

Profile Page



Name : Dr Davinder Singh

Designation : Assistant Professor Grade-i

Department : Civil Engineering

Qualification : Ph.D. (Geo-environmental Engineering) Civil Engineering
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M.E. (Civil) Specilization of Environmental Engineering
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B.E. Civil Engineering (Punjab Engineering College
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Research Interests :

Water And Wastewater Treatment, Environmental Engineering, Geo-environmental Engineering, Solid waste Management, Ground improvement and pavement

Other Profile Links :

Google Scholar Link :

Google Scholar Profile [Click Here](#)

Personal Web Link :

ResearchGate Profile [Click Here](#)

Journal Publications :

Year	Journal	Publication
2022	Materials Today: Proceedings	Davinder Singh, Dacharla Manojkumar "Strength characteristics of kaolin clay mixed with RHA, sand and lime"
2022	Construction and Building Materials Volume 367 [SCI Index]	Prediction of UCS and CBR behavior of fiber-reinforced municipal solid waste incinerator bottom ash composites using experimental and machine learning methods

2021	Materials Today: Proceedings (Scopus Indexed) doi.org/10.1016/j.matpr.2021.07.346	Pravez Alam, Davinder Singh, Sanjeev Kumar" Incinerated municipal solid waste bottom ash bricks: A sustainable and cost-efficient building material
2021	Innovative Infrastructure Solutions volume 6, Article number: 201 (2021) (Scopus Indexed)	Kumar S. and Singh D. Municipal solid waste incineration bottom ash: a competent raw material with new possibilities
2020	Environment, Development and Sustainability (SCI indexed) 2020,22: 6891-6905	Singh D, Kumar A. Factors affecting properties of MSWI bottom ash employing cement and fiber for geotechnical applications
2019	Innovative Infrastructure Solutions (2019) 4:61 (Scopus Indexed)	Singh D, Kumar A. Mechanical characteristics of municipal solid waste incineration bottom ash treated with cement and fiber
2017	Journal of Rock Mechanics and Geotechnical Engineering, Elsevier 2(9), 370-375 (SCI indexed)	Singh D, Kumar A, Geo-environmental application of municipal solid waste incineration ash stabilized with cement
2017	Int. J. of Geosynth and Ground Eng. 3:16 (Scopus Indexed)	Singh D, Kumar A. Performance Evaluation and Geo-Characterization of Municipal Solid Waste Incineration Ash Material Amended with Cement and Fibre
2013	International Journal of Environmental Science Vol 3 ISSN 0976-4402	Davinder Singh,Vasundara Singh and Arvind Kumar Study of textile effluent in and around Ludhiana district in Punjab
2013	International Journal of Environmental Science and Research Vol 2, pp 135-139	Davinder Singh and Amandeep Kaur "Study of Traffic Noise Pollution at different Location in Jalandhar City, Punjab, India
2010	International journal of chemical and Biological Engineering Vol 72, Page 433-438, 2010	N.K.Srivastva and Davinder Singh "Application of Genetic Engineering for Chromium Removal from Industrial wastewater

Conference Publications :

Year	Conference	Publication
2023	UKIERI Concrete Congress 14 - 17 March 2023	Arpit Bhardwaj, Davinder Singh "Potential applications of eggshell waste as a green building material: A review"
2023	ICOCE 2023 Singapore 24-26 March 2023	Davinder Singh, Sanjeev Kumar "Challenges of Municipal solid waste management in Jalandhar, Punjab (India): A case study"
2023	UKIERI Concrete Congress 14 - 17 March 2023	D Raghavendher, Davinder Singh "Solid waste incinerator bottom ash as supplementary material in the production of green cement mortar and concrete – A review"
2023	ICRMAM 2023- Sri Anandpur Sahib Punjab	Devshri Vats, Davinder Singh "Emerging Role of Artificial Intelligence in Geotechnical Engineering"
2021	First Indian Geotechnical and Geoenvironmental Engineering Conference (IGGEC-21)	Pravez Alam, Davinder Singh "Recovery Techniques and LCA involved with Municipal Solid Waste Bottom Ash Treatment: A review"
2021	First Indian Geotechnical and Geoenvironmental Engineering Conference (IGGEC-21)	Shweta Ranjan, Davinder Singh "Analysis Of Landfill Leachate And Contaminated Groundwater: A Review"

