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|  | Curriculum Vitae**Dr. Chippagiri Ravijanya**Assistant Professor, Civil Engineering Department, NITK Surathkal.Ph.D., M. Tech (Construction Technology & Management)  |
|  | : [+91-9032484940](https://wa.link/e72bsz)  |  | : ravijanya991@gmail.com |
| Profile Links: | [Google Scholar](https://scholar.google.co.in/citations?user=8qiDtSQAAAAJ&hl=en&oi=ao) | [ORCiD](https://orcid.org/0000-0002-1698-8282) | [LinkedIn](https://www.linkedin.com/in/ravijanya-chippagiri-49719149/) | [Scopus](http://www.scopus.com/authid/detail.url?authorId=57220039518) | [Research Gate](https://www.researchgate.net/profile/Ravijanya-Chippagiri) |

**Profile**

Dr. Chippagiri Ravijanya has more than 4 years’ experience as an academician and more than 4 years of research experience. His research area includes sustainable construction materials and technology that help in building up energy-efficient, and affordable social housing.

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| Journal Publications: 10 (SCI/E) | Patents: 2 (IN) | Conferences: 7 | Citations: 159 | h-index: 8 |

**Educational Background**

2019-2023 **Doctor of Philosophy** (Civil Engineering) ***(4 years 3 months)***

 **Visvesvaraya National Institute of Technology**, Nagpur, Maharashtra, India.

*Thesis title:* Development of a Sustainable Prefabricated Walling Material for Modular Construction

*Area of Research:* Sustainable Construction Materials and Technology, Energy-efficient Buildings.

2013-2015 **Master of Technology** (Construction Technology & Management) ***CGPA – 7.78/10***

 **National Institute of Technology**, Warangal, Telangana, India.

*Dissertation Title:* Scheduling and Resource Optimization using Critical Path Segment Method with Primavera P6 software

2009-2013 **Bachelor of Technology** (Civil Engineering) ***Percentage–77.48%***

**Gayatri Vidya Parishad College of Engineering** (Autonomous), Visakhapatnam, Andhra Pradesh, India.

*Dissertation Title:* Economic Cost Comparison of In-situ And Precast Multi-Storeyed Buildings

2007-2009 Higher Secondary Education, Board of Intermediate Education, Andhra Pradesh. ***Percentage–88.7%***

2006-2007 10th, Board of Secondary Education, Andhra Pradesh. ***Percentage–84.17%***

**Work Experience**

Dec 2024 - Assistant Professor

Present **National Institute of Technology Karnataka, Surathkal,** Mangalore, Karnataka, India.

2023 - 2024 Adhoc Faculty (***1 year 3 months)***

 **National Institute of Technology - Andhra Pradesh**, Tadepalligudem, Andhra Pradesh, India.

Subjects Taught: Construction Technology and Project Management, Building Materials and Concrete Technology, Engineering Geology and Surveying, Repair and Rehabilitation of Infrastructure, Quantity Surveying and Public Works.

Handled UG project titled “*Optimising Building Energy Performance and Consumption for a Pitched Roof Building using BIM Approach*”.

2015-2019 Assistant Professor ***(3 years 4 months)***

DVR & Dr. HS MIC College of Technology (Autonomous), Kanchikacherla, Andhra Pradesh, India.

Roles: Teaching, research, laboratory testing, consultancy, accreditation works, etc.

Major subjects taught: Concrete Technology, Estimation & Costing, and Construction Technology & Management.

