

Curriculum vitae

Dr. Pawan Kumar



☎: +91-9919998425.

✉: drpwnkrp@gmail.com, pawankumar@siet.in

ORCID ID: <https://orcid.org/0000-0002-0902-328X>.

Researcher ID: <https://ResearchID.co/rid40791>

Research Gate: <https://www.researchgate.net/profile/Pawan-Kumar-171>

- Recipient of “*Young Researcher Award-2023*” by Institute of Scholars (INSC) International Publishers (An ISO 9001:2015 Certified & Registered under MSME & Corporate Affairs, Govt. of India) with Premium Lifetime member with Membership ID **20232YRA267**, <https://www.insc.in/awards/singleinfo.php?tid=8155>.
- Recipient of “*Noble Laureate Dr. CV Raman National Science Day Award-2023*” during the National Science Day 2023 celebrations on February 28, 2023 by Art of Giving Charitable Trust, India (NGO Darpan, NITI Ayog, Govt. of India, Regd. No. TN/2018/0214207) in association with inspire institute of technology & management (associated to AIITE, New Delhi, India, Registered with MSME, Govt. of India), Certificate No. **CVRNSD202303**.

Area of interest

Geotechnical Engineering: Applied and advanced soil mechanics, Advanced foundation Engineering, Foundation analysis, and design, Geotechnical site investigation, Sub-surface investigation and exploration, Sustainable geotechniques.

Geoenvironmental Engineering: Heavy metals contamination, Remediation of heavy metals contaminated soil, Phytoremediation, Human Health Risk Assessment, Sustainable Waste Management, Biomass Utilization study.

Academic details

S. No.	Qualifications	School/College	Board/University	YoP	%/ CGPA
1	Ph.D. (Civil Engineering)	MNNIT Allahabad, Prayagraj-211004	MNNIT Allahabad, Prayagraj, U.P.	Awarded 2022	8.75
2	B. Tech. (Civil Engineering)	BBDNITM Lucknow, U.P.	UPTU Lucknow, U.P., India	2013	78.48
3	Intermediate (P.C.M.)	Riyaz IC Ukhaiya Khas Kaushambi, U.P.	Board of High School & Intermediate Education, U.P.	2008	76.60
4	High School (Science)	Riyaz IC Ukhaiya Khas Kaushambi, U.P.	Board of High School & Intermediate Education, U.P.	2006	79.66

1. Ph.D. Thesis (Awarded)

Thesis Title: Phytoremediation of heavy metals contaminated land using *Chrysopogon zizanioides* and potential valorization.

Thesis supervisor: Dr. Vishwajeet Pratap Singh, Assistant Professor, Geotechnical

Engineering Laboratory, Department of Civil Engineering, MNNIT Allahabad, Prayagraj – 211004, U. P., India.

2. B. Tech. Project

Project Title: Design and analysis of a senior secondary high school building as per CBSE norms.

Project supervisor: Prof. Mohd. Shakib Khan, Head, Department of Civil Engineering, BBD National Institute of Technology Lucknow – 227105, U. P., India.

3. B. Tech. Summer industrial training

Company: Geotechnical Engineering Directorate, Research Designs & Standards Organization (RDSO), Lucknow, U. P., India.

Duration: 11 June - 06 July 2012

Project: Triaxial test for earth retaining structures.

4. GATE: Civil Engineering, qualified in 2013, 2016 and 2021.

5. Lifetime member of Institute of Scholar International Publishers with Premium ID 20232YRA267.

Academic work experience

S. No.	Institute	Nature of work	Time period
1	Shambhunath Institute of Engineering and Technology, Jhalwa, Prayagraj-211015, UP	Head & Assistant Professor, Department of Civil Engineering	From 01/09/2022 till today
2	United College of Engineering and Research, Allahabad-211010, UP, India	Lecturer, Department of Civil Engineering	Feb. 2015 to Dec. 2016
3	Abhay Memorial Trust Group of Institutions, Allahabad-212208, UP, India		July 2014 to Feb. 2015
4	Babu Banarasi Das University, Lucknow-227105, UP, India		July 2013 to June 2014