2021	First Indian Geotechnical and Geoenvironmental Engineering Conference (IGGEC-21)	Mayadrashni Laishram, Davinder Singh "The Utilization of Industrial Waste As A Stabilizing Agent"
2021	First Indian Geotechnical and Geoenvironmental Engineering Conference (IGGEC-21)	Vishal Pastapure, Davinder Singh "Effects Of Open Dumping Of Municipal Solid Waste On Surrounding Soil Characteristics: A Review."
2021	First Indian Geotechnical and Geoenvironmental Engineering Conference (IGGEC-21)	Anas Khan , Shaurya Kumar Singh , Davinder Singh, Tarun Kumar "Performance Evolution and Analytical Approach of Air Pollution Control System in Al Foundry"
2021	1st International conference on Construction materials and environment. At JUIT , Solan, H.P	Anusha Raj K., Pragya Sinha and Davinder Singh "Critical Overview of reinforcing sand using geocell for shallow foundation.
2021	2nd International congress on advances in mechanical and systems engineering. NIT Jalandhar	Pragya Sinha, Anusha Raj K. and Davinder Singh. "Mechanical behavior of geotextiles and geogrids on soil stabilization"
2021	International Conference on Recent Developments on Materials, Reliability, Safety and Environment Issues-2021. NIT Jalandhar	Pravez Alam, Davinder Singh and Sanjeev Kumar "Sustainable construction Engineering Applications of MSW Incinerated Bottom Ash: A review"
2020	International Conference on Experimentation and Progression in Engineering LPU Jalandhar	Abhishank Kumar, Shasikant Sharma and Davinder Sing "Materials needed for Yielding a Bendable and Ductile concrete A Review.
2019	7 th International Congress pm Computational Mechanics and simulation, IIT Mandi	Abhinath. B Davinder Singh "Effect of Bracings and Base Isolators on the Seismic response of Reinforced concrete and Steel Frames"
2018	International Conference on Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering, March 29-31, 2018, NIT Jalandhar	Davinder Singh, Kasilingam Senthil, P.C. Emmanuel "Mechanical and Durability Properties of Recycled Aggregate Self Compacting Concrete Along with Basalt Fibers
2018	International Conference on Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering, March 29-31, 2018, NIT Jalandhar	Kasilingam Senthil, Davinder Singh, Ivjot Singh "Compression and Shear Resistance of Self Compacting Concrete with Arch-type Steel and Polypropylene Fibers
2018	International Conference on Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering, March 29-31, 2018, NIT Jalandhar	Sunayana, Davinder Singh, Komal Kalawapudi, Akash Priadarshee " Geotechnical and Chemical engineering properties for incinerated ash and mixtures
2018	International Conference on Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering, March 29-31, 2018, NIT Jalandhar	Davinder Singh, Tarun Kumar, Bonny Emmannue James, Mohd Hanifa "Utilization of MSWI ash for geotechnical application: A Review
2018	Proceedings of National Conference: Advanced Structures, Materials And Methodology in Civil EngineeringNational Conference	Abhinath, Davinder Singh "CORROSION OF REINFORCED CONCRETE; A REVIEW"
2013	International Conference World Academy of Science Engineering and Technology - 78 PARIS Vol 2755-2759	D Singh, S Singh, R Khan, Assessment of Traffic Noise Pollution at Commercial and Silence Zones
2013	UKIERI Concrete Congress Innovations in Concrete Construction held 5-8 March 2013 at Dr.B.R.Ambedkar National Institute of Technology Jalandhar	A Kaur, D Singh, Phytotoxicity of Assenic (As) To Rice (Oryza Sativa l.)

