BIODATA

1. Name in Full : Dr SANJIV KUMAR AGGARWAL

2. Date of Birth : 02/02/1970

3. Present position & Department : Professor of Civil Engineering

Giani Zail Singh Campus College of

Engineering & Technology, &

Dean, Distance Education Programme,

MRSPTU, Bathinda (Pb)

4. Address for Correspondence : House No. 17152, Street No. 5,

:

Aggarwal Colony, Bathinda (Pb)

 $\pmb{E\text{-mail:}} \ \, \mathsf{sanjiv_aggarwal@rediffmail.com}$

Mobile: 94780 22281

5. Academic Qualifications

SI No	Exam passed	University/ Board/ Institution	Month/ Year of passing	Specialization	Remarks
1	PhD	Indian Institute of Technology, Roorkee	November, 2003	Civil (Transportation Engineering)	
2	ME	Punjab Engineering College (PU Chandigarh)	January, 1996	Civil (Highway Engineering)	Distinction
3	BE	Thapar Institute of Engineering & Technology, Patiala	October, 1990	Civil Engineering	Distinction
4	Pre Engg.	Punjab University, Chandigarh	June, 1986	Non-Medical	University Merit
5	Pre Uni.	Punjab University, Chandigarh	June, 1985	Non-Medical	University Merit
6	Matric	Punjab School Education Board, SAS Nagar	May, 1984		Distinction

6. Teaching and Research Experience

Name of Institute	Period of service		Designation & Department	Scale of Pay	
	From	То			
GZS Campus College of Engineering & Technology, Bathinda	18.06.2010	Continuing	Professor of Civil Engineering	37400 – 67000 + 10000 AGP	
GZS College of Engineering & Technology, Bathinda	01.01.2006	17.06.2010	Associate Professor of Civil Engineering	37400 – 67000 + 9000 AGP	
GZS College of Engineering & Technology, Bathinda	17.09.2002	31.12.2005	Assistant Professor of Civil Engineering	12000 - 18300	
GZS College of Engineering & Technology, Bathinda	17.09.1997	16.09.2002	Senior Lecturer of Civil Engineering	10000 - 15200	
GZS College of Engineering & Technology, Bathinda	23.04.1992	16.09.1997	Lecturer of Civil Engineering	8000 - 13500	

7. Research Guidance

PhD Awarded

- 1. Planning for the Ecotourism in the Hill Region: A Case Study Paragpur, Himachal Pradesh Inderpal Singh (2011)
- 2. Energy Efficient Envelope Design Strategies: Office Buildings in Composite Climate of India **Jatinder Kaur (2018)**

