Bio-Data

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EDUCATION QUALIFICATION:

Degree	Institute	Board/University	Year of Passing	Grade/ Percentage
Ph. D (Doctor of Philosophy)	National Institute of Technology Raipur, G.E. Road Raipur http://www.nitrr.ac.in	National Institute of Technology Raipur, G.E. Road Raipur	7 th Nov. 2014	-
Master's (M.Tech. in Geotechnical Engineering)	Indian Institute of Technology (IIT), Delhi, India <u>http://www.iitd.ac.in</u>	Indian Institute of Technology,Delhi, India	2005	7.95 (Scale of 10)
Bachelor's (B.E. in Civil Engineering)	Government Engineering College (GEC), Raipur, Now known as National Institute of Technology (NIT), Raipur, Chhattisgarh, India http://www.nitrr.ac.in	Pt. Ravi Shankar Shukla University, Raipur, Chhattisgarh, India	2001	72.12
Higher Secondary Examination (12 th Standard)	Saraswati Higher Secondary (S.H.S.) School, Bagbahara, Chhattisgarh, India	Board of Secondary Education, Bhopal, Madhya Pradesh, (M. P. Board), India	1996	73.55
High School Examination (10 th Standard)	S.H.S. School, Bagbahara, Chhattisgarh, India	M. P. Board, India	1994	87.07

PUBLICATION DETAILS LINK:

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Scopus details: <u>https://www.scopus.com/authid/detail.uri?authorId=55988856700</u> Research Gate: <u>https://www.researchgate.net/profile/Laxmikant_Yadu</u> Google Scholar :<u>https://scholar.google.com/citations?authuser=1&user=8MCagSYAAAAJ</u> Publons Web of Science Researcher ID:AAP-9091-2021

	All	Since 2018	
Citations		545	416
<u>h-index</u>		10	9
i10-index		10	9

Assessed on 30.03.2023 directly from the site https://scholar.google.com/citations?user=8MCagSYAAAAJ&hl=en

PATENT

 "Composition and Process for Preparation of Sub-Base Material for Mine Haul Road Construction"
Name of Inventor: Tarun Kumar Rajak, LaxmikantYadu
Application Number: 201921049347
Date of Filing: 01.12.2019
Date of Publication: 03.01.2020
Status: Granted
Date of Grant: 08.03.2022
Patent No. 391465

BOOK CHAPTER

 Geotechnical Characteristics of Soils and Rocks of India, International, CRC Press / Balkema, Taylor & Francis Group London, Published on 31st December 2021, 742 pages, ISBN 9781032010984, Pub. Location: London <u>https://doi.org/10.1201/9781003177159</u>, Authors: Laxmikant Yadu, Sunny Deol Guzzarlapudi, Mahasakti Mahamaya, Arun Bhave

SPONSORED R&D PROJECTS (Completed):

- "Performance Evaluation of some Selected PMGSY Roads sections in the state of Chhattisgarh" Funded by National Rural Road Development Agency, New Delhi of amount 41.89 Lakhs - awarded in 15th October 2015
- "Construction of Low Volume Roads on Soft Subgrade Soil Imporved by Locally Available Marginal Materials" Funded by Human Settlement Management Institute - Housing and Urban Development Corporation (HSMI-HUDCO), New Delhi for two year of Amount 25.0 Lakhs – Awarded in Feb 2014.
- **3.** "Improving soft subgrade for the construction of low volume roads using locally available materials" Sponsored by Chhattisgarh Council of Science and

Technology, Government of Chhattisgarh for two years of Amount 2.0 Lakhs. - Awarded in March 2012.

SPONSORED R&D PROJECTS (Submitted):

1. Stability analysis and Utilization of mine Overburden dumps by using industrial By product and Microbial Induced calcite precipitation technique to SERB Department of Science and Technology under Core Research Grant on March 2023 of amount Rs 41,36,198.

PAPER PUBLISHED IN INTERNATIONAL / NATIONAL JOURNALS

<u>Year 2022</u>

- Yadu, L.K., Bajaj, P., Premjani, R. (2022) "Study on Vertical Batter Piles and Pile Groups under uplift Load Conditions in Non-Cohesive Sub-soil"IOP Conf. Series: Earth and Environmental Science 982 (2022) 012052 pp 1-11. (Published March 2022) (doi:10.1088/1755-1315/982/1/012052) (ISSN: 1755-1315)
- Premjani, R., Yadu, L.K., Bajaj, P. (2022) "A Comparative Study of Vertical and Batter Piles under Lateral Loading Conditions: A Review" IOP Conf. Series: Earth and Environmental Science 982 (2022) 012045 pp 1-8. (Published March 2022) (doi:10.1088/1755-1315/982/1/012045) (ISSN: 1755-1315)

<u>Year 2021</u>

- Gautam A. D., Yadu, L. K., (2021). "Study on the Characteristics of Overburden Dump of the Coal Mines" Transportation, Water and Environmental Geotechnics, Lecture Notes in Civil Engineering 159, Springer, Singapore. Online ISBN 978-981-16-2260-1, First online 3rd August 2021. (DOI: https://doi.org/10.1007/978-981-16-2260-1_6)
- Rajak, T. K., Mishra, A., Yadu, L.K., (2021) "Effect of GGBS on Strength Characteristics and Stability of Pond Ash Mixed Soil Embankment" IOP Conf. Series: Earth and Environmental Science 982 (2022) 012049 pp 1-11. (Published March 2022) (doi:10.1088/1755-1315/982/1/012049) (ISSN: 1755-1315)

<u>Year 2020</u>

 Rajak, T. K., Yadu, L., Chouksey, S. K. (2020). "Strength Characteristics and Stability Analysis of Ground Granulated Blast Furnace Slag (GGBFS) Stabilized Coal Mine Overburden-Pond Ash Mix" *Geotechnical and Geological Engineering - An International Journal Springer (38), 663-682*.ISSN1573-1529 (electronic) 0960-3182 (Print) (ESCI) **38**, pages 663–682 (2020) published on 12thSeptember 2019. (DOI: 10.1007/s10706-019-01056-z) Received 27 March 2019 / Accepted: 5 September 2019 (Publisher :Springer Nature Switzerland AG 2019)

6. Tarun Kumar Rajak, LaxmikantYadu, Sandeep Kumar Chouksey(2020). "Effect of fly ash on geotechnical properties and stability of coal mine overburden dump: an overview. SN Applied Sciences, 2:973. Springer (ESCI) <u>https://doi.org/10.1007/s42452-020-2803-3.</u> *Received: 27 Sentember 2019 / Accented: 22 April 2020 published online 27th*

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7. Rajak, T. K., Yadu, L., Dewanagn P. K. (2020). "Strength Characteristics and GGBS Stabilized Stability Analysis of Flv Ash-Overburden Dump" International Journal of Mining, Reclamation and Environment (NSME), Volume 34, Issue 9, pp 1-24. Taylor & Francis ISSN: 1748-0930, E-ISSN: 1748- 18^{th} 0949 Accepted (SCIE) September 2019. on https://doi.org/10.1080/17480930.2019.1670327.

Year 2019

- Ansu Thomas, R. K. Tripathi, L. K .Yadu (2019), "Application of Taguchi Method for Optimization of Various Factors in Improving the Shear Modulus of Enzyme Treated Soil", National Academy Science Letters (SCLE) Springer. volume 34, No. 2, 2020, pp. 171-175 Accepted (SCI-E) on 5th August 2019. ISSN 2250-1754. (DOI: 10.1007/s40009-019-00833-x)
- Ansu Thomas, R. K. Tripathi, L. K .Yadu (2019), "Alkali-activated GGBS and Enzyme on the swelling properties of sulfate bearing soil", Geomechanics and Engineering- An International Journal, *Technopress*. Vol. 19, No. 1 (2019) pp 21-28 (SCI-E) Accepted on 25th August 2019. ISSN 2005-307X Impact factor 2.594. (DOI: https://doi.org/10.12989/gae.2019.19.1.021)
- Bajaj P., Yadu L.K. and Chouksey S.K. (2019). "Behavior of Vertical and Batter Piles Under Lateral, Uplift and Combined Loads in Non-Cohesive Soil" Innovative Infrastructure Solutions 4:55, Springer. ISSN: 2364-4176 (print version) ISSN: 2364-4184 (electronic version) (ESCI) <u>https://doi.org/10.1007/s41062-019-0242-z</u> published online 22nd October 2019.
- Bajaj P., Yadu L.K. and Chouksey S.K. (2019). "Study on vertical and batter piles subjected to lateral loads in different non-cohesive sub-soil conditions" *International Journal of Geotechnical Engineering*, Taylor & Francis. Volume 14, issue 6, 2020ISSN 1939-7879 https://doi.org/10.1080/19386362.2018.1564181. Published online 2nd Jan 2019.
- Maliwal S., Verma, M.K., Yadu L.K. andMurmu M. (2019). "Estimation of Runoff Potential by the Application of Curve Number Method in GIS Platform" International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-8 Issue-6, August 2019 (Scopus).DOI: 10.35940/ijeat.F9174.088619
- 13. Maliwal S., Verma, M.K., Yadu L.K. and Murmu M. (2019). "Multi-Reservoir Flood Control Operation by Optimization Technique: A Review" International

Journal of Engineering Research & Technology (IJERT), Vol. 8 Issue 08, August-2019. ISSN: 2278-0181.