**Journal Publications (SCI/E):**

1. **R. Chippagiri**, D. Biswal, S. Mandavgane, Ana Bras, and R. V. Ralegaonkar, "Life Cycle Assessment of a Sustainable Prefabricated Housing System: A Cradle-to-Site Approach Based on a Small-scale Experimental Model", *Buildings*, 2023, <https://doi.org/10.3390/buildings13040964.> (Q2, Impact Factor - 3.1)
2. B. Lanjewar, **R. Chippagiri**, V. A. Dakwale, R. V. Ralegaonkar, “Development of bio-based blended ash and fly ash-based alkali-activated concrete,” *Magazine of Concrete Research*; vol. 75, no. 23, 2023. https://doi.org/10.1680/jmacr.22.00251. (Q2, Impact Factor – 2.67)
3. S. Mujeeb, M. Samudrala, B. A. Lanjewar, **R.** **Chippagiri**, M. Kamath, R. V. Ralegaonkar, “Development of Alkali-Activated 3D Printable Concrete: A Review” *Energies* 2023*, 16*. https://doi.org/10.3390/en16104181. (Q1, Impact Factor – 3.0)
4. M. Samudrala, S. Mujeeb, B. A. Lanjewar, **R.** **Chippagiri**, M. Kamath, R. V. Ralegaonkar, “3D-Printable Concrete for Energy-Efficient Buildings” *Energies* 2023, *16*. https://doi.org/10.3390/en16104234. (Q1, Impact Factor – 3.0)
5. B. Lanjewar, **R. Chippagiri**, V. A. Dakwale, R. V. Ralegaonkar, “Application of Alkali-Activated Sustainable Materials: A Step towards Net Zero Binder,” *Energies*; vol. 16, no. 969, 2023. https://doi.org/10.3390/en16020969. (Q1, Impact Factor – 3.0)
6. **R. Chippagiri**, H. R. Gavali, Ana Bras, and R. V. Ralegaonkar, "Performance Evaluation of a Sustainable Prefabricated System using Small-scale Experimental Model Technique" *Buildings*, 2022, <https://doi.org/10.3390/buildings12112000>. (Q2, Impact Factor - 3.1)
7. **R. Chippagiri**, A. Bras, D. Sharma, and R. V. Ralegaonkar, “Technological and Sustainable Perception on the Advancements of Prefabrication in Construction Industry,” *Energies*, vol. 15, no. 7548, 2022, doi: https://doi.org/10.3390/en15207548. (Q1, Impact Factor – 3.0)
8. **R. Chippagiri**, A. Bras, and R. V. Ralegaonkar, “Development of sustainable prefabricated housing system by small-scale experimental model,” *Proc. Inst. Civ. Eng. - Engineering Sustainability*, pp. 1–14, 2022, doi: https://doi.org/10.1680/jensu.21.00071. (Q3, Impact Factor – 1.4)
9. **R. Chippagiri**, H. R. Gavali, R. V Ralegaonkar, M. Riley, A. Shaw, and A. Bras, “Application of Sustainable Prefabricated Wall Technology for Energy Efficient Social Housing,” *Sustainability*, vol. 13, no. 1195, 2021, doi: https://doi.org/10.3390/su13031195. (Q2, Impact Factor – 3.3)
10. A. Bras, **C. Ravijanya**, V. T. de Sande, M. Riley, and R. V. Ralegaonkar, “Sustainable and affordable prefab housing systems with minimal whole life energy use,” *Energy Build.*, vol. 220, p. 110030, Apr. 2020, doi: 10.1016/J.ENBUILD.2020.110030. (Q1, Impact Factor – 6.6)

**Conferences:** (Scopus publications – 4 (S. Nos. 1, 2, 3, & 6))

1. **R. Chippagiri**, B. Lanjewar, A. Bras, V. Dakwale, R. Ralegaonkar, “Application of Sustainable Prefab Walling Panels in Erection of a Toilet Unit at a Rural Village” in *Second International Conference on Construction Materials and Structures* (ICCMS2022), 2022. https://doi.org/10.1016/j.matpr.2023.04.064.
2. N. Rathod, **R. Chippagiri**, R. Ralegaonkar, “Cleaner production of geopolymer materials: A critical review of waste-derived activators” in *Second International Conference on Construction Materials and Structures* (ICCMS2022), 2022. Published in Materials Today – Proceedings, 2023. <https://doi.org/10.1016/j.matpr.2023.03.502>.
3. B. Lanjewar, N. Jayan, A. Chaware, A. Kondawar, **R. Chippagiri**, V. Dakwale, R. Ralegaonkar, “Effect of Cupola Slag as a Coarse Aggregate on Compressive Strength of Concrete” in *Second International Conference on Construction Materials and Structures* (ICCMS2022), 2022. https://doi.org/10.1016/j.matpr.2023.04.214.
4. **R. Chippagiri**, H. R. Gavali, A. Bras, R. Ralegaonkar, “Sustainable Pre-Fab Walling Elements for Urban Slum Housing in Developing Countries” in *First International Conference on Water, Energy & Environment* (WEECON2021), 2021.
5. **C. Ravijanya**, Pramendra Kumar, H. R. Gavali, and R. V. Ralegaonkar, "Development of Lightweight Alkali Activated Concrete using Industrial Rejects," in *Second ASCE India Conference on* *Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economies* (CRSIDE2020), 2020, pp. 1190-1194.
6. N. Rathod, **R. Chippagiri**, H. R. Gavali, and R. V Ralegaonkar, “Development of Sustainable Masonry Blocks Using Industrial Rejects and Alkali Activation,” in *International Conference on Innovative Technologies for Clean and Sustainable Development*, 2020, pp. 357–368, Springer RILEM Bookseries 29, doi: https://doi.org/10.1007/978-3-030-51485-3\_24.
7. R. Chippagiri, B. Lanjewar, M. Kamath, and R. V. Ralegaonkar, “Prediction of Construction Materials and Alkali-activated 3D Concrete Printing” in *International Conference on Advancing Sustainable Futures (ICASF 2023)*, 2023, Dubai, United Arab Emirates.