M.Tech. Awarded

- 1. Maintenance Management Planning of Highway Network Using HDM-4 Anmol Garg (2006)
- 2. Development of Project Level Pavement Management System for a Section of National Highway Paramjot Singh (2007)
- 3. A Sustainable Approach towards Retrofit Design Strategies for Greening the Existing Buildings Jatinder Kaur (2008)
- 4. Construction Methodology and Planning of a Multistorey Building Satish Katwal (2009)
- 5. Performance Evaluation of Intelligent Buildings Rishav Garg (2010)
- 6. A Comparative Study Of Concrete Mix Design by IS:10262-1982 and IS:10262-2009 Jaspreet Singh Brar (2011)
- 7. Effects of Using Fibre Reinforced Concrete in Pavements Sunita Kotwal (2012)
- 8. Appraisal of Building Maintenance Strategies Adopted in a Major Government Building in Punjab Baljinder Singh (2014)
- 9. Effect of Replacing Fine Aggregate with Pond Ash on Properties of Concrete Murari Lal (2014)
- 10. Comparative Cost Analysis of Green Buildings Abha (2015)
- 11. Structural Audit of RCC Structures using Non-Destructive Tests Kalluri Sujana (2015)
- 12. Financial Implications of Designing Earthquake Resistant Buildings in Different Seismic Zones of India Rajesh Kumar Jindal (2015)
- 13. Comparative Cost Study of Rain Water Harvesting Reservoir Sukriti (2015)
- 14. Effect of Partially Replacing Fine Aggregate with Pond Ash on Properties of Concrete Harshpreet Arora (2015)
- 15. Problems and Remedial Measures of Irrigation Scenario in Malwa Belt A Case Study Gursimran Singh Dhaliwal (2015)
- 16. Envelope Performance Factor as a Tool for Assessing and Improving Energy Efficiency in Buildings Ramneet Kaur (2015)
- 17. Traffic Study and Signalization of Bibi Wala Intersection at Bathinda Navjot Singh (2015)
- 18. Economizing the Rural Road Cement Concrete Pavements using Pond Ash as Partial Replacement of Fine Aggregates **Arun Singla (2015)**
- 19. Comparative Study of Static and Dynamic Analysis of a Regular RCC Building **Jatin Singla** (2016)
- 20. Effect of Partial Replacement of Cement with Silica Fume on Properties of Concrete Rajinder Partap Singh (2016)
- 21. Study of Causes of Time and Cost Overrun in Panipat to Jalandhar Six Lane Highway Project **Tarun Deep Singh (2016)**
- 22. A Comparative Study of Use of Glass Fiber and Steel Fiber in Concrete Pavement Parvesh Rai (2016)
- 23. Effect of Partial Replacement of Cement With Marble Dust Fly Ash Mix on Strength Characteristics of Concrete **Harneet Singh (2016).**
- 24. Effect of Partial Replacement of Cement With Rice Husk Ash on Strength Characteristics of Concrete Ravi Bhushan (2016)
- 25. A Comparative Study of Himalayan Engineered Bamboo Mat Board with Conventional Plywood **Surabhi (2016)**
- 26. A Comparative Study of Autoclave Aerated Concrete Blocks and Conventional Clay Bricks Gaurav Bajaj (2016)
- 27. Study on Economical Impact of Partial Replacement of Cement with Flyash on Concrete Pavement Construction in Rural Area **Ravi Thakur (2016)**
- 28. Effect of Glass Fibre on Strength Properties of Concrete Neelima Garg (2017)
- 29. A Case Study of Widening and Strengthening of Suratgarh Sri Ganganagar Section of NH-62 as per IRC:73-2015 **Sunil Kumar Srivastva (2017)**
- 30. A Study on Strength Enhancement and Cost Effectiveness of using Ultra Fine Cement in Concrete **Puneet Verma (2017)**

- 31. Study of Stress Strain Behaviour of Glass Fibre Reinforced Self Compacting Concrete under Axial Compression **Mohammad Haris (2017)**
- 32. Stabilization of Subgrade Soil Using Rice Husk Ash and Lime Sukhdeep Singh (2017)
- 33. A Comparative Study of Strengthening of Flexible Pavement as per IRC:37 and IRC:81 Pankaj Mittal (2017)
- 34. Stabilization of Clayey Soil with Low Density Polyethylene Waste Plastic Powder **Ramanjot Kaur (2018)**
- 35. Effect of Addition of Brass Coated Steel Fibre on Strength Properties of Concrete Sumit Duddi (2018)
- 36. Case Study on Maintenance Management of a Government Educational Building **Amandeep Singh (2018)**
- 37. Case Study of Bypass Around Jammu City Under National Highway Development Project Amardeep Singh (2018)
- 38. Effect of Partial Replacement of Fine Aggregate with Crumbed Rubber on Strength Properties of Concrete **Manoj Mahawar (2018)**

PhD Under Progress

SI. No.	Name of the Student with Regd. No.	Title of the Thesis (PhD)	Discipline & Faculty & Name of the University	expected year of Submission
1	Parmjot Singh 01.25.08	Development of Network Level Pavement Management System for Selected Highway Network Using HDM-4	Civil Engineering – IKGPTU, Kapurthala	2019
2	Nirpinder Jain 1302003	Identification and Prioritization of Accident Blackspots on National and State Highway Network of Northern India	Civil Engineering – IKGPTU, Kapurthala	2019
3	Kewal Krishan 1302005	Study of III-Effects of Traffic Congestion in A Metropolitan City Area of India	Civil Engineering – IKGPTU, Kapurthala	2019
4	Manpreet Kaur 1302002	CBR Behaviour of Geosynthetic Reinforced Granular Fills Overlying Expansive Soil Subgrade	Civil Engineering – IKGPTU, Kapurthala	2019
5	Pankaj Mittal 17116MPE02	Maintenance Management and Life Cycle Cost Analysis of Flexible and Rigid Pavements	Civil Engineering – MRSPTU Bathinda	2021
6	Manik Goyal 18116MPE01	Material Characterization of Modified Bitumen	Civil Engineering – MRSPTU Bathinda	2022