<u>Year 2018</u>

- Ansu Thomas, R. K. Tripathi, L. K. Yadu (2018), "A Laboratory Investigation of Soil Stabilisation using Enzyme and Alkali Activated Ground Granulated Blast Furnace Slag", Arabian Journal for Science and Engineering.43, pages 5193–5202 (2018),<u>https://doi.org/10.1007/s13369-017-3033-x</u> (SCI)
- Rajak, T. K., Yadu, L., Chouksey, S. K., &Dewangan, P. K. (2018). "Stability analysis of mine overburden dump stabilized with fly ash". *International Journal* of Geotechnical Engineering, Volume 15, 2021, Issue 5, pp., 1-11.ISSN 1939-7879 <u>https://doi.org/10.1080/19386362.2018.1503780</u>.

<u>Year 2017</u>

- 16. Verma, M.K., Verma, M.K., Yadu, L.K. and Murmu Meena. Drought Analysis in the Seonath River Basin using Reconnaissance Drought Index and Standardised Precipitation Index. International Journal of Civil Engineering and Technology. 2016: 7 (6): 714-719.
- 17. Verma, M.K., Verma, M.K., Yadu, L.K. and MurmuMeena. A study on Calibration of a Hydrological Model and Sensitivity analysis of its parameters: A case study of a Seonath River Basin, Chhattisgarh, India. *Current Science Journal. (under 2nd review)*.
- Verma, M.K., Verma, M.K., Yadu, L.K. and MurmuMeena. A Study of Climate Change Impact on Precipitation of Sheonath River Basin. *Indian Journal of Science and Technology, Vol 10(11), DOI: 10.17485/ijst/2017/v10i11/104361, March 2017.* (Scopus Index with Fee). ISSN 0974-5645

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- Mani Kant Verma, M. K. Verma, L.K. Yadu, MeenaMurmu (2016), "Drought Analysis in the Seonath River Basin Using Reconnaissance Drought Index and Standardised Precipitation Index", International Journal of Civil Engineering & Technology (IJCIET) Volume 07, Issue 6: 714-719(ISSN 0976-6308) (Scopus Index with Fee).
- Mani Kant Verma, Dr. M. K. Verma, Dr. L.K. Yadu, MeenaMurmu, "Calibration and Sensitivity analysis of a Hydrological Model for Seonath River Basin, Chhattisgarh, India", submitted to IJAER Scopus Indexed Journal (under review).
- Thomas A., Tripathi R.K. and Yadu L.K. (2016) "Soil Stabilisation using Terrasil", International Journal of Earth Sciences and Engineering", Vol. 09 No.02, (ISSN 0974-5904) (Scopus Indexed)

- 22. Ansu Thomas, R. K. Tripathi, L. K. Yadu (2016), "Effect of Enzymes on the Unconfined Compressive Strength of Soil", *International Journal of Applied Engineering Research*, Vol.11 No.10. (ISSN 0973-4562), (Scopus Indexed)
- 23. Deepak RanjanRath, ManikantVerma, L.K.Yadu (2016) "Application of SCS-CN method in Sheonath basin", International Journal of Scientific Progress and Research –(Accepted with fee)
- 24. Ansu Thomas, R. K. Tripathi, L. K. Yadu (2016), "Variation in shear modulus of enzyme treated soil under cyclic loading", *Geotechnical Special Publication*, *GeoChina 2016 American Society of Civil Engineers*, Behavior of Geomaterials and Foundations for Civil Infrastructure Applications: pp. 88-95 doi: 10.1061/9780784480021.012

<u>Year 2015</u>

25. Yadu L.K. and Tripathi R.K. (2015). "Response of Circular Footing on New Key Engineering Material - Granulated Blast Furnace Slag as Structural Fill" International Journal of Advanced Materials Research, Trans Tech Publications, Switzerland, Vol 1119, pp 726-730.(ISSN 1662-8985)

(doi:10.4028/www.scientific.net/AMR.1119.726).

Year 2014

26. VivekVermaandYaduL.K.(2014). "Response of circular footing by varying the vertical spacing of reinforcement resting on structural fill." International Journal of Innovative Research in Science Engineering and Technology, Volume-3, Issue-9, pp 16294-16299. (ISSN: 2319 –8753).

Year 2013

27. Yadu L.K. and Tripathi R.K. (2013). "Effectiveness of Granulated Blast Furnace Slag over Sand as Overlay for the Stabilization of Soft Clay" International Journal of Advanced Technology in Civil Engineering, Volume-2, Issue-2, pp 22-27. (ISSN: 2231–5721, Available online at

http://interscience.in/ijatce_vol2Iss2.html).http://interscience.in/IJATCE_Vol2Iss 2/32-37.pdf

 Yadu L.K. and Tripathi R.K. (2013). "Stabilization of Soft Soil with Granulated Blast Furnace Slag and Fly Ash" International Journal of Research, Engineering and Technology, Volume 2, Issue 2, pp115-119. (ISSN: 2319-1163, available online at <u>http://www.ijret.org/</u>)

<u>Year 2012</u>

29. Yadu, L.K., Tripathi, R.K., and Singh, D.V. (2011). "Laboratory Performance Evaluation of Stabilized Black Cotton Soil with Rice Husk Ash," Journal of

Chhattisgarh Swami Vivekanand Technical University Bhilai, Volume 4, No. 1, pp 50-55. (ISSN 0974-8725).

- 30. Singh D.V., Reddy, S.K., and Yadu, L.K. (2011). "Moisture and Compaction Based Statistical Model for Estimating CBR of Fine Grained Subgrade Soils," International Journal of Earth Sciences and Engineering, Volume 04, No. 06 SPL, pp 100-103. (ISSN 0974-5904). Scopus Journal Rating (SJR) 0.103; CSIR-NISCAIR, INDIA Impact Factor 0.042; Indexed in- Scopus Compendex and Geobase (products hosted on Engineering Village) Elsevier, Amsterdam, publishing by CAFET-INNOVA Technical Society (CITS), Hyderabad, INDIA. (Scopus indexed)
- 31. Yadu, L.K., Tripathi, R.K., and Singh, D.V. (2011). "Comparison of Fly Ash and Rice Husk Ash Stabilized Black Cotton Soil,"International Journal of Earth Sciences and Engineering, Volume 04, No. 06 SPL, pp 42-45. (ISSN 0974-5904). (Scopus Indexed)

PAPER PUBLISHED IN GEOTECHNICAL SPECIAL PUBLICAION-ASCE

Year 2016

 Ansu Thomas, R. K. Tripathi, L. K. Yadu (2016), "Variation in shear modulus of enzyme treated soil under cyclic loading", *Geotechnical Special Publication*, *GeoChina 2016 American Society of Civil Engineers*, Behavior of Geomaterials and Foundations for Civil Infrastructure Applications: pp. 88-95 doi: 10.1061/9780784480021.012.

<u>Year 2014</u>

- Yadu L.K. and Tripathi R.K. (2014). "Effect of Depth and Number of Layers of Reinforcement on Bearing Capacity Ratio of Strip Footing Resting on Granulated Blast Furnace Slag Reinforced with Geogrid" in Geo-Congress 2014: Geocharacterization and modeling for sustainability, *Geotechnical Special Publication No. 234, ASCE pp 3605-3614*
- Tripathi R.K. and Yadu L.K. (2014). "Effect on Bearing Capacity Ratio of Strip Footing for Various Granular Fill Thickness and Number of Geogrid Layers in Granular Fill Overlay on Soft Soil " in Geo-Congress 2014: Geo-characterization and modeling for sustainability, *Geotechnical Special Publication No. 234,* ASCE pp 2503-2512.

PAPER PUBLISHED IN PROCEEDIA ENGINEERING-ELSEVIER

<u>Year 2016</u>

 Ansu Thomas, R. K. Tripathi, L. K. Yadu (2016), Variation in Damping Ratio of Enzyme Treated Soil, Special Section on: Current Research Topics in Power, Nuclear and Fuel Energy, SP-CRTPNFE 2016, from the International Conference on Recent Trends in Engineering, Science and Technology 2016, 1 June 2016, Hyderabad, India, pp 8-13 (Conference / Elsevier Energy Procedia)

Year 2013

 Yadu L.K. and Tripathi R.K. (2013). "Effect of the Length of Geogrid Layers in the Bearing Capacity Ratio of Geogrid Reinforced Granular Fill-Soft Subgrade Soil System" Procedia - Social and Behavioral Sciences, Elsevier, Volume 104, pp 225-234. (ISSN: 1877-0428). (Scopus Indexed)

<u>Year 2012</u>

3. YaduL.K., Tripathi, R.K. (2012). "Effects of Granulated Blast Furnace Slag in the Engineering Behavior of Stabilized Soft Soil" Elsevier Procedia Engineering 51(2013)125-131.(ISSN: 1877-7058) (Scopus Indexed)

PAPER PUBLISHED IN INTERNATIONAL / NATIONAL CONFERENCES

Year 2023

- Rathour, S., Yadu, L.K., (2023) "Investigation of Slope Stability of Ash Dyke by Ifluencing the Upstream and Downstream Slopes and Height of Raising", Indian Power Stations – 2023 O&M Conference on Strategies for Reliable and Sustainable Power Generation in Changing Energy Scenario, 13-14 Feb 2023, Conducted by National Thermal Corporation at Raipur, Chhattisgarh, India.
- Verma N., Goel, A., Yadu, L.K., (2023) "Comparative Study of Ash Dyke Raising Methods for Slope Stability and Economy", Indian Power Stations – 2023 O&M Conference on Strategies for Reliable and Sustainable Power Generation in Changing Energy Scenario, 13-14 Feb 2023, Conducted by National Thermal Corporation at Raipur, Chhattisgarh, India.

