

- IL1:** Interplay of heat, charge and spin currents in a manganite thin film
- IL2:** Effect of strain on the electronic and magnetic properties of pulsed laser deposited transition metal oxides thin films
- IL3:** Strain Engineering in ferroic systems for sensing and energy harvesting applications.
- IL4:** TBC
- IL5:** Role of transition metal valence state at conducting oxide interfaces
- IL6:** Photovoltaic applications of ferroelectric oxides
- IL7:** Large-scale growth of atomically-thin 2D TMDs (CVD)
- IL8:** Laser induced crystallization - A means to achieve crystallization of oxide thin films at lower temperatures
- IL9:** Magnetic and Magnetoelectric coupling studies on single and heterolayer structures by Pulsed Laser Deposition System
- IL10:** Work Function Calculation using Electrostatic Force Microscopy (EFM) of 2D-2D, 2D/3D Heterostructures made by Pulsed Laser Deposition
- IL11:** Ferroelectric Topology
- IL12:** Development of Materials for Performance Improvement in Hybrid Solar Cells
- IL 13:** Oxide electronics: Disruptive computing technologies
- IL14:** Laser based Optical Communication for atmospheric and under water applications
- IL15:** Artificial Saturable Absorber based 2  $\mu\text{m}$  Ultrafast Fiber Lasers and Its Applications
- IL16:** Review of Tunable Quantum Cascade Lasers
- IL17:** Emergent of electron-hole quantum liquid phases at room temperature in laser ablated MoS<sub>2</sub> nanoparticles
- IL18:** Challenges in preparation, structure, microstructure properties correlations in quantum materials
- IL19:** Advances in vibrational energy harvesters for wearable/portable devices
- IL20:** Pulsed laser Deposition rocks: A story of non-trivial quantum oscillations at the interface of LaVO<sub>3</sub> and KTaO<sub>3</sub>
- IL21:** Optical tweezers combined with micro-Raman investigation of Externally Induced Stress on live RBC
- IL22:** Effect of ultraviolet, infrared, and microwave radiation on animal cells
- IL23:** Characterization and Investigation on Thermal Performance of Low Melting Alloys (LMAs) as Thermal Interface Materials (TIMs)
- IL24:** Light-matter interaction at ultrafast time-scales

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on

## Laser Deposition (iCOLD-2023)

March 23-25, 2023

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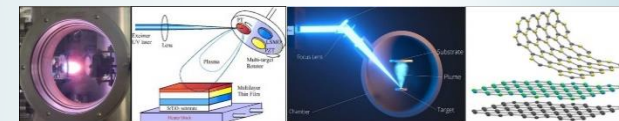
**Defence Institute of Advanced Technology,  
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- ❖ Dr. AVR Murthy, DIAT, Pune



## DAY 1 (23<sup>rd</sup> March, 2023)

Time	Program			
8.45 am - 9.30 am	Registration			
Venue	C.V. Raman Auditorium			
9.30 am - 10.00 am	Inauguration			
10.00 am - 10.40 am	Plenary Lecture (PL1): <b>Prof. S. B. Ogale</b>			
10.40 am - 11.00 am	Tea Break			
11.00 am - 11.40 am	PL2 : <b>Prof. MSR Rao</b> Session chair (SC): Prof. Sangeeta Kale			
Venue:	Brahmos SC: Prof. Murugavel P	Sagarika SC: Dr. Anjana Dogra		
11.40 am - 12.10 pm	IL1: <b>Dr. Sunil Nair</b>	IL2 : <b>Dr. R. J. Choudhary</b>		
12.10 pm - 12.40 pm	IL3 : <b>Prof. Ranjith Ramadurai</b>	IL4 : <b>Prof. K Nandakumar</b>		
12.40 pm - 1.30 pm	Lunch			
Venue	C.V. Raman Auditorium SC: Dr. Richard Pinto			
1.30 pm - 2.10 pm	PL3 : <b>Dr. Wilfrid Prellier</b>			
2.20 pm - 3.00 pm	PL4 : <b>Prof. Lalit Kukreja</b>			
Venue	Brahmos SC: Dr. Sujit Das	Sagarika SC: Dr. Bhagwati Prasad		
3.00 pm - 3.30 pm	IL5 : <b>Dr. Anjana Dogra</b>	IL6 : <b>Prof. Murugavel P</b>		
3.30 pm - 3.45 pm	OP	Mr. Rajat Srivastava	OP	Dr. Ankur Rastogi
3.45 pm - 4.00 pm		Mr. Somak Basistha		Mr. Soumen Pradhan
4.00 pm - 4.15 pm	Tea break			
Venue	Brahmos SC: Dr. Suvankar Chakraverty	Sagarika SC: Dr. R. J. Choudhary		
4.15 pm - 4.45 pm	IL7 : <b>Dr. Senthil Kumar</b>	IL8: <b>Prof. K C James Raju</b>		
4.45 pm - 5.00 pm	OP	Ms. Saranya Sasi	OP	Dr. Fiyanshu Kaka
5.00 pm - 5.15 pm		Mr. Arpit Mendhe		TBC
5.15 pm - 6.30 pm	Poster presentation (with light snacks)			
7.00 pm onwards	Banquet Dinner			