8. Awards / Honours received:

- (i) Awarded **Merit Scholarship** by P.S.Ed.B., Mohali for 1984-1986 for securing place in Merit List of Matriculation Examination
- (ii) Awarded **Merit Scholarship** by T.I.E.T. Patiala for 1986-1990 for continuously maintaining position in Top Three of B.E. Civil Engineering Course
- (iii) Awarded **GATE Scholarship** by A.I.C.T.E. for 1990-1992 for pursuing Postgraduate Course (M.E.) at P.E.C. Chandigarh
- (iv) Awarded **QIP Fellowship** by A.I.C.T.E. for 2000-2003 for pursuing Doctoral Course (Ph.D.) at I.I.T. Roorkee
- (v) Honoured with Vikas Rattan Shiromani Award by Society for Friendship

- & National Unity, New Delhi, June 2006.
- (vi) Honoured with **Achiever of India Gold Medal** by Society for Friendship & National Unity, New Delhi, June 2006.
- (vii) Honoured with **Bharat Jyoti Award** by India International Friendship Society, New Delhi, June 2007.
- (viii) Honoured with **Rajiv Gandhi Excellence Award** by India International Friendship Society, New Delhi, October 2007.
- (ix) Honoured with **Air India BOLT (Broad Outlook Learner Teacher)** Award by Hon'ble Education Minister, Punjab, Dr. Upinderjeet Kaur at Jalandhar on April 23, 2008.
- (x) Honoured with **Shiksha Rattan Award** by His Excellency Governor of Punjab, Sh. Shivraj V. Patil, on April 26, 2012.

:

9. Membership of Professional Organizations

Sr. No.	Name of Organization	Category of Membership	Membership Number
1.	American Society of Civil Engineers (ASCE), USA	Member	M-403619
2.	World Road Association (PIARC), Paris, France	Member	IM-01010
3.	Road Engineering Association of Asia & Australasia (REAAA), Selangor, Malaysia	Life Member	LM-0079
4.	Indian Roads Congress (IRC), New Delhi	Life Member	LM-22796
5.	Indian Geotechnical Society, New Delhi	Life Member	LM-3434
6.	Indian Institute of Urban Transport (IUT), New Delhi	Life Member	LM-382
7.	Institution of Engineers (India), Calcutta	Life Fellow	F-115474-1
8.	Indian Society for Technical Education (ISTE), New Delhi	Life Member	LM-17368
9.	Indian Institution of Bridge Engineers (IIBE), Mumbai	Life Fellow	LF-1499
10.	Indian Society for Continuing Engineering Education (ISCEE), Roorkee	Life Member	LM-398
11.	Indian Society for Construction Materials and Structures (ISCMS), Roorkee	Life Member	LM-605

10. Short-term Courses and Conferences Attended:

Short Term Courses Attended

- 1. AICTE Summer School on "Critical State Soil Mechanics", Thapar Institute of Engineering & Technology, Patiala, June 1997.
- 2. AICTE Short Term Course on "Neural Networks and Fuzzy Logic Systems Using C++", GZS College of Engineering & Technology, Bathinda, December 1997.
- 3. ISTE Short Term Course on "Total Quality Management in Technical Education", Dr. B.R. Ambedkar Regional Engineering College, Jallandhar, February 1999.
- 4. QIP Short Term Course on "Planning, Design, Construction and Maintenance of Rural Roads", Department of Civil Engineering, University of Roorkee, Roorkee, June 1999.
- 5. IIPC Short Term Course on "Industry Institute Partnership: Vision 2000 and Beyond", Dr. B.R. Ambedkar Regional Engineering College, Jallandhar, December 1999.
- 6. QIP Short Term Course on "A Teaching Capsule for Remote Sensing and GIS", Department of Civil Engineering, University of Roorkee, Roorkee, June 2000.