Year 2022

- Gupta V., Yadu, L.K., (2022) "Seepage Analysis of An Earthen Dam: A Case Study of Tamta Dam" Indian Geotechnical Conference onGEOLEAP- Geotechnics: Learning, Evaluation, Analysis and Practice. 15-17 Dec' 2022, by IGS Kochi Chapter in association with Cochin University of Science and Technology at Kochi, Kerla, India.
- 4. Pyadi, R., Yadu, L.K., Chouksey, S.K., (2022) "Application of Biopolymers in Geotechnical EngineeringPractices: An Eco-Friendly Approach" Indian Geotechnical Conference on GEOLEAP- Geotechnics: Learning, Evaluation,

Analysis and Practice. 15-17 Dec' 2022, by IGS Kochi Chapter in association with Cochin University of Science and Technology at Kochi, Kerla, India

 Gautam, A. &Yadu, L.K., (2022) "Utilization of Gondegaon Coal Mine Overburden Dump as aConstruction Material" Indian Geotechnical conference onGEOLEAP- Geotechnics: Learning, Evaluation, Analysis and Practice. 15-17 Dec' 2022, by IGS Kochi Chapter in association with Cochin University of Science and Technology at Kochi, Kerla, India.

<u>Year 2021</u>

- Rajak, T. K., Yadu, L.K., Alam, M.A., (2021) "Numerical, ANN, and MLR Modelling for Stability Analysis of Coal Mine Overburden Dump" Proceedings of Eighth Indian Young GeotechnicalEngineers Conference 2021, September 17-18, 2021, India.
- Pyadi, R., Yadu, L.K., Chouksey, S.K., (2021) "Strength Characteristics of Fine Sand Reinforced with Polypropylene Fiber" Proceedings of Eighth Indian Young Geotechnical Engineers Conference 2021, September 17-18, 2021, India.
- Rajak, T. K., Mishra, A., Yadu, L.K., (2021) "Effect of GGBS on Strength Characteristics and Stability of Pond Ash Mixed Soil Embankment" International Conference onInnovative and Sustainable Technologies in Civil Engineering(ISTCE-2021)Organized By Department of Civil EngineeringBapatla Engineering College: Bapatla, 24th -25th September 2021.
- Yadu, L.K., Bajaj, P., Premjani, R. (2021) "Numerical and Experimental Analysis of Vertical Piles Batter Piles and Pile Groups Under Uplift Load Conditions in Non-Cohesive Sub-soil"International Conference onInnovative and Sustainable Technologies in Civil Engineering(ISTCE-2021)Organized By Department of Civil EngineeringBapatla Engineering College: Bapatla, 24th -25th September 2021.
- Premjani, R., Yadu, L.K., (2021) "Numerical and Experimental Analysis of Vertical Piles Batter Piles and Pile Groups Under Uplift Load Conditions in Non-Cohesive Sub-soil"International Conference on Innovative and Sustainable Technologies in Civil Engineering(ISTCE-2021) Organized By Department of Civil Engineering Bapatla Engineering College: Bapatla, 24th -25th September 2021.

<u>Year 2020</u>

11. Gautam Atul D., Yadu, L.K. (2020) "Study on the Characteristics of Overburden Dump of the Coal Mines" Indian Geotechnical Conference 2020 Developments In Geotechnical Engineering For Sustainable Tomorrow (DIGEST) from 17th Dec to 19th Dec 2020, Indian Geotechnical Society Visakhapatnam Chapter in association with Department of Civil Engineering College of Engineering, Andhra University Visakhapatnam - 530 003 Andhra Pradesh, India.

12. Sankalp P., Yadu, L.K. (2020) "Design and Stability Analysis of Gravity Section of Pairi High Dam" International Conference on Role of Innovation, enterprenurship and Management for Sustainable Developmentfrom 26th Sept to 27th Sep 2020, Organised by O.P. Jindal University Raigarh, India.

Year 2019

- 13. Pankaj Bajaj, Laxmikant Yadu, Sandeep Kumar Chouksey (2019) "Numerical and Experimental Study of Laterally Loaded Piles in Sandy Soil Conditions" Symposium on Recent Advances in Sustainable Geotechnics, IGS Kanpur Local Chapter in collaboration with Indian Geotechnical Society (IGS), on 17th to 20th October 2019 at Department of Civil Engineering, IIT Kanpur.
- 14. Renu Premjani, LaxmikantYadu (2019) "A comparative study of vertical and batter piles under lateral loading conditions" Symposium on Recent Advances in Sustainable Geotechnics, IGS Kanpur Local Chapter in collaboration with Indian Geotechnical Society (IGS), on 17th to 20th October 2019 at Department of Civil Engineering, IIT Kanpur.

Year 2018

15. Tarun Kumar Rajak, Laxmikant Yadu, Sandeep Kumar Chouksey and Sujit Kumar Pal (2018) "Stability Analysis Of Soil Slope Stabilized With Fly Ash and Lime"International Conference on"Advances in Concrete, Structural, & Geotechnical Engineering" during 26 - 28th February 2018 at BITS Pilani, India.

Year 2017

- 16. Tarun Kumar Rajak, LaxmikantYadu, Sandeep Kumar Chouksey and Sujit Kumar Pal (2017) "Strength Characteristics of Fly Ash Stabilized Soil Embankment and Stability Analysis Using Numerical Modelling" Indian Geotechnical Conference Geotechnics for Natural and Engineered Sustainable Technologies GeoNEst14-16 December 2017, IIT Gowahati, GeoNest, India.
- 17. Pankaj Bajaj, Laxmikant Yadu, Sandeep Kumar Chouksey and Renu Premjani (2017) "Experimental Study of Vertical and Batter Pile groups under LateralLoads in sand" Indian Geotechnical Conference IGC 2017- Geotechnics for Natural and Engineered Sustainable TechnologiesGeoNEst14-16 December 2017, IIT Gowahati, GeoNest, India.

Year 2016

- 18. Verma, M.K., Verma, M.K., Yadu, L.K. and MurmuMeena (2017). Statistical Downscaling of GCM Data and Analysis of Trend of Predicted Data for Seonath River Basin, ICACEC 2017, The World Academy of Research in Science & Engineering, Hongkong, during January 16-17, 2017.
- 19. Laxmikant Yadu (2016). "Statistical Analysis of Strength Property of Soil", International Conference on "Engineering & Technology, Computer, Basic and Applied Sciences"- ECBA-2016 at Dubai from June 10-12, 2016.
- 20. Mani Kant Verma, Dr. M. K. Verma, MokshdharMeshram, Dr. L.K. Yadu, (2016) "Impact of Climate Change on Precipitation of Kwardha Station in Sheonath River Basin", National Conference on Water Resources and Hydropower being held during 17th -18th June, 2016 at University of Petroleum and Energy Studies, Dehradun.
- 21. Deepak RanjanRath, Mani Kant Verma, LaxmikantYadu, abyasachi Swain, Saran Aadhar(2016), "Hydrological Modelling through SWAT: Pros and Cons" National conference on water Resource and Hydro Power(WRHP) organized by UPES and IIT Roorkee, June 17-18, 2016.
- 22. Ansu Thomas, R. K. Tripathi, Laxmikant Yadu (2016), "Variation in Damping Ratio of Enzyme Treated Soil, Special Section on: Current Research Topics in Power, Nuclear and Fuel Energy, SP-CRTPNFE 2016, from the International Conference on Recent Trends in Engineering, Science and Technology 2016, 1 June 2016, Hyderabad, India, pp 8-13 (Conference / Elsevier Energy Procedia)
- 23. Ansu Thomas, R. K. Tripathi, LaxmikantYadu (2016), "Effect of GBS on the UCS and Shear modulus of soil" International Geotechnical Engineering Conference onSustainability in Geotechnical Engineering Practices and Related Urban Issues, September 23-24, 2016, Mumbai, India.
- 24. Tarun Kumar Rajak, LaxmikantYadu (2016), "Stability Analysis of Lime Stabilized Soil Slope" International Geotechnical Engineering Conference on Sustainability in Geotechnical Engineering Practices and Related Urban Issues, September 23-24, 2016, Mumbai, India.
- 25. Pankaj, LaxmikantYadu (2016), "Experimental study of vertical and batter piles in loose sand under lateral loads" International Geotechnical Engineering Conference on Sustainability in Geotechnical Engineering Practices and Related Urban Issues, September 23-24, 2016, Mumbai, India.
- Tarun Kumar Rajak, LaxmikantYadu, Sujit Kumar Pal (2016) "Analysis of Slope Stability of Fly Ash Stabilized Soil Slope" Indian Geotechnical Conference 15-17 December 2016, IIT Madras, Chennai, India (Accepted).
- 27. LaxmikantYadu, Pankaj Bajaj and Rajesh Kumar Tripathi (2016) "Bearing Capacity of Circular Footing on Geogrid-Reinforced Granulated Blast Furnace Slag" Indian Geotechnical Conference 15-17 December 2016, IIT Madras, Chennai, India (Accepted).

