

ACADEMIC PROFILE

1) Name : B.R. JAYALEKSHMI

2) Designation & Experience : Professor, 28years

3) Total Teaching Experience : 31years

4) Details of Academic Qualifications:

B.Tech. (Hons), Civil Engineering, 1988, **REC (NIT) Calicut**

M.E., Structural Engineering, 1992, **Govt. Engineering College, Jabalpur**

Ph.D., Civil Engineering, 2009, **NITK Surathkal**

5) Post-Doctoral Research Fellowship: IIT Madras - 2010

6) Teaching & Curriculum Development

(a) Added the following courses in Curriculum

B. Tech (Civil Engineering)

- FEM Applications in Civil Engineering
- Computer Aided Design and Applications in Civil Engineering
- Seismoresistant Concrete Structures

M.Tech (Structural Engineering)

- Computational Techniques and Computer Aided Design in Structural Engineering.
- Computer Aided Design in Structural Engineering.
- Aseismic Design of RC Buildings

(b) Subjects taught

B. Tech Civil Engineering

- Structural Analysis I
- Structural Analysis II
- Structural Design I (RCC)
- Computer Aided Design & Applications in Civil Engineering (C/C++)
- Finite Element Analysis & Applications in Civil Engineering
- Elements of Earthquake Engineering
- Seismoresistant Concrete Structures
- Computer Programming (FORTRAN Theory & Lab)
- Computer Programming (C Theory & Lab)
- Civil Engineering Materials Lab I & II

M.Tech (Structural Engineering)

- Computational Techniques and Computer Aided Design in Structural Engg.
- Theory of Elasticity and Plasticity
- Shells & Folded Plates
- Earthquake Engineering
- Finite Element Method

- ## 7) Sponsored Research Projects (Co - Investigator)

- Page 2 of 3

6. Amrita, Jayalekshmi, B.R., Shivashankar, R., (2025), Numerical study on reinforced vertical cuts integrated with RC buildings under the effects of ground motion, Institute of Engineering Mechanics (IEM), Volume 24, pages 959–976, (2025), DOI: 10.1007/s11803-025-2354-0
7. Jogi, P., Jayalekshmi, B.R., (2025), Innovative floating hybrid baffles for improved performance of liquid storage tanks under seismic excitations, Ships and Offshore Structures, DOI: 10.1080/17445302.2025.2537940
8. Jogi, P., Jayalekshmi, B.R. (2025), Experimental investigation on a novel base-isolator for ground supported liquid storage tanks, Multiscale and Multidisciplinary Modeling, Experiments and Design, 8 (1), art. no. 105, p1-22, DOI: 10.1007/s41939-024-00687-x
9. Mathews, M., Jayalekshmi, B.R., Venkataramana, K., (2025), Fragility curve modifiers for dual-frame systems in various site classes incorporating nonlinear SSI effects, Journal of Structural Integrity and Maintenance, 10 (3), art. no. 2503118, Pp1-18, DOI: 10.1080/24705314.2025.2503118
10. Jogi, P., Jayalekshmi, B.R., (2024), Numerical investigation of a novel flow damping device for mitigating liquid sloshing under bi-directional excitation, Multiscale and Multidisciplinary Modelling, Experiments and Design, 7 (6), pp. 5543 - 5564, DOI: 10.1007/s41939-024-00543-y
11. Amrita, Jayalekshmi, B.R., Shivashankar, R., (2024), Integrating soil-nailed walls with RC building for seismic stability in space-constrained sites, Bulletin of Engineering Geology and the Environment, 83 (10), art. no. 423, DOI: 10.1007/s10064-024-03922-4
12. Mathews, M., Jayalekshmi, B.R., Venkataramana, K., (2024), Site specific fragility modification factor for mid-rise RC buildings based on plastic energy dissipation, Earthquake and Structures, 27 (4), pp. 331 - 344/, DOI: 10.12989/eas.2024.27.4.331
13. Amrita, Jayalekshmi, B.R., Shivashankar, R. (2024), Dynamic stability evaluation of nail stabilised vertical cuts in various site classes, Geomechanics and Engineering, 38 (4), pp. 421 - 437, DOI: 10.12989/gae.2024.38.4.421

11) Awards / Recognitions

1. **Women Achievers Award 2017** from Institution of Engineers (India), Karnataka
2. **Associate Editor**, International Journal of Innovative Infrastructure Solutions, Springer
3. **Expert Member, Bureau of Indian Standards, BIS CED38:** Special structures sectional committee
4. **External Expert Member in Academic Council /Senate/ BoS (Civil Engineering)** for different Universities
5. **Ph.D Evaluator/External Examiner/Chairman of Viva-voce** for different Universities
6. **Chair / Co-Chair** in International Conferences
7. **Reviewer** of Journal articles, Springer and Techno Press Journals,