

Faculty Profile

1. Name of the faculty : Dr. Hemanth Kumar V
2. Name of the Department : Civil Engineering
3. Present position held : Assistant Professor
4. Educational qualifications : Ph.D. (Transportation Engineering), NITK

(Degree onwards)

| Degrees | Class/ Grade | University/ Institution | Stream Regular/ Distance | Year of award |
|----------------|------------------------------------|--|--------------------------------------|----------------------|
| UG Degree | First Class / 63.34% | RV College of Engineering (VTU) | Civil Engineering – Regular | 2010 |
| PG Degree | First Class with Distinction / 79% | Dayananda Sagar College of Engineering (VTU) | Highway Technology - Regular | 2012 |
| PhD | First Class / 6.5 | National Institute of Technology Karnataka, Surathkal, | Transportation Engineering – Regular | 2022 |

5. E-mail and contact number : hemanth.visl@gmail.com / 8904958991
6. Date of Joining the Institute : 01-04-2022
7. Total teaching experience : (Mention in Reverse chronological order)

| Year | | Designation | Dr. AIT/Other Institutions | Academic-Administrative Responsibility held |
|-------------|-----------|----------------------------|-----------------------------------|---|
| From | To | | | |
| 2022 | 2025 | Assistant Professor | Dr. AIT | NAAC, NIRF, UGC, Skill Lab, IQAC, Industrial Visit |

8. Courses taught :

1. Elements of Civil Engineering
2. Highway Engineering
3. Railways, Airport, Tunnel and Harbour
4. Advanced Survey
5. Pavement material and construction
6. Environmental studies
7. Urban Transport Planning
8. Pavement Design

9. Specialization : Transportation Engineering
10. Research experience : 4 Years

11. Major research projects completed: Title of the project, Date of sanction and Duration, Grant received, Funding agency. PI or Co-PI.

| Academic Year | Major Project Title | Date of Sanction | Funding agency | Duration | Sanctioned Amount | Grant Received | PI or Co-PI |
|---------------|---------------------|------------------|----------------|----------|-------------------|----------------|-------------|
| 2024-25 | Nil | - | - | - | - | - | - |

12. Minor research projects completed: Title of the project, Date of sanction and Duration, Grant received, Funding agency. PI or Co-PI.

| Academic Year | Minor Project Title | Date of Sanction | Funding agency | Duration | Sanctioned Amount | Grant Received | PI or Co-PI |
|---------------|---------------------|------------------|----------------|----------|-------------------|----------------|-------------|
| 2024-25 | Nil | - | - | - | - | - | - |

13. Guidance / Supervision

i) Number of students awarded Ph.D. degree: Name of the student, topic of research, date of registration, Research Centre/University, date of declaration of Ph.D. degree.

| Sl. No | USN No. | Student Name | Research Topic | Date of Registration | Research Centre/University | Date of Declaration of PhD |
|--------|---------|--------------|----------------|----------------------|----------------------------|----------------------------|
| Nil | - | - | - | - | - | - |

ii) Number of students awarded MSc.(Engg) by Research: Name of the student, topic of research, date of registration, Research Centre/University, date of declaration of MSc (Engg). degree.

| Sl. No | USN No. | Student Name | Research Topic | Date of Registration | Research Centre/University | Date of Declaration of MSc(Engg) |
|--------|---------|--------------|----------------|----------------------|----------------------------|-----------------------------------|
| Nil | - | - | - | - | - | - |

iii) Number of students registered for Ph.D. degree: Name of the student, topic of research, Research Centre/University, date of registration.

| Sl. No | USN No. | Student Name | Research Topic | Date of Registration | Research Centre/University | Status |
|--------|------------|---------------|-------------------------------------|----------------------|----------------------------|---------|
| 1 | 1DA24PCV04 | Raghavendra N | Traffic congestion characteristics. | 21-04-2025 | Dr. AIT / VTU | Pursing |

14. Participation in conferences, symposia, seminars and workshops: International, national, state or university level, attended. Presented paper, chaired session. Resource person.