- 7. QIP Short Term Course on "Techniques for Improving Classroom Teaching", Quality Improvement Programme Centre, University of Roorkee, Roorkee, June 2001.
- 8. Short Term Training Course on "Highway Development and Management System (HDM-4)", Central Road Research Institute (CRRI), New Delhi, April 2002.
- 9. Short Term Training Course on "Pavement and Traffic Engineering", Indian Institute of Technology, Kanpur, October 2005.
- 10. Training Course on "ArcGIS ArcView", NIIT-GIS, New Delhi, May 2006.
- 11. NPEEE Short Term Course on "Geotechnical Earthquake Engineering", Indian Institute of Technology, Roorkee, June 2006.
- 12. QIP Short Term Course on "Modern Concrete Construction Practices", Indian Institute of Technology, New Delhi, July 2006.
- 13. QIP Short Term Course on "Advances in Rock Engineering", Department of Civil Engineering, Indian Institute of Technology, Roorkee, December 2006.
- 14. QIP Short Term Course on "Planning, Design and Construction of Rural Roads under PMGSY", Department of Civil Engineering, Indian Institute of Technology, Roorkee, February 2007.
- 15. QIP Short Term Course on "Urban Transport Planning", Department of Civil Engineering, Indian Institute of Technology, Roorkee, June 2007.
- 16. Short Term Programme on "Renewable Energy Based Technologies", National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh, July 26-30, 2010.
- 17. Short Term Programme on "Earthquake Risk Management for Urban and Rural Housing", conducted by National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh, at GZS College of Engineering & Technology, Bathinda, December 6-10, 2010.
- 18. Short Term Programme on "Intellectual Property Rights and Patenting System in India", conducted by National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh, at GZS College of Engineering & Technology, Bathinda, April 4-8, 2011.
- 19. QIP Short Term Course on "Analysis and Design of Bridges: Existing and New Trends", Q.I.P. Centre, Indian Institute of Technology, Roorkee, May 30–June 3, 2011.
- 20. Short Term Programme on "GIS Applications in Engineering and Science", conducted by National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh, at GZS College of Engineering & Technology, Bathinda, December 12-16, 2011.
- 21. Short Term Course on "Research Methodology", organized by National Institute of Technical Teachers' Training & Research (NITTTR), Chandigarh at PTU GZS Campus, Bathinda, April 16-20, 2012.
- 22. QIP Short Term Course on "Engineering Surveying Using Modern Instruments", Q.I.P. Centre, Indian Institute of Technology, Roorkee, July 2 6, 2012.
- 23. Residential Training Programme on "Scrutiny of Detailed Project Reports of Roads & Bridges", organized for PMGSY State Technical Agencies by National Rural Roads Development Agency (NRRDA) at Indian Academy of Highway Engineers, Noida from December 23rd 27th, 2013.
- 24. TEQIP-II sponsored "Management Development Programme on Academic Leadership", at Indian Institute of Management, Kozhikode and Kochi Campus during January 5th 12th, 2014.
- 25. Short Term Training Programme on "Rural Roads for Development", at Birmingham University, UK from September 14th 20th, 2014.
- 26. Short Term Training Programme on "Enhancing Organizational Performance Through IT", organized by National Productivity Council at GOA during March 9 13, 2015.

Conference/Seminar/Workshops Attended:

- 1. Technical Session, 80th Annual General Meeting of Institution of Engineers, UP State Centre, Lucknow, December 23, 2000.
- 2. National Seminar on 'Challenges for Road Transportation in 21st Century: Leading to Fuel Economy', Thapar Institute of Engineering & Technology, Patiala, February 23-25, 2001.
- 3. National Conference on 'Vulnerable & Neglected Road User- the Pedestrian', Institute of Road Traffic Education (IRTE), India Habitat Centre, New Delhi, September 28, 2001.
- 4. 'The Asian GPS Conference', Centre for Spatial Database Management and Solutions (CSDMS), India International Centre, New Delhi, October 30-31, 2001.
- 5. IRC-PIARC International Seminar on Sustainable Development in Road Transport, Vigyan Bhawan, New Delhi, November 10-12, 2001.

