

Ashok M Raichur

Name : Ashok M Raichur
Current Affiliation : Indian Institute of Science, Bengaluru
Ph.D : University of Nevada, Reno, USA, 1996
Post-Doc : School of Civil Engineering., Uni. of Nottingham, UK.
Research Interest :

- Polyelectrolyte/nanoparticle multilayers for environmental application
- Nanostructured multilayers for sensing applications
- Development of 2D and 3D structures as fillers in epoxy nanocomposites
- Developing new generation of drug delivery systems for gene and anticancer drugs

Website : <https://materials.iisc.ac.in/faculty-list>
<https://sites.google.com/view/raichur-group/home>

Brief CV

Ashok M. Raichur is a distinguished Professor in the Department of Materials Engineering at the Indian Institute of Science, Bangalore, holding a Ph.D. from the University of Nevada, Reno, and having completed post-doctoral research at the University of Nottingham. His extensive academic career at IISc began in 1997, progressing to a full professorship in 2009, alongside various administrative and visiting faculty roles at institutions like the University of South Africa and the University of Johannesburg. Dr. Raichur's research focuses on advanced materials, including polyelectrolyte/nanoparticle multilayers for environmental and sensing applications, 2D and 3D structures for epoxy nanocomposites, and innovative drug delivery systems for gene and anticancer therapies. A Fellow of both the Indian National Academy of Engineering and the Royal Society of Chemistry, he has been recognized with numerous prestigious awards, such as the National Bioscience Award and the Humboldt Research Fellowship, highlighting his significant contributions to materials science and engineering.

Publications

- Chitosan-assisted delivery of *Decalepis hamiltonii* extract for improved anticancer efficacy in HeLa cell lines_ International Journal of Biological Macromolecules, 145359 (2025)
- Mucin-capped CuS nanoparticles for mitochondrial targeted NIR-II photothermal therapy and photoacoustic imaging Journal of Drug Delivery Science and Technology 105, 106668 (2025)

- Enhancing chemosensitivity and reducing cancer stem-like cell population using doxorubicin-loaded polyelectrolyte nanocapsules *Journal of Drug Delivery Science and Technology* 104, 106494 (2025)
- Mucin-Based Dual Cross-Linkable IPN Hydrogel Bioink for 3D Bioprinting and Cartilage Tissue Engineering *ACS Applied Bio Materials* 8 (2), 1186-1200 (2025)
- Emerging applications of stimuli-responsive novel vesicular carriers: exosomes, supramolecular vesicles, and catanionic vesicles Tumor-Targeting with Stimuli-Responsive Vesicular Nanocarriers, 317-339 (2025)