## DAY 2 (24<sup>th</sup> March, 2023)

Time	Program			
Venue	C.V. Raman Auditorium SC: Prof. Balasubramanian			
9.00 am - 9.40 am	PL5: <b>Prof. Pratap Raychaudhuri</b>			
Venue	Brahmos SC: Dr. Shyamal Mondal	Sagarika SC: Prof. Lalit Kukreja		
9.40 am - 10.10 am	IL9 : <b>Dr. C. Gopalakrishnan</b>	IL10 : <b>Dr. Suvarna Datar</b>		
10.10 am - 10.40 am	IL11 : <b>Dr. Sujit Das</b>	IL12 : <b>Dr Tejashree Bhawe</b>		
10.40 am - 11.00 am	Tea Break			
Venue	C.V. Raman Auditorium SC: Prof. K. P. Ray			
11.00 am - 11.40 am	PL6 : <b>Prof. Richard Pinto</b>			
Venue	Brahmos SC: Dr. Jayarama	Sagarika SC: Dr. Sivarama Krishnan		
11.40 am - 12.10 pm	IL13: <b>Dr. Bhagwati Prasad</b>	IL14: <b>Dr. AVR Murthy</b>		
12.10 pm - 12.40 pm	IL15: <b>Dr Shyamal Mondal</b>	IL16 : <b>Dr. Devnath Dhirhe</b>		
12.40 pm - 1.30 pm	Lunch			
Venue	C.V. Raman Auditorium SC: Dr. Wilfrid Prellier			
1.30 pm - 2.10 pm	PL7 : <b>Prof. Sangeeta Kale</b>			
2.20 pm - 3.00 pm	PL8: <b>Prof. Shriganesh Prabhu</b>			
Venue	Brahmos SC: Dr. C. Gopalakrishnan	Sagarika SC: Prof. Pratap Raychaudhuri		
3.00 pm - 3.30 pm	IL17 : <b>Dr. Sivarama Krishnan</b>	IL18 : <b>Prof. G. Raghavan</b>		
3.30 pm - 4.00 pm	IL19 : <b>Dr. Jayarama</b>	IL20: <b>Dr Suvankar Chakraverty</b>		
4.00 pm - 4.15 pm	Tea break			
Venue	C.V. Raman Auditorium SC: Prof. P. K. Khanna			
4.15 pm - 5.30 pm Industry Session	<b>Dr. Max Fischer, Coherent GmbH Germany</b>			
	<b>Dr. James McDowell, Litron Lasers Ltd. UK</b>			
	<b>Mr. Gayatri Prasad Panda</b>			
	<b>Mr. B. N. Palit, Micro Dynamics</b>			
6.00 pm - 7.00 pm	<b>Dr. Subhash Pai, Excel Instruments</b>			
	Musical programme followed by dinner (for conference delegates)			

## DAY 3 (25<sup>th</sup> March, 2023)

Time	Program		
Venue	C.V. Raman Auditorium SC: Dr. AVR Murthy		
9.00 am - 9.40 am	PL9 : <b>Prof. Venky Venkatesan (Online)</b>		
Venue	Brahmos SC: Prof. G. Raghavan	Sagarika SC: Dr. Senthil Kumar	
9.40 am - 10.10 am	IL21 : <b>Prof. Santhosh Chidangil</b>	IL22 : <b>Dr. Dhananjay Bodas</b>	
10.10 am - 10.40 am	IL23: <b>Dr. Satyanarayan</b>	IL24: <b>Dr. Kanaka Raju Pandiri</b>	
10.40 am - 11.00 am	Tea Break		
Venue	C.V. Raman Auditorium		
11.00 am-12.30 pm	Valedictory function		
12.30 onwards	Lunch and Log off		

PL = Plenary Lecture      OP= Oral Presentation      IL = Invited Lecture

**PL1:** Expanding the Horizons of Pulsed Laser Deposition and CO<sub>2</sub> laser processing to Emergent Science and Applications: Non-Oxide Materials

**PL2:** Physics and technology of wide and ultra-wide bandgap systems

**PL3:** Functional Oxide Thin Films for Applications in Electronic and Health

**PL4:** Application of Ultra-short (100 fs – 2 ps) Laser Pulses for Shock Peening of Stainless Steel

**PL5:** Imaging vortex liquid states using scanning tunneling spectroscopy

**PL6:** Advances in hydrogen fuel cells: current status and way forward

**PL7:** From generation of preferential high-quality growth to laser patterning: an interplay of multiple deposition parameters in PLD Systems for plethora of applications

**PL8:** Terahertz (THz) Spectroscopy with various Applications to the study of Materials.

**PL9:** Robust Resistive and Mem-devices for Neuromorphic Circuits