- 6. 'MAP-INDIA 2002', International Conference on GIS and GPS Technologies, Centre for Spatial Database Management and Solutions (CSDMS), Hotel Taj Palace, New Delhi, February 5-7, 2002.
- 7. National Conference on "Human Values in Technical Education", QIP Centre, Indian Institute of Technology, Roorkee, March 13, 2002.
- 8. National Conference on Transportation Systems (NCTS), Indian Institute of Technology, New Delhi, April 23-25, 2002.
- 9. Fifth National Conference on 'Construction The Way Ahead', Construction Industry Development Council (CIDC), India Habitat Centre, New Delhi, November 11-12, 2002.
- 10. IRC National Seminar on "Financial Management and Institutional Reforms in Highway Sector", Vigyan Bhawan, New Delhi, November 18-19, 2002.
- 11. First Annual Congress of Institute of Urban Transport (India), India Habitat Centre, New Delhi, December 10-11, 2002.
- 12. 'MAP-INDIA 2003', International Conference on GIS and GPS Technologies, Centre for Spatial Database Management and Solutions (CSDMS), Hotel Grand Intercontinental, New Delhi, January 28-31, 2003.
- 13. "Modern Trends in Highways & Bridges", Workshop organized by Department of Civil Engineering, Thapar Institute of Engineering & Technology, Patiala, August 19, 2003.
- 14. National Seminar on Integrated Development of Rural and Arterial Road Network for Socio-economic Growth, Indian Roads Congress, Vigyan Bhawan, New Delhi, December 5-6, 2003.
- 15. 65th Annual Session of the Indian Roads Congress, Bangalore Palace Grounds, Bangalore, January 8-11, 2005.
- 16. National Seminar on Trends in Geotechnical Engineering, GZS College of Engineering & Technology, Bathinda, April 30, 2005.
- 17. 66th Annual Session of the Indian Roads Congress, Gandhi Maidan, Bhubaneswar, November 10-15, 2005.
- 18. National Conference on 'India An Emerging World Power', Dr. Rajendra Prasad Auditorium New Delhi, May 20, 2006.
- 19. National Seminar on 'Economic Growth and National Integration', Hotel Connaught Place, New Delhi, Friday, June 23, 2006.
- 20. International Workshop on 'Transportation Asset Management', IRC Headquarters, New Delhi, Wednesday, October 11, 2006.
- 21. 67th Annual Session of the Indian Roads Congress, Parade Grounds, Panchkula, November 18-20, 2006.
- 22. National Conference on "Civil Engineering: Meeting The Challenges Of Tomorrow", Department of Civil Engineering, Guru Nanak Dev Engineering College, Ludhiana, November 24-25, 2006.
- 23. "National Conference on Rural Roads", National Rural Roads Development Agency, Vigyan Bhawan, New Delhi, May 22-24, 2007.
- 24. Workshop on "Quality Assurance Handbook, New Design Guidelines & DPR issues under PMGSY" held at SCOPE Convention Centre, Lodhi Road, New Delhi on August 7th, 2008.
- 25. Interactive Workshop on "Performance of National Quality Monitors and State Technical Agencies", at National Institute for Training of Highways Engineers (NITHE), Sector 62, Noida, on 9th 10th February, 2009.
- 26. National Workshop on "Stabilisation of Soil and Granular Layers for Pavements", organized by Indian Roads Congress, New Delhi and PEC University of Technology, at Chandigarh on October 24, 2009.
- 27. UK-India Education & Research Initiative (UKERI) Seminar on "Concrete for Sustainable High Performance Infrastructure: Challenges and Opportunities" conducted by Civil Engineering Department of Guru Nanak Dev Engineering College, Ludhiana on February 17, 2010.
- 28. National Seminar on "Green Building Philosophy", conducted by Military Engineer Services, Bathinda Zone, in collaboration with Institution of Engineers, Local Centre, Bathinda on September 7, 2010.
- 29. 8-day Residential Workshop on "Human Values and Professional Ethics", conducted by Human Values Cell, Punjab Technical University at College of Engineering, Bhaddal from July 18-25, 2011.
- 30. National Conference on "Innovative Challenges in Civil Engineering", PTUGZS Campus, Bathinda, March 15-16, 2012.

- 31. "16th Punjab Science Congress Technology for Health", Baba Farid University of Health Sciences, Faridkot, February 7-9, 2013.
- 32. National Conference on "Geo-technical and Geo-environmental Aspects of Waste and their Utilization in Infrastructure Projects", Guru Nanak Dev Engineering College, Ludhiana, February 15-16, 2013.
- 33. India Canada Workshop on "Water for Health", Baba Farid University of Health Sciences, Faridkot, November 7-8, 2013.
- 34. National Workshop on "Applications of GIS in Transportation Systems (AGTS-2014)", organized by PEC University of Technology on August 22nd, 2014.
- 35. National Conference on "Geotechnical Engineering Practice and Sustainable Infrastructure Development", Guru Nanak Dev Engineering College, Ludhiana, October 11-12th, 2014.
- 36. International Conference on "Frontiers in Material Research and Applications", (FMRA-2014)", Shaheed Bhagat Singh State Technical Campus, Ferozepur, October 30-31st, 2014.
- 37. National Congress on "Science, Technology, and Management", DAV Institute of Engineering & Technology, Jalandhar, November 7th, 2014.
- 38. Indian Geotechnical Society TC-8 Workshop on "Numerical and Physical Modelling", conducted by Guru nanak Dev Engineering College on October 3rd, 2015.
- 39. Seminar on "Amritsar A Smart City", organized by Amritsar College of Engineering & Technology, Amritsar on January 28th, 2016.
- 40. National Conference on "Advances in Engineering & Technology, Management and Sciences" organized by ASRA College of Engineering & Technology, Bhawanigarh in technical collaboration with MRSPTU, Bathinda on April 23rd, 2016.
- 41. International Interdisciplinary Conference on "Science, Technology, Engineering, Management, Pharmacy and Humanities (STEMPH 17)", Nanyang Technological University, Singapore, April 22-23, 2017.
- 42. International Conference on "Sustainable Waste Management", Guru Nanak Dev Engineering College, Ludhiana, November 2-3, 2018.