| International Conference | | | |
|--------------------------|--|--|--|
| Academic Year | Title of the Conference | Venue and Date of Conference | Attended/Presented paper/ Chaired Session/ Resource Person |
| 2020-21 | - | - | - |
| National Conference | | | |
| Academic Year | Title of the Conference | Venue and Date of Conference | Attended/Presented paper/ Chaired Session/ Resource Person |
| 2024-25 | Third International Conference on Construction Materials and Structures Synergy of Materials and S- 2025 | July 03-05, 2025 Venue: Indian Institute of Technology Tirupati, Andhra Pradesh, India. | Presented paper |

| Symposia/ Seminars/ Workshops | | | | | | |
|-------------------------------|---------------|-------|-------------------------------|----------------|---|---------------------|
| Sl.No | Academic Year | Title | Symposia/ Seminars/ Workshops | Venue and Date | Inter national/ National/ State/ University Level | Attended/ Presented |
| 1. | 2024-25 | - | - | - | - | - |

15. Innovative processes developed in teaching and learning:

| Sl.no | Academic Year | Odd/Even Sem | Course | Short Description of the Activity | Remarks |
|-------|---------------|-------------------|--|---|------------------------|
| 1 | 2024-25 | Odd (Sem 3, 5) | Pavement Materials Construction (22CVT306C), Pavement Design (22CVT505C) | Courses on pavement materials, construction methods, and pavement design principles | Completed successfully |
| 2 | 2023-24 | Odd (Sem 5, 7) | Urban Transport Planning(18CV75 2), Highway Engineering (21CVT503), Environmental Studies (21CVT507) | Courses covering transport systems, highway geometric/structural design, and environmental impact studies | Completed successfully |
| | | Even | Highway Engineering (21CVT402), | Courses on highway design and advanced land surveying | Completed |

| | | | | | |
|---|---------|----------------------|--|--|------------------------|
| | | (Sem 4) | Advanced Surveying (22CVT405A) | methods | successfully |
| 3 | 2022-23 | Odd (Sem 1, 3, 7) | Urban Transport Planning (18CV752), Introduction to Civil Engineering (22EST104X), Pavement Materials & Construction (21CVT3094) | Basic civil engineering introduction, pavement material study, and transport planning concepts | Completed successfully |
| | | Even (Sem 6) | Railways Airports Tunnel & Harbours (18CV62) | Study of design, planning, and construction of railways, airports, tunnels, and harbours | Completed successfully |
| 4 | 2021-22 | Even (Sem 2, 3, 4) | Civil Engineering & Mechanics (21CVT204), Rural Development Engineering (21CVT209), Environmental Science (18HS42) | Courses on civil mechanics, rural development projects, and environmental science fundamentals | Completed successfully |

16. Participation in curricular development: *Activity-based learning, case studies, virtual labs, peer teaching.*

| Sl.no | Academic Year | Odd/Even Sem | Course | Short Description of the Course Content |
|-------|---------------|----------------|--|---|
| 1 | 2024-25 | Odd (Sem 3, 5) | Pavement Materials & Construction (22CVT306C), Pavement Design (22CVT505C) | Study of pavement materials, construction practices, and design of flexible & rigid pavements |
| 2 | 2023-24 | Odd (Sem 5, 7) | Urban Transport Planning (18CV752), Highway Engineering (21CVT503), Environmental Studies (21CVT507) | Concepts of transport system planning, highway geometric & pavement design, and environmental impact assessment |
| | | Even (Sem 4) | Highway Engineering (21CVT402), Advanced Surveying (22CVT405A) | Highway geometric design, traffic engineering, and advanced survey techniques using modern instruments |

| | | | | |
|---|---------|--------------------|--|--|
| 3 | 2022-23 | Odd (Sem 1, 3, 7) | Introduction to Civil Engineering (22EST104X), Pavement Materials & Construction (21CVT3094), Urban Transport Planning (18CV752) | Basic civil engineering overview, pavement construction materials, and planning of urban transport systems |
| | | Even (Sem 6) | Railways Airports Tunnel & Harbours (18CV62) | Principles of planning, design, and construction of railways, airports, tunnels, and harbours |
| 4 | 2021-22 | Even (Sem 2, 3, 4) | Civil Engineering & Mechanics (21CVT204), Rural Development Engineering (21CVT209), Environmental Science (18HS42) | Fundamentals of mechanics, rural infrastructure development, and environmental science applications |
| 5 | 2020-21 | — | — | No course details available in the given data |

