Dr. Bablu Kirar

Assistant Professor, Dept. of Civil Engg., SATI Vidisha (M.P.)



CONTACT INFORMATION

			Present	Permanent
EMAIL	bablu.sati@gmail.com	ADDRESS	B-3, Balaji Avenue,	131, Yuvraj Club Road
Mob.	+91-9997416266/9993711493		Vidisha (M.P.) PIN - 464001	Sherpura, Vidisha (M.P.) PIN - 464001

EDUCATION

Indian Institute of Technology Roorkee				
Indian Institute of	M. Tech (2008-2010), Civil Engineering (Geotechnical Engineering)			
Technology Guwahati	First class (CGPA: 6.88/10)			
	Dissertation: Dynamic Properties of Soil for the Design of Machine			
	Foundations.			
	Advisor: Dr. A. Murali Krishna			
Samrat Ashok Technological Institute (SATI), Vidisha	B.E. (2004-2008), Civil Engineering First with Hons. (76.72 %)			
M.P. Board, Bhopal	HSC (2002-2003), Science Stream SSC (1999-2000), First class (74.88 %) First class (71.20 %)			
GATE	Year: 2007 Score: 321 AIR: 1221 Percentile: 86.1			

OTHER INFORMATION

		INTERNATIONAL	NATIONAL	
PUBLICATIONS*	JOURNALS	16	01	
	CONFERENCES	09	05	
	*A separate list providing details of publications appended to the C.V.			

LANGUAGE SKILLS

English & Hindi

SOFTWARES SKILLS

MATLAB, Pro-Shake, PLAXIS-3D, Auto-CAD, & STAAD-Pro.

PROFESSIONAL MEMBERSHIPS

Indian Geotechnical Society (IGS), LM-3600 Indian Society of Earthquake Technology (ISET), LM-1676 Institution of Engineers (IEI), M-1725291

PROJECTS & TRAINING

- **BE Project:** Analysis of Bridge Deck using 'STAAD-Pro'.
- **Minor Project I:** Design of central school building at Vidisha under CPWD.
- **Minor Project II:** Analysis of multistory building using 'STAAD-Pro'.
- Training for Building Construction under 'M.P. Housing Board' at Riviera Town, Bhopal.
- Training for Construction of Bridge under 'M.P. P.W.D.' at Ganj Basoda, Vidisha.

EXTRA CURRICULAR ACTIVITIES

- Fellowship under MHRD Scheme for Ph.D. at IIT Roorkee (Dec-2010).
- Secure first position in BE (Civil) 2nd year 2006 examination.
- Participated as a Convener, Co-Convener and Member at College Activity.

PERSONAL DETAILS

Nationality: Indian Marital Status: Married

REFERENCES

Dr. B.K. Maheshwari

Professor

Department of Earthquake Engineering Indian Institute of Technology Roorkee Roorkee - 247667, Haridwar, Uttarakhand

Email - <u>bkmahfeq@iitr.ac.in</u> bkmaheshwari.iitr@gmail.com Dr. R.S. Jakka

Associate Professor Department of Earthquake Engineering Indian Institute of Technology Roorkee

Roorkee - 247667, Haridwar Uttarakhand

Email - jakkafeq@iitr.ac.in rsjakka@gmail.com

I hereby declare that the above written particulars are true to the best of my knowledge and belief.

Place: Vidisha Signature of candidate

Date: 15-Jun-23 (BABLU KIRAR)

