

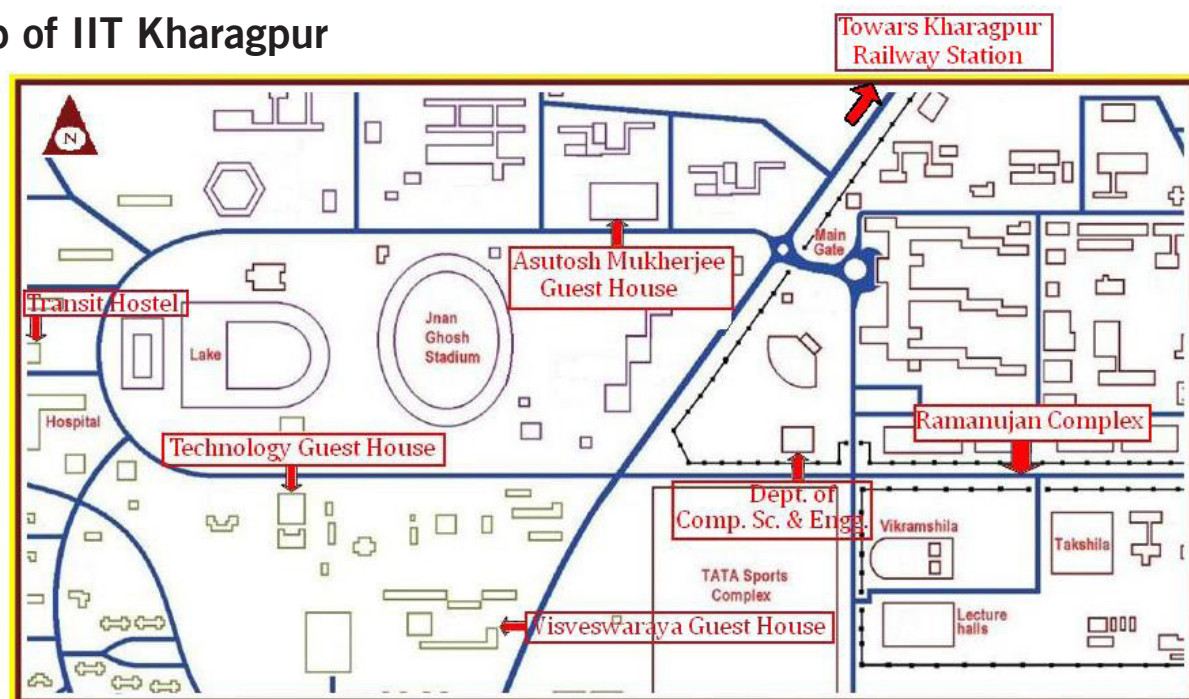
## Day 4, Tuesday, December 6, 2022

Session-14	LASERS IN CHEMISTRY AND BIOLOGY	
9:30-10:00	<b>Dr. Rashmi Shrivastava, RRCAT Indore</b> <i>Emerging Paradigms in Biophotonics for Diagnosis and Management of Diseases</i>	IT-21
10:00-10:30	<b>Prof. Sajan D. George, MAHE Manipal</b> <i>Nanoscale Surface Engineering: Applications in Biology and Chemistry</i>	IT-22
10:30-11:00	<b>Dr. Vinu Namboodiri, BARC Mumbai</b> <i>Superresolved microscopy using defocused orientation and position imaging (DOPI)</i>	IT-23
11:00-11:15	<b>Tea Break</b>	
Session-15	LASER SPECTROSCOPY	
11:15-11:45	<b>Dr. Asawari Rath, BARC Mumbai</b> <i>Insight into Selective photoionization of Lu-176 using RIMS</i>	IT-24
11:45-12:15	<b>Prof. Nilmoni Sarkar, IIT Kharagpur</b> <i>Understanding The Self-Assembly of Biological Building Block Molecules and Their Impact on Membranes</i>	IT-25
Session-16	CONCLUDING SESSION	
12:15-13:15	Award Presentation and Concluding Ceremony	
13:15-14:00	<b>Lunch</b>	

### Contact Details of Volunteers:

1.	Transport: Mr. Tara Singha,	Ph: 9800050985
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### Map of IIT Kharagpur