Publications

International Journal (SCI Indexed Journal) (1)

1. **Kumar, P.,** Singh, Vishwajeet P., Tagade, A., & Sawarkar, Ashish N., (2023) “*Thermochemical characterization of post-phytoremediated vetiver (Vetiveria zizanioides (L.) Nash) root and shoot for their prospective bioenergy potential*”, vol. 191, 115964, Industrial Crops & Products, Elsevier (I.F. = 6.5) <https://doi.org/10.1016/j.indcrop.2022.115964>

International Journal (Scopus indexed Journals: Book Chapter) (3)

1. Yadav H., **Kumar, P.,** Singh, V. P. (2019) “*Hazards from the Municipal Solid Waste Dumpsites: A Review*” in Singh H., Garg P., Kaur I. (eds.) Proceedings of the First International Conference on Sustainable Waste Management through Design. ICSWMD 2018. Lecture Notes in Civil Engineering, Springer Nature Switzerland, Vol. 21. pp 336-342, ISBN: 978-3-030-02707-0, https://doi.org/10.1007/978-3-030-02707-0_39.

2. **Kumar, P., & Singh, V. P.** (2021) “*Distribution and Health Risk Assessment of Heavy Metal in Surface Dust in Allahabad Municipality*” in Latha Gali M., & Raghuvver Rao P. (eds.) *Problematic Soils and Geoenvironmental Concerns. Lecture Notes in Civil Engineering*, Springer Nature Singapore, Vol. 88, pp 229-243, ISBN: 978-981-15-6237-2, https://doi.org/10.1007/978-981-15-6237-2_20.
3. **Kumar, P., & Singh, V. P.** (2023) “*The Potential of Chrysopogon zizanioides (L.) Nash in remediation of heavy metal contaminated land - A Review*” in Agnihotri A.K., Reddy, K.R., & Chore H.S. (eds.) *Proceeding of Indian Conference on Geotechnical and Geoenvironmental Engineering (ICGGE) 2021*, Vol. 2, ICGGE 2021. *Lecture Notes in Civil Engineering*, Springer Nature Singapore, Vol. 281, pp 63-74, Springer Nature Singapore, ISBN: 978-981-19-4731-5, https://doi.org/10.1007/978-981-19-4731-5_6.

International conference (4)

1. **Pawan Kumar, Roop Kishor & V. P. Singh** (2020) “*A review on post-remediation value-added utilization of contaminated vetiver plant*”, *International Conference on Energy and Environmental Technologies for Sustainable Development (Chem-Conflux²⁰)*, organized by Department of Chemical Engineering, MNNIT Allahabad, Prayagraj, India during February 14 - 16th, 2020.
2. Roop Kishor, **Pawan Kumar & V. P. Singh** (2020) “*Valorization practices in sustainable utilization of rice husk ash: A review*”, in *proceedings of International Conference on Energy and Environmental Technologies for Sustainable Development (Chem-Conflux²⁰)*, organized by Department of Chemical Engineering, MNNIT Allahabad, Prayagraj, India during February 14 - 16th, 2020.
3. **Pawan Kumar & V. P. Singh** (2020) “*Potential of vetiver grass to uptake heavy metal from contaminated land: A review*”, in *proceedings of International Conference on Biotechnologies Interventions for Societal Development (BioSangam-2020)* organized by Department of Biotechnology, MMNIT Allahabad, Prayagraj, during February 21 - 23rd, 2020, (ISBN- 978-93-80634-53-1).
4. **Pawan Kumar, & V. P. Singh** (2021) “*Study of biomass growth and decontamination potentials of vetiver (Chrysopogon zizanioides) in Pb-contaminated alluvial soil*” *Proceeding of International Conference on Life Sciences and Biotechnology (The 4th ICOLIB)*, towards sustainable development: application of biosciences to improve welfare and quality of life organized by Department of Biology, Faculty of Mathematics and Natural Sciences, University of Jember, Indonesia, held during November 15th-16th, 2021. <https://unej.id/abstractbookicolib2021> (Virtual mode).

