

## Faculty: M. Gattu

### List of Publications in Last 3 years

#### SCI Journals:

1. **Gattu, M.**, and Aala, S. (February 2021) "Size-effect method to determine mode-I fracture toughness of aluminium alloys", Engineering Fracture Mechanics, Volume 242.  
<https://doi.org/10.1016/j.engfracmech.2020.107504>, [publons.com/p/41232618/](https://publons.com/p/41232618/)
2. Rajsekhar, V., and **Gattu, M.** (June 2022) "Fracture and energetic strength scaling of epoxy resins toughened with multi-walled carbon nanotubes", Engineering Fracture Mechanics, Volume 268.  
<https://doi.org/10.1016/j.engfracmech.2022.108495>
3. Rajsekhar, V., and **Gattu, M.** (June 2023) "Size-effect testing : Nano-alumina enhances fracture toughness of epoxy resins", Theoretical and Applied Fracture Mechanics, Volume 125.  
<https://doi.org/10.1016/j.tafmec.2023.103859>

#### Conference Publications:

1. **M. Gattu**, "Effect of loading rate and material viscosity on fracture energy dissipation," Mater. Today Proc., vol. 91, part 1 , pp. 143–147, **June 2023**. <https://doi.org/10.1016/j.matpr.2023.06.094>
2. Abhishek K, **Gattu, M.** Determination of Stress Intensity Factor for Metal Plate under Tensile Load, International Conference on Materials, Mechanics and Structures (ICMMS-2020), **July 14-15, 2020**. NIT-Calicut, Kerala.
3. Anju Rawate, **Gattu, M.** Determination of Stress Intensity Factor for Metal Plate under three point bending, International Conference on Materials, Mechanics and Structures (ICMMS-2020), **July 14-15, 2020**. NIT-Calicut, Kerala.
4. O. S. Vishnu and **M. Gattu**, "Materials Today: Proceedings Cohesive zone modeling of thin aluminium sheets," Mater. Today Proc., vol. 33, pp. 5672–5677, **Dec 2020**. [publons.com/p/32910116/](https://publons.com/p/32910116/), [doi.org/10.1016/J.MATPR.2020.04.185](https://doi.org/10.1016/J.MATPR.2020.04.185)

### Sponsored Research Projects in last 3 years

Name of the Project	Sponsoring Agency	Name of the PI	Total Value (Rs. in Lakhs)	Start Date	Close Date
Increasing fracture toughness of glass fiber epoxy composite laminates using a quasi-isotropic orientation of the glass fibers	NPIU ( National Project Implementation Unit) through TEQIP-III, NIT-Rourkela	<b>M.Gattu</b>	Rs. 1. 69 lakhs	16-Jan-2020	30-Nov-2020