Name : Dr.S.PRADEEPKUMAR

Designation : Assistant Professor Department : Civil Engineering

Mail I'd : <u>pradeepkumar_s@vnrvjiet.in</u>

Experience (in years): 9.1 Teaching: 4.8 Research: 3.5 Others (if any, specify): 01

1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	B.E.,	2009	Civil & Structural Engineering
2	M.Tech.	2012	Environmental Engineering
3	Ph.D	2018	Environmental Engineering

2. Teaching and Learning:

2.1. Teaching Interests:

- Environmental Engineering I & II,
- Environmental Science and Engineering,
- Solid Waste Management,
- Hazardous Waste Management,
- Waste to Energy,
- Intelligent Waste Management and Recycling System,
- Environmental Impact Assessment,
- Air Pollution Control Engineering,
- Environmental Geo-technology,
- Environmental Microbiology,
- Renewable Energy Technologies,
- Environmental Health & Psychology.

2.2. Novel Teaching & Learning Techniques adopted:

- PPT,
- WIT & WIL,
- Creative and Awareness Videos, and
- Case Studies.

2.3. Involvement in curriculum updating / Design: Involved in developing curriculum for the courses in R-18 & R-19 such as:

- Green Buildings,
- Air Pollution Control,
- Environment Impact Assessment,
- Environmental Laws and Policies,
- Rural Water Supply & Sanitation,
- Solid waste management,
- Hazardous waste management,



- Waste to Energy and
- Intelligent waste management and recycling system.

3. Co-curricular and Extra-Curricular Activities

- **3.1. Interests and Hobbies:** Playing games and Reading books.
- 3.2. CCA/ECA Organized: NIL
- 3.3. CCA/ECA participated: NIL
- **3.4. Counseling and Mentoring Activity:** Mentor for 2nd and 3rd year students of CE (20 numbers)
- 3.5. Committees involved in:

Department level: Environmental Engineering Lab In-charge Technical Seminar and

Comprehensive viva.

Institute Level: NIL

4. Conference / Workshop / Seminar / Guest Lectures :

4.1 Conducted: 01

WORKSHOPS Business Opportunities In Waste Management (BOWM-2019).

ORGANISED A National Level Workshop organized by Department of Civil Engineering, October VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad

3rd & 4th, 2019 No. of Participants - 80

4.2 Attended:

INTERNATIONAL / NATIONAL FDP / WORKSHOPS / STTPs ATTENDED

- Participated through online in Expert Lecture on "Wastewater Treatment and Energy Conservation" by Dr.D.N.Ravi Shankar, Director (Technical) ENEWATE on 19th May 2021, Organized by DCE, VNRVJIET.
- Participated through online in Virtual Faculty Training Program (VFTP 2K20) in "BlockChain Technology (BCT)", organized by Competency Development Centre, Computer Society of India and Dept. of CSE, VNRVJIET, Hyderabad, 28th Sep 3rd Oct 2020.

Participated through online in Three day Webinar on "Waste to Energy", Sponsored by TEQIP-III, organized by Centre for Environment, IST, JNTUH, 19–21st Sep -2020.

Participated through online in Webinar on "Green Building with Integrated Design Approach", organized by IEI Faridabad Local Centre, 29-08-2020.

Participated through online in Webinar on "Analysis of Heavy Metal Pollution on soil using Machine Learning Techniques" organized by Dept. of Civil Engg., JCT College of Engineering and Technology, Coimbatore-641105, 19-08-2020.

Participated through online in Webinar on Advanced Wastewater Treatment Systems and Conservation of Water, organized by Department of Civil Engineering, VVCE, Mysuru, 17th August 2020.

Participated through online in Webinar on "Preparing Oneself for Industry 4.O" organized by Dept. of Mechanical Engg., VNRVJIET, Hyderabad, 13-08-2020.

Participated through online in One Week Online International FDP on Latest Trends In Engineering, Science and Technology: Nanomaterials (LIET: Nanomaterials), organized by Department of Chemistry, S&H, Lendi Institute of Engineering and Technology, Visakhapatnam-Vizianagaram Rd., 10th -15th August, 2020,

Participated through online in "Online webinar on Handling, Management and Recycling of Biomedical waste" organized by Dept. of Civil Engg., Vignana Bharathi Institute of Tech., 4th July 2020.