National Conferences (3)

1. **Pawan Kumar & V. P. Singh** (2017), “*Geotechnical Aspect for Design of Track Formation System for High-Speed Rail Lines on Alluvial Soil Deposited – A Review*” *Indian Geotechnical Conference 2017 – GeoNEst*, Indian Geotechnical Society Guwahati Chapter (NE) and Indian Institute of Technology Guwahati, Assam, India. http://www.igs.org.in/portal/igc-proceedings/Theme02/Th02_698.pdf.

2. **Pawan Kumar, Roop Kishor & V. P. Singh** (2019) “*Characterization of expansive soils collected from different part of UP & MP India for pavement subgrade*”, Indian Conference on Geotechnical and Geoenvironmental Engineering (ICGGE) 2019, MNNIT Allahabad, Prayagraj, 01 - 02 March, 2019, (ISBN- 978-93-80634-47-0).
3. Roop Kishor, **Pawan Kumar & V. P. Singh** (2019) “*Sustainable improvement of pavement subgrade soil using industrial and agricultural waste materials: A review*”, Indian Conference on Geotechnical and Geoenvironmental Engineering (ICGGE) 2019, MNNIT Allahabad, Prayagraj, 01 – 02 March 2019, (ISBN- 978-93-80634-47-0).

Workshop (1)

1. V. P. Singh & **Pawan Kumar** (2017) “*Potential of vetiver plant (Chrysopogon zizanioides (L.) Nash) in phytoremediation techniques*”, workshop on sustainable Geotechniques, Indian Institute of Technology Kanpur & Indian Geotechnical Society, Kanpur Local Chapter U. P., India.

Teaching subjects

1. Geotechnical Engineering (KCE-501)
2. Surveying and Geomatics (KCE-301)
3. Foundation Design (KOE-064)
4. Design of concrete structures (KCE-601)
5. Digital & Social Media Marketing (KOE-094)
6. B. Tech. Projects (KCE-851)

Certificates (Diploma/Training/Short-term-courses)

S. No.	Course title	Organizer	Duration
1	Limit State Design of Steel Structures (LSDSS-2013)	CED, MNNIT Allahabad	One week (17 – 23 rd Oct. 2013)
2	Project Management & MS Project Software	CED, UCER Prayagraj & Consbull, New Delhi	One week (18 – 26 th Feb. 2016)
3	Foundation Analysis, Design & Construction Technique (FACT-2018)	CED, MNNIT Allahabad & IGS Prayagraj Chapter	Five days (21 – 25 th May 2018)
4	Contaminated Sites: Assessment, Remediation & Risk	CED, MNNIT Allahabad & GIAN by MHRD, Govt. of India	Five days (19 – 23 rd Nov. 2018)
5	Numerical & Optimization Technique (NOT-2019)	CED, MNNIT Allahabad	Five Days (08 – 12 th Nov. 2019)
6	Foundation Analysis, Design & Construction Technique (FACT-2020)	CED, MNNIT Allahabad & IGS Prayagraj Chapter	Five days (20 – 24 th Dec 2021)

7	Software Application for Analysis & Design of Structures (SAADS-2021)	CED, MNNIT Allahabad	Five Days (26 – 30 th July 2021)
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Workshops/Webinars/FDPs

S. No.	Program Title	Type	Organizing Institute	Duration
1	ISTE – STTP on Introduction to Structural Engineering	Workshop	CED, IIT Kharagpur & National Mission on Education through ICT (MHRD), India	30 th Nov 2015 - 9 th Jan 2016
2	Best Possible Uses of Online Education and E-Content Development	Online national workshop	Faculty of Commerce & Research Studies, SSPG College Shahjahanpur UP India	17-19 th June 2020
3	Certificate Course on Intellectual Property Rights	Online IFRDP	Science Research Library, India in association with Art of Giving Charitable Trust India	July 27-28 th , 2020
4	Demystifying literature review techniques	Online Workshop	Koach Scholar, New Delhi	30 th July to 02 nd August 2020
5	Advancement in Building Technologies	Online FDP	CED, Ajay Kumar Garg Engineering College, Ghaziabad with Indian Concrete Institution	10-14 th August 2020
6	Art of Thesis Writing and Academic Publishing	Online Workshop	Koach Scholar, New Delhi,	14-16 th August 2020
7	Recent Advances in Geotechnical Engineering (RAGE-2021)	Online workshop	CED, NIT Hamirpur, HP, India	01-05 th March 2021
8	Vetiver Grass Technology (VGT-2021) theme: Vetiver Grass: “A Sustainable System & Livelihood Solution Amidst these Challenging time	Online International Webinar	Vetiver Center, Central Bicol State University of Agricultural, San Jose, Pili, Camarines Sur, Philippines.	28-29 th , Sept. 2021