2013	2nd International Conference on Biomedical Engineering and Assistive Technologies on 6-7 December 2012 at Jalandhar	D Singh, A Kaur, Evaluation of Traffic noise pollution in commercial zones
2013	International Conference World Academy of Science Engineering and Technology - 78 PARIS Vol 3203-3210	R Khan, D Singh, Generation of Green Electricity using Green House Approach
2012	International Conference World Academy of Science Engineering and Technology - 61 Dubai UAE Vol 1456-1460 January 2012	D Singh, A Kaur, Characteristics of industrial effluents and Design of Sewage Treatment Plant
2011	The 1st Environment Asia International conference on Environmental Supporting in Food and Energy security	D Singh, NK Srivastava, G Kaur, Treatment of domestic waste water using moving bed biofilm reactor

Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISSN No.	Year
Conference proceedings	Critical Overview of Reinforcing Sand Using Geocell for Shallow Foundation	springer	K. Anusha Raj, Pragya Sinha, Sanjeev Kumar, and Davinder Singh	978-981-16-6556-1	2021
Conference proceedings	Evaluation on Risk Assessment on Indoor Air Pollution: A Case Study of Delhi-NCR Region. In IOP Conference Series: Earth and Environmental Science (Vol. 796, No. 1, p. 012055). IOP Publishing.	IOP Publishing	Singh, S., Kumar, T. and Singh, D.		2021
pp.581-591)	Evaluation of Strength and Diffusion Capability of High Volume Fly Ash Based Engineered Cementitious Composites Incorporating Powder Scrap Rubber	Proceedings of SECON 2020	Abhishank Kumar, Shashikant Sharma and Davinder Singh	: 10.1007/978-3-030-55115-5_53	2021
pp.327-334	Influence of Fly ash, Lime, Fines Obtained From Demolished Structures Waste On Geotechnical and Strength Characteristics of Soil	Sustainable Environment and Infrastructure, Proceedings of EGRWSE 2019	Davinder Singh, Tarun Kumar and Amandeep Kaushal	10.1007/978-3-030-51354-2_30	2020
page no 179-191	Compression and Shear Resistance of Self Compacting Concrete With Arch-Type Steel and Polypropylene Fibers	Springer	Kasilingan Senthil, Davinder Singh, Ivjot Singh	978-981-13-7016-8	2019
Page No 199-211	Mechanical and Durability Properties of Recycled aggregate Self Compacting Concrete Along With Basalt Fibers	Springer	Davinder Singh, Kasilingan Senthil, P.C.Emmanuel	978-981-13-7016-8	2019
Page No 229-236	Utilization of MSWI Ash for Geotechnical Application: A Review	Springer,	Davinder Singh, Tarun Kumar, Bonny Emmanuel, Mohd Hanifa	978-981-13-7009	2019

Page No 247-254	Geotechnical and Chemical Engineering Properties for Incineration Ash and Mixtures	Springer	Sunayana, Davinder Singh, Komal Kalawapudi, Akash Priadarshee	978-981-1 3-7009	2019
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Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Principal Investigator	Sponsored research	Preparation of Bricks of Municipal solid waste Incineration ash treated with cement and fiber	TEQIP (Phase-III)	03-7-19		150,000	completed	Dr A K Agnihotri

Events Organized :

Category	Type	Title	Venue	From	To	Designation
Short Term Course	National	Advances in Construction Materials and Methods (Under TEQIP III)	Department of Civil Engineering Dr B R Ambedkar National Institute of Technology Jalandhar - 144011, Punjab	01/07/2019	5/07/2019	Coordinators
Expert Lecture	National	Innovative Specialty Chemicals for Durable & Sustainable Concrete	Department of Civil Engineering Dr B R Ambedkar National Institute of Technology Jalandhar	20.02.20		Coordinator
One week (On-line) Short Term Course	National	Construction Materials and Methods in Civil Engineering (Under TEQIP-III)	Department of Civil Engineering DR B R Ambedkar National Institute Of Technology Jalandhar	25-08-2020	29-08-2020	Convener
One week (on line) short term course	National	Analysis and design of Structure : Practices and Challenges	Department of Civil Engineering , Dr B R Ambedkar National Institute of Technology Jalandhar	15/02/2021	19/02/2021	Coordinator

Professional Affiliations :

Designation	Organization
Life Member	The Institution of Engineers, Calcutta, (India)

Life member	Indian Association of Hydraulic
Life Member	Indian Geotechnical Society
Life Member	International Association of engineers
Life Member	Indian Road Congress
Life Member	ASCE (American Society of Civil Engineers)

PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Ravinder Kaur	Yet to be decided	Ongoing	2021	-----
Humaib Nasir	Yet to be decided	Ongoing	2020	sole
Sanjeev Kumar	Theme related to Geoenvironmental Engineering	On going	2019	Sole

PG Dissertation Guided :

