1. Name and Photograph : AJAY KUMAR JAIN

2. Designation and complete address: Principal Scientist

including email id.

**Pavement Evaluation Division** 

CSIR - CRRI, Delhi - Mathura Road

New Delhi – 110025 akjain.crri@gmail.com



3. Areas of Interest:

- 1. Flexible Pavements Construction and Materials
- 2. Rigid Pavements Construction and Materials
- 3. Highway Construction Procurement & Contract Management
- 4. Quality Management System

## 4. Educational Qualification – starting from the highest degree

Class	Year of Passing	Board / University/ Institution	Subject	Division
M.E. (Civil)	1990	I.I.T, Roorkee (formerly University of Roorkee)	Transportation Engineering	79%, 1 <sup>st</sup> (with Honours)
B. Tech (Civil)	1988	K. N. I. T, Sultanpur (Awadh University, Faizabad)	Civil Engineering	82.35% 1 <sup>st</sup> (with Honours)
Intermediate	1984	U.P. Board, Allahabad	Hindi, English, Maths, Physics, Chemistry	78%, 1 <sup>st</sup> (with Honours)
High School	1982	U.P. Board, Allahabad	Hindi, English, Maths, Science, Geo. Drawing	76%, 1 <sup>st</sup> (with Honours

# Professional Experience - in reverse chronological order

Sl.No.	Period	Name of Organisation	Position held
1	04.06.2015 to till date	CSIR-Central Road Research Institute, New Delhi	Principal Scientist
2	14.01.2013 to 03.06.2015 (Promoted to the post of Sr. Scientist w.e.f. 04.06.2010	CSIR-Central Road Research Institute, New Delhi	Senior Scientist
3	16.05.2008 to 13.01.2013	National Highways Authority of India (NHAI), New Delhi	DGM (Tech)
4	04.10.2004 to 15.05.2008 (Promoted to the post of Scientist 'C' w.e.f.04.06.2002	CSIR-Central Road Research Institute, New Delhi	Scientist 'C'

Sl.No.	Period	Name of Organisation	Position held
5	23.03.2001 to 03.10.2004	National Highways Authority of India (NHAI), New Delhi	Manager (Tech), Manager (Tech) cum Project Director from 12.03.2004 to
6	04.06.1997 to 22.03.2001	CSIR-Central Road Research Institute, New Delhi	03.10.2004 Scientist 'B'
7	18.10.1996 to 03.06.1997	CSIR-Central Road Research Institute, New Delhi	Project Assistant-II
8	22.10.1991 to 31.10.1995	CSIR-Central Road Research Institute, New Delhi	Senior Research Fellow (SRF)

- 6. Membership to Professional Bodies: (i) Member, Indian Roads Congress
  - (ii) Associate Member, Institution of Engineers (India)
  - (iii) Life Member, Indian Geotechnical Society (Delhi Chapter)

#### 7. Achievements

a. Honours and Awards:

### b. Research Projects:

- 1. Investigation of Bihta Samera Section of SH-78 in Bihar for Needed Remedial Measures for already constructed Pavement Layers and Improvement Measures for the ongoing Construction in the Project Section
- 2. Evaluation of Asaf Ali Road and Chaman Lal Marg for needed Strengthening and Remedial Measures in Jurisdiction of PWD SRD Division 1
- 3. Evaluation of Road from Sector 14A to Film City Flyover connecting Noida to Greater Noida Expressway for needed Strengthening and Remedial Measures
- 4. Evaluation of G. T. Road from Shahdara Flyover to Apsara Border for needed Overlay and Remedial Measures
- 5. Detailed Investigations to find reasons for Premature Pavement failure at various locations on Pali Pindwara (131.12 Km in Length ) section of NH 14 in the State of Rajasthan
- 6. Restoration / Upgradation of Internal Roads at Facility Centre, Khajoori Khas, Delhi
- 7. External Party Quality Checking of Construction of Inner Ring Road (Phase-I) from Kuberpur to Fatehabad Road, Agra
- 8. Examination of Works as per the directions of Hon'ble High Court of Delhi regarding four laning of Gujarat/Maharashtra Border Surat -Hazira port section of NH-6 in the State of Gujarat
- 9. Quality Assurance of Construction of 4 bridges across Agra Canal at Faridabad
- 10. Quality Assurance of Construction of Fly Over at Meerut Road T-Point in Ghaziabad