9	Advanced Testing Technologies for Geotechnical Investigation	Online Webinar	CED, JUIT, Solan HP, India, with Indian IGS Shimla chapter	16-18 th Oct 2021
10	Sustainable Development and Practices in Geotechnical and Geoenvironmental Engineering	Online FDP	CED, Rajagiri School of Engineering & Technology, Kerala India	12-23 rd Oct 2021
11	Transportation Geotechniques and Materials for Sustainable Infrastructure (TGMSI-2021)	Online FDP	CED and Centre for Transportation Engineering, SK Institute of Technology, Management and Gramothan, Jaipur, India	13-17 th Dec 2021
12	Applications of Artificial Intelligence and Machine Learning in Civil Engineering	Online FDP	Department of Civil Engineering, Vishnu Institute of Technology, Bhimavaram	24 to 29 th Nov., 2022

Technical skills

1. **Software:** Auto CAD, M.S. Office, ETABS, MS-Project, Mendeley
2. **Operating Systems:** Windows 7 & 10.
3. Handheld X-Ray Fluorescence (XRF) Device
4. VOSviewer application tool

Extracurricular activities

- Event coordinator for a one-week training program for B. Tech. students in United College of Engineering and Research (UCER) Naini, Prayagraj.
- Event organizer to visit Indian Institute of Remote Sensing (IIRS), Dehradun, Uttara Khand, during March 2015 & April 2016, along with the lab staff & B. Tech. 3rd year students of UCER Allahabad, for one-week survey camp at DSV, Haridwar, Uttara Khand, to explore the site through Plane Table Surveying, Total Station, Compass, GPS, Auto Level, Dumpy Level, and Theodolite.
- Addressed the valedictory function for a one-week workshop on “**MS Project**” at UCER Naini, Prayagraj.
- Organized short-term course on “Foundation Analysis, Design and Construction Technique (FACT), two times under the supervision of Dr. V. P. Singh, Assistant Professor, CED, MNNIT Allahabad, Prayagraj, U.P., India.

Personal skills and strength

- A good team player and able to work collectively.
- Ability to motivate people and gender sensitivity.
- Committed to work and organization.
- Analytical and logical approach towards works.
- High adaptability, quick learner, sincere & hard working.
- Positive mindset, punctual & honest.

Personal details

Father's Name: Mr. Ram Sajiwan
Date of Birth: 02nd June, 1991
Marital status: Married
Hobbies: Playing Chess, Ludo, Cycling, Rubik's Cube, and Traveling.
Gender: Male
Nationality: Indian
Languages: Hindi and English
Permanent address: Village- Gulam Noor Ka Poora, Post- Karari, Tehsil: Manjhanpur,
District: Kaushambi – 212206, Uttar Pradesh, India.

References

1. Prof. (Dr.) R. K. Srivastava, Professor (Rtd.) Department of Civil Engineering, Motilal Nehru National Institute of Technology Allahabad, Prayagraj-211004.
Email: rksciv23@gmail.com, Mob.: +91-9415216865.
2. Dr. Vishwajeet P. Singh, Assistant Professor, Department of Civil Engineering, Motilal Nehru National Institute of Technology Allahabad, Prayagraj-211004.
Email: yps15783@mnnit.ac.in, yps15783@gmail.com, Mob.: +91-9628574540.

Declaration

I hereby declare, that all information furnished above, is true and correctly describes about me and my qualifications, to the best of my knowledge and belief. I do hope that if I shall get a chance to prove myself, I will enhance the progress and performance of the organization/institute.



(Dr. Pawan Kumar)