

4 de septiembre de 2026

12:00h

Sala de Conferencias,
Edificio I+D+I. Campus Rio Ebro

**Engineered Extracellular Vesicles &
Nucleic Acid-Polymer Hybrid
Nanomaterials – Therapeutic
Targeting and Automated Science**

Prof. Subha R. Das
Carnegie Mellon University (CMU), USA



About the speaker:

- Subha R. Das is an Associate Professor of Chemistry at Carnegie Mellon University (CMU) and a member of the Center for Nucleic Acids Science & Technology (CNASt), where his laboratory develops nucleic acid and polymer-based tools for nanobiotechnology and therapeutic delivery applications.
- After completing his M.Sc. in Chemistry and B.Eng. in Computer Science at BITS Pilani, India, he earned his Ph.D. at Auburn University and conducted postdoctoral training at the University of Chicago and the Howard Hughes Medical Institute.
- His group at CMU has pioneered nucleic acid-polymer hybrids (NAPHs), built by incorporating atom transfer radical polymerization (ATRP) initiators at defined sites within DNA and RNA, and has extended this platform to develop oligonucleotide systems exploiting G-quadruplex structures and aptamers for rapid, modular surface engineering of extracellular vesicles (EVs), achieving targeted therapeutic delivery without cellular engineering.
- This work, published in ACS Nano, PNAS, and Biomacromolecules, has been licensed to Coya Therapeutics for clinical translation.
- Dr. Das also directs the CMU Automated Science Lab education program, integrating cloud-based robotic experimentation and machine learning into research and teaching, and holds over 70 peer-reviewed publications and multiple patents in nucleic acid chemistry and polymer hybrids for nanobiotechnology.