

# 25<sup>th</sup> Raman Memorial Conference – 2019

“Physics of 2D Materials: Theory and Experiments”

## Scientific Program

Date : 14<sup>th</sup> February, 2019

08.00 am – 09.00 am

Registration and Breakfast

09.00 am - 09.30 am

Inauguration (Raman Auditorium)

09.30 am – 10.30 am	Key Note	<b><u>Prof. Bodh Raj Mehta</u></b> KPFM based nanoscale investigations of 2D-3D interfaces
10.30 am – 11.00 am		High Tea
<b>Session (10 + 2 min)</b>		
11.00 am – 11.12 am	OP-1	<b><u>Abhishek Pandey</u></b> 3D Oxidized Graphene Frameworks for Efficient Filtration of Methylene Blue Dye
11.12 am – 11.24am	OP-2	<b><u>Mihir Durve</u></b> Learning to Flock, Flocking to Learn
11.24 am – 11.36 am	OP-3	<b><u>Indranil Roy</u></b> Origin of pseudo-gapped vortex core: an example of Quantum fluctuation
11.36am – 11.48am	OP-4	<b><u>Farsa Ram</u></b> Organic Flexible Nanogenerators for Mechanical Energy Harvesting
11.48 am – 12.00pm	OP-5	<b><u>Suyog Raut</u></b> Mechanical vibration damping by thermal plasma synthesized iron oxide nanoparticles
12.00 pm – 01.00 pm	IT-1	<b><u>Dr. Nirmalya Ballav</u></b> Chemically Derived Reduced Graphene Oxide for Energy Applications
01.00 pm – 02.00 pm		Lunch
<b>Session (10+2)</b>		
02.00 pm – 03.00 pm	IT-2	<b><u>Prof. Pratap Raychaudhuri</u></b> Observation of hexatic vortex fluid in a thin superconducting film
03.00 pm – 03.12pm	OP-6	<b><u>Sameer Salunkhe</u></b> Multi-frequency Radio Study of the Galaxy Cluster Abell 2744
03.12 pm – 03.24 pm	OP-7	<b><u>Bhagyashri Shinde</u></b> Model for growth, transport and morphology of fungal hyphae
03.24 pm – 03.36 pm	OP-8	<b><u>Swati Parmar</u></b> Structural and Electrical Properties of 2D/2D MoS <sub>2</sub> -hBN Mosaic Structure and Triboelectric Nanogenerator Application

<b>03.36 pm – 03.48 pm</b>	<b>OP-9</b>	<b><u>Sushant Sahu</u></b> Visible-to-Ultraviolet Upconversion Sensitized Photocatalysis: Fact or Fiction?
<b>03.48 pm – 04.00 pm</b>	<b>OP-10</b>	<b><u>Sudip Kumar Kundu</u></b> Computation of flood-drought year by using IMD monthly rainfall data over Gangetic plain
<b>04.00 pm – 04.12 pm</b>	<b>OP-11</b>	<b><u>Sushmita Rath</u></b> Design and Development of Quartz Tuning Fork based Sensor Array for Metabolic Rate monitoring
<b>04.12 pm – 04.24 pm</b>	<b>OP-12</b>	<b><u>Yogesh Shinde</u></b> Synthesis of Platinum Decorated RGO-TiO <sub>2</sub> (P25) Composites for Enhanced Photocatalytic Hydrogen Evolution and Dye Degradation
<b>04.24 pm-04.36 pm</b>	<b>OP-13</b>	<b><u>Hemlata Bhandari</u></b> Light-cone and front dynamics of single particle extended quantum walk.
<b>04.36pm-05.06pm</b>	<b>TP</b>	<b><u>Vishal Bharud</u></b> Measurement of Cross Sections for formation of Metastable states and Radioisotopes of a few Nuclei through Nuclear Reactions induced by Bremsstrahlung Radiation and Neutrons
<b>05.06pm-07.00pm</b>	<b>Poster Session + High Tea</b>	
<b>07.00pm-08.00pm</b>	<b>Cultural Programme</b>	
<b>07.00pm-Onwards</b>	<b>Dinner</b>	

**Date : 15<sup>th</sup> February, 2019**

08.30 am – 09.30 am	<b>Breakfast</b>	
<b>Session-1</b>		
09.30 am – 10.30 am	IT-3	<b><u>Dr. Suwarna Datar</u></b> Nanowire Gap- Plasmon's assisted Raman Scattering
10.30 am – 10.42 am	OP-14	<b><u>Shalaka Kamble</u></b> Thermionic emission measurement of refractory materials using indigenously developed thermionic emission measurement set up.
10.42 am – 10.54 am	OP-15	<b><u>Onkar Ramdasi</u></b> Ferroelectric, Dielectric and Piezoelectric Properties of Hf Modified BaTiO <sub>3</sub>
10.54 am – 11.30 am	<b>High Tea</b>	
<b>Oral Session (10 + 2 min)</b>		
11.30 am – 11.42 am	OP-16	<b><u>Sachin Wadhaj</u></b> Synthesis of Highly Efficient Metal Free Phosphorus doped Graphitic Carbon Nitride / P25 (TiO <sub>2</sub> ) Composite for Visible Light Photocatalytic Hydrogen Evolution
11.42 am – 11.54 am	OP-17	<b><u>Ambadas Phatangare</u></b> Development of Nuclear battery using Tritium gas filled tubes and Photovoltaic devices
11.54 am – 01.00 pm	IT-5	<b><u>Dr. Vasant Sathé</u></b> Polarized Raman scattering of 2-D structures
01.00 pm – 02.00 pm	<b>Lunch</b>	
<b>Oral Session (10+2)</b>		
02.00 pm – 02.12 pm	OP-18	<b><u>Swapnil Doke</u></b> Sustained multiferroicity in liquid crystal induced by core/shell geometry of quantum dots
02.12 pm – 02.24 pm	OP-19	<b><u>Kishor Gavhane</u></b> Dosimetric properties of BaF <sub>2</sub> :X (X= Gd, Yb and Ce) phosphor for $\gamma$ -ray
02.24 pm – 02.36 pm	OP-20	<b><u>Supriya More</u></b> Proliferation of Human Mesenchymal Stem cells on UHMWPE polymer surface as an effect of plasma processing

02.36 pm – 02.48 pm	OP-21	<b><u>Prachi Ghoderao</u></b> Development of Antibiotic-Magnetic Carbon Nanovectors Complexes for Enhancing Efficacy of the Antibiotic
02.48 pm – 03.00 pm	OP-22	<b><u>Shrreya Krishnamurthy</u></b> Designing white light emitting phosphors using 2D hybrid perovskites
03.00 pm – 03.12 pm	OP-23	<b><u>Imran Shaikh</u></b> Spin coated Ag nanoparticles as a SERS substrate for trace detection of food adulterant melamine in the milk powder
03.12 pm - 03.24 pm	OP-24	<b><u>Neha Ghodke</u></b> Synthesis of Ni nanoparticles by thermal plasma method and their implementation for hydrogen production from alkaline sodium borohydride solution
03.24pm – 3.36 pm	OP-25	<b><u>Theodore Selwyn</u></b> Statistical model analysis of neutron induced reactions on <sup>232</sup> Th from reaction threshold to 20 MeV for ADSS application
03.36pm-4.36pm	IT - 6	<b><u>Prof. Rudolf Holze</u></b> Supercapacitors: From the Leyden Jar to Supercap Trams and Busses – Past and Perspectives
04.36 pm – 04.50 pm	<b>High Tea</b>	
04.50 pm Onwards	<b>Valedictory function</b>	