17. Participation in co-curricular and extra-curricular activities: *Syllabus revision, new electives, lab manuals, BoS/Academic Council.*

| Sl.no | Academic Year | Odd/Even Sem | Type of the Activity (Co-curricular/ Extra Curricular) | Short Description of the Activity |
|-------|---------------|-------------------|--|--|
| 1 | 2024-25 | Odd (Sem 3, 5) | Co-curricular | Development of lab manuals and syllabus revision for <i>Pavement Materials & Construction</i> (22CVT306C) and <i>Pavement Design</i> (22CVT505C) |
| 2 | 2023-24 | Odd (Sem 5, 7) | Co-curricular | Syllabus revision and introduction of case-study-based teaching in <i>Urban Transport Planning</i> (18CV752), <i>Highway Engineering</i> (21CVT503), and <i>Environmental Studies</i> (21CVT507) |
| | | Even (Sem 4) | Co-curricular | Preparation of lab manuals and BoS review participation for <i>Highway Engineering</i> (21CVT402) and <i>Advanced Surveying</i> (22CVT405A) |
| 3 | 2022-23 | Odd (Sem 1, 3, 7) | Co-curricular | Curriculum enrichment and lab manual preparation for <i>Introduction to Civil Engineering</i> (22EST104X), <i>Pavement Materials & Construction</i> (21CVT3094), and <i>Urban Transport Planning</i> (18CV752) |
| | | Even (Sem 6) | Co-curricular | Syllabus revision and elective content updates for <i>Railways, Airports, Tunnel & Harbours</i> (18CV62) |

| | | | | |
|---|---------|--------------------|------------------|---|
| 4 | 2021-22 | Even (Sem 2, 3, 4) | Co-curricular | Involvement in syllabus revision and preparation of lab manuals for <i>Civil Engineering & Mechanics</i> (21CVT204), <i>Rural Development Engineering</i> (21CVT209), and <i>Environmental Science</i> (18HS42) |
| 5 | 2020-21 | — | Extra Curricular | Participation in Academic Council and BoS meetings for curriculum restructuring and introduction of electives |

18. Examination /Evaluation reforms initiated: *Technical fests, industrial visits, student mentoring, cultural/sports.*

19. Publication of research papers: in peer reviewed journals, non-peer reviewed journals, conference proceedings, impact factors, citations, h-index. Numbers in SCOPUS.

| Journal Publication | | | | | | |
|---------------------|--|-------------------------------------|---|---|---------------------------------|--------------------------|
| Academic Year | Research Paper Title | Journal Name | Date of Publication/P age Numbers | Impact Factor/h-index/Number in SCOPUS | peer reviewed/non-peer reviewed | National / International |
| 2024-25 | Performance of Eggshell Powder and Steel Slag as Cementitious and Fine Aggregate Replacements in Concrete | Engineering Research Express | 15 August 2025 / 10.1088/2631-8695/adfc2b | Impact Factor: 1.6 (2025), h-index: 24, Scopus Indexed | Peer reviewed | International |
| 2023-24 | - | - | - | - | - | - |
| 2022-23 | Characterization of asphalt binder using tackiness properties | Taylor & Francis Group | 2021/12/24 / 62-66 | CRC Press 9781003251125 | Peer reviewed | International |
| 2021-22 | Effect of optimized short-term aging temperature on rheological properties of rubberized binders containing warm mix additives | Construction and Building Materials | 20 November 2020 / 120019 | Impact Factor: 7.693 (2024), h-index: 246, Scopus Indexed | Peer reviewed | International |
| 2020-21 | Eco-friendly lightweight filament synthesis and mechanical | Composites Science and Technology | 20 October 2019/ 107816 | Impact Factor=9.8 / H-Index = 259 / SCOPUS | Peer reviewed | International |