Year 2015

28. Yadu L.K. and Tripathi R.K. (2015). "Response of Circular Footing on New Key Engineering Material - Granulated Blast Furnace Slag as Structural Fill" 5th International Conference on Key Engineering Materials 2015 (ICKEM 2015), March 21-23, 2015, Singapore.

<u>Year 2013</u>

- 29. Yadu L.K., Tripathi, R.K. (2013). "Effectiveness of Granulated Blast Furnace Slag over Sand as Overlay for the Stabilization of Soft Clay". International Conference on Advances in engineering and Technology Convergence (AETC) Organised by Interscience Research Network, at Bangkok Thailand on 28th April 2013, pp 40-45. (ISBN No. 978-93-82208-89-1). Availbale online at www,irnetexplore.ac.in. (Received Young Investigator Award for this paper).(Published in the Journal of IJATCE)
- 30. Tripathi R.K. and Yadu L.K. (2013). "Bearing Capacity of Square Footing on Soft Soil Stabilized with Rice Husk Ash – An Experimental Study". International Conference on Emerging Trends in Engineering and Technology (ICETET'2013) Dec. 7-8, 2013 Patong Beach, Phuket (Thailand).

<u>Year 2012</u>

31. Yadu L.K., Tripathi, R.K. (2012). "Potential of Disposed Jute Bags for Sustainable Civil Construction Works in Chhattisgarh State" National conference on Role of Science and Technology for Sustainable Development of Chhattisgarh, Shri Shankracharya Technical Campus Junwani, Bhilai, Chhattisgarh, India, January 25-26.

<u>Year 2011</u>

- 32. Yadu, L.K., Singh, D.V., and Tripathi, R.K. (2011). "Strength Characteristics of Rice Husk Ash Stabilized Black Cotton Soil," Proceedings of International Conference on Advances in Materials and Techniques for Infrastructure Development (AMTID 2011), Department of Civil Engineering, National Institute of Technology, Calicut, Kerla, India, September 28-30, Paper No. T022.
- 33. Yadu, L.K., Tripathi, R.K., and Patel, A. (2011). "Smart Building and Photovoltaic Based Cooling System," Proceedings of 27th National Convention of Civil Engineers and National Seminar on Integrated Development of Towns as Growth Centers, The Institution of Engineers (India) Chhattisgarh State Centre, Raipur in Association with National Institute of Technology Raipur, CG, India, October 15-16, pp 150-153.

<u>Year 2010</u>

34. Singh, D.V., Reddy, K.S., Yadu, L.K. (2010). "Characterization of Fine Grained Subgrade Soils for Pavement Design," Proceedings of International Conference on Development of Road Transportation, Department of Civil Engineering, National Institute of Technology, Rourkela, Orissa, India, October 08-10, pp 367-375.

Year 2007

- 35. Yadu, L. K., and Shahu, J. T. (2007). "Analysis of Gravity Dam Foundation with Shear Seam and Remedial Measure," Proceedings of National Conference on Civil Engineering Advancement and Challenges (CEAC-2007), M. M. Engineering, College, Ambala, Haryana, India, March 9-11, pp 126-131.
- 36. Yadu, L. K., and Shahu, J. T. (2007). "Gravity Dam Foundation Analysis with Shear Seam and Concrete Pile as a Remedial Measure," Proceedings of National Conference on Emerging Technology and Developments in Civil Engineering, Government College of Engineering, Amravati, Maharastra, India, March 22-23, pp VII-86-VII-92.
- 37. Yadu, L. K. (2007). "Analysis of Gravity Dam Foundation With Shear Seam A Parametric Study," Proceedings of National Conference on Advances and Innovations in Civil Engineering, MepcoSchlenk Engineering College, Sivakasi, Tamilnadu, India, March 24, pp 20-23.

SUPERVISION:

PhD Supervision:

Sl.	Candidate	Proposed Topic	Status/ Joint-
No.	Name		Supervisors
1	Mr. Ishtiyaq	Integrated river basin planning &	Awarded in 9 th
	Ahamd	management: Sheonath basin in	December 2016 /
	(Entry 2010)	Chhattisgarh state	Dr. M. K. Verma
2	Mr. Manikant Verma (Entry 2013)	Impact of Climate Variability and Land Use on the Hydrology (A Case Study of Seonath River Basin)	Awarded in 23 rd April 2018 / Dr. M. K. Verma & Dr MeenaMurmu
3	Ms. Ansu	A Comparative Study of Soil Stabilization	Awarded in
	Thomas	using Tradition, Non-traditional and	2 nd July 2018 / Dr.
	(Entry 2014)	Byproduct Stabiliser	R. K. Tripathi
4	Mrs. Shobha	Flood control measures by integrated	Awarded on
	Maliwal	operation of multi reservoir system:	14 th July 2021
	(Entry 2012)	Mahanadi reservoir project complex	Dr. M. K. Verma
5.	Mr. Pankaj	Study on vertical pile, batter pile and	Awarded on 27 th
	Bajaj	pile groups subjected to lateral, uplift	Oct 2020 /

	(Entry 2015)	and combined loading in non cohesive soil	Dr. S Chouksey
	(Entry 2013)	and combined loading in non conesive son	•
6	Mr. Tarun	A Parametric study on Stability of Coal	Awarded on15 th
	Kumar Rajak	Mine Overburden Dump Material Mixed	December 2020/
	(Entry 2015)	with Industrial By-Products	Dr S Chouksey
7	Ms. Renu	Study of vertical, lateral and combined	Ongoing /
	Premjani	loads on vertical pile, batter pile and	sole
	(Entry 2018)	pile group in cohesion-less soil	3010
	(Linu y 2010)		
8	Mr Atul D.	Study on Stabilization of Coal Mine	Ongoing /
	Gautam	Overburden Dump Using Microbial	sole
	(Entry 2018)	Induced Calcite Precipitation and Industrial	
	())	By-product.	
9	Mr.	Disaggregate Analysis and Modelling of	Ongoing /
	Styanandam	FWD Deflection Profile for Prediction of	Dr Sunny Deol
	Srinivasan	Backcalculated Pavement Layer Moduli	G.
	(Entry 2018)		0.
10.	Mr Rakesh Pydi	Characterisation of Geotechnical Properties	Ongoing/
	(Entry 2020)	Soil Treated with Biopolymers	Dr S Chouksey
			DI 5 Chouksey

M Tech Supervision:

Sl. No.	Candidate Name	Торіс	Joint- Supervisors
1	Ms. Deepali Tamboli (R.N.14244004) (2016) at NIT Raipur	Estimation of Soil Erosion for Sheonath River Basin by Using RUSLE and GIS	Completed / Sole
2	Mr. Deepak RanjanRath(R.N. 14244002) (2016) at NIT Raipur	Application of Hydrological Modelling of Upper Sheonath Basin for Estimation of Runoff	-
3	Mr. Pranav S Sankapal R. N. 18244009 at NIT Raipur	Design, Stability and Seepage Analysis of an Earthen Dam- A Case Study of Proposed Pairi Dam	Completed / Sole
4	Mr.Vikas Dubey R. N. 18244012 at NIT Raipur	Mapping of Proposed Dam at Gariyabad District	Completed / Sole

5.	Mr.Ajay Markam R. N. 19244001 at NIT Raipur	A case study on dam break failure analysis on Hirakund dam.	Completed / Sole
6.	Mr. Ashish Kuldeep R. N. 19244004 at NIT Raipur	Stability and Seepage Analysis of an Earth Dam : A Case Study of Kodar Dam	Completed / Sole
7	Ms. Bhanu Sahu R. N. 19244007 at NIT Raipur	Assessment of Runoff for Ahiran River Watershedusing Hydrological Modelling :A Case Study Of AhiranKharu Link Project	Completed / Sole
8	Mr Rajnish Kumar R. N. 20244009 at NIT Raipur	Identification of Ground Water Potential Zone Mand River Basin, Chhattisgarh India	Completed / Sole
9	Mr Vishal Gupta R. N. 20244011 at NIT Raipur	Seepage and Slope Stability Analysis of Tan Earthen Dam: A Case Study	Completed / Sole
10	Ms Sweta Rathore R. N. 21244012 at NIT Raipur	Seepage and stability analysis of ash dyke: Case Study of Lotlota Ash dyke	Ongoing / Sole
11	Ms Nidhi Verma, from NIT Kurukshetra	Comparative study of various methods raising of ash dyke	Ongoing / Sole

ACHIVEMENTS AND SCHOLARSHIP:

- Honorary Secretary of Indian Geotechnical Society Raipur Chapter from 8th July 2019 to 7th July 2021 and 8th July 2021 for two years
- Young Investigator Award by Interscience Research Network for Paper entitled "Effectiveness of Granulated Blast Furnace Slag over Sand as Overlay for the Stabilization of Soft Clay" at Bangkok, Thailand, on 28th April 2013.
- Selected in State Engineering Services 2008 conducted by Chhattisgarh Public Service Commission for the post of Assistant Engineer (Civil) and Posted in Rural Engineering Services, Government of Chhattisgarh.
- Selected for the post of Assistant Engineer (Civil)-2008 at Chhattisgarh State Electricity Board and posted at Jagdalpur, Chhattisgarh State Power Transmission Company Limited.
- Appeared in the interview twice on Engineering Services Examination 2007 and 2008 conducted by Union Public Service Commission.

