विज्ञान एवं प्रौद्योगिकी विभाग
DEPARTMENT OF
SCIENCE & TECHNOLOGY

SATHI Foundation BITS Pilani

SOPHISTICATED ANALYTICAL & TECHNICAL HELP INSTITUTES

BITS Pilani
Pilani | Dubai | Goa | Hyderabad | Mumbai
An Institution of Eminence

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2 DAYS HANDS-ON TRAINING

SUPER-RESOLUTION STRUCTURED ILLUMINATION MICROSCOPY (SIM)

Visualizing Cellular Architecture Beyond The Conventional Resolution



SIM image of fixed cells (Actin, Microtubules, Nucleus)



ZEISS Lattice SIM 5

Exploring The Cellular Dynamic Processes With Exceptional Spatial Resolution, Speed and Imaging Sensitivity.



2D/3D
Live and Fixed Cell Imaging

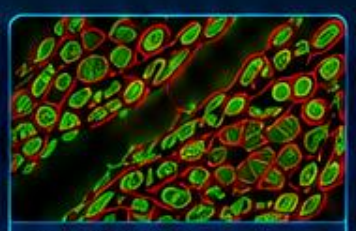
60 nm
Super Resolution Capability

Up to 255 fps
Burst Mode Processing


Microtubules


Actin filaments


Endoplasmic reticulum


Mitochondria


Multicolor imaging

DATE: 22 – 23 DECEMBER 2026

DURATION: 2 DAYS HANDS-ON TRAINING

VENUE: SATHI Foundation, BITS Pilani, Pilani Campus

WHAT WILL YOU LEARN ?

CORE PRINCIPLES

- Fundamentals and Principles of Super Resolution Microscopy
- Lattice SIM and SIM² Reconstruction
- Optical Sectioning Structured Illumination Microscopy (OS-SIM) Reconstruction

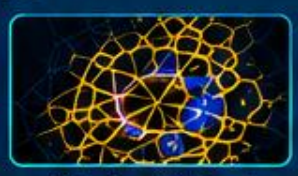
PRACTICAL TRAINING

- Instrument Setup and Operation
- Fluorescence Image Acquisition
- Live and Fixed Cell Imaging workflow
- Image Reconstruction and Analysis
- Imaging optimization and best practices

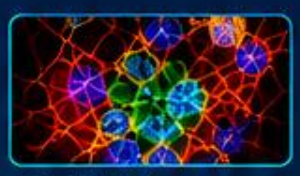
RESEARCH APPLICATIONS


Live-cell dynamics


Cytoskeletal architecture


Mitochondrial and organelle interactions


Endoplasmic reticulum networks


Multicolor fluorescence imaging


3D imaging of cells and tissues

REGISTRATION FEE
(INCLUDING ACCOMMODATION AND FOOD)
TOTAL SEATS 20

INTERNAL
₹ 2,500 + 18% GST

EXTERNAL
₹ 3,500 + 18% GST

INDUSTRIES
₹ 4,500 + 18% GST
(Including accommodation and food)

OUR EXPERT



Dr. Somenath Ghatak
Application Specialist
Zeiss Microscopy

REGISTRATION LINK
Scan the QR code or visit
https://shorturl.at/kwBCk

Scan to Register

SATHI, BITS Pilani Campus

Email:
sathi@bits-pilani.ac.in

Instrument Information:
www.zeiss.com/lattice-sim

Hands-on training | Advanced microscopy | Scientific image analysis

Certificates will be provided

LinkedIn