



**GYEONGSANG
NATIONAL UNIVERSITY**



PostDoc, in Computational Mechanics and Constitutive Modeling of Soft Matter, Gyeongsang National University, South Korea

General Description. Applications are invited for a Postdoctoral Researcher position in computational mechanics and constitutive modeling of soft matter at the [Composite Structures Lab \(CSL\)](#) at Gyeongsang National University (GNU), led by [Prof. Hyoung Jun Lim](#). The successful candidate will conduct research on the development and computational implementation of constitutive models for soft materials exhibiting hyperelastic, viscoelastic, viscoplastic, and viscoelastoplastic behavior under finite deformation.

Requirements.

- ✓ PhD in mechanical & Aerospace engineering, materials science, applied mechanics, or a related field.
- ✓ Demonstrated experience in constitutive modeling, continuum mechanics, and nonlinear finite element analysis.
- ✓ Proficiency in programming languages related to AI (MATLAB, Python, Fortran, etc.)

In addition, a competitive candidate for this role should demonstrate one or several of the following desirable (non-essential) qualifications:

- ✓ Strong background in constitutive modeling of soft matter, polymers, elastomers, gels.
- ✓ Experience with hyperelastic, viscoelastic, viscoplastic, or viscoelastoplastic material modeling.
- ✓ Experience in finite element implementation of constitutive laws, such as UMAT, VUMAT, or similar user-defined material subroutines.
- ✓ Strong understanding of finite-strain mechanics, material parameter calibration, and model validation.

Contact. Please send your CV, Cover Letter to Prof. Hyoung Jun Lim (hj.lim@gnu.ac.kr)

About GNU. Gyeongsang National University (GNU) is a flagship national university located in Jinju, South Korea. GNU is renowned for aerospace engineering. Jinju is nationally recognized as a specialized city for aerospace engineering and industry, hosting major aerospace institutions and companies, thereby offering researchers unique opportunities for collaboration, innovation, and professional development.



GNU main campus



GNU aerospace center