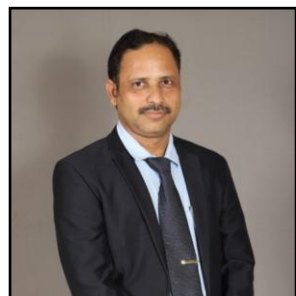


Speakers



Dr. Reena Rajput is a Professor in Department of Bio-technology and Bio-engineering at IAR Gandhinagar. Her work focuses on Immunology, Neurobiology and cellular reprogramming.



Dr. Anand K. Tiwari is a Dean (Research and Innovation) and Professor in Department of Biotechnology and Bio-engineering at IAR Gandhinagar. His work focuses on Drosophila Developmental Biology and Neurobiology.



Dr. Alok Pandya is an Assistant Professor in Department of Biotechnology and Bioengineering at Institute of Advanced Research. His research are Nano-biotechnology, Nano-chemistry and Forensic Nano-technology



Dr. Sushilkumar D Ramdasi is an Application Scientist at Beckman Coulter Life Sciences. He is an expert in demonstrating the advanced application and hands on training on Flow cytometry technique.

Registration & Contact Details

Interested participants must register and only selected candidates would be invited for the workshop.

For selected candidates Registration fees, local travel, Boarding and lodging will be covered by STUTI grant.

Interested participants should register using the following link: <https://forms.gle/6eRRCbiPQrVJVvAfr6>

Registration Deadline: 28th June 2022

Shortlisted candidates will be intimated by email, latest by 1st July 2022.

Eligibility criteria:

- Minimum qualification: Post Graduate (Science) or B.Tech. (Technology).
- Professors / Scientists / Post-Doc Fellows / Ph.D. Fellows / Industry persons who are actively involved in R&D.
- Not more than 3 participants from one institute.

For more information:

Access: <https://events.iitgn.ac.in/stuti/>

Mail: stuti@iitgn.ac.in

Address: 317, IAR Gandhinagar, Koba Institutional Area, Gandhinagar, Gujarat – 382426

Contact No. : +91-9426362106 /+91-7698715292

Acknowledgements



The University for Innovation



Department of Science & Technology (DST) funded

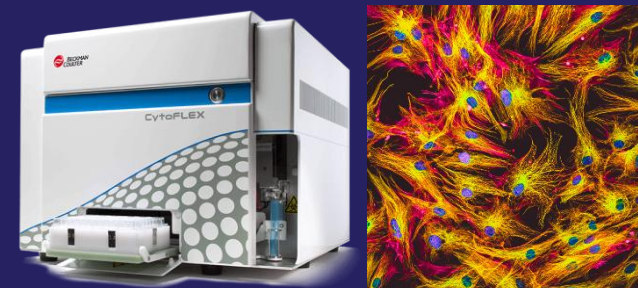
Training workshop under **STUTI** (Synergistic Training Program Utilizing the Scientific and Technological Infrastructure)

7 Days Workshop on

Florescence-based characterization techniques

4th July to 10th July 2022

IAR Gandhinagar, Gujarat



Contents of the workshop

Day 1 - Session I & II

- Inauguration and Welcome note
- Introduction of the Participants and the Host
- Introduction to APD Based Flow Cytometers
- SuperNova – Next Generation Polymer Dyes

Day 2 - Session I & II

- Fundamentals of Sorting and CytoFLEX SRT – An Advanced Cell Sorter
- Application of Flow cytometry in immunology
- Lab visit

Day 3 - Session I & II

- Microscopy: Basic introduction of Microscopy
- Data collection & processing of Fluorescence microscopy
- Hands on: Instruction to instrument

Day 4 - Session I & II

- Working principle of Confocal microscopy
- Application of different imaging mode of Confocal microscopy
- Hand on: Sample preparation and imaging mode

Day 5 - Session I & II

- Basics of FT-IR in identification and characterisation of materials
- Conceptual understanding of acquiring the FT-IR spectra of various functional groups
- Hands on: sample preparation & instrument operation

Day 6 - Session I & II

- Application of FT-IR technique in biological and diagnostic application
- Hands on: tanning on spectrum interpretation of characteristic peaks.
- Hands on: participants sample analysis

Day 7 - Session

- Interactive and Problem solving session

Overview of STUTI and Objectives of Workshop

DST welcomes all the participants for the workshop on Florescence based characterization techniques organised under STUTI. The STUTI program envisions hands-on-training and sensitization of the state-of-the-art equipment as well as towards sharing while ensuring transparent access to S&T facilities. Department of Science and Technology has identified IIT-Gandhinagar to function as a Project Management Unit (PMU) and IAR_ Gandhinagar as one of the as co-ordinator for this workshop.

This workshop is aimed to provide an insight into the basic principles and advanced usage of different Florescence based characterization techniques such as Flow Cytometer, Confocal microscope, Fluorescence microscope and FTIR. The participants will be introduced to the basic concepts of image generation, instrumentation, troubleshooting and the advanced modes of operation. The participants will be provided with hands on experience on the operation of the instrument and will have a chance to interact with subject experts and also analyse their own samples (with prior approval).

Schedule

Day 1	Day 2	Day 3	
08:30 Registration	09:00 Expert Talk (S-I)	09:00 Expert Talk (S-I)	
09:00 Inaugural Session	10:30 Tea Break	10:30 Tea Break	
10:00 Expert Talk (S-I)	11:00 Expert Talk (S-I)	11:00 Expert Talk (S-I)	
11:00 Tea Break	12:30 Lunch	12:30 Lunch	
11:20 Expert Talk (S-I)	14:00 Hands on training (S-II)	14:00 Session II–A	
12:30 Lunch	16:00 Tea Break	15:30 Tea Break	
14:00 Hands on training (S-II)		15:45 Session II-B	
16:00 Tea Break			
16:20 Campus Visit			
Day 4	Day 5	Day 6	Day 7
09:00 Expert Talk (S-I)	09:00 Expert Talk (S-I)	09:00 Expert Talk (S-I)	09:00 Interactive session
10:30 Tea Break	10:30 Tea Break	10:30 Tea Break	11:15 Tea Break
11:00 Expert Talk (S-I)	11:00 Expert Talk (S-I)	11:00 Expert Talk (S-I)	11:30 Closing remarks
12:30 Lunch	12:30 Lunch	12:30 Lunch	
14:00 Session II–A	14:00 Session II–A	14:00 IITGN Lab visit	
15:30 Tea Break	15:30 Tea Break	16:00 Tea Break at IITGN	
15:45 Session II-B	15:45 Session II-B	16:45 IITGN Lab visit	

Sessions IIA & IIB will be Hands on training