


Resume

<p>Dr Rajiv Kumar Designation: Scientist Flexible Pavement Division, CSIR-Central Road Research Institute Delhi-Mathura Road, New Delhi –110 025, India Email id: rajivkumar.crrri@nic.in Mobile No- +91-9557529945</p>	
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Educational Qualification

Degree	Year of Passing	University/ Institution	Subject	Remarks
PhD	2017	IIT-Roorkee	Transportation Engineering	Thesis- Development of warm stone matrix asphalt
M-Tech	2012	IIT-Guwahati	Transportation Engineering	Thesis-An improved laboratory mix methodology for microsurfacing and its field application
B-Tech	2010	CUSAT-Kochi	Civil Engineering	Thesis- Stone mastic asphalt stabilization with polypropylene

PROFESSIONAL EXPERIENCE

Post	Institute	Time Duration
Scientist	CSIR -Central Road Research Institute	26 -02-2021 to till date
Assistant Professor	NIT-Jalandhar	04-01-2018 to 25- 02-2021
Associate Professor	JECRC-Jaipur	22-09-2017 to 02-01-2018
Assistant Professor	VIIT-Pune	12-06-2013 to 30-04-2014
Assistant Professor	TCOER-Pune	27-07-2012 to 10-04-2013

MEMBERSHIP TO PROFESSIONAL BODIES

- Life Member at Indian Road Congress

Research Interests:

Transportation Engineering: Flexible Pavement design and maintenance of hot mix asphalt, Warm mix asphalt, and Cold mix asphalt.

-Pavement Material Characterization

-Characterization and Mix Design of Reclaimed Asphalt Pavement

-Super-pave Mix Design

-Tribology of asphalt binders

Journal Publications:

Rajiv Kumar, Moni Kumari, Mayank Pathak, Jagpreet Singh Kamboj, "Direct and indirect Impacts of Climatic Change on Soil Communities and Plants" Climate Change and Microbiome, Springer Nature Heidelberg Germany (Accepted)

Year	Journal	Publication
2021	Advances in Sustainable Construction Materials, Springer. pp 143-153.	Jugmohan Singh, Rajiv Kumar, Akshay Choudhary, Characterization of Cement Grouted Semi-flexible Pavement,
2020	International Journal of Transportation Engineering, Volume 8, Issue 2 - Serial Number 30	Mohammad Mehdi Khabiri, Rajiv Kumar and Mohammad Mehdi Majidi Shad "Effect of Fine Recycled Asphalt Aggregates and Cement Additives on the Sandy Subgrade Performance"
2019	International Journal of Recent Technology and Engineering, ISSN: 2277-3878, Volume-8, Issue-1, May 2019	Gandu Srikanth, Arpita Saha, Rajiv Kumar
2018	Civil Engineering and Construction Review, Vol 31, No. 4, April 2018, pp66-68	Kumar Praveen and Kumar Rajiv, Warm Mix Additives in Bituminous Layers of Pavements
2018	American Society of Civil Engineers. DOI: 10.1061/(ASCE)MT.1943-5533.0002367. © 2018	Nikhil Saboo; Rajiv Kumar; Praveen Kumar; and Ankit Gupta, Ranking the Rheological Response of SBS- and EVA-Modified Bitumen Using MSCR and LAS Tests.
2017	Construction and Building Materials, Elsevier Ltd, 138, 352–362.	Kumar, R., Saboo, N., Kumar, P., and Chandra, S. (2017). "Effect of warm mix additives on creep and recovery response of conventional and polymer modified asphalt binders."
2016	Civil Engineering and Urban Planning: An International Journal (CiVEJ), 3(2), 75–86.	Kumar, R., and Chandra, S. (2016). "Warm Mix Asphalt Investigation on Public Roads - A Review."
2013	European Journal of Sustainable Development (2013), 2, 4, 165-176.	T.Lyngdoh.R, Rajiv Kumar, "Green Road Approach In Indian Road Construction For The Sustainable Development".
2012	International Journal of Computer Applications, No-4, foundation of computer science, New York, USA, 2012, PP.4-8	Rajiv Kumar, T.Lyngdoh.R, 2012. "Rural Road Preventive Maintenance with Micro-surfacing"

Conference Publications:

Mayank, Manik Bhandari, **Rajiv Kumar**, “A Review on Suitable Material for Soil Stabilization in Road Construction”, Young Scientist’s Conference (IISF), Frontier Areas of Research – Engineering Sciences, Sponsored by Government of India New Delhi, December 2020

Mayank Pathak, Manik Bhandari, **Rajiv Kumar**, Agrima Shukla, “A Comprehensive Review of Stabilization of Soil by using Nano Additives”, National Conference Sustainable Research in Energy and Environment (SREE-2021), Organized by NIT Jalandhar, January 2021