11. Conference/Seminar Chair/Co-Chair/Invited Speaker

Invited Lectures

- 1. Invited Lecture on "Design of Flexible and Rigid Pavements for Rural Roads in India, during the I.S.T.E Short Term Training Programme on Recent Advancement in Pavement Design including Low Volume Roads (RAPDLVR), June 16-20, 2008.
- 2. Invited Lecture on "Pradhan Mantri Gram Sadak Yozna, during the I.S.T.E Short Term Training Programme on Recent Advancement in Pavement Design including Low Volume Roads (RAPDLVR), June 16-20, 2008.
- 3. Invited Lecture on "Intelligent Transportation System for Traffic Management in Urban Areas", during the AICTE-ISTE short term course on Intelligent Buildings organized by Department of Architecture, National Institute of Technology, Hamirpur on February 26, 2010.
- Six Expert Lectures on the following topics at the National Programme for Capacity Building of Engineers in Earthquake Risk Management (NPCBEERM), conducted by the Department of Civil Engineering, GZS College of Engineering & Technology, Bathinda from December 21-29, 2009.
 - a. Engineering Seismology, Earthquake Hazards & Mitigation Measures
 - b. Seismic Performance of Buildings, Seismic Evaluation of Buildings
 - Retrofitting Materials
 - d. Base Isolation Techniques
- 5. Expert Lecture on "GIS in Transportation Engineering", during Short Term Programme on "GIS Applications in Engineering and Science", conducted by National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh, at GZS College of Engineering & Technology, Bathinda, December 12-16, 2011.
- 6. Invited Lecture on "Soil Stabilisation Techniques for Road Construction", during the AICTE sponsored Staff Development Programme on "Ground Improvement and Ground Control including Waste Containment with Geosynthetics", Guru Nanak Dev Engineering College, Ludhiana, December 22, 2011 January 5, 2012.

- 7. Invited Lecture on "Construction and Quality Control for Soil Stabilised Roads", during the AICTE sponsored Staff Development Programme on "Ground Improvement and Ground Control including Waste Containment with Geosynthetics", Guru Nanak Dev Engineering College, Ludhiana, December 22, 2011 January 5, 2012.
- 8. An invited lecture on "Use of Geosynthetics in Transportation Engineering" during the International Conference on Frontiers in Material Research and Applications, organized by Shaheed Bhagat Singh State Technical Campus, Ferozepur on October 31st, 2014.
- 9. An invited lecture on "Intelligent Transport Systems", during the National Congress on Science, Technology, and Management conducted by DAV Institute of Engineering & Technology, Jalandhar on November 7th, 2014.
- 10. An invited lecture on "Use of Intelligent Transport System for Congestion Management", on the occasion of National Science Day theme of "Science for Nation Building", celebrated at Baba Farid College of Engineering and Technology, Deon, Bathinda on March 2nd, 2015.
- 11. An Expert Lecture on "Characterization of Bituminous Materials in India", during the Faculty Development Programme entitled "Material Technology and Characterization Techniques", on December 21st, 2015.
- 12. Expert Lecture on "Intelligent Transport System for Smart Cities", during the Seminar on "Amritsar A Smart City", organized by Amritsar College of Engineering & Technology, Amritsar on January 28th, 2016.
- 13. Key Note Speaker in National Conference on Advances in Engineering & Technology, Management and Sciences organized by ASRA College of Engineering & Technology, Bhawanigarh in technical collaboration with MRSPTU, Bathinda on April 23rd, 2016.
- 14. Expert Lecture on "Traffic Control Devices for Roads & Roadsides" during the Training Program on Road Safety for Field Engineers organized by Punjab Engineering College, Chandigarh in collaboration with Asian Institute of Transport Development, at Chandigarh on 13th June, 2018.
- 15. Expert Lecture on "Night time Visibility Measures for Road Safety" during the Training Program on Road Safety for Field Engineers organized by Punjab Engineering College, Chandigarh in collaboration with Asian Institute of Transport Development, at Chandigarh on 13th June, 2018.