Participated through online in "5 Days Online Webinar series on "Geo-Environmental Engineering" organized by Dept. of Civil Engg., Sri Ramakrishna Engineering College, Coimbatore, 29-3rd July, 2020.

Participated through online in "Online FDP on "Application of Software Tools in Research Methodology" organized by Amity Business School, Amity University, Kolkata, 27-1st July 2020.

Participated through online in "3 Days Online FDP on "Recent Trends in Environmental Engineering" organized by Dept. of Civil Engg., Mohamed Sathak A J College of Engineering, 4-6 June 2020.

Participated through online in 04 Days International Training on "Bamboo for Rural Livelihood" organized by NIRDPR-NERC, Guwahati, from 26th to 29th May, 2020.

Participated through online in "Art of Writing Research / Review Articles for Publishing in peer Reviewed Journals" organized by MES College Erumely, Kottayam, Kerala, India, on 25th May 2020.

Participated through online in E-Expert Talk "Environment Friendly & Sustainable Building Materials - An Overview" organized by KDK College of Engineering, Nagpur in association with Indian Concrete Institute, Nagpur Centre and ACC Cement, on 23rd May 2020.

Participated through online in 4-Day FDP on "EIA, Drinking Water Supply, Wastewater Management and E-Waste Management" organized by Dept. of Civil Engg., GMRIT, Telangana, from 20th to 23rd May 2020.

Participated through online in 02 Days Webinar on "Simplifying Literature Review & Methods to write a Review Article" organized by Voice of Environment, from 20th to 21st May 2020.

Participated through online in Online webinar on "Recent Advancements, Challenges and Opportunity for Engineers in Environment" organized by KPRIET - Environmental Engineers Association (EEA) – Coimbatore, from 19th to 20th May 2020.

Participated through online in "Faecal Sludge Management; Indian Scenario & Way Forward" organized by KDK College of Engineering, Nagpur, with IWWA, Nagpur Centre & ICI, Nagpur Centre and ACC Cement, on 19th May 2020.

Participated through online in "Artificial Intelligence, Applications And Employment Generation: A Global Perspective" organized by Institute of Management Studies, Noida, on 17th May 2020.

Participated through online in Online webinar on "How to Prepare for the Patent Agent Examination" organized by Lawctopus.com and NoticeBard.com, from 16th to 17th May, 2020.

Participated through online in Workshop on "Writing Literature Review Article" organized by Manuscriptpedia and Cape Institute of Technology, Kanyakumari on 16th May, 2020.

Participated through online in National Virtual Workshop on "Scientific Article Writing" organized by Dept. of Civil Engg., Vignana Bharathi Institute of Technology, on 12th May 2020.

Participated through online in National webinar on "Environmental Management of River Basin" organized by Dr.N.G.P. Institute of Technology, Coimbatore, Dept. of Civil Engg, with Indian Water Works Association, Mumbai, on 11 May 2020.

Participated through online in National webinar on "Patent Drafting and Processing with Importance of Trademark and Copyright" organized by Hexacube & Journal of Advanced Engineering Research, from 08th to 09th May 2020.

Participated through online in National webinar on "Domestic Wastewater Management" organized by Dept. of Civil Engg, Hindustan College of Engg & Tech, Coimbatore, on May 4th 2020.

Participated through online in National webinar on "IP Strategy and Valuation and Patent Protection" organized by Lawctopus, on April 26th, 2020.

Participated through online in 05 days Virtual Training Sessions on "Best Practices in Environmental Sustainability" organized by CII Godrej GBC, Hyderabad, from 24th to 29th April 2020.

Participated in 5 days Faculty Development Programme on "DESIGN THINKING" organized by Centre for Presencing and Design Thinking (CPADT), VNR Vignana Jyothi Institute of Engineering and Technology (VNRVJIET) from 20th to 25th January, 2020.

- Participated one-week workshop on "LEARNING BY DOING ON PYTHON" organized by CDC with Department of Computer Science Engineering, VNR Vignana Jyothi Institute of Engineering and Technology from 18th to 23rd November, 2019.
- Participated one-week Short Term Training Programme (STTP) on "COASTAL AND OFFSHORE STRUCTURE" organized by Department of Civil Engineering, Pondicherry Engineering College, Puducherry-605014 from 5th to 9th December, 2016 under the sponsorship of Quality Improvement Programme (QIP), AICTE, Govt. of India.

