



# CENTER FOR ATOMIC, MOLECULAR, & OPTICAL SCIENCES & TECHNOLOGIES (CAMOST)

A joint research initiative of IIT Tirupati & IISER Tirupati



**Inauguration Program: 14 August 2020 16:00 – 18:00 IST**

About CAMOST	Organizational Structure	Program																
<p>Atomic, Molecular, and Optical (AMO) sciences encompass significant areas of human activity directly impacting quality of life through applications in health, communication, navigation, metrology, and space sciences. Center for Atomic, Molecular, and Optical Sciences &amp; Technologies (CAMOST) has been established to address key challenges in frontier areas of AMO science and technology of the 21<sup>st</sup> century. One of the major objectives of CAMOST is to facilitate exchange of information, collaboration and consolidate the cross-fertilization of ideas relevant to the frontier areas of AMO science and technologies by allowing researchers from institutions pan-India to communicate and collaborate with each other under the aegis of CAMOST.</p> <p><b>Vision</b></p> <p>Inspire tangible solutions to frontier problems in AMO Science &amp; Technologies through innovative research initiatives in basic and applied science domains.</p> <p><b>Mission</b></p> <p>To advance AMO Sciences &amp; Technologies by:</p> <ul style="list-style-type: none"> <li>• Developing innovative solutions to frontier problems of AMO quantum Science and Technology</li> <li>• Contributing to solving key problems in atmospheric, space, and bio sciences</li> <li>• Fostering human resources to meet 21<sup>st</sup> century challenges in AMO Quantum Sciences and Technologies</li> </ul> <p><b>Thrust Areas</b></p> <ul style="list-style-type: none"> <li>• Ultrafast dynamics in atoms and molecules</li> <li>• Quantum communication and Quantum technology applications</li> <li>• Cold plasma applications for food processing and water treatment</li> <li>• Laboratory astrophysics, Laboratory astrochemistry, and Atmospheric sciences</li> <li>• Optical tweezers for biomedical applications</li> <li>• Single molecule magnetism for high-density data storage</li> <li>• Quantum chemistry &amp; Statistical mechanics</li> <li>• High technology devices</li> </ul>	<p><b>Administrative Advisory Council</b></p> <p>K N Satyanarayana (Director, IIT Tirupati) K N Ganesh (Director, IISER Tirupati) P C Deshmukh (Mentor and Convener)</p> <p><b>Scientific Advisory Council</b></p> <p>Dilip Angom (PRL, Ahmedabad) E Krishnakumar (RRI, Bangalore) C P Safvan (IUAC, New Delhi) Dmitry Budker (JGU Mainz &amp; UCB) John Costello (Dublin City University) Bhanu P Das (Tokyo Institute of Technology) S T Manson (Georgia State University) G Ravindra Kumar (TIFR, Mumbai) Roland Wester (University of Innsbruck) Jan Michael Rost (MPI for Complex Systems)</p> <p><b>Core Administrative Members</b></p> <p>Arijit Sharma (Coordinator, IIT Tirupati) S Sunil Kumar (Coordinator, IISER Tirupati) Koteswara Rao, HoD Physics, IIT Tirupati (Ex-Officio member) G Ambika, Chair Physics, IISER Tirupati (Ex-Officio member)</p> <p><b>Principal Investigators</b></p> <p><b>IIT Tirupati:</b></p> <table border="0"> <tr> <td>Arijit Sharma</td> <td>Arun K Manna</td> </tr> <tr> <td>Debashish Mondal</td> <td>N N Murty</td> </tr> <tr> <td>P C Deshmukh</td> <td>Rajib Biswas</td> </tr> <tr> <td>Reetesh K Gangwar</td> <td>Swapnil Bhuktare</td> </tr> <tr> <td>Vijaya K Gurugubelli</td> <td>Vinay P Majety</td> </tr> </table> <p><b>IISER Tirupati:</b></p> <table border="0"> <tr> <td>Padmabati Mondal</td> <td>Raghunath O</td> </tr> <tr> <td></td> <td>Ramabhadran</td> </tr> <tr> <td>Soumit S Mandal</td> <td>S Sunil Kumar</td> </tr> </table> <p><b>Adjunct Members:</b></p> <p>Dhananjay Nandi (IISER Kolkata) G Aravind (IIT Madras) Koushik Saha (IIT Dharwad) R Hari Varma (IIT Mandi) Jobin Jose (IIT Patna) Rajesh K Kushawaha (PRL Ahmedabad) S Sivakumar (KREA University) Sivarama Krishnan (IIT Madras) Ramachandra Rao Yalla (Uni. Hyderabad) G V Pavan Kumar (IISER Pune)</p>	Arijit Sharma	Arun K Manna	Debashish Mondal	N N Murty	P C Deshmukh	Rajib Biswas	Reetesh K Gangwar	Swapnil Bhuktare	Vijaya K Gurugubelli	Vinay P Majety	Padmabati Mondal	Raghunath O		Ramabhadran	Soumit S Mandal	S Sunil Kumar	<p><b>16:00 – 16:06 Welcome</b></p> <p>Professor P C Deshmukh (Mentor and Convener, CAMOST)</p> <p><b>16:06 – 16:18 Directors' Address</b></p> <p>Professor K N Satyanarayana (Director, IIT Tirupati) Professor K N Ganesh (Director, IISER Tirupati)</p> <p><b>16:18 – 16:23 On the Origin of CAMOST</b></p> <p>Dr C P Safvan, IUAC, New Delhi (President, Indian Society of Atomic and Molecular Physics)</p> <p><b>16:23 – 16:45 Video &amp; Brochure release and INAUGURAL SPEECH</b></p> <p>Dr Arabinda Mitra (Scientific Secretary, Office of the Principal Scientific Advisor to Government of India)</p> <p><b>16:45 – 17:00 Atomic collisions with meso-nano-bio systems and interdisciplinary science</b></p> <p>Professor Lokesh Tribedi, TIFR, Mumbai</p> <p><b>17:00 – 17:15 Recent development in quantum technologies</b></p> <p>Professor Aditi Sen De, HRI, Prayagraj</p> <p><b>17:15 – 17:30 Physics with Extreme Light</b></p> <p>Professor G Ravindra Kumar, TIFR, Mumbai</p> <p><b>17:30 – 17:40 Aspirations by program coordinators</b></p> <p>Dr Arijit Sharma (IIT Tirupati) Dr S Sunil Kumar (IISER Tirupati)</p> <p><b>17:40 – 17:46 Aspirations by adjunct members</b></p> <p>Dr Koushik Saha (IIT Dharwad) Dr Jobin Jose (IIT Patna) Dr Rajesh Kushawaha (PRL, Ahmedabad)</p> <p><b>17:46 – 17:56 Remarks</b></p> <p>Members of the Scientific Advisory Council</p> <p><b>17:56 – 18:00 Vote of Thanks</b></p> <p>Professor G Ambika, Chair Physics, IISER Tirupati</p>
Arijit Sharma	Arun K Manna																	
Debashish Mondal	N N Murty																	
P C Deshmukh	Rajib Biswas																	
Reetesh K Gangwar	Swapnil Bhuktare																	
Vijaya K Gurugubelli	Vinay P Majety																	
Padmabati Mondal	Raghunath O																	
	Ramabhadran																	
Soumit S Mandal	S Sunil Kumar																	