- 11. Project Monitoring and Quality Assurance of Construction of additional two lane Hindan Bridge on NH-58E in Ghaziabad
- 12. Evaluation of Recycled Concrete Aggregates for Use in Pavement Construction
- 13. Field Trials on Use of Rubber and Polymer Modified Binders in Bituminous Road Surfacings
- 14. Field Trials on Use of Geosynthetic Pavement Reinforcing Fabric Interlayer to Control Cracking in Bituminous Overlays
- 15. Techno Economic Feasibility of Micro surfacing Sections Constructed in the State of Assam near Guwahati on NH-37
- 16. Pavement Performance Study: Study on Existing Pavement Sections
- 17. Maintenance Cost Studies for Pavements under Different Conditions
- 18. Criteria for Choice of Type of Bituminous Surface Courses for Flexible Pavements
- 19. Performance of Some Recycled Bituminous Roads in Delhi and Recycling as Alternative Pavement Maintenance Technology in Indian Context
- 20. Third Party Quality Checking of Concrete Roads in Adarsh Nagar Area of Delhi
- 21. Third Party Quality Control for the Construction of Internal Roads of Derawal Nagar and Gujrawala Town, Delhi
- 22. Third Party Quality Assurance of Road Works in fruit, vegetable and grain market at IFC Ghazipur New Delhi
- 23. Field Trials on Use of Ethylene Vinyl Acetate (EVA) Modified Bitumen in Flexible Pavements
- 24. Field Trials on Use of Styrene Butadiene-Styrene block Copolymer (SBS) Modified Bitumen in Flexible Pavements
- 25. Evaluation of Pond Ash Soil Subgrade Materials for Design of Flexible Pavement of LPG Bottling Plant Complex at Madanpur Khadar, New Delhi
- 26. Design of Flexible Pavement for Roads and Parking Area of LPG Bottling Plant Complex at Trisundi (Sultanpur) U.P
- 27. ISO 9001 Quality Management System Implementation in the Institute
- 28. CRRI Employee's Data Base in the form of two separate Volumes on "Scientific & Technical Manpower".

#### c. Research Publications

## **Papers in Journals**

1. Jain, A.K., Jain, P.K. and Gupta, A.K., (2000), "Design, Construction and Performance of Flexible Pavement Constructed over Pond Ash Fills", "Indian Highways" Indian Roads Congress Publication, March, 2000

## **Papers in Conferences**

- 1. Dr. Sangita, Yash Pandey, Dr. (Mrs.) Vandana Tare and Jain, A. K., (2015) "Environment Friendly Road Construction Approach Used for Reducing Global Warming" Proceedings of Bhartiya Vigyan Sammelan (BVS) -235, held at GOA,
- 2. Jain, P. K., Jain, A. K. and Kamaraj, C., (2008) "Pavement Preservation Utilizing Cost Effective Modified Bitumen Seals A Pilot Study" 23<sup>rd</sup> ARRB Conference, Adelaide, Australia.
- 3. Jain, A. K. and Gupta, Saroj (Dr.), (2006) "Recycled Concrete as a Source of Aggregates for Concrete Pavements A Strategic Review" National Seminar on Concrete Pavements; Design, Construction and its Repair, organized by Indian Concrete Institute, Allahabad,.
- 4. Jain, P.K., Jain, A.K. and Sharma, S.D., (2000) "Full Scale Performance Studies and Specifications of Rubberised Bitumen for Works in India-Status Report", 18<sup>th</sup> Rubber Conference organised by IRMRA.
- 5. Jain, A.K. and Bharadwaj, R.S., (1999) "Development of Suitable and Economical Specifications for Rural Roads and Appropriate Rural Road Technologies", Second All India People's Technology Congress, Calcutta.
- 6. Jain, A.K. and Bharadwaj, R.S.,(1998) "Privatisation in Highway Sector- A Need of Today", National Seminar on Road Transportation Issues & Strategies (RTIS-98), organised by Thaper Institute of Engineering and Technology, Patiala.
- 7. Jain, A.K., Gupta, A.K. and Yadav Rajesh, (1997) "Some Significant Considerations in Bitumen Emulsions and Mix Technology An Overview", National Workshop on Use of Bitumen Emulsion in Road Construction Problems & Prospects, organised by Central Road Research Institute, New Delhi.
- 8. Chandra, Satish, Mehndiratta, H.C. and Jain, A.K., (1995) "Some Aspects of Flexible Pavement Reinforced with Geotextile", International Conference on Roads and Road Transport Problems (ICORT-95), organised by Department of Civil Engineering, University of Roorkee.
- 9. Jan, P.K., Jain, A.K. and Arya, I.R., (1995) "Polymer Modified Binders and Their Application in Flexible Pavements", International Conference on Roads and Road Transport Problems (ICORT-95), organised by Department of Civil Engineering, University of Roorkee.
- 10. Jain, P.K. and Jain, A.K., (1995) "Eco-Friendly Disposal of Non-Biodegradable Polymeric Wastes by Their Use in Bituminous Road Construction", All India Symposium on "Converting Waste into Wealth" organised by Bihar Institute of Technology, Sindri, Dhanbad.

## d. Any Other information:

Having more than 25 years experience in the field of Roads and Highways. Out of the total experience of more than 25 years, about 8 years experience of working in National Highways Authority of India (NHAI) in the capacity of Manager (Tech) at NHAI HQ and Project Implementation Unit (PIU) and Deputy General Manager (Tech) at NHAI HQ. Having about 5 years experience in the procurement and implementation of Highway Projects under Public Private Partnership (PPP). Besides this, experience in Research & Development and Consultancy assignments in the area of Roads and Highways in various positions at Central Road Research Institute, New Delhi. Also attended various National and International training programmes, Seminars and Conferences in the area of Roads and Highways.