Student Name	Dissertation Title	Status	Year	Co-Supervisor
Vishal Pastapure	Improving Engineering Properties of MSWI Bottom ash using Lime and Fibers as a Sustainable Application for Reuse	Completed	2022	---
Shweta Ranjan	STRENGTH CHARACTERISTICS VARIATION OF KAOLINITE SUBGRADE WITH RBI GRADE 81	Completed	2022	---
Mayadarshini Laishram	ENHANCEMENT OF GEOTECHNICAL PROPERTIES OF KAOLIN CLAY BY ALCCOFINE INCLUSION	Completed	2022	---
Pravez Alam	Manufacturing of eco-friendly unfired bricks by utilization of MSWI bottom ash	Completed	2021	Sole
Pragya Sinha	Behaviour of geogrid reinforced shallow foundation under static and dynamic loading	Completed	2021	Sole
Anusha Raj K	Numerical analysis of geocell reinforced shallow foundation on sandy soil	Completed	2021	Sole
Dacharla Manojkumar	Application of rice husk ash in kaolinite clay stabilization using lime and sand	Completed	2021	Sole
Ajeet Kumar	Preparation of Municipal solid waste incineration ash mixed with natural fiber	Completed	2020	Davinder Singh
Abhinath.B	Effect of Bracings and Base Isolators on the seismic Response of Reinforced Concrete and Steel frames	Awarded	2019	Sole
Ivjot Singh	Influence of Arch-Type steel Fibres and Polypropylene fibres on the properties of Self Compacting Concrete	Awarded	2018	Dr. K. Senthil
Amandeep Kaushal	Soil Stabilization using Fly Ash, Lime And Fines of Demolished Structure	Awarded	2018	Dr. Tarun Kumar
Emmanual P.C	Influence of basalt fiber and recycled concrete aggregate on durability and mechanical property in concrete	Awarded	2018	Dr. K. Senthil
Mohd. Hanifa	Effect of polypropylene fiber and cement admixture on mechanical properties of MSWI ash	Awarded	2018	Sole
Bonny Emmanuel James	Strength characteristics of MSWI ash mixed with of polypropylene cement and fiber	Awarded	2018	Sole
Jitender Singh	An Experimental study on influence of grapheme oxide in cement based composites	Awarded	2017	Dr Rizwan Khan

Vinay Jaiswal	A Study on development of metakaolin and fly ash based geopolymers reinforced with basalt fibers exposed to elevated temperature	Awarded	2017	Dr Rizwan Khan
Anup Kumar Tripathi	An Experimental investigation on strength and durability of rice husk ash concrete reinforced with steel fibers	Awarded	2017	Dr Rizwan Khan
Saurabh Baghel	A Study on the Mechanical properties of basalt fiber reinforced concrete	Awarded	2017	Dr Rizwan Khan
Pujari Padma Rao	Development of Concrete Using Municipal Solid Waste Incineration Ash	Awarded	2017	Dr Rizwan Khan
Ravindra Singh	Seismic pounding effect between adjacent buildings and mitigation measures	Awarded	2017	Dr Rizwan Khan
Jagdeep Singh	Behaviour of Sand and Lime Admixture Amended with Fiber	Awarded	2017	Dr. Tarun Kumar
jaisal Muneer	Development of Concrete Using Municipal Solid Waste Incineration Ash	Awarded	2014	Dr Rizwan Khan

Admin. Responsibilities :

Position Held	Organization	From	To
Warden, Mega Hostel Boys Block A	Dr B R Ambedkar National Institute of Technology Jalandhar	07-03-2017	12-02-2018
Assistant Proctor	Dr B R Ambedkar National Institute of Technology Jalandhar	31-03-2008	28-02-2011
Incharge of Hydraulic Engineering Laboratory	Dr B R Ambedkar National Institute of Technology Jalandhar	2005	to 25-01-2018
Incharge of Environmental Engineering Laboratory	Dr B R Ambedkar National Institute of Technology Jalandhar	2001	till date
Coordinator	M.Tech (Geotechnical and Geoenvironmental Engineering)	June 2019	till date
Coordinator "Water Management and Waste Disposal"	Dr B R Ambedkar National Institute of Technology Jalandhar	02-03-2021	till date
Coordinator	PhD [Department of Civil Engineering]	03/2/23	