

# Dr P ADAVALA SIVA SHANMUKHA ANJANEYA BABU

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## PROFESSIONAL SUMMARY

With a decade of experience as an Assistant Professor, I have honed my expertise in Construction Materials, Design of Reinforced Concrete Structures, Repair and Rehabilitation of Structures, Remote Sensing, and Disaster Management. My commitment to fostering an engaging and interactive learning environment has been recognized through my ability to maintain open communication and provide personalized mentorship, guiding students to develop both the knowledge and critical skills essential for thriving in the dynamic field of civil engineering.

Adaptable and eager to learn, I continuously seek to enhance my professional capabilities. I am proficient in various software applications, including AutoCAD, STAAD Pro, Microsoft Office 365, Life cycle Assessment, Taguchi, ANOVA, and Response Surface Method. Additionally, I possess programming skills in Python, enabling me to integrate technology effectively into my teaching and research endeavors.

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## WORK EXPERIENCE

Seshadri Rao Gudlavalleru Engineering College | Gudlavalleru, Andhra Pradesh, India

**Assistant Professor** | October 2014 – Present

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## EDUCATION

Doctorate - PhD (Civil Engineering), GITAM (Deemed University)	June, 2024
Masters - M.Tech (SE & NDM), GITAM (Deemed University)	August, 2014
Bachelors - B. Tech (Civil Engineering), P.V.P Siddhartha Institute of Technology (JNTUK)	April, 2012
Intermediate, Sri Chaitanya Junior College	April, 2008
SSC, Amaleswari Vidyaniketan	April, 2006

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## RESEARCH PROFILE

- Google Scholar - <https://scholar.google.com/citations?user=q5SuZ3wAAAAJ&hl=en>  
h- index – 11, i10- index – 11
- Scopus - <https://www.scopus.com/authid/detail.uri?authorId=58493455500>
- ORCID - <https://orcid.org/0000-0002-6405-4097>

## PUBLICATIONS

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- “Experimental and machine learning based analysis of pervious concrete enhanced with fly ash and silica fume” **Next Materials**, 2025 Oct 1; 9:101018. (ELSEVIER - ESCI & SCOPUS)
- “Enhanced Concrete Performance and Sustainability with Lime Sludge and Wollastonite Powder: A Comprehensive Experimental Study” **Iranian Journal of Science and Technology, Transactions of Civil Engineering**, 2025 Apr 24:1-23. (SPRINGER - SCOPUS)
- “Performance evaluation of concrete blended with industrial and agricultural wastes reinforced with hybrid fibres—a feasibility study” **Scientific Reports**, 2025 Feb 24; 15(1):6662. (NATURE - SCIE & SCOPUS)
- “A study on the synthesis and performance evaluation of fly ash and alccofine as sustainable cementitious materials” **Scientific Reports**, 2024 Aug 18; 14(1):19115. (NATURE - SCIE & SCOPUS)
- “Building information modelling-simulation and analysis of a university edifice and its environs - A sustainable design approach” **Green Technologies and Sustainability**, 2024 Nov 19, 100150. (ELSEVIER - SCOPUS)
- “Synthesis of various types of green biosorbents materials for removals of sulphates from contaminated water for better aquatic environments” **Waste Management Bulletin**, 2024 Oct 1. (ELSEVIER - SCOPUS)
- “Optimizing the bituminous pavement constructions with waste plastic materials improved the road constructions performance and their future applications” **AI in Civil Engineering**, 2024 Dec; 3(1):16. (SPRINGER- SCOPUS)
- “A Systematic Analysis of Binary Blend Cement Concrete Infused with Lime Sludge and Fly Ash” **Chemistry of Inorganic Materials**, 2024 Sep 23:100065. (ELSEVIER)
- “Removal of chlorides and hardness from contaminated water by using various biosorbents: A comprehensive review” **Water-Energy Nexus**, 2024 Dec 1; 7:39-76. (ELSEVIER - SCOPUS)
- “An experimental study on the parthenium biosorbents for removals of chlorides and hardness from contaminated water” **Energy Nexus**, 2024 Sep 1; 15:100309. (ELSEVIER - ESCI & SCOPUS)
- “Flexural behavior of cold formed steel with and without lips: a theoretical, experimental and numerical study of “Hat” and “Z” sections” **Innovative Infrastructure Solutions**, 2024 Jun; 9(6):1-4. (SPRINGER - ESCI & SCOPUS)
- “Sustainable concrete development towards the eco-friendly construction: Enhancing the strength and durability by using fly ash and silica fume” **Journal of Building Pathology and Rehabilitation**, 2024 Jun; 9(1):50. (SPRINGER - SCOPUS)