Annexure - I LIST OF PUBLICATIONS

A. Journal Papers

- Kumar, K., Kirar, B., Agarwal, M. and Deshpande, V. (2022). "Application of Novel Hybrid Machine Learning Techniques for Particle Froude Number Estimation in Sewer Pipes". *Natural Hazards*. ISSN: 1573-0840; Impact Factor: 3.685 (five years). DOI: https://doi.org/10.1007/s11069-022-05786-x
- Yadav, V. and Kirar, B. (2022) "Mathematical Computation of Water Quality Index for the Groundwater in Morena City, Madhya Pradesh State, India", Journal of Emerging Technologies and Innovative Research, Vol. 9(10), pp. c134-c143, ISSN UGC Approved (Journal No: 63975) & 7.95 Impact Factor, ISSN: 2349-5162. Available: http://www.jetir.org/papers/JETIR2210215.pdf
- Muley, P., Maheshwari, B.K. and Kirar, B. (2022). "Liquefaction Potential of Sites in Roorkee Region Using SPT-Based Methods".
 International Journal of Geosynthetics and Ground Engineering, Vol. 8: 26, DOI: https://doi.org/10.1007/s40891-022-00374-2
 ISSN: 2199-9279 (electronic version).
- Rai, A. and Kirar, B. (2021) "Review of Method of Maintenance of Flexible Pavement by White topping", Journal of Emerging Technologies and Innovative Research, Vol. 8(9), pp. d694-d699, ISSN UGC Approved (Journal No: 63975) & 7.95 Impact Factor, ISSN: 2349-5162. Available: http://www.jetir.org/papers/JETIR2109377.pdf
- Guru, S. and Kirar, B. (2021). "Assessment of Black Cotton Soil by Use of Ceramic Dust, RBI Grade 81 and Lime", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Vol. 9(3). pp. 1224-1229. ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.177. DOI: https://doi.org/10.22214/ijraset.2021.33492
- Kushwah, J.R. and Kirar, B. (2021). "A Study of Black Cotton Soil Stabilization with Lime and Waste Plastic Bottle Stirrup", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Vol. 9(3). pp. 1218-1223. ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.177. DOI: https://doi.org/10.22214/ijraset.2021.33490
- 7. **Kirar, B.**, Jain, P.K., Jain, R., Chandrawanshi, S. and Chauhan, B.S. (2021). "Behaivior of expansive soil with lime and waste plastic", Journal of Emerging Technologies and Innovative Research, Vol. 8(3), pp. 1976-1982, ISSN UGC Approved (Journal No: 63975) & 5.87 Impact Factor, ISSN: 2349-5162. Available at :http://www.jetir.org/papers/JETIR2103245.pdf
- 8. Chauhan, B.S., Kumar, R., Jain, R., **Kirar, B.** and Chandrawanshi, S. (2021) "Suitability of Geosynthetic Clay Liners based on Hydraulic Conductivity for Various Types of Leachate", Journal of Emerging Technologies and Innovative Research, Vol. 8(3), pp. 1904-1907, ISSN UGC Approved (Journal No: 63975) & 5.87 Impact Factor, ISSN: 2349-5162. Available http://www.jetir.org/papers/JETIR2103237.pdf
