

## “Novel Biomaterials Based Personalized Burn Wound Care at Patient Bedside” (JRF/SRF) @ Department of Biomedical Engineering, IIT Hyderabad

Burns are one of the most common and devastating forms of trauma. In 2004, nearly 11 million people worldwide and 1 million people in India were burned moderately or severely. An estimated 0.1 million deaths every year are caused by burns mainly in low- and middle-income countries. The current treatment modalities of burn wound depend on the degree-of-burn, and based on the supportive treatment to the patient to heal the skin tissue by their own. The current treatment modalities of burn trauma are not effective for lost skin tissue regeneration as well as expensive and not affordable for common Indian population.

Our laboratory (eNARM Lab, <https://www.iith.ac.in/~jgiri/> PI: Dr. Jyotsnendu Giri, Associate Professor) at IIT Hyderabad (with collaboration with hospital) leading by highly energetic interdisciplinary peoples, is working at the interface between materials and biology to develop next-generation Regenerative approaches for burn wound healing, which can be applied at patient bedside. We are seeking talented, motivated and passionate individuals (1 no) to join in our efforts for cutting-age research on “**Novel biomaterials based personalized for burn wound care at patient bedside**”. The candidate will get highly interdisciplinary work environment to perform cutting age research. The candidate will closely work with collaborators from Hospital in Hyderabad.

### JRF/SRF

Essential Qualification: M Tech, M.S, M.Sc, M Pharm. Chemistry/Pharmacy/ Material Science/Biomedical Egg/Nanotechnology/ Biochemistry with minimum 60 % mark from reputed institutes with relevant experience (2-3 years). For M.Sc background candidate must have Gate or NET (fellowship) qualification.

### Work Experience:

- Experience on Biomaterials processing or scaffold fabrication particularly polymers based for tissue engineering application
- Polymer synthesis and modification (optional), Polymer blending, Biomaterial's fabrication
- Basic Knowledge on Physical, Organic Chemistry and solvent chemistry, worked with Biopolymers, Basic organic synthesis,
- Candidate should be innovative in their thinking, and hardworking in their work
- Eager to learn new interdisciplinary research and technique related to the research
- **Biology:** Basic knowledge in Biology advantageous, if not, then eager to learn. Cell and culture and different biochemical assays.
- **Further Technical Information:** Candidate may contact the Principal Investigator. Dr. Jyotsnendu Giri, **Email: enarm@bme.iith.ac.in**



**Duration of project:** Two to Five years (Based on the funding). The appointment will be on temporary basis for a period of six months. Based on performance in the initial period, the appointment could be extended till the end of project. **Candidate may have strong interest to pursue PhD. Depending on the performance; candidate will be offered to continue this work for PhD.**

**Emoluments:** Will be decided based on the candidate qualification and experience according to Government OM.

**How to Apply:** Eligible candidates should apply with their CV via **email to enarm@bme.iith.ac.in** on or **before 26<sup>th</sup> November, 2022**, with the subject marked as “Research Assistant Position on Wound Healing”. **Candidate should provide short justification note to support his/her candidature for this project.** Candidates will be short listed for the interview based on merit and experience will be informed via email. (Interview will be conducted between **28<sup>th</sup> November to 4<sup>th</sup> December, 2022**)

**Preference:** will be given to the candidates having **relevant experience on the above-mentioned work** and also **CSIR/UGC/NET holder with strong interest on this research field** also given priority as well.