session-6G** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Nanocomposites and catalysts, Nanobiotechnology, nanotoxicology and nanomedicine** | **Nanostructured solar cells and thermoelectrics** | | **Molecular and Nanoelectronics** | | **Nanotechnology for energy harnessing, transport and storage** | | **Sensors, actuators and NEMS/MEMS** | | **Manipulation and characterization of materials at nanoscale/atomic scale** | | **Surfaces, interfaces and thin films, Low-dimensional and 2D materials** |
| **10:50-11:20** | **IL44** Dirac nodal lines and the flat band surface state in the functional oxide RuO2 **Dr. Vedran Jovic National Isotope Center GNS Science, New Zealand [18:20 NZDT]** | **10:50-11:25** | **TL09** Electron-Phonon Interaction Observed in Thermoelectric Properties of Si Micro/Nanowires **Prof. Hiroya Ikeda, Shizuoka University, Japan [14:20 JST]** | **10:50-11:20** | **IL48** Electron-electron scattering in silicon and its impact on future emerging devices **Prof. Yukinori Ono Shizuoka University, Japan [14:20 JST]** | **10:50-11:20** | **IL49** A new approach of reduced graphene oxide with a porous structure by a microwave-assisted one-pot method for high capacitance supercapacitor **Jiaojiao Ma, Shizuoka University, Japan[14:20 JST]** | **10:50-11:20** | **IL51** Thermal Characterization of Porous Silica by Micrometer-Size Resistance Thermometry **Prof. Hiroshi Inokawa Shizuoka University, Japan [14:20 JST]** | **10:50-11:20** | **IL54** Charge pumping under electron spin resonance **Prof. Masahiro Hori Shizuoka University, Japan [14:20 JST]** | **10:50-11:20 IL56** Synthesis of ?-FeSi2, MnSi1.7 and Mg2Si nano/micro-structures by Reactive Deposition Process **Prof. Hirokazu Tatsuoka Shizuoka University, Japan [14:20 JST]** |
| **11:20-11:50** | **IL45** Probabilistic machine learning for predicting cytotoxicity of TiO2-(multi)metal (Ag, Pt, Au) nanoparticles **Paul Rossener Regonia, Nara Institute of Science and Technology, Japan [14:50 JST]** | **11:25-11:55** | **IL47** Recent advances in the organic solar cells based on nonfullerene small molecule acceptors **Prof. Ganesh D. Sharma, LNMIIT, Jaipur, India** | **11:20-11:55** | **TL10** Extremely High-Performance InGaAs FinFETs for Next-Generation CMOS Logic Applications **Prof. Edward Yi Chang, National Chiao Tung University, Taiwan [13:50 CST]** | **11:20-11:50** | **IL50** Direct Solar Water Splitting for Low-Cost Hydrogen Production **Dr. Siva Krishna Karuturi, Australian National University, Australia [16:50 AEDT]** | **11:20-11:50** | **IL52** Ultrasonically assisted tunable localized surface plasmon resonance and its multisensor Application **Prof. Jun Kondoh, Shizuoka University, Japan [14:50 JST]** | **11:20-11:50** | **IL55** Atomic-scale structural analysis by X-ray fluorescence holography and photoelectron diffraction **Prof. Masaru Shimomura, Shizuoka University, Japan [14:50 JST]** | **11:20-11:50 IL57** Development of double polarity selective area growth using MOVPE for fabrication of GaN QPM crystal **Prof. Takayuki Nakano Shizuoka University, Japan [14:50 JST]** |
| **11:50-12:20** | **IL46** Molybdenum-based quantum dots, nanocubes and integrated 2D nanostructures for virus detection **Dr. Ojodomo J. Achadu, Shizuoka University, Japan [15:25 JST]** | **11:55-12:25** | **CL100-CL102 Abstr. No. (1382, 1390, 1480)** | **11:55-12:25** | **CL103-CL105 Abstr. No. (983, 1001, 1050)** | **11:50-12:20** | **CL106-CL108 Abstr. No. (332, 562, 655)** | **11:50-12:20** | **IL53** Electrocatalytic Water Oxidation Based Virus Sensing, **Dr. Akhilesh Babu Ganganboina, Shizuoka University, Japan [15:25 JST]** | **11:50-12:20** | **CL109-CL111 Abstr. No. (338, 348, 482)** | **11:50-12:20 CL112-CL114 Abstr. No. (479, 496, 512)** |