Participated one-week Short Term Training Programme (STTP) on "RECENT TRENDS IN INDUSTRIAL EFFLUENT TREATMENT (RTIET – 16)" sponsored by TEQIP-II organised by the Department of Chemical Engineering, Pondicherry Engineering College, Puducherry-14, from 20th – 25th June 2016.

- Participated "25th IPHE National Convention on Environment Engineering & 3rd International Conference and Exhibition ENVISION 2025" held between 12th to 14th March 2014, jointly organised by IPHE, Chennai Puducherry Regional Centre and CLRI at Central Leather Research Institute, Adyar, Chennai -20.
- Participated in one-day workshop on "Environmental Research Programme for Sustainable Development" conducted by National Institute of Technical Teachers Training and Research (NITTTR), Chennai on 27th July 2013.
- Participated in National Workshop on "Environment and Climate Modelling" held at SRM University, organized by Department of civil Engineering in association with Indian Meteorological Department (IMD), Chennai and Tamil Nadu Pollution Control Board (TNPCB) on 20 & 21st January 2012.
- Participated two days First National students' conference on "RIVER BASIN PLANNING" (BRiP-2011), for Ganga River, November 4-5, 2011 at Indian Institute of Technology, Kanpur, Organized by Seven IITs.

5. Academic Contribution and Research & Consultancy

5.1. Invited Lectures: 02

RESOURCE PERSON IN WORKSHOP

 $24^{th} - 28^{th}$ of **Lecture Title - Self-Healing Concrete**

February 2020 Recent Advanced Materials for Sustainable Development in Construction

TKR Engineering College, Hyderabad.

No. of Days – 05; Presented Date - 25/02/2020; No. of Participants - 100

15th September Lecture Title - E-waste Management and Treatment

2020 Guest Lecture

> Sri Manakula Vinayagar Engineering College, Pondicherry, India. No. of Days – 01; Presented Date – 15/09/2020; No. of Participants - 65

5.2. Articles / Chapters published in Books: NIL

5.3. Books published as single author or as editor: 01

BOOK PUBLICATION

18th March 2020 ADVANCED CONCRETE TECHNOLOGY

Dr.S.Kandasamy, Dr.S.Syed Ibrahim, and Dr.S.Pradeepkumar

Publisher: Notion Press, Book Length: 196

ISBN-10 1648690785; ISBN-13 978-1648690785

https://www.amazon.in/dp/1648690785/ref=cm sw r wa apa i znfEEbSV036AB

5.4. Projects Guided:

a) UG: 27 b) PG: NIL

5.5. Research Interests:

- Solid and Hazardous Waste Management,
- Environmental Microbiology,
- Waste to energy,
- Intelligent waste management system,
- Environmental Health & Psychology.

5.6. Ph.D students:

a) Enrolled: NIL b) Submitted: NIL c) Awarded: NIL

5.7. Papers published in reviewed journals:

INTERNATIONAL JOURNALS

2020 S. Syed Ibrahim, S. Kandasamy, S. Pradeepkumar et. al., Effect of discrete steel

fibres on strength and ductility of FRP laminated RC beams, Ain Shams Engineering

Journal, (Article in Press) (SCIE & SCOPUS Indexed).

