

Indian Institute of Technology Hyderabad

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Postdoctoral Position on "Novel Biomaterials for Drug Delivery and Tissue Engineering" Department of Biomedical Engineering, IIT Hyderabad

We invite applications for a Postdoctoral Research Position in *Novel Biomaterials for Drug Delivery and Tissue Engineering*. The successful candidate will work on the design and synthesis of innovative polymeric and biopolymer-based systems to address critical challenges in therapeutic delivery and regenerative medicine. Candidates with a strong background in organic synthesis, chemical modification of biopolymers, or development of functional polymers for controlled release and tissue repair are encouraged to apply. This position offers a unique opportunity to contribute to cutting-edge translational research to create next-generation biomaterials with clinical impact and commercial potential.

We are seeking talented, motivated and passionate individuals, eager to learn a multidisciplinary skill set and ready to explore their talent/idea/experience in the improvement of human health care, and to join our efforts in a leading-edge translation research on "Novel Biomaterials for Drug Delivery and Tissue Engineering". The candidate will get a highly interdisciplinary work environment to perform cutting-edge research and high-impact publications.

Essential Qualifications and Work Experience: PhD in Chemistry, Polymer Science, Materials Science, or related discipline with a strong focus on organic synthesis or polymer chemistry.

- Proven expertise in designing, synthesising, or modifying biopolymers, natural polymers, or synthetic polymers for biomedical applications.
- Hands-on experience in drug delivery systems, including nanoparticle formulation, hydrogel development, microneedles, scaffolds, or controlled-release platforms.
- Strong background in chemical characterisation techniques such as NMR, FTIR, GPC, DSC, TGA, HPLC, LC-MS, and rheology.
- Demonstrated research experience through high-impact publications or patents in biomaterials, drug delivery, or tissue engineering.
- Ability to independently design experiments, analyze data, and drive research objectives in a multidisciplinary environment.
- Experience with cell-material interaction studies or tissue regeneration models (desirable but not mandatory).
- Proficiency in writing reports and manuscripts, managing and working in group is necessary

Duration of project: 2 years. The appointment will be temporary. Based on performance, the appointment could be extended till the end of the project.

Emoluments: INR 75,000 per month consolidated salary.

How to Apply: Eligible candidates should apply with their CV via email to "enarm@bme.iith.ac.in" by 9th November, 2025, with the subject marked as "Postdoctoral Position on Novel Biomaterials for Drug Delivery and Tissue Engineering". Application will be accepted till the finding suitable candidate. Candidates who are short-listed for the interview based on merit and experience will be informed via email.

Preference: will be given to the candidates with enough experience in the above-mentioned work and committed to working on the project for longer, preferably at least 1.5 years.