Special Lectures Delivered

- 1. Lecture on 'Good Traffic Management Practices' delivered to all traffic police personnel of Bathinda District in the presence of Deputy Commissioner, Bathinda, and Senior Superintendent of Police, Bathinda
- 2. Lecture on 'Use of Intelligent Transport System in Indian Scenario' at Malout Institute of Management and Information Technology, Malout.
- 3. Lecture on 'Utilization of Flyash in Road Construction' at the Institution of Engineers (I), Bathinda Local Centre.
- 4. Lecture on 'Natural Disasters' at the workshop conducted on the occasion of National Science Day at GZS College of Engineering & Technology, Bathinda.
- 5. Lecture on 'Transport Scenario in World Class Cities' delivered on the occasion of National Management Day at the Bathinda Management Association.
- 6. Lecture on the theme of 42nd Engineers day 'Engineering Solutions to Combat Climate Change, during the function held on October 9, 2009.
- 7. Special Lecture on "Green Economy" on the occasion of "World Environment Day", at Institution of Engineers, Bathinda Local Centre, on June 5, 2012.
- 8. Special Lecture on "Green Buildings", at Institution of Engineers, Bathinda Local Centre, on August 21, 2012.
- 9. Special Lecture on "Energy Conservation", on the occasion of "World Earth Day" at Institution of Engineers, Bathinda Local Centre, on December 9, 2012.
- 10. Special Lecture on "Illegal Wildlife Trade" on the occasion of "World Environment Day", at Institution of Engineers, Bathinda Local Centre, on June 5, 2016.

Conference/Session Chairmanship

1. Co-chairman of Technical Session during National Seminar on Green Building Philosophy, conducted by Military Engineer Services, Bathinda Zone, in collaboration with Institution of Engineers, Local Centre, Bathinda, September 4-5, 2010.

- 2. Co-chairman of Technical Session during National Conference on Innovative Challenges in Civil Engineering", held at PTUGZS Campus, Bathinda on March 15-16, 2012.
- 3. Co-chairman of Plenary Session of National Conference on "Geo-technical and Geoenvironmental Aspects of Waste and their Utilization in Infrastructure Projects" organized by the Department of Civil Engineering, Guru Nanak Dev Engineering College, Ludhiana on February 15-16, 2013.
- 4. Chaired a technical session during National Conference on "Geotechnical Engineering Practice and Sustainable Infrastructure Development", Guru Nanak Dev Engineering College, Ludhiana, October 11-12th, 2014.
- Co-Chairman of the National Conference on Advancement in Sustainable Practices & Innovations in Renewable Energy (ASPIRE), Giani Zail Singh Punjab Technical University Campus, Bathinda, October 10-11, 2013
- Co-Chairman of Technical Session of International Interdisciplinary Conference on Science, Technology, Engineering, Management, Pharmacy and Humanities (STEMPH 17) held at Nanyang Technological University, Singapore during April 22-23, 2017.
- 7. Chairman of the Technical Session at International Conference on Sustainable Waste Management held at Guru Nanak Dev Engineering College, Ludhiana, November 2-3, 2018.

12. IRC Codes of Practice developed

Developed and published the following codes of practice of the Indian Roads Congress as a member of the national level Flexible Pavement Committee of the IRC:

- 1. IRC:16-2008 "Standard Specifications and Code of Practice for Prime Coat and Tack Coat".
- 2. IRC:SP:78-2008 "Specifications for Mix Seal Surfacing and Close Graded Premix Surfacing".
- 3. IRC:SP:79-2008 "Tentative Specifications for Stone Matrix Asphalt".
- 4. IRC:SP:81-2008 "Tentative Specifications for Slurry Seal and Microsurfacing".
- 5. IRC:27-2009 "Specifications for Bituminous Macadam".
- 6. IRC:111-2009 "Specifications for Dense Grade Bituminous Macadam".