- 9. Vishwakarma, D., **Kirar, B.** and Amritphale, S.S. (2019). "Tensile Strength of Geopolymeric Concrete". International Journal of Emerging Technologies and Innovative Research, Vol. 6(6), pp. 463-469. Available at http://www.jetir.org/papers/JETIR1907P73.pdf, ISSN: 2349-5162
- Sahu, M., Sharma, P. and Kirar, B. (2019). "An Experimental Study on Compressive Strength and Permeability of Porous Concrete
 with the Use of Fly Ash for the Pavement Purpose". International Journal of Emerging Technologies and Innovative
 Research, Vol.6(5),pp.83-90. Available at: http://www.jetir.org/view?paper=JETIR1905O13, ISSN: 2349-5162
- 11. Sharma, P.K., Sharma, P. and **Kirar, B.** (2019). "Experimental Study on Strength Parameters of Demolished Concrete by Adding Jute Fiber". International Journal of Emerging Technologies and Innovative Research, Vol. 6(2), pp.166-170. Available at: http://www.jetir.org/papers/JETIR1902126.pdf, ISSN: 2349-5162
- 12. Pandey, P., Jain, R. and **Kirar, B.** (2019). "An Experimental Study of Ground Improvement Technique by Sand Column". International Journal of Emerging Technologies and Innovative Research, Vol. 6(1), pp.563-569. Available at : http://www.jetir.org/papers/JETIR1901673.pdf, ISSN: 2349-5162
- 13. Saxena, R., Jain, R. and **Kirar, B.** (2018). "Improvement of Soil Properties using Raw Plastic Bottles". International Journal of Emerging Technologies and Innovative Research, Vol. 5(12), pp. 608-612. Available at : http://www.jetir.org/papers/JETIR1812681.pdf, ISSN: 2349-5162
- 14. Pal, R., Jain, R. and **Kirar, B.** (2018). "Soil Stabilization using E-wires", International Journal of Emerging Technologies and Innovative Research, Vol. 5(12), pp. 486-491. Available: http://www.jetir.org/papers/JETIR1812761.pdf, ISSN: 2349-5162
- 15. Kirar, B. and Maheshwari, B.K. (2018). "Dynamic properties of soils at large strains in Roorkee region using field and laboratory tests". *Indian Geotechnical Journal*, Vol. 48(1), pp.125-141. DOI: https://doi.org/10.1007/s40098-017-0258-2, ISSN: 2277-3347 (electronic version)
- 16. Maheshwari, B.K. and Kirar, B. (2017). "Dynamic properties of soils at low strains in roorkee region using resonant column tests". *International Journal of Geotechnical Engineering*, Vol. 13(5), pp.399-410. DOI: https://doi.org/10.1080/19386362.2017.1365474, ISSN: 1939-7879 (electronic version)