- S. Syed Ibrahim, S. Kandasamy and **S. Pradeepkumar**, "Performance evaluation of hybrid FRC using adaptive neuro-fuzzy technique", International Journal of Civil Engineering and Technology (IJCIET), Volume 11, Issue 2, pp. 164-173, ISSN Print: 0976-6308 and ISSN Online: 0976-6316, February 2020. (**Google Scholar**).
- R.SaravaneVelan, S.Govindaradjane, **S.Pradeepkumar**, "Adsorption of Phosphate from Surfactant Industrial Wastewater on Teak Leaves Activated Carbon A Kinetic Study" International Journal of Modern Trends in Engineering and Research (IJMTER) Volume 04, Issue 9, pp: 218-232, September—2017, ISSN (Online):2349—9745; ISSN (Print):2393-8161, DOI:10.21884/IJMTER.2017.4300.OL5JV. (**Google Scholar**).
 - **S.Pradeepkumar**, S.Govindarajane, T.Sundararajan, "A Review on Socio-Economic Scenario of E-waste in India Compared with Developed and Developing Countries", International Journal of Emerging Technology and Advanced Engineering Website: www.ijetae.com (ISSN 2250-2459, ISO 9001:2008 Certified Journal, Volume 7, Issue 09, September 2017, (UGC APPROVED).
 - **S.Pradeepkumar**, S.Govindarajane, "A Comprehensive Review on Parameters Influencing Bioleaching of Metals from E-Waste", International Journal of Current Engineering and Scientific Research (IJCESR), ISSN (PRINT): 2393-8374, (ONLINE): 2394-0697, VOLUME-4, ISSUE-8, pp: 63-75, 2017, (UGC APPROVED, Google Scholar).
 - R.SaravaneVelan, S.Govindaradjane, **S.Pradeepkumar**, "Studies on teak leaves (*Tectona Grandis*) as low cost adsorbent for the treatment of detergent industrial wastewater", International Journal of Scientific Engineering and Research (IJSER), ISSN (Online): 2347-3878, Vol.5, Issue 5, pp. 110-115, May 2017. (UGC APPROVED, Google Scholar).
- K.Srinivasan, S.Govindaradjane, **S.Pradeepkumar**, "A study on the influence of Deepavali festival level in Puducherry town, India", at International Journal of Research in Engineering, Science and Technologies, (IJRESTs), ISSN: 2395 -6453 (online), Vol 1, Issue 11, pp 86 94, 2016. (**Google Scholar**).
- S. Pradeepkumar, S. Govindaradjane, T. Sundararajan (2013), "Recovery of copper from printed circuit boards through electrolytic process A case study", International Journal of Engineering Research and Applications (IJERA), ISSN: 2248-9622 www.ijera.com Vol. 3, Issue 2, March -April 2013, pg no. 469-473. (UGC APPROVED, Google Scholar).
 - **S. Pradeepkumar**, S. Govindaradjane, T. Sundararajan (2013), "Management Strategies for Various E-Waste Generators in Puducherry Region A Case Study", International Journal of Emerging Technology and Advanced Engineering, (ISSN 2250-2459, ISO 9001:2008 Certified Journal, Volume 3, Issue 1, January 2013), pg. No. 546-551. (UGC APPROVED).

5.8. Papers presented at National / International Conferences:

INTERNATIONAL CONFERENCES

2021

S.Pradeepkumar, S.Govindarajane, and T.Sundararajan, "Studies on Bioleaching and Recovery of Metals from Printed Circuit Boards using Acidophile and Alkaliphile Bacteria" at International Conference on Sustainable Biowaste Management 2020 (SBM2020) organized by Sino-Forest Applied Research Centre for Pearl River Delta Environment (ARCPE), **Hong Kong Baptist University**, going to be held from 12 -14 Apr 2021.

2016

S.Pradeepkumar, S.Govindarajane, and T.Sundararajan, "Parameters influencing bioleaching of metals from E-waste: A Review" at International Conference on Emerging and Sustainable Technologies for Infrastructure System (ESTIS 2016) held from 22nd – 23rd April 2016. Organized by Department of Civil Engineering, Amrita Vishwa Vidyapeetham, Coimbatore-641112.

K.Srinivasan, S.Govindaradjane, **S.Pradeepkumar**, "Characterization and analysis of ambient noise level in Puducherry town, India", International Conference on Advances in Civil Engineering and Sustainable Construction" – ACESC'16 held from 30th March – 1st April 2016. Organized by Department of Civil Engineering, SRM University, Ramapuram Campus, Chennai - 89.

The Same paper has been published in "International Union of Laboratories and Experts in Construction Materials, Systems and Structure", (RILEM), pp: 158-165.

https://www.rilem.net/gene/main.php?base=500218&id_publication=479 https://www.rilem.net/publication/publication/479?id_papier=11011

K.Srinivasan, S.Govindaradjane, **S.Pradeepkumar**, "The effect of road traffic noise pollution using noise indices in India: A brief review", at 2nd International Conference on Environment and Ecology ICEE 2016 in Bharathiyar University, Coimbatore, In association with International Foundation for Environment and Ecology, Kolkata and Collaborated with Confederation of Indian University, New Delhi, was held on 7-8-9 March 2016.

P.PrasannaNatesh, S.Govindarajane, **S.Pradeepkumar**, "Methodological Review on Recovery of Gold from E-waste in India" at International Conference on Science, Technology, Engineering and Management (ICONSTEM 2K15) in Jeppiaar Engineering College, held on 26th and 27th of March 2015, Vol-1.

2012

S.Pradeepkumar, S.Govindarajane, T.Sundararajan, "E-waste management strategies for IT-Industries in Puducherry region" in The International conference on Renewable Energy Utilization (ICREU-2012) at Coimbatore Institute of Technology, Coimbatore and jointly organized with Oklahoma State University, USA held on 4-6th, Jan-12.