| **12:30-13.15** | **KEYNOTE LECTURE 19** | Over-the-horizon van der Waals layered materials**, Prof. Young Hee Lee, SUNGKYUNKWAN University, Suwon, 16419, Korea [16:00 KST]** | | | | | | | | | | |
| **13:15-13:45** | **BREAK** | | | | | | | | | | | |
| **13:45-14:30** | **KEYNOTE LECTURE 20** | Ferroelectricity at Ultimately Small Length Scales**, Prof. Umesh V. Waghmare Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore** | | | | | | | | | | |
| **14.30-15:15** | **KEYNOTE LECTURE 21** | Quantum Materials and Advances in Nanotechnology**, Prof. M. S. Ramachandra Rao, IIT Madras, Chennai, India** | | | | | | | | | | |
| **15:15-16:00** | **KEYNOTE LECTURE 22** | Building with bubbles. Is it the start of a New generation of Catalysts? **Prof. Suresh Bhargava, RMIT University, Melbourne VIC, Australia[20:45 AEDT]** | | | | | | | | | | |

| | **Session-7A** | **Session-7B** | | **Session-7C** | | **Session-7D** | | **Session-7E** | | **Session-7F** | | **Session-7G** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Themes** | **Nanoscale modelling and applications** | **Nanostructured solar cells and thermoelectrics/ Nanocomposites and catalysts/ Environmental nanotechnology** | | **Molecular and Nanoelectronics** | | **Complex and Meta-Nanophotonics: Classical to Quantum/ Surfaces, interfaces and thin films** | | **Sensors, actuators and NEMS/MEMS** | | **Industrial nanotechnology: products and commercialization** | | **Nanomagnetism and Spintronics** |
| **16:00-16:30** | **IL58** Descriptors to Search Best Catalyst for OER/NRR using Quantum Mechanics/Machine Learning approach **Prof. Ranjit Thapa SRM IST AP, INDIA** | **16:00-16:30** | **IRAP (IL59)** Boosting thermoelectric performance of bulk thermoelectric materials through in-situ created nanoinclusions **Dr. Ajay Singh, Bhabha Atomic Research Centre (BARC) Mumbai, India** | **16:00-16:30** | **IL60** Device Scaling for Novel Low-Dimensional Materials in High-Frequency Nanoelectronics Applications **Dr. Abhay A. Sagade SRM IST, Chennai, India** | **16:00-16:30** | **IL61** Complex Nanophotonics for Authentication and Quantum Information Processing **Prof. Pepijn Pinkse, University of Twente, Netherlands [11:30 CET]** | **16:00-16:30** | **IL62** Hierarchical Two Dimensional Nanostructures for Electrochemical and Biosensor Applications **Prof. R. Jayavel, Anna University, Chennai, India** | **16:00-16:30** | **IL63** Self affine dendritic fractal architectures of ZnO for energy harvesting **Dr. G. Mangamma, Indira Gandhi Centre for Atomic Research, Kalpakkam, India** | **16:00-16:30 IL64** Spin Hall Magnetoresistance in Antiferromagnetic Insulators. **Dr. Matthias Opel, Walther Meissner Institute for Low Temperature Physics, Germany [11:30 CET]** |
| **16:30-17:00** | **CL115-CL117 Abstr. No. (255, 1343, 1724*) *WRAP** | **16:30-17:00** | **CL118-CL120 Abstr. No. (1444, 1489, 2463*) *YRAP3** | **16:30-17:00** | **CL121-CL123 Abstr. No. (73, 180, 812)** | **16:30-17:00** | **CL124-CL126 Abstr. No. (1365, 1372, 1455)** | **16:30-17:00** | **CL127-CL129 Abstr. No.(417, 475, 590)** | **16:30-17:00** | **CL130-CL132 Abstr. No. (555, 932, 1277)** | **16:30-17:00 CL133-CL135 Abstr. No. (27, 485, 506)** |
| **17:05-17:50** | **KEYNOTE LECTURE 23** | Evolution of microstructure in magnetron sputtered nanocomposite thin films and its effect on mechanical behavior, **Prof. Rahul Mitra, Indian Institute of Technology Kharagpur, India** | | | | | | | | | | |
| **17:50-18:35** | **KEYNOTE LECTURE 24** | Ultra-low switching Energy Memories to artificial neurons**, Prof. T. Venky Venkatesan, NUSNNI, National University of Singapore [7:20 EST]** | | | | | | | | | | |
| **18:35-19:05** | **AWARDS AND CONCLUDING SESSION** | | | | | | | | | | | |