17. **Kirar, B.,** Maheshwari, B.K. and Muley, P. (2016). "Correlation between shear wave velocity (V_s) and SPT resistance (N) for Roorkee region". *International Journal of Geosynthetics and Ground Engineering*, Vol. 2(1): 9, DOI: https://doi.org/10.1007/s40891-016-0047-5, ISSN: 2199-9279 (electronic version)

B. Journal Papers (In Review)

1. **Kirar, B.** and Maheshwari, B.K. (2020). "Effects of reinforcement on dynamic properties and liquefaction resistance of solani sand at high strains". *In: Review, Journal of Geotechnical and Geoenvironmental Engineering, ASCE*.

C. Conference Papers

- 1. Chauhan, B.S., Kumar, R., Jain, R., **Kirar, B.** and Chandrawanshi, S. (2021). "Classification of geosynthetic clay liners based on hydraulic conductivity", *44th Indian Social Science Congress (ISSC-XLIV)*, Indian Social Science Academy and SATI, Vidisha (M.P.), India. February 15-19, 2021.
- 2. **Kirar, B.**, Jain, P.K., Jain, R., Chandrawanshi, S. and Chauhan, B.S. (2021). "Stabilization of black cotton soil with lime and waste plastic bottles", *Proc. International Conference on Recent Advances in Civil Engineering for Sustainable Development (RACESD-2021)*, Department of Civil Engineering, MANIT, Bhopal (M.P.) India, Paper ID: GEO12. February 13-14, 2021.
- 3. Chauhan, B.S., Kumar, R., Jain, R., **Kirar, B.** and Chandrawanshi, S. (2021). "Suitability of geosynthetic clay liners for landfill dumping sites based on hydraulic conductivity", *Proc. International Conference on Recent Advances in Civil Engineering for Sustainable Development (RACESD-2021)*, Department of Civil Engineering, MANIT, Bhopal (M.P.) India, Paper ID: GEO13. February 13-14, 2021.
- Raghuwanshi, P. and Kirar, B. (2020). "Improvement of the Physical Characteristics of Fibre Reinforced Concrete by using Industrial Waste Polymer as Fibre", Proc. 1st National Conference (online) on Geo-Science and Geo-Structure (GSGS-2020), Department of Civil Engineering, NIT Jamshedpur, India, Paper ID, GSGS031.
- 5. Chauhan, B.S., Bele, S. and **Kirar, B.** (2020). "Utilization of Recycled Concrete Aggregate with Rice Husk Ash for Concrete Construction: A Review", *Proc. National Conference on Advances in Sustainable Construction Materials (ASCM 2020)*, Department of Civil Engineering, NIT Jamshedpur, India, Paper ID, ASCM2020 216.
- 6. Chauhan, B.S., **Kirar, B.** and Prajapati, B. (2020). "Application of Steel Fiber in Soil Stabilization" *Proc.* 7th *International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics* (7ICRAGEE), IISc Bangalore, India, Paper ID, 172.
- 7. **Kirar, B.** and Maheshwari, B.K. (2018). "Effect of Coir Fiber on Dynamic Properties of Solani Sand at Small Strains using Resonant Column Apparatus", *Proc.* 16th Symposium on Earthquake Engineering (16SEE), IIT Roorkee, India, Paper No. 254.
- 8. **Kirar, B.** and Maheshwari, B.K. (2017). "Dynamic Properties of Solani Sand at Small Strains using Resonant Column Apparatus", *Proc. 16th World Conference on Earthquake Engineering (16WCEE)*, Santiago, Chile, Paper No. 886.
- 9. **Kirar, B.**, Krishna, A.M. and Rangwala, H.M. (2016). "Dynamic Properties of Soils for the Design of Machine Foundations". *Proc. Indian Geotechnical Conference (IGC2016)*, IIT Madras, Chennai, India, Paper No. 265.
- 10. **Kirar, B.** and Maheshwari, B.K. (2015). "Soil Amplification Studies for Roorkee Region". *Proc. 6th International Geotechnical Symposium (6IGS-2015) on Disaster Mitigation in Special Geoenvironmental Conditions*, Chennai, India. pp 137-140.
- 11. Maheshwari, B.K., Muley, P., **Kirar, B.** and Paul, D.K. (2015). "Comparison of Different Methods of Evaluating the Liquefaction Potential of Roorkee Region". 6th Annual Conference of the International Society for Integrated Disaster Risk Management, New Delhi, India.
- 12. **Kirar, B.** and Maheshwari, B.K. (2013). "Effect of Silt Content on Dynamic Properties of Solani Sand". *Proc.* 7th International Conference on Case Histories in Geotechnical Engineering, Chicago, USA. Paper No. 4.08b.
- 13. **Kirar, B.**, Maheshwari, B.K. and Jakka, R.S. (2012). "Dynamic Properties of Solani Sand Reinforced with Coir Fibers". *Proc. 15th World Conference on Earthquake Engineering (15WCEE)*, Lisbon, Portugal. Paper No. 1482.