Mayank Pathak, Manik Bhandari, Ashish Pratap Singh, **Rajiv Kumar**, Mahesh Patel, “Stabilization of Soil by Using Locally Available Stabilizing Agent”, International Conference on Recent Development on Materials, Reliability, Safety and Environmental Issues, Organized by NIT Jalandhar, June 2021 (SCOPUS Indexed)

Mayank Pathak, Vinod Kumar Sharma, Ashish Pratap Singh, **Rajiv Kumar**, Mahesh Patel, “A Review of Soil Stabilization Using Resilient Modulus”, International Conference on Advances in Structural Mechanics and Applications (ASMA-2021) Organized by NIT Silchar, June 2021 (SCOPUS Indexed Proceedings)

Mayank Pathak, **Rajiv Kumar**, Manik Bhandari, Mahesh Patel, “A Comprehensive Review of Various Wastes to Modify the Index and Engineering Properties of Subgrade Soils”, International Conference on Transportation Systems Engineering and Management Organized by NIT Calicut.

Year	Conference	Publication
2020	Young Scientist’s Conference (IISF), Frontier Areas of Research – Engineering Sciences, Sponsored by Government of India New Delhi, December 2020	Mayank Pathak, Manik Bhandari, Rajiv Kumar A Review on Suitable Material for Soil Stabilization in Road Construction
2021	National Conference Sustainable Research in Energy and Environment (SREE-2021), Organized by NIT Jalandhar, January 2021	Mayank Pathak, Manik Bhandari, Rajiv Kumar, Agrima Shukla, A Comprehensive Review of Stabilization of Soil by using Nano Additive
2020	IMMM 2020	Manoj Olla, Dr. Rajiv Kumar, Akshay Choudhary & Anusha Raj K "Effect of Fly Ash Replacement on Strength and Durability Properties of Slag Based Geopolymer Concrete"
2020	NATIONAL CONFERENCE ON ADVANCES IN SUSTAINABLE CONSTRUCTION MATERIALS (ASCM 2020)	Jugmohan Singh, Rajiv Kumar and Akshay Choudhary "CHARACTERISATION OF CEMENT GROUTED SEMI-FLEXIBLE PAVEMENT"
2020	NATIONAL CONFERENCE ON ADVANCES IN SUSTAINABLE CONSTRUCTION MATERIALS (ASCM 2020)	Nagendra Patel, Rajiv Kumar and Akshay Choudhary, "UTILIZATION OF RECLAIMED ASPHALT PAVEMENT MATERIALS IN RIGID PAVEMENT"

2018	ASMMCE – 2018, 03 - 04th November, 2018	Gandu Srikanth, Dr Rajiv Kumar & Rohit Vasudeva, "A Review on Warm Mix Asphalt"
2018	ASMMCE – 2018, 03 - 04th November, 2018	Vinod Kumar Sharma, Rajiv Kumar, "Laboratory Investigations on Stone Matrix Asphalt Containing PET Bottles"
2018	"NCITCE-2018" at Poornima University, Jaipur during April 13-14, 2018	Rajiv Kumar, Monaal Kaushal, Vishav Thind & Smriti Saini "PERFORMANCE GRADING SYSTEMS FOR HOT MIX ASPHALT PAVEMENTS IN INDIA"
2018	"NCITCE-2018" at Poornima University, Jaipur during April 13-14, 2018	Rajiv Kumar, Ankesh Jaiman, Ganpat Kumar & Devinder pal Garg "LABORATORY EVALUATION OF WARM MIX ASPHALT IN INDIA"
2016	Conference on Sustainable Asphalt Pavements for Developing Countries, CRRI, New Delhi, March 11-12, 2016.	Kumar, R., Chandra, S., and Kumar, P., Effect of Warm Mix Additive on the Creep and Recovery Behaviour of Different Binders,
2016	International Conference on Recent Advances in Civil Engineering, Kochi, Kerala Jan. 14-16, 2016	Kumar, R., and Chandra, S., History and Development of Warm Mix Asphalt
2016	Transportation Planning and Implementation Methodologies for Developing Countries 19-21 December 2016.	Kumar, R., and Chandra, S., A Comparative Study on PFC Mixes
2016	Civil Engineering Conference – Innovation for Sustainability (CEC – 2016)	Kumar, R., Chandra, S., and Kumar, P. "Bituminous Binder Grading Systems for Hot Mix Asphalt Pavements in India",
2016	National Conference, FYPMGSY 2016	Kumar, R., Kumar, P., and Chandra, S. "Laboratory Evaluation of Warm Mix Asphalt In India"
2014	Transportation Planning and Implementation Methodologies for Developing Countries. IIT-B. December 2014	Rajiv Kumar, T. Lyngdoh, R., "New laboratory modified method mixing of microsurfacing"
2013	Annual International Conference on Architecture and Civil Engineering (ACE2013) March 2013 Singapore	Rajiv Kumar, T. Lyngdoh, R., "IIT-Guwahati: Department of Transportation Experience with Microsurfacing"
2012	International Conference on Environmentally Sustainable Urban Ecosystems (ENSURE-2012) February 2012. Indian Institute of Technology Guwahati.	T. Lyngdoh, R., Rajiv Kumar, "Green Road Approach In Indian Road Construction For The Sustainable Development".