- “Experimental study on concrete by partial replacement of cement with fly ash and coarse aggregates with palm kernel shells (Pks) and with addition of hybrid fibers” **Chemistry of Inorganic Materials**, 2024 Apr 1; 2:100033. (ELSEVIER)
- “Degradation of plastics waste and its effects on biological ecosystems: A scientific analysis and comprehensive review” **Biomedical Materials & Devices**, 2024 Mar; 2(1):70-112. (SPRINGER - SCOPUS)
- “Material estimation and energy analysis for a domestic building using Revit architecture and insight: a sustainable approach” **Asian Journal of Civil Engineering**, 2024 Feb 14:1-7. (SPRINGER - SCOPUS)
- “Utilization of Various Types of Biosorbents for Removal of Nitrites from Water” **Biomedical Materials & Devices**, 2024 Feb 5:1-22. (SPRINGER - SCOPUS)
- “Bond strength of fly ash and silica fume blended concrete mixes” **Asian Journal of Civil Engineering**, 2024 Jan; 25(1):895-909. (SPRINGER - SCOPUS)
- “Evaluate the use of flower waste biosorbents for treatment of contaminated water” **Water-Energy Nexus**, 2023 Dec 1; 6:187-230. (ELSEVIER - SCOPUS)
- “Recycling of e-waste materials for controlling the environmental and human health degradation in India” **Green Analytical Chemistry**, 2023 Dec 1; 7:100085. (ELSEVIER - ESCI & SCOPUS)
- “Performance evaluation of ternary blended cement concrete partially replacement of natural sand with granite quarry dust” **Hybrid Advances**, 2023 Dec 1; 4:100082. (ELSEVIER - SCOPUS)
- “Performances of plant leaf biosorbents for biosorption of phosphorous from synthetic water” **Cleaner Materials**, 2023 Jun 1; 8:100191. (ELSEVIER - ESCI & SCOPUS)
- “Renewable energy present status and future potentials in India: An overview” **Innovation and Green Development**, 2022 1 (1): 100006. (ELSEVIER - SCOPUS)
- “Experimental investigation on tobacco waste ash for sustainable development” **IOP Conference Series: Earth and Environmental Science**, 2022 Sep 1 (Vol. 1086, No. 1, p. 012057), IOP Publishing. (IOP - SCOPUS)
- “Comparative analysis of strength and deformation characteristics of clayey soil, when treated with fly ash and ground granulated blast furnace slag” **IOP Conference Series: Earth and Environmental Science**, 2022 Sep 1 (Vol. 1086, No. 1, p. 012022), IOP Publishing. (IOP - SCOPUS)
- “Performance evaluation of mechanical and durability properties of fly ash and silica fume based concrete for sustainable building material” **Transdisciplinary Journal of Engineering & Science**, 2022 May 19;13. (ATLAS - SCOPUS)
- “Mechanical properties of ternary blended mix concrete of fly ash and silica fume” **Materials Today: Proceedings**, Volume 43, Part 2, 2021, ISSN: 2214-7853. (ELSEVIER - SCOPUS)

## **BOOK PUBLICATIONS**

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- “Mechanical Durability Properties of Ternary Blended Cement Concrete”, 2023, LAP Lambert Academic Publishing. ISBN: 978-620-6-15974-2.

## **PATENTS**

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- Name of the Patent: Fiber Glass Based System for Reinforcing Concrete Panels
- Application Number: 202241051266
- Date of publication: 16-09-2022

## **PROFESSIONAL MEMBERSHIP**

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- Institute of Engineers, India - AM184352-7

## **RESEARCH INTEREST**

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- Sustainable Concrete
- Life Cycle Assessment
- Resource Conservation and Recycling

## **COURSES TAUGHT**

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- Concrete Technology
- Building Materials
- Design of Reinforced Concrete Structures
- Design of Steel Structures
- Repair and Retrofitting of Structures
- Disaster Management
- Stability of Structures (M.Tech)
- Advanced Reinforced Concrete Structures (M.Tech)
- Earthquake Resistant Design of Structures (M.Tech)