14. Deshpande, V. and **Kirar, B.** (2007). "Behaviour of Expansive Soil with Stone Dust as a Stabilizer". *Indian Geotechnical Society*, Geoconcept-07, Indore Chapter. pp 55-60.

Annexure - II Conference/Seminar/Workshop/FDP/STTP/Training Attend

- Participated in AICTE Training And Learning (ATAL) Academy Online Elementary Faculty Development Programme (FDP) on "Recent Advances in Earthquake Engineering" from 20/09/2021 to 24/09/2021 (One Week) at Madan Mohan Malaviya University of Technology, Gorakhpur.
- Participated as Co-Coordinator in AICTE Training And Learning (ATAL) Academy Online Elementary Faculty Development Programme (FDP) on " Advance Improvement Techniques" from 06/09/2021 to 10/09/2021 (One Week) at Samrat Ashok Technological Institute, Engineering College, Vidisha.
- 3. Participated in 7th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics (7ICRAGEE), Jointly organised by the Indian Society of Earthquake Technology, Civil Engineering Department, IISc Bangalore and Department of Earthquake Engineering, IIT Roorkee, Roorkee, India, held online during July 12-15, 2021.
- Participated in a Nirmaana 2021 Curtain Raiser Lecture Series on "Tunnel lining configurations" organised by Institute for Research, Development & Training of Construction Trades & Management in Association with Nitte Meenakshi Institute of Technology(NMIT), held on 27th May, 2021.
- 5. Participated in a webinar series on "Industry-Institute-Interaction and Training". Organized by Department of Civil Engineering, Dr B R Ambedkar National Institute of Technology Jalandhar between 5th Sep. to 5th Dec., 2020.
- Participated in a webinar on "New Education Policy: 2020". Organized by Unnat Bharat Abhiyan (UBA) Cell, RGPV, Bhopal under TEQIP III on 23rd September 2020.
- Participated in TEQIP III sponsored webinar on "Recent Developments in Geotechnical Engineering (RDGE-2020)". Organized by Department of Civil Engineering, NIT Rourkela, between September 14-18, 2020.
- 8. Participated in Faculty Development Programme (FDP) on "Recent Advances in Earthquake Engineering" held from 07-l1 September 2020 (One Week) organized by Department of Civil Engineering at Madan Mohan Malaviya University of Technology, Gorakhpur.
- 9. Participated in a Webinar on "Intellectual Property Rights (IPR)" Organized by Ujjain Engineering College with Twinning Partner GEC Aurangabad on July 2, 2020.
- 10. Participated in Five Days Hands on Workshop on "Patent Searching, Drafting and Filing" (Online Mode) from 29-05-2020 to 02-06-2020. Organized by Department of Computer Science and Engineering, Panimalar Institute of Technology, Poonamallee, Chennai, Tamil Nadu, In Association with Turnip Innovations and Exilyze Intellectual Services, IEEE Computer Society & Computer Society of India.
- 11. Participated in workshop on "Implementation of Finance/Accounting Guidelines in CRS Project" Organized on Feb. 08, 2020 by State Project Implementation Unit, Madhya Pradesh, India
- 12. Participated in two days workshop on "Retrofitting Techniques and Associated Challenges" Under TEQIP-III, Organized by Department of Civil Engineering, SATI Vidisha during Feb. 4 5, 2020, at SATI Vidisha, India
- Participated as Coordinator in "Internal Hackthon for Smart India Hackathon 2020" Organized by SATI Vidisha during January
 15 19, 2020, at SATI Vidisha, India
- 14. Participated as Co-Coordinator in two days workshop on "Ground Improvement Techniques" Organized by Department of Civil Engineering, SATI Vidisha during January 7 8, 2020, at SATI Vidisha, India
- Participated in One Day Workshop on Assessment of Online Courses for TEQIP Institute, Organized on Dec 14, 2019 by SGSITS Indore, India
- Participated in Workshop on Innovative Construction Machineries, Materials and Methods, Organized on Nov 9-10, 2019 by IIT Jammu at Jammu, India
- 17. Participated in workshop on "Procurement Procedure of CRS Proposal" Organized on Oct. 23, 2019 by State Project Implementation Unit, Madhya Pradesh, India
- Participated in Short Term Training Programme (STTP) on "Bentley Software's for Civil Engineering" Organized by SATI Vidisha during Aug 20-24, 2019 at SATI Vidisha, India
- 19. Participated in Short Term Training Programme (STTP) on "Limit State Design of Steel Structure" Organized by Department of Applied Mechanics, VNIT Nagpur during July 29-Aug 02, 2019 at VNIT Nagpur, India
- Participated as Coordinator in One Week Training Programme on "Introduction to Random Vibration" Organized by Department of Applied Mechanics, VNIT Nagpur during July 16-20, 2019 at VNIT Nagpur, India