- Awarded Merit Scholarship during M. Tech. (Graduate Study) in IIT Delhi, India from Ministry of Human Resources Development (MHRD), India.
- Qualified and secured position in top 9% of total appeared candidates in Graduate Aptitude Test in Engineering (GATE) Examination conducted at National Level in India.
- Merit Position (24th Rank) in High School Examination at State Level.
- Awarded Ideal & Best Student Award consecutively for Two years at School Level.
- Given Merit Scholarship for outstanding performance during school education from class 8th standard to class12th standard.

VISIT ABROAD:

Thailand: Bangkok, PatayaDuring 27th April to 30th April 2013.Singapore:During 20th March to 24th March 2015.Dubai:During 9th June to 13th June 2016.

PROFESSIONAL MEMBERSHIP:

- 1. Member of American Society of Civil Engineers [A.M. ASCE, Member ID# 9132503]
- 2. Member of Geo-Institute, American Society of Civil Engineers.
- 3. Member of International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) for the Years 2022-2025. [IND12LM-3183]
- 4. Member of Indian Geotechnical Society, Delhi Chapter, India. [LM-3183]
- 5. Member of Indian Roads Congress, New Delhi, India. [LM-37607]
- 6. Member of Institution of Engineers (India) [AM099438-6]
- 7. Member of Indian Concrete Institute [LM-9656]
- 8. Member of Indian Association of Soil and Water Conservationists [LM-1827]
- 9. Member of Indian Meteorological Society [LM-2587].
- 10. Member of Institution of Engineering and Technology (IET) [1100550889].
- 11. Member of International Society of Geosynthetics [15738]
- 12. Member of Indian Society of Earthquake Technology (ISET) [LM 1781]
- 13. Member of International Society of Rock Mechanics (ISRM) [008/INDIVIDUAL/2023/LY]
- 14. Member of Indian Society of Rock Mechanics and Tunnel Technology[LM 2295]

REVIEWER

Journals:

- Journal of Geological Resource and Engineering, David Publishing. ISSN:2328-2193. (<u>http://www.davidpublishing.com/journals_info.asp?jId=2119#</u>)
- Geomechanics and Engineering: An International Journal.
- Canadian Geotechnical Journal.
- Arabian Journal of Geosciences
- Computational Methods in Engineering
- Structures
- Ain Shams Engineering Journal

TEACHING EXPERIENCE:

- Currently working as an Associate Professor in Civil Engineering Department National Institute of Technology, Raipur, Chhattisgarh, India (July 2018 to till date).
- Worked as an Associate Professor & Head in Civil Engineering Department in Government Engineering College, Raipur, Chhattisgarh, India (July 2016 to 24th July 2018)). (<u>http://www.gecraipur.ac.in</u>)
- Worked as an Assistant Professor in Civil Engineering Department in National Institute of Technology, Raipur, Chhattisgarh, India (March 2009 to 11.07.2016 and taken lien for two years to join GEC Raipur as Associate Professo). (<u>http://www.nitrr.ac.in</u>)
- Worked as a Lecturer in Civil Engineering Department (Geotechnical Group) in Birla Institute of Technology and Science (BITS), Pilani, Rajasthan, India (December 2005 to July 2008). (<u>http://www.bits-pilani.ac.in</u>)
- Worked as a Lecturer (Guest Faculty) in Civil Engineering Department, National Institute of Technology, Raipur, Chhattisgarh, India (Sep. 2001 to July 2003). NIT, Raipur is considered one of the most reputed Engineering Institute of India. (<u>http://www.nitrr.ac.in</u>)
- Major contribution in organizing of C⁺⁺ language and AutoCAD course conducted by Canada-India Institute Industry Linkage Project in NIT, Raipur, Chhattisgarh, India (Jan. to June 2003).

FIELD EXPERIENCE:

- Worked as an Assistant Engineer (Sub-Divisional Officer) in Rural Engineering Services, Panchayat and Rural Development Department, Government of Chhattisgarh, Raipur at Project Implementation Unit (PIU), Pradhan Mantri Gram SadakYojanaDurg, Chhattisgarh, India (July 2008 to March 2009).
- Worked as an Assistant Engineer (Sub-Divisional Officer) for Asian Development Bank funded project under Pradhan Mantri Gram SadakYojana (PMGSY) affiliated with National Rural Roads Development Authority (NRRDA), New Delhi, India at Project Implementation Unit (PIU) Mahasmund, Chhattisgarh, India (June 2005 to Nov. 2005).
- Involved in the testing of construction materials such as Soil, Aggregates and Concrete Cube during my tenure as Assistant Engineering in PMGSY, PIU -Mahasmund, Chhattisgarh, India (June 2005 to Nov. 2005).
- Involved in the preparation of Detail Project Report (DPR) as well as conducted various Traffic Survey during my tenure as Assistant Engineer in PMGSY, PIU -Mahasmund, Chhattisgarh, India (June 2005 to Nov. 2005).
- Involved in the Consultancy works in BITS-Pilani for determination of Soil Bearing Capacity for RCC water tank at Bhatiwara, Rajasthan, India (March 2006).

- Involved in the Consultancy works in NIT Raipur for determination of Soil Bearing Capacity by Plate Load Test at Kabirdham, Chhattisgarh, India (May 2002).
- Involved in the Consultancy works in NIT Raipur for estimation of present cost of a Risk Husk Power Generation Plant, Balouda Bazar, Raipur, Chhattisgarh, India (January 2002).
- Involved in the Consultancy works in NIT Raipur for Contouring of a plot near Raipur, Chhattisgarh, India (March 2003).

ADMINISTRATIVE EXPERIENCE:

- Associate Dean (Planning &Development) at NIT Raipur from 5th September 2020 to till date.(Office Order No./NITRR/DIR/S-1/2020/051 Dated 02-09-2020)
- Professor Incharge Estate Office (Civil) at NIT Raipur from August 2018 to 7th September 2020. .(Office Order No./NITRR/DIR/S-1/2018/1752 Dated 17-08-2018)
- Head, Department of Civil Engineering, Government Engineering College Raipur from 12th July 2016 to 24th July 2018.
- Nodal Officer (Finance) TEQIP-III Project at Government Engineering College Raipur from July 2017 to till date.
- TEQIP-II Departmental Coordinator of Civil Engineering Department, NIT Raipur, Chhattisgarh, India. (October 2013 to 4th July 2016).
- Head (Incharge) of Civil Engineering Department, NIT Raipur, Chhattisgarh, India. (June' 12th to June 30th 2013).
- Assistance to Dean (Planning and Development), NIT Raipur, Chhattisgarh, India (Sep' 2011 to till date).
- Professor-Incharge of Testing works in Civil Engineering Department, NIT, Raipur, Chhattisgarh, India (August 2010 to August 2011 and 24th September 2013 to 1st July 2016).
- Professor-Incharge of Civil Engineering Association in Civil Engineering Department, NIT, Raipur, Chhattisgarh, India (8thJuly'2009 to 1st August 2013).
- Geotech Engineering Laboratory Incharge in Civil Engineering Department, NIT, Raipur, Chhattisgarh, India (8thMay'2009 to 1st July 2016).
- Member of the Anti-Ranging Committee for Boy's Hostels on Wednesday and Thursday. [Institute order No./NITRR/Anti Ranging/2011/264 Raipur Dated 19.07.11].
- Member of the committee for the venue and seating arrangement in ECLECTIAK 2009 and 2010.
- Faculty Member of the Institute Technical Committee for year 2009-10 and 2010-11.
- Member of the team for investigation for Chimney collapse at Balco Nagar Polce Station Crime N0. 377/09 under section 304,34 of I.P.C. [Institute order No 370/Civil/Consultancy/2009, Raipur, Dated 07.10.2009].

- Worked as an Analyzer of the question paper for Sub-Engineer (Civil) Rural Engineering Services selection Exam 2011 conducted by Chhattisgarh Professional Examination Board Raipur (CGVYAPAM).
- Worked as an Analyzer of the question paper for Sub-Engineer (Civil) NagriyaNikay selection Exam 2010 conducted by Chhattisgarh Professional Examination Board Raipur (CGVYAPAM).
- Worked as an Analyzer of the question paper of Public Health Engineering for Sub Engineer (Civil) Selection Exam – 2010 conducted by Chhattisgarh Professional Examination Board Raipur (CGVYAPAM).
- Worked as an Analyzer of the question paper of Tribal Department, Civil Engineering Recruitment Exam-2008 conducted by Chhattisgarh Professional Examination Board Raipur (CGVYAPAM).
- Incharge of Consultancy works at Civil Engineering Group, BITS, Pilani, Rajasthan, India (July 2007 to July2008).
- Member of the Library Committee at BITS, Pilani, Rajasthan, India (July 2007 to July2008).
- Worked as Administrator Proctor for smooth conduction of BITS, Pilani Entrance Examination (BITSAT-2006) (May-June 2006).