## Sessions Schedule for NLS-31

### Day 1, Saturday, December 3, 2022

Session-1	Inaugural Session	
9:30-10:00	Welcoming of Dignitaries and Guest of Honour	
10:00-10:30	Address by Chief Guest <b>Dr. R. Chidambaram, Chairman (Honorary), School of Advanced Studies in Nuclear Science and Technology, BARC</b>	
10:30-11:15	Keynote Address <b>Dr. S.K. Sarkar, Former GD, Chemistry Group, BARC and RRF, DAE</b> <i>Chronicles of Chemical Dynamics</i>	
11:15-12:00	<b>Inauguration of Industrial Exhibition followed by High Tea</b>	
Session-2	ADVANCED LASER TECHNOLOGIES AND APPLICATIONS	
12:00-12:30	<b>Prof. V.R. Supradeepa, IISc Bangalore</b> <i>High Power Narrow-Linewidth Fiber Lasers for Directed Energy Applications</i>	IT-01
12:30-13:00	<b>Shri D.N. Sanyal, NPCIL Mumbai</b> <i>Laser based Technology Innovations for use in Nuclear Power Plants</i>	IT-02
13:00-14:00	<b>Lunch Break</b>	
Session-3	POSTER SESSION I	
14:00-16:30	Poster Presentations	PP-1
16:30-16:45	<b>Tea Break</b>	
Session-4	LASER INSTRUMENTATION AND SENSORS	
16:45-17:15	<b>Prof. Sunil Khijwania, IIT Guwahati</b> <i>All-Optical Smart Sensing for Structural Health Monitoring using FBG and Specialty Fiber</i>	IT-03
17:15-17:45	<b>Dr. N. Kawade, BARC Mumbai</b> <i>Dual Mach-Zehnder Interferometer based Optical Fiber Sensor for Perimeter Intrusion Detection System</i>	IT-04
17:45-18:15	<b>Prof. Rajan Jha, IIT Bhubaneswar</b> <i>Broadband LED based Modal Interferometer for potential Device Development</i>	IT-05
	<b>Tea Break</b>	
19:00- 20:00 Evening talk	Special Evening Talk-1 <b>Prof. R.P. Singh, PRL Ahmedabad</b> <i>Free space quantum communication</i>	SET-01
<b>BANQUET</b>		

## Day 2, Sunday, December 4, 2022

Session-5	NANO-PHOTONICS	
9:30-10:00	<b>Prof. Sajal Dhara, IIT Kharagpur</b> <i>Exploring exciton-photon interactions in 2D materials with twist and turn of light beam</i>	IT-06
10:00-10:30	<b>Prof. Y. Ramachandra Rao, Univ. of Hyderabad</b> <i>Optical nanofibers: a versatile platform for Nanophotonics and Quantum Optics</i>	IT-07
10:30-11:00	<b>Prof. Rajesh V. Nair, IIT Ropar</b> <i>Harnessing color centers in diamond for quantum technologies</i>	IT-08
11:00-11:15	<b>Tea Break</b>	
Session-6	INDUSTRIAL AND DEFENCE APPLICATIONS OF LASERS	
11:15-11:45	<b>Dr. C.P. Paul, RRCAT Indore</b> <i>LAM Activities at RRCAT</i>	IT-09
11:45-12:15	<b>Prof. Swarup Bag, IIT Guwahati</b> <i>A perspective on laser welding of metallic materials: Modelling and experiments</i>	IT-10
12:15-12:45	<b>Dr. Gaurav Singhal, CHES Hyderabad</b> <i>High Power Laser Source Technology and Applications</i>	IT-11
12:45-13:30	<b>Lunch Break</b>	
Session-7	POSTER SESSION II	
13:30-16:00	Poster Presentations	PP-2
16:00-16:15	<b>Tea Break</b>	
Session-8	ULTRAFAST LASERS AND APPLICATIONS	
16:15-16:45	<b>Prof. Syamsundar De, IIT Kharagpur</b> <i>Classical and quantum noise of ultrafast light</i>	IT-12
16:45-17:15	<b>Dr. P.K. Mukhopadhyay, RRCAT Indore</b> <i>Generation of pulses in diverse temporal formats from modelocked all-normal dispersion fiber laser</i>	IT-13
17:15-17.45	<b>Prof. Jayeeta Bhattacharya, IIT Madras</b> <i>Carrier dynamics in semiconductors studied using ultrafast lasers</i>	IT-14
17.45-18:00	<b>Tea Break</b>	
18.00- 19.00	ILA General Body Meeting	

**CULTURAL PROGRAM & DINNER**

## Day 3, Monday, December 5, 2022

Session-9	INTERNATIONAL YEAR OF GLASS	
9:30-10:00	<b>Dr. K. Annapurna, CGCRI Kolkata</b> <i>An endeavor towards indigenous technology development of large size Nd<sup>3+</sup>-doped phosphate glass rods and discs: A preferred gain medium in high energy-high power Lasers</i>	IT-15
10:00-10:30	<b>Shri Sudipta Bhaumik, Sterlite Tech. Ltd., Pune</b> <i>Glass Optical Fibre: Building blocks of digital connectivity</i>	IT-16
10.30-11:00	<b>Tea Break</b>	
Session-10	PARALLEL SESSIONS	
10A	ELECTRONICS AND INSTRUMENTATION FOR LASERS	
11:00-11:30	<b>Shri Rajesh Arya, RRCAT Indore</b> <i>Laser power supplies and controllers for laser based nuclear field applications</i>	IT-17
11:30-12:00	<b>Dr. Shubendu Ghosh, IUAC New Delhi</b> <i>Commissioning of a coherent tunable THz radiation source based on Free Electron Laser</i>	IT-18
10B	NONLINEAR AND QUANTUM OPTICS	
11:00-11:30	Prof. Tarak Nath Dey, IIT Guwahati <i>Optically sculpting atomic waveguide for vector beams</i>	IT-19
11:30-12:00	<b>Prof. Saptarishi Chaudhuri, RRI Bangalore</b> <i>Laser Cooled atomic mixture as quantum sensors</i>	IT-20
Session-11	Industrial Session	
12:00-13:00	Industry Presentations	
13:00-13:30	Panel Discussion – Industry Academia Interactions	
13:30-14-30	<b>Lunch Break</b>	
Session-12	POSTER SESSION III	
14:30-16:30	Poster presentations	
16:30-16:45	<b>Tea Break</b>	
Session-13	Ph.D. Thesis Presentations	
16:45-19:15	Thesis presentations	

**DINNER**