- Participated in Short Term Training Programme (STTP) on "Modelling Issues of Soil-Structure Interaction Problem" Organized by Department of Civil Engineering, VNIT Nagpur during July 8-12, 2019 through web transmission/AV Recording at SATI Vidisha, India
- Participated in Summer Training Program on Advanced Pedagogy and Digital Tool, Organized on May 27-31, 2019 by IIT Gandhinagar at IIT Gandhinagar, India.
- 23. Participated in workshop on "How to Write Collaborative Research Proposal" Organized on April 30, 2019 by State Project Implementation Unit, Madhya Pradesh, India
- Participated in five days Start-up Conclave 2k19 "Ideate, Innovate & Start-up" Organized by SATI Start-Up Cell Vidisha under TEQIP-III in collaboration with VNIT Nagpur on April 08-12, 2019 at SATI Vidisha (M.P.), India.
- 25. Participated in the Microsoft Workshop on "Transforming Education through Technology" on April 3, 2019 at International Conference on Digital Pedagogies, April 2019, New Delhi, India.
- 26. Participated in International Conference on "Digital Pedagogies: Changing Mindsets for Sustainable Learning", Organized on April 1-2, 2019 by The JISCE and AICTE at AICTE Auditorium, New Delhi, India.
- 27. Participated in One Week Short Term Training Programme (STTP) on "Recent Trades in Remote Sensing and Geographic Information System Technologies" Organized by Ujjain Engineering College on Feb 11-15, 2019 at Ujjain (M.P.), India.
- 28. Participated in two days workshop on "Outcome Based Education (OBE)" Organized by SATI Vidisha on Jan 11-12, 2019 at Vidisha (M.P.), India.
- 29. Participated in Sixteenth Symposium on Earthquake Engineering (16SEE), Organized on Dec. 20-22, 2018 by Department of Earthquake Engineering & Indian Society of Earthquake Technology at IIT Roorkee, Roorkee, India.
- 30. Participated as Co-Coordinator in International Seminar & Exhibition on "Innovations and Opportunities in Building Materials and Housing Technologies" Organized by SATI Vidisha on Nov 01-03, 2018 at Vidisha (M.P.), India.
- Participated in One Week Training Programme on "Wind Effect on Structures" Organized by Department of Applied Mechanics, VNIT Nagpur from 29th October to 2nd November 2018 through AV Recording/ web transmission at SATI, Vidisha, India
- 32. Participated in One Week Faculty Development Programme (FDP) on "Recent Advances in Transportation Engineering" Organized by Dept. of Civil Engg., SATI Vidisha and Dept. of Civil Engg., VNIT Nagpur on Oct. 08-12, 2018 at Vidisha (M.P.), India.
- 33. Participated in TEQIP-III Summer Training Program on Active Learning Workshop, Organized on June 11-15, 2018 by IIT Bombay at IIT Bombay, India.
- 34. Participated in two day workshop on "Design and Innovation" during 12 to 13 April 2018, Organized by start-up cell SATI Vidisha, under TEQIP-III at Vidisha (M.P.), India.
- 35. Participated in two days Faculty Development Program on "Total Quality Teaching" Organized by SATI Vidisha on March 16-17, 2018 at Vidisha (M.P.), India.
- Participated in TEQIP-III Sponsored Pedagogy and Management Capacity Enhancement Programme for Teaching Staff, Organized by SATI Vidisha in Collaboration with Experts of Engineering Staff College of India, Hyderabad from March 05-09, 2018 at Vidisha (M.P.).
- 37. Participated in Faculty Induction Workshop, organized by TEQIP Office, IIT Indore from Jan 23-27, 2018 at IIT Indore, India.
- 38. Participated in National Conference on "Numerical Modeling in Geomechanics" (CoNMiG), Organized on March 3-4, 2017 by The Department of Civil Engineering, IIT Roorkee and IGS Roorkee Chapter at IIT Roorkee, Roorkee, India.
- 39. Participated in National Workshop on "Assessment & Mitigation in Liquefaction Hazards for Seismic Microzonation" Organized on Nov. 27-28, 2015 by The Indian Society of Earthquake Technology, in association with Department of Earthquake Engineering & Centre of Excellence in Disaster Mitigation and Management at IIT Roorkee, Roorkee, India.
- Participated in 6th Annual Conference "International Society for Integrated Disaster Risk Management" (IDRiM), Organized on Oct. 28-30, 2015 by TIFAC at Scope Convention Centre, New Delhi, India.
- Participated in Indo-Norwegian Traning Programme on "Nonlinear Modelling and Evaluation of Structutes" Organized on Dec. 14-16, 2014 by Department of Earthquake Engineering & Norwegian Geotechnical Institute (NGI) at IIT Roorkee, Roorkee, India.
- 42. Participated in Fifteenth Symposium on Earthquake Engineering (15SEE), Organized on Dec. 11-12, 2014 by Department of Earthquake Engineering & Indian Society of Earthquake Technology at IIT Roorkee, Roorkee, India.
- 43. Participated in Workshop on "Challenges in Seismic Site Characterization and Solutions through Recent Developments" Organized on Dec. 10, 2014 by Department of Earthquake Engineering & QIP at IIT Roorkee, Roorkee, India.
- 44. Participated in "Entrepreneurship Awareness Camp" Organized on March 17, 2008 Sponsored by 'National Science and Technology Entrepreneurship Development Board (NSTEDB)', Department of Science and Technology, Government of India, at 'S.A.T.I. Vidisha'.
- 45. Participated in National Level Paper Presentation in 'GEOCONCEPT- 07' under "Indian Geotechnical Society Indore Chapter" at 'S.G.S.I.T.S. Indore' in academic year 2007-08 for topic "Behaviour of Expansive Soil with Stone Dust as a Stabilizer"
- 46. Participated in Training Course on "AUTO CAD" Duration from 15-06-2006 to 01-08-2006 at Prema Computer, CAD CONSULTANT, Bhopal (M.P.)