Book/Chapter Publications:

Type	Title	Publisher	Authors	ISBN/ISS N No.	Year
Book Chapter	Green Road Approach in Indian Road Construction for the Sustainable Development	Springer	Rajiv Kumar, G. AppaRoa and Teiborlang Lyngdoh Ryntathiang	Urban Ecology, Water Quality and Climate Change pp 107-119	2018

Events Organized:

Category	Type	Title	Venue	From	To	Designation
Conference	National	ASMMCE-2018	Civil Engineering Department, Dr B R Ambedkar National Institute of Technology Jalandhar (NIT Jalandhar)	03-11-2018	04-11-2018	Organizing Secretary
STC	National	"Emerging Trends in Highway Engineering and Infrastructure Development" 23 - 27 June 2020	Dr B R Ambedkar National Institute of Technology Jalandhar Department of Civil Engineering	23-06-2020	27-06-2020	Coordinator
Workshop	National	Application of Remote Sensing and GIS in Civil Engineering	Dr B R Ambedkar National Institute of Technology Jalandhar Department of Civil Engineering	04-07-2020	04-07-2020	Coordinator

PhD Supervised:

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Gurpreet Kaur	Development of Pavement Roughness Model and Maintenance Priority Index for Jalandhar City	ON GOING	2020	-
Rohin Kaushik	Flexible pavement design based on resilient modulus	ON GOING	2020	-
Akshay Choudhary	Characterization of semi flexible Pavement	ON GOING	2019	-
Najim Ali	Design and maintenance of hill roads	ON GOING	2019	Dr Shashi Kant Sharma
Vinod Kumar Sharma	Laboratory Investigation of Reclaimed Asphalt Pavement in Warm Mix Asphalt	ON GOING	2018	Prof. A.P. Singh

PG Dissertation Guided:

Student Name	Dissertation Title	Status	Year	Co-Supervisor
Mayank	Soil Stabilization Based on the Resilient Modulus	Completed	2021	-
Manik Bhandari	Numerical Modelling of Soil Stabilization of Highway Embankment	Completed	2021	-

Gagandeep Singh	Experimental Study of Bituminous Pavement using Low Density Polyethylene (LDPE) and Sasobit (WMA)	Completed	2021	-
Anmol Tyagi	Characterization of Microsurfacing Mix Design	Completed	2021	-
Ashish Pratap Singh	Design of Flexible Pavement Using Resilient Modulus	Completed	2021	-
Bijit M Sangma	Characterization of Reclaimed Asphalt Pavement (RAP) for use in Bituminous Concrete	Completed	2021	-
Jagmohan Singh	Aggregate gradation influence on air voids and mix design of bituminous mixture for semi-flexible pavement	Completed	2020	-
Udham Singh	Comparison of Porous (Open Graded) Asphalt Concrete And Pervious Cement Concrete Pavement By Using Marshal Mix Design	Completed	2020	-
Manoj Olla	Effect of Fly Ash Replacement on Strength and Durability Properties of Slag Based Geopolymer Concrete	Completed	2019	-
Nagendra Patel	UTILIZATION OF RECLAIMED ASPHALT PAVEMENT MATERIALS IN RIGID PAVEMENT	Completed	2019	-

RESEARCH PROJECTS:

As a Principal Investigator

Project Name- Green road approach in Indian road construction for the sustainable development, Funded by NIT-Jalandhar.

Project Name: Tribological approach to characterize the warm mix binders funded by CSIR-CRRI- 29.8 Lakh

As a Team Member

Project Name: Feasibility Study (Lab & Field) of Using Higher RAP Content in Bituminous Pavements, funded by NHAI- 168.28 Lakh

KEYNOTE LECTURE DELIVERED:

- Keynote speaker in conference IACCM 2021 on “Highway Construction Materials and Asphalt Mixtures” NICMAR HYD, India. September 18, 2021.
- Keynote Speaker in Workshop on “Intelligent Transportation System for Sustainable Development in India” sponsored by TEQIP-III RTU (ATU).
- On “sustainable road construction: current and future concepts”, on 12/1/2021, Rajasthan Technical University Rawatbhata Road, Akelgarh, Kota-324010.
- TEQIP sponsored Two week online short term training Programme on "Assessment of Engineering in Infrastructural Development" from 26 October 2020 to 04 November 2020.
- On Warm Mix Asphalt, 16th Oct 2020, Department of Civil Engineering, Punjabi University, Patiala, Punjab.
- On Recent research and innovations in the flexible pavement, RayatBahra University, Chandigarh.