SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

SEMINAR

Name of the Speaker	Dr. Benjamin Rappaz Head of Life Sciences at Lyncée Tec SA, a Swiss company specializing in Digital Holographic Microscopy (DHM)
Title of the Talk	Digital Holographic Microscopy (DHM)
Date & Time	20.11.2026 (Friday) 3 PM
Venue	PhD Classroom, SoC

ALL ARE INVITED

Date: 20/11/2026

Prof. R Chandrasekar
Faculty In-charge

About the Speaker:

* Current Role. He leads the life sciences division at Lyncée Tec. focusing on label-free high-content screening technologies.
* Academic Background. He is affiliated with the Swiss Federal Institute of Technology in Lausanne (EPFL), where his research centered on living systems and quantitative phase imaging.
* Research Focus. His published work covers non-invasive cellular analysis, including image-based marker-free drug screening and quantifying mechanical changes in single cells.

DHM is a quantitative, label-free microscopy technique that enables the study of live cells and biological processes. It provides quantitative information on cell morphology, thickness, intracellular dry mass, cell dynamics, and 3D localisation.

Key applications include:

- Live-cell imaging and cell-culture monitoring
- Cell dynamics, including beating cardiomyocytes
- Cytotoxicity and drug-response studies
- Cell migration and proliferation
- 3D spheroid/organoid analysis and 4D tracking
- DHM–fluorescence imaging