INSTITUTE OUT REACH ACTIVITY

- Nominee of Vice Chancellor, Chhattisgarh Swami Technical University for Bhilai Institute of Technology Durg for Doctoral Research committee for PhD work.
- Member of Board of Studies at O.P. Jindal University Raigarh from 2018.
- Member of Interview committee at Public Service Commission Prayagraj Uttar Pradesh.
- AICTE Expert Committee visit as an expert at NMDC DAV Polytechnic Old Central School Building Dantewada, Chhattisgarh for the academic year 2016-17 on 26.10.2016.
- Inspection of Chhatrapati shivaji institute of technology durg for affiliation 2017-18 on 20.03.2017.
- Worked as an expert for Analysis of question paper of Assistant Engineer (Civil) Exam 2014 conducted by Chhattisgarh Professional Examination Board Raipur on 06.02.2015.
- Worked as an expert for Analysis of question paper of Sub Engineer (Civil) Exam 2014 conducted byChhattisgarh Professional Examination Board Raipur on 06.02.2015.
- Worked as an Analyzer for the question paper of Sub-Engineer (Civil) panchayat & Rural development dept Exam – 2011, Exam conducted by Chhattisgarh Professional Examination Board Raipur.
- Worked as an Analyzer for the question paper of Sub-Engineer (Civil) combined exam for PWD, RES, Irrigation, Nagar Nigam for Sub Engineer (Civil) Selection

Exam – 2013, Exam conducted by Chhattisgarh Professional Examination Board Raipur.

• Judge for district level science project "Land resources – use for prosperity and save for posterity" organised by Chhattisgarh science and technology parishad on 10.11.2010 at Mayaram Surjan Government higher secondary school Choubey colony Raipur

EXPERT LECTURE DELIVERED:

- Delivered an Expert-lecture on topic "Fly Ash a Resourceful Material in Construction" on 29th March 2023 organised by NSPCL (A joint Venture of NTPC and SAIL) Bhilai on Ash User Meet 2023 at Hotel Central Park Bhilai, Chhattisgarh.
- Delivered an Expert-lecture on topic "Geotechnical Investigation: A Myth for A Civil Engineer" on 23rd September 2022 organised by Faculty of Technology, Department of Civil Engineering Kalinga University, Chhattisgarh.
- Delivered an Expert-lecture on topic "Management of Lab and Its Safety" on 8th March 2022 in the Two Weeks Non-Teaching Staff Trainng Program (NTSTP-IV 2022) on "Expansion of Performance Potential of Officers and Staff for continuous Advancements of Academic Institutions from 25th Feb to 9th March 2022 organised by Chhattisgarh Swami Vivekanand Technical University Bhilai (CSVTU Bhilai).
- 4. Delivered an Expert-lecture on topic "Geotechnical Investigation Basics and It's Importance" on 15th September 2021 organised by IGS student Chapter at Bhilai Institute of Technology Raipur, Chhattisgarh.
- Delivered an Expert-lecture on topic "Managing Lab and It's Facilities" on Two Weeks Non-Teaching Staff Training Program (NTSTP-III-2021) on 16th December 2021 organised by SSIPMT Raipur, Chhattisgarh.
- 6. Delivered an Expert-lecture on topic "Forensic Geotechnical Engineering and Case Studies" on 5thsptember 2021 organised by Indian Geotechnial Society Jabalpur Chapter and Student Chapter of IGS Jabalpur Chapter.
- 7. Delivered an Expert-lecture on topic "Test on Soils" on 28th July 2021 in the Online training program for E.E., A.E. and J.E. on Quality Control, Managament, Maintenance Material Testing & Procedure for Rural Roads Construction (Field & Lab) from 27th July to 29th July 2021 organised by RCTRC Bhawan Village Jhanjh Sector 24 Naya Raipur.
- 8. Delivered an Expert-lecture on topic "Laboratory Management and Lab Safety" on 12th July 2021 in the Two Weeks Non-Teaching Staff Trainng Program (NTSTP-2021) on Management Capacity Enhancement Training Program for Non Teaching Officers and staff from 5th July to 17th July 2021 organised by Chhattisgarh Swami Vivekanand Technical University Bhilai (CSVTU Bhilai).
- 9. Delivered an Expert-lecture on topic "Geotechnical Investigation and Basic Soil Tests and its Significance" on 9thJune 2021 in the Short-Term TrainingProgramme (STTP) on "Advances in Geotechnical,Mining, and Geology" jointly organized by IGSRaipur Chapter, NIT Raipur and SSIPMT Raipur, Chhattisgarh from 9th June 2021 to 13th June.
- 2021.Delivered an E-lecture on topic "Basic Forensic Geotechnical Engineering and Case Studies" on 28th April 2021 in the One Week Teachers Training Program (TTP-2021) on "Geotechnical Investigations in Civil

Engineering" jointly organized by AICTE-CSVTU Bhilai and hosted by Department of Civil Engineering, Vishwavidyalaya Engineering College, Lakhanpur, Ambikapur, Dist – Surguja, Chhattisgarh.

- 11. Delivered an expert talk on 'Foundation of Expansive Soils: Problems and Remedial Measures'in online International Short Term Training Program on 1st July 2020 on 'Advances in Technology and Management in Civil Engineering-ATMCE' from 23rd June to 3rd July 2020, organized by KDK College of Engineering Nagpur.
- Delivered an E-lecture on "Foundation on Expansive Soils: Problem and Remedial Measures" at O.P. Jindal University, Raigarh on on 14th May 2020 in Ewebinar.
- 13. Delivered a lecture on "Geotechnical Investigation: A Myth for Civil Engineering" at Columbia Institute of Engineering and Technology Raipur on 25th January 2020 as Key note speaker in the National conference on innovative trends and Sustainable development.
- 14. Delivered a lecture on "Importance of Geotechnical Laboratory and Field Test In Civil Engineering Construction Practices" on 1^{4th} March 2019 at Civil Engineering Department Government Engineering College Raipur Chhattisgarh.
- 15. Delivered a lecture on "Importance of Geotechnical Site Investigation in Development of Infrastructure" on 12th February 2019 at Civil Engineering Department Government Engineering college Raipur Chhattisgarh.
- 16. Delivered a lecture on "Design Aspects of Earthquake Resistant Shallow foundation" on 28th November 2018 at Civil Engineering Department O.P. Jindal UniversityRaigarh.
- 17. Delivered a lecture on "Soil: Classification, Testing and Investigation, Technical Consideration and Implementation Arrangements" on 16.03.2016 in the Training Programme on Rural Road Maintenance to Engineer and Contractor in non RRP-II States At RCTRC Bhawan Village Jhanjh Sector – 24 Naya Raipur scheduled from 15th March to 17th March 2017.
- 18. Delivered a lecture on "Geo-environmental Challenges and Solutions" on two weeks course "Modern Geotechnical Engineering" under Global Initiative for Global Network (GIAN) programme funded by Ministry of Human Resources Development, Government of India from 21st Dec to 28th Dec 2015 at NIT Raipur on 27.12.2015.
- 19. Delivered a lecture on "Geotechnical Investigations for various sites & Laboratory & field investigations for Construction of subgrade and granular layers using locally available material" in five days short term hands on training programme "Testing Methods in Civil Engineering Construction" under TEQIP-II at Civil Engineering Department, National Institute of Technology Raipur on 19.11.2015.
- 20. Delivered an Expert Lecture on topic "New Trends in Geotechnical Engineering" at O.P. Jindal Institute of Technology Raigarh, Chhattisgarh, India on 1st April 2015.
- 21. Delivered an Expert Lecture on topic "Design Aspects of Earthquake Resistant Shallow Foundation" in Training Programme on "Earthquake Resistant Building Construction Techniques and Safe Construction Practices" for the Engineers of various government department of Government of Chhattisgarh and Engineers of Public & Private Sectors on 9th March 2015 at Government Engineering College Bilaspur, Chhattisgarh, India.

- 22. Delivered a Lecture on topic "Fly Ash: A Resource Material for Soil Stabilisation and Embankment Construction" in one day Workshop "Ash Utilization Challanges and Opportunities" on 24th February 2015 at NSPCL Bhilai Expansion Plant Bhilai, Chhattisgarh. India.
- 23. Delivered a Lecture on topic "Geotechnical Investigation and Foundation Types" in "Training Programme for Capacity Building of Engineers -2012" for the Engineers of Public Works Department, Government of Chhattisgarh, PWD (B&R) Division Kanker on 22nd September 2012 at ManasBhavan, Kanker, Dist-Kanker, Chhattisgarh.
- 24. Delivered a Lecture on topic "Design Aspects of Earthquake Resistant Shallow Foundation" in a shortterm course for the Practicing Engineers of the Government Department of Government of Chhattisgarh, under National Programme for Capacity Building of Engineers in Earthquake Risk Managament funded by Ministry of Home Affairs, Government of India, on 4th May 2010 at National Institute of Technology Raipur.
- 25. Delivered Lecture on "Radioactive Waste: The Problem and its Management" as an Expert for Academic and Industrial Participant on Hazardous Waste Management two days seminar under Ministry of Environment and Forest Department, Government of India in association with National Institute of Technology Raipur at National Institute of Technology Raipur Chhattisgarh (22nd August 2009).
- 26. Delivered Series of Lectures on "Quality Control and Assurance of Rural Roads" for Assistant Engineer and Junior Engineer of Public Works Department (PWD) Rajasthan State, India under Pradhan Mantri Gram SadakYojana (Prime Minister Village Road Scheme) Training Programme, conducted by National Rural Roads Development Authority (NRRDA), New Delhi, India at Birla Institute of Technology and Science (BITS), Pilani, Rajasthan, India (Jan March 2006).