S.Pradeepkumar, S.Govindarajane, T.Sundararajan, "Performance Study of a HUASB Reactor for treating the Dairy Wastewater" in The 2nd International Conference on Advances in Mechanical, Manufacturing and building Sciences (ICAMB), at Vellore Institute of Technology University, Vellore, held from 9-11th, January, 2012.

RESEARCH PUBLICATIONS

NATIONAL CONFERENCES

2018

Badhrinadhan.R, Govindaradjane.S, **Pradeepkumar.S**, "Studies on Bio-Degradation of Plastic Waste and Its Biochemical Property by Using Mealworm (*Tenebriomolitor*)", at two-day UGC-SAP sponsored National Seminar on "Sustainable Technologies for Intelligent Water and Environmental Management", held on 22 & 23 March 2018, organized by Department of Civil Engineering, Annamalai University.

2016

DharamaPrakash.M, Logaranjan.S, Varunraj.B, S.Govindaradjane, T.Sundararajan, **Pradeepkumar.S**, SaravanaVelan.R, "Studies on low cost adsorbent (*AzardirachtaIndica*) for dairy waste water treatment", at National Conference on Hydraulics, Water Resources, Coastal and Environmental Engineering (HYWACE 2016), held on 6th October 2016, organized by Department of Civil Engineering, Pondicherry Engineering College, Puducherry and funded by TEQIP-II.

S.Pradeepkumar, S.Govindarajane, T.Sundararajan, "A comparative study on E-waste management practices in developed and developing countries", at National Conference on Hydraulics, Water Resources, Coastal and Environmental Engineering (HYWACE 2016), held on 6th October 2016, organized by Department of Civil Engineering, Pondicherry Engineering College, Puducherry and funded by TEQIP-II.

S.Pradeepkumar, S.Govindarajane, T.Sundararajan, "Physical parameters influencing bioleaching of metals from E-waste: A Review" at National Conference on Energy and Environment (NCEE 2016), held from 16th to 17th September 2016, Jointly Organized by Indian Institute of Technology Madras (IITM) and The Coimbatore District Small Industries Association (CODISSIA) at CODISSIA trade fair complex, Coimbatore.

K.Srinivasan, S.Govindaradjane, **S.Pradeepkumar**, "A study on the influence of Deepavali festival level in Puducherry town, India", at National Conference on "Sustainable Modern Advances in Research and Technology (SMART-2016) in Dr.Paul's Engineering College held on $23^{\text{rd}} - 24^{\text{th}}$ March 2016.

S.Pradeepkumar, S.Govindarajane, T.Sundararajan, "Impact of climate change in the Indian sub-continent: Overall scenario and challenges ahead" at 26th Indian Engineering Congress of The Institute of Engineers (India) in Bangalore held on 15-18th December, 2011.

5.9. Sponsored research Projects: NIL

5.10 Consultancy Projects: NIL

5.11 Patents:

PATENTS

Publication Date					

ublication Date	
16/08/2019	Design for Earthquake Load Modelling using Critical Excitation Method. Filed & Published, (App. No. 201941031691 A)
18/10/2019	Recovery process of metals from printed circuit boards (PCBs) using <i>Acidiphilium acidophilium</i> bacteria. Filed & Published, (App. No. 201941040530 A)
29/11/2019	Recovery Process of Metals from Printed Circuit Boards (PCBs) using <i>Acidithiobacillus ferrooxidans</i> Bacteria. Filed & Published, (App. No. 201941042768 A)
30/01/2020	Recovery Process of Metals from Printed Circuit Boards (PCBs) using <i>Acidithiobacillus thiooxidans</i> Bacteria. Filed & Published, (App. No. 202041002562 A)
24/01/2020	Recovery Process of Metals from Printed Circuit Boards (PCBs) using <i>Thiobacillus Novellus</i> Bacteria. Filed & Published, (App. No. 202041002560 A)
31/01/2020	Recovery Process of Metals from Printed Circuit Boards (PCBs) using <i>N. Bacteria</i> . Filed & Published, (App. No. 202041002563 A)

6. Awards / Honours received:

Jan – June 2010 Gold Medal in Conversational English, Certified by SBIOA, Chennai, India.

7. Motto: Trying to be a Rationalist and Trying to make students to think Rationally.