**Patents**

1. “Composition for M30 Grade Alkali Activated Concrete Prepared using Agro-industrial Wastes” (Application No. 202221040625, Date of grant: 20/11/2023).

Inventors: Rahul V. Ralegaonkar, Bhagyashri Lanjewar, **Ravijanya Chippagiri**, and Vaidehi Dakwale.

1. “A Composition of Sustainable Bricks and Method of Preparation Thereof” (Application No. 202221037162, Date of grant: 17/03/2023).

Inventors: Rahul V. Ralegaonkar, Bhagyashri Lanjewar, **Ravijanya Chippagiri**, and Vaidehi Dakwale.

**Awards and Collaborations**

* Winner of RISE 2022 award conducted by Leeds Beckett University, and UWE, Bristol, UK.

Poster Title: **Development of Sustainable Prefabricated Composite Walling Elements for Volumetric Constructions** [Category: New Technologies and Building Materials]

* Best Paper Award at *Second International Conference on Construction Materials and Structures* (ICCMS2022), NIT Calicut, India.

Paper title: Effect of Cupola Slag as a Coarse Aggregate on Compressive Strength of Concrete

* Collaborated with Dr. Ana Bras, Associate Professor, Liverpool John Moores University, UK in developing a sustainable lightweight prefabricated walling panel for volumetric construction.
* Associated with CSIR-NEIST, Jorhat, India in a project related to development of sustainable 3D volumetric construction material.

**Industry Exposure**

* Associated with M/s. Apple Chemie India Pvt. Ltd., Nagpur, India for experimentation and M/s. Zeal Pavers and Tiles, Nagpur, India for mass production of lightweight prefab panels.
* Tunnelling works – P.S. Veligonda Tunneling Project located near Dornala, Andhra Pradesh, India – Exposure on Scheduling and Planning works.
* Pile Foundations – Summer Internship under M/s. J. D. Constructions for their project on Construction of substructure for storage facilities at Vizag Steel Plant, Visakhapatnam, India.

**Academic Responsibilities undertaken**

* Handled GATE classes for final year and third year B. Tech students - organized by SC/ST cell of NIT Andhra Pradesh.
* Guided Mini Projects for II, III B.Tech students during second semester of A.Y. 2023-24.
* Review committee member for B. Tech projects during both the semesters of the A.Y. 2023-24.
* Was part of the organizing team for Field Trips for the B.Tech students.
* Part of the Organizing team for various Conferences, Invited Guest Lectures, Training Programs, etc.
* Departmental Coordinator for NAAC and NBA.

**Others**

* Reviewer for the following journals:

Engineering Sustainability (Proceedings of ICE),

Sustainable Cities and Society (Elsevier), and

International Journal of Environmental Science and Technology (Springer)

* Organizer of various international workshops conducted at VNIT, Nagpur (Sustainable Construction Engineering: Research and Practices, Oct’20; Adoption of Green Construction Practices with focus on Water Resource, Feb’22).
* Participated in ATAL-FDP (2021) on “Application of Sustainable Construction Engineering for Enhancing Durability of Existing Structures” and BRICS-webinar (2021) on “Energy, Environment and Climate Change”.
* Participated in National level Tech Fests at Graduate and Post-graduate level.
* Qualified in GATE 2013

**Personal Information**

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| Name | : | Chippagiri Ravijanya |
| Date of Birth | : | 05-10-1991 |
| Father’s name | : | Late C. Surender |
| Mother’s name | : | C. Kanaka Durga |
| Nationality | : | Indian |
| Marital status | : | Married (Spouse name: Pangi Veena Madhuri) |
| Language proficiency | : | English, Hindi, Telugu (Mother tongue) |
| Permanent address | : | Flat No. 117, Vignesh Towers, Nunna Road, Kunda vari Kandrika, Vijayawada – 520015, Andhra Pradesh, India. |

**Declaration:**

I hereby declare that all the details mentioned above are true to the best of my knowledge.

**Dr. Chippagiri Ravijanya**