SESSION CHAR IN THE CONFERENCE AND KEY NOTELECTURE:

- Chaired the parallel technical session of paper presentation on 20th of March 2021 in IC-AICE-2021 during the International Conference on Advancements and Innovations in Civil Engineering from 18th - 20th March 2021 at KDKCE premise. (Online Mode)
- Chaired the technical session of technical paper presentation on 31st January 2020 on 2nd International Conference on Recent Trends in Renewable Energy and Sustainable Development (Sustainable Global Development) on 30th-31st January 2020 is Association with TEQIP-III CSVTU Bhilai, & JNTU Hyderabad & Chhattisgarh Council of Science & Technology, Raipur at BIT Raipur.
- Chaired the technical session of paper presentation on 24th and 25th January 2020 on National ConferenceOn"Innovative Trends & Sustainable Development in Different Engineering Fields" Organised by CIET, Raipur & CSVTU, Bhilaiat Columbia Institute of Engineering & Technology, Raipur24th -25th January 2020.
- Delivered a key note lecture on 25th January 2020 on topic "Geotechnical Investigation: A Myth for a Civil Engineer" on National ConferenceOn"Innovative

Trends & Sustainable Development in Different Engineering Fields" Organised by CIET, Raipur & CSVTU, Bhilaiat Columbia Institute of Engineering & Technology, Raipur24th -25th JANUARY 2020.

- Chaired a technical session on 25th March 2017 in the International Conference on Innovations & Sustainable Development in Sciences, Management & Technology on 25th – 26th March, 2017 at SSIPMT Raipur.
- Delivered a key note lecture on "Soil Investigation: Local Practices and Problems" as an expert speaker for the technical session on 25th March 2017 in the International Conference on Innovations & Sustainable Development in Sciences, Management & Technology on 25th – 26th March, 2017 at SSIPMT Raipur.

EDITOR OF CONFERECE PROCEEDINGS:

Guest editor (Shri Ram Krishna Mishra, Shirish V. Deo, LaxmikantYadu, Vikas Dubey & Dhananjay Kumar Deshmukh) of a conference proceedings "Advanced Material Letters" Volume 12, issue 5 May 2021, of 2nd International Conference on Recent Trends in Renewable Energy and Sustainable Development (Sustainable Global Development) on 30th-31st January 2020 is Association with TEQIP-III CSVTU Bhilai, & JNTU Hyderabad & Chhattisgarh Council of Science & Technology, Raipur,

SHORT TERM COURSE ATTENDED:

- One week refresher course on "Finite Element Method" Organised by Department of Mechanical Engineering, National Institute of Technology Raipur at NIT Raipur from 18-22nd June 2012.
- 2. Short term course on "Waste Treatment and Cleaner Technologies" held at National Institute of Technology Raipur organised by Department of Chemical Engineering during 28th May to 1st June 2012.
- 3. Short Course on "Finite Element Method, Constitutive Modeling and Applications" held at Indian Institute of Technology Gandhinagar during April 02-05, 2012.
- 4. Four Weeks Training programme under "National Programme for Capacity Building of Engineers in Earthquake Risk Management (NPCBEERM)" Conducted by Ministry of Home and National Earthquake Risk Management Department, Government of India at Civil Engineering Department, Indian Institute of Technology Kharagpur West Bengal as a Faculty of State Resources Institute (NIT Raipur) (June 08 – July 05 2009).

SEMINAR / WORKSHOP ORGANISED:

- Organised 5 days Faculty Development Program (FDP) on "Geo-environmental and Geo-transportation Engineering" jointly organized by IGS Raipur Chapter, NIT Raipur and SSIPMT Raipur, Chhattisgarh from 27th June 2022 to 1st July 2022.
- 2. Organised 5 days Short Term Training Programme (STTP) on "Advances in Geotechnical, Mining, and Geology" from 9th June to 13th June 2021, jointly

organised by IGS Raipur Chapter in association with National Institute of Technology (NIT) Raipur& Department of Civil Engineering, Shri Shankaracharya Institute of Professional Management and Technology (SSIPMT) Raipur.

- Organized fivedays workshop on "Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" under and funded by Human Settlement Management Institute - Housing and Urban Development Corporation (HSMI-HUDCO), New Delhi at NIT Raipur from 24th September 2019 to 28th September 2019.
- 4. Organised two weeks course "Modern Geotechnical Engineering" under Global Initiative for Global Network (GIAN) programme funded by Ministry of Human Resources Development, Government of India from 21st Dec to 28th Dec 2015 at NIT Raipur as Course Coordinator and host faculty.
- 5. Organized five days short term hands on training programme "Testing Methods in Civil Engineering Construction" under TEQIP-II at Civil Engineering Department, National Institute of Technology Raipur from 16th November to 20th November 2015 as Coordinator.
- 6. Organized two days workshop "Water Resources in Developing Countries: Planning and Management under TEQIP-II at Civil Engineering Department, National Institute of Technology Raipur on 27th and 28th August 2015 as organising member.
- 7. Organized one day workshop under research project "Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at Civil Engineering Department, National Institute of Technology Raipur in association with HSMI, HUDCO New Delhi on ^{14th} August 2015 as Coordinator.
- Organized one day workshop "Research Schemes in DST & Recent Advances in Civil & Transportation Engineering" under TEQIP-II at Civil Engineering Department, National Institute of Technology Raipur on 1st August 2015 as Coordinator.
- 9. Organized a Regional Educational Workshop on "Structural Engineering Solutions" organized by Civil Engineering Department, National Institute of Technology Raipur in association with Concept Tele Systems (Bentley Channel Partner) on 29th and 30th October 2012 at National Institute of Technology Raipur as Member of Organizing Committee.
- 10. Organized a Short term course for the Practicing Engineers of the Government Department of Government of Chhattisgarh, under National Programme for Capacity Building of Engineers in Earthquake Risk Managament funded by Ministry of Home Affairs, Government of India, during 3rd May to 7th May 2010 at National Institute of Technology Raipur as a Co-ordinator.
- 11. Organized A Technical Presentation on "Birla White YunaRatan Awards 2010 for Engineering Students and Birla White Cement Products" by Grasim Industries Limited (White Cement Divison) Raipur at National Institute of Technology Raipur, Chhattisgarh, India (4th August 2010).
- 12. Organized A Technical Presentation on "Birla White YunaRatan Awards 2009 for Engineering Students and Birla White Cement Products" by Grasim Industries

Limited (White Cement Divison) Raipur at National Institute of Technology Raipur, Chhattisgarh, India (22nd July 2009).

SEMINAR / WORKSHOP ATTENDED:

- 1. Two day workshop on Sustainable Construction Materials and Agricultural Waste" organised by Department of Civil and Engineering, VNIT Nagpur on Oct 11 to Oct 12, 2015 at VNIT Nagpur.
- 2. One day workshop under research project "Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at Civil Engineering Department, National Institute of Technology Raipur in association with HSMI, HUDCO New Delhi on 14th August 2015.
- One day workshop "Research Schemes in DST & Recent Advances in Civil & Transportation Engineering" under TEQIP-II at Civil Engineering Department, National Institute of Technology Raipur on 1st August 2015.
- 4. Workshop on "Intellectual Property Rights (IPR)" on 4th and 5th April 2014 organised by National Institute of Technology Raipur and Chhattisgarh Council of Science and Technology, held at National Institute of Technology, Raipur.
- 5. Workshop on "Intellectual Property Rights (IPR)" on 4th and 5th April 2014 organised by National Institute of Technology Raipur and Chhattisgarh Council of Science and Technology, held at National Institute of Technology, Raipur.
- Workshop on Mathematical Modelling, Chemoinformatics and Quantum Chemistry on 19th February 2013 conducted by Department of Electronics &Telecommunication and Central Computing Center, held at National Institute of Technology, Raipur.
- 7. Workshop on "Deployment and Collaboration of Analytical Reports & Models" on February 1, 2013 held at National Institute of Technology Raipur.
- 8. Regional Educational Workshop on "Structural Engineering Solutions" organized by Civil Engineering Department, National Institute of Technology Raipur in association with Concept Tele Systems (Bentley Channel Partner) on 29th and 30th October 2012 at National Institute of Technology Raipur.
- 9. National seminar on "Emerging Concept of Green Buildings in Chhattisgarh", organized on 17thOctober, 2012 at Hotel Golden Tulip, Raipur by E-Tech Consultancy Services & Enterprises GEC Structural Consultants & Contractors.
- 10. All India workshop on "Awareness of Indian Standards with Particular Reference to National Building Code (NBC) 2005" organised by The Institution of Engineers (India) Chhattisgarh State Centre, Raipur (Under the aegis of Civil Engineering Division Board IEI Kolkata) in association with Bureau of Indian Standards, New Delhi on 27th April 2012, at Raipur Chhattisgarh.
- 11. QIP Course AICTE Sponsored workshop on Engineering Optimization using Matlab and Excel held at IIT Guwahati, organised by Civil and Mechanical Engineering Department during February 29 to March 2, 2012.
- 12. Indo Norwegian Workshop on "Potential For Increased Use Of Mineral Wastes In Cement And Concrete" at Le Mariadian Hotel New Delhi on 20th Dec 2011,

Sponserd by National Council for Cement and Building Materials and SINTEF Norwary.