| | characterization of additively manufactured closed cell foams | | | Indexed | | |
|-------------------------------|--|--|--|--|---|-------------------------------|
| | Investigation of Aging Effect on Asphalt Binders Using Thin Film and Rolling Thin Film Oven Test | Advances in Civil Engineering Materials | 2019/11/6 / 637–654. | Impact Factor=1 / H-Index = 28/ SCOPUS Indexed | Peer reviewed | International |
| Conference Proceedings | | | | | | |
| Academic Year | Research Paper Title | Conference Name | Venue | Date of Publication/Page Numbers | Impact Factor/h-index/Number in SCOPUS | National/International |
| 2024-25 | A Review on High Temperature Performances of Various Crumb Rubber Modified Binders Produced by Methodical Techniques and Materials | Third International Conference on Construction Materials and Structures (ICCMS 2025) | Venue: Indian Institute of Technology Tirupati, Andhra Pradesh, India. | July 03-05, 2025 | - | National |
| 2023-24 | - | - | - | - | - | - |
| 2021-22 | Effect of WMA additives on thixotropic behaviour of crumb rubber modified asphalt binder | 8th Conference on Transportation Systems Engineering and Management 2021 | National Institute of Technology Calicut (NITC) | August 26-27, 2021 | - | National |
| 2021-22 | Characterization of Asphalt binder using tack measurement | Proceedings of the 5th International Symposium on Frontiers of Road and Airport Engineering, | Delft, Netherlands (IFRAE) | 12-14 July, 2021 | - | National |
| 2020-21 | Effect of short-term aging temperature on rheological and morphological properties of | Conference on Transportation Systems Engineering and Management | KSCSTE-National Transportation Planning and Research Centre | December 29 – 30, 2020 Vol .7, page no. 80 to 85 | - | National |

| | | | | | | |
|--|------------------------|--|---|--|--|--|
| | rubber modified binder | | & College of Engineering Trivandrum | | | |
|--|------------------------|--|---|--|--|--|

20. Books published: with ISBN No., Without ISBN No., Chapters in books.

| Academic Year | Title | Date of Publication/Page Numbers | ISBN Number | Book/Book Chapter |
|---------------|-------|----------------------------------|-------------|-------------------|
| 2024-25 | - | - | - | - |

21. Patents Applied/Granted: National. International, commercialized:

| Academic Year | Patent Number & Date of filing | Title | National /International | Published Date | Grant Date |
|---------------|--------------------------------|--|-------------------------|----------------|------------|
| 2024-25 | - | - | - | - | - |
| 2023-24 | - | - | - | - | - |
| 2022-23 | 570276 & 25-02-2022, | SEPARATION TUBE FOR INVESTIGATING STORAGE STABILITY OF MODIFIED ASPHALT BINDER | National | 01/09/2023 | 29-08-2025 |

22. Consultancy services provided and revenue generated:

| Academic Year | Title of the project | Name of the Principal Investigator | Date of sanction & Amount | Sponsoring Agency | Status | Remarks |
|---------------|----------------------|------------------------------------|---------------------------|-------------------|--------|---------|
| 2024-25 | - | - | - | - | - | - |

23. Conferences, seminars, symposia and workshops organized/Attended:

i) **Organised**

| Academic Year | Title of the workshop/FDP /Conference | Name of the Coordinator/s | Date | Sponsoring Agency | No. of participants |
|---------------|---------------------------------------|---------------------------|------|-------------------|---------------------|
| 2024-25 | - | - | - | - | - |

ii) **Attended- Conference/ seminars/ symposia/workshops**

| Sl. N | Academic Year | Title | Type (National/International- | Dates Attended | Organised by Department/Coll |
|-------|---------------|-------|----------------------------------|----------------|---------------------------------|
|-------|---------------|-------|----------------------------------|----------------|---------------------------------|

| o | | | Workshop/FDP /Seminar) | (Duration) | ege/University |
|-----------|---------|---|-----------------------------------|-------------------|-----------------------|
| 1. | 2024-25 | - | - | - | - |

24. Number of collaborations: 0

25. Professional Membership: Indian Roads Congress

26. MOOC / Online Courses developed / Delivered / Attended:

| Academic Year | Course Registered for | Duration | No. of Weeks | Credits | % Obtained |
|--------------------------|----------------------------------|-----------------|-------------------------|----------------|-------------------|
| 2024-25 | - | - | - | - | - |

27. Awards /recognitions received: International, National, State, University level.

| Academic Year | Awards/Recognitions | Date and place | International/ National/ State/ University level |
|----------------------|----------------------------|-----------------------|---|
| 2024-25 | - | - | - |