- 13. Three days 44th Annual convention of Indian Water Works Association at Shri AgrasenDham, Raipur, CG, India (7th to 9th January 2012).
- 14. Two days 27th National Convention of Civil Engineers and National Seminar on "Integrated Development on Town as Growth Centers", The Institution of Engineers (India) Chhattisgarh State Centre, Raipur in Association with National Institute of Technology Raipur, CG, India, (15th and 16th October 2011).
- 15. One day International Seminar/workshop on "Mega Foundations-Large and Deep Foundations," Civil Engineering Department, Indian Institute of Technology Mumbai at Indian Institute of Technology Mumbai, India. (9th September 2010).
- 16. Two days National Seminar on "Future Urbanization" organized by Arhitecture Department, National Institute of Technology Raipur at National Institute of Technology Raipur. (27th and 28th July 2010).
- 17. Two days National seminar on "Hazardous Waste Management," under Ministry of Environment and Forest Department, Government of India in association with National Institute of Technology Raipur at National Institute of Technology Raipur Chhattisgarh. (21st and 22nd August 2009).
- 18. One day National Seminar/workshop on "Durability of concrete and Role of Blended Cements," ACC Cements in Association with Civil Engineering Department, National Institute of Technology Raipur at National Institute of Technology Raipur Chhattisgarh. (29th March 2009).
- 19. Geosynthetics India 2004, A Seminar-Workshop, organized by IIT Delhi and Indian Geotechnical Society, Delhi chapter (October 27-30, 2004).

B. Tech. (Graduate Level) Final Year Thesis:

- ChandrashekharOgrey, Tapan Kumar Chakravarty, SagarSahu, Jwala Kant Sahu, Rajkumar Sinha and LokeshChandrakar (2009). "Improvement of Soft Subgrade Soil by Rice Husk Ash for Low Volume Roads," for the partial fulfillment for the requirement of Pt. Ravishankar Shukla University Raipur for the award of degree of Bachelor of Technology in Civil Engineering in 2009-2010at National Institute of Technology Raipur Chhattisgarh.
- 2. Sandeep Kumar Sahu and Rahul Dev Berma (2010). "Stabilisation of soft soil using Rice Husk Ash for Rural Roads" for the partial fulfilment for the requirement of National Institute of Technology Raipur (C.G.) for the award of degree of Bachelor of Technology in Civil Engineering in 2009-2010.
- 3. Lawrence Kumar and Vinay Kumar (2010). "Ground Improvement and Soil Structure Interaction," for the partial fulfilment for the requirement of National Institute of Technology Raipur (C.G.) for the award of degree of Bachelor of Technology in Civil Engineering in 2009-2010.
- 4. ManvendraKumar Singh MayankParakh and TikeshwarVerma (2011). "Soil Stabilisation with Fly-Ash & Design of Block-Type Machine Foundation using Matlab" for the partial fulfilment for the requirement of National Institute of Technology Raipur (C.G.) for the award of degree of Bachelor of Technology in Civil Engineering in 2010-2011.

- 5. Kamini Joshi, Paridhee Agrawal and Sarita Mishra (2011). "Stabilization of Soft Soil using Geosynthetics Material Gunny Bag," for the partial fulfilment for the requirement of National Institute of Technology Raipur (C.G.) for the award of degree of Bechelor of Technology in Civil Engineering in 2010-2011.
- 6. OmprakashMeena and Saurabh Singh (2012). "Stabilisation of Soft Soil using Rice Husk Ash And Fly Ash for Low Volume Roads" for the partial fulfilment for the requirement of National Institute of Technology Raipur (C.G.) for the award of degree of Bechelor of Technology in Civil Engineering in 2011-2012.
- LavanyaPushpParganihaand Rohit Bhardwaj (2012). "Granulated Blast Furnace Slag as Stabilizer of Soft Sub Grade Soil for Low Volume Roads" for the partial fulfilment for the requirement of National Institute of Technology Raipur (C.G.) for the award of degree of Bechelor of Technology in Civil Engineering in 2011-2012.
- 8. AtulKumar Singh and Jai Chand Bhagat (2012). "Stabilised soil using Fly Ash and Blast Furnace Slag for Low Volume Roads" for the partial fulfilment for the requirement of National Institute of Technology Raipur (C.G.) for the award of degree of Bechelor of Technology in Civil Engineering in 2011-2012.
- 9. Abhishek Singh (2013). "Effect of thickness on load settlement behaviour of blast furnance slag overlay on soft clay under square Footing." at NIT Raipur.
- 10. DharmendraPrasad& Satish Gupta (2013). "Load settlementbehaviourofreinforcedgranulated blast furnaceslagwithsinglelayerofgeogridundercircularfooting:an experimental study." at NIT Raipur.
- 11. Sunil Kumar (2013). "Statistical analysis of soil properties & numerical modelling of granular fill." at NIT Raipur.
- 12. Rahul Ranjan& Rakesh Kumar Pure (2013). "Improvement of soft subgrade soil by fly ash for low volume roads" at NIT Raipur.
- 13. AshishKumar Nayak, RajendraBairwa&Poonam Wankhede (2013). "Load settlement behaviour of stabilized soil using fly ash and rice husk ash." at NIT Raipur.
- 14. Shruti A.&Vivek Kumar (2014). "Study of load settlement behaviour of granulated blast furnace slag as a granular fill under circular footing." at NIT Raipur.
- 15. ManishaKujur& Karan Gupta (2014). "Load-settlement behaviour of unreinforced and reinforced granulated blast furnace slag overlay on soft caly under square footing." at NIT Raipur.
- 16. Ashish Mittal, Akbar Khan &Vaibhav Kumar (2015). "Improvement of soft soil using stone column method." at NIT Raipur.
- 17. NishantDubey, PeeyushRamrakhyaniandSudhanshuRanjan(2015). "Effect on bearing capacity of unreinforced and reinforced granulated blast furnace slag overlay on soft clay slope" at NIT Raipur.
- 18. K Sourabh, Neha Chandra (2016). "Behavior of circular footing resting on improved soft soil by stone column and unreinforced and reinforced GBFS overlay" at NIT Raipur.

- 19. KumarAmritesh and Vishal Kushwaha (2016). "Effect on bearing capacity of unreinforced and reinforced granulated blast furnace slag overlay on soft clay slope under square footing" at NIT Raipur.
- 20. Lokeshwari Kanwar, Priyanka, Shruti Rani Chandrakar, Suman Patel, RanjniBharadwaj(2017). "Stabilisation of soil by Industrial Waste With Lime" at GEC Raipur.
- 21. Abhishek Singh, Prateek Saxena, Anusriya Jain (2019) "Slope Stability Analysis of Fly Ash Dyke of NTPC Sipat"
- 22. Mehar Singh Jat and Narendra Singh Parihar (2019) "A study of soil moisture sensor and its application in different type of soil"
- 23. Tanmay Singh Vaishnavi Nayak Zajariya Rohit Sanjay (2020) "Simulating 1D consolidation of fully saturated soil using Abaqus" at NIT Raipur.
- 24. Sagar Bhardvaj and Y.Swati (2020) "A study on Reinforced Soil Wall" at NIT Raipur
- 25. Rahul Kumar Mishra (2021) "failure of slope using slope/w and proposed solution" at NIT Raipur
- 26. Palash Khatri and Sandeep Baroliya (2021) "Stability and design of red mud pond" at NIT Raipur
- 27. Bhavi Patel and Shraddha Rathore (2021) "Soil stabilization by Microbially Induced Calcite Precipitation" at NIT Raipur
- 28. Aditya Verma, Sanjeev Bhardwaj, Vishal Thakur (2022) "Design of Retaining Wall using Python" at NIT Raipur
- 29. Udit Gupta, Vedant Abhay Ashtikar (2022) "Structural Behaviour of Howe Truss Bridge on the Basis of Computer Simulation Software (STADD Pro)"
- 30. Kumar Vikas, Rahul Kumar Sahu (2023) "Improvement of Shear Strength Parameter of Sand using Biopolymers"
- 31. Arvind Gupta, Ujjawal Trivedi (2023) "Improvement of Shear Strength Parameter of Cohsionless Soil using Biopolymers"
- 32. Rahul Kumar Sinha, Rajiv Ranjan (2023) "Improvement of Shear Strength Parameter of Pond Ash using Biopolymers"



Dr LaxmikanyYadu Associate Professor Civil Engineering Department & Associate Dean (Planning & Development) National Institute of Technology Raipur

G.E. Road Raipur CG