13. Administrative Positions

SI. No.	Position held	Department/ Organisation	Period
1	Dean	Distance Education Programme, MRSPTU, Bathinda	26.07.2018 to continuing
2	Director	Punjab Institute of Technology, GTB Garh (Moga)	15.07.2015 to 20.12.2017
3	Head of Department	Department of Civil Engineering, GZSCCET, Bathinda	17.11.2009 to 04.10.2010 and 04.05.2012 to 28.04.2015
4	Head of Department	Department of Training & Placement, GZSCCET, Bathinda	01.08.2011 to 30.04.2014
5	State Coordinator	State Technical Agency, PMGSY, GZSCCET, Bathinda	From November, 2006 till date
6	Coordinator, TEQIP Project	GZSCCET, Bathinda	From October 2015 till date
7	Nodal Officer (Finance), TEQIP	GZSCCET, Bathinda	From May 2013 till date
8	Chairman	NBA Accreditation Committee, GZSCCET, Bathinda	From June 2018 till date
9	SPOC	Smart India Hackathon, GZSCET, Bathinda	From November 2018 till date

10	Chairman	Editorial Board, GZSCCET, Bathinda	2006 to 2008
11	Chairman	Campus Road Maintenance Inspection Committee, GZSCCET, Bathinda	20010 to 2012
12	Chairman,	Computer Centre Development Committee, GZSCCET, Bathinda	2009 to 2010
13	Coordinator	PTU-BFUHS Joint Courses, GZSCCET, Bathinda	2012 to 2015
14	Coordinator	Value Education Cell, GZSCCET, Bathinda	2011 to 2014
15	Chairman	University Advertising Agency Empanelment Committee, MRSPTU, Bathinda	2015
16	Chairman	University Fund Management Committee, MRSPTU, Bathinda	2016
17	Estate Officer	GZSCCET, Bathinda	2007 to 2010
18	Chairman/Co- chairman	College Admission Committee	2007 to 2017
19	Chairman	Campus Whitewash and Painting Committee GZSCCET, Bathinda	2012

14. MRSPTU and Other Universities' Duties

S.No.	Name of the Body	Designation	Nature of work
1.	Board of Studies, Civil and Environmental Engineering, IKGPTU, Kapurthala	Member	Study Scheme of UG/PG courses and syllabi
2.	Board of Studies, Civil and Environmental Engineering, MRSPTU Bathinda	Member	Study Scheme of UG/PG courses and syllabi
3.	Board of Studies, Civil Engineering, SBS State Technical Campus, Ferozepur	Nominee of Vice Chancellor	Study Scheme of UG/PG courses and syllabi
4.	Board of Studies, Civil, Sant Longowal Institute of Engineering & Technology, Longowal, Sangrur	Member	Study Scheme of Diploma courses and syllabi
5.	Board of Studies, Civil Engineering, Bahra University, Shimla	Member	Study Scheme of UG/PG courses and syllabi
6.	Board of Studies, Civil Engineering, Guru Nanak Dev Engineering College, Ludhiana	Member	Study Scheme of UG/PG courses and syllabi
7.	Board of Studies, Civil Engineering, Guru Kashi University, Talwandi Sabo	Member	Study Scheme of UG/PG courses and syllabi
8.	Joint Board of Studies, PTU/BFUHS Joint Courses	Course Coordinator	Study Scheme of joint courses and syllabi
9.	Building Inspection Committee, SBSSTC, Ferozepur	Chairman/Member	Inspection of New Buildings
10.	Building Inspection Committee, MIMIT, Malout	Chairman	Inspection of New Buildings
11.	Building Inspection Committee, PIT, Arniwala, and PIT, Bajeke	Chairman	Inspection of New Buildings
12.	Academic Council, MRSPTU, Bathinda	Member	Academic approvals of the University.

13.	IKGPTU Admission 2016-17 Core Committee	Member	Coordinating Admissions 2016-17, with IKGPTU, Kapurthala
14	MRSPTU Expert Committee for College Inspection	Chairman	Physical Inspection of New Colleges/Courses under MRSPTU
15	MRSPTU Expert Committee for College Application Scrutiny	Chairman	Scrutiny of Applications for opening of New Colleges/Courses under MRSPTU
16	MRSPTU Committee on Prime Minister's Kaushal Vikas Yozna	Member	Identification of Skill Development Trades to be taken up under this scheme
17	MRSPTU Recruitment Test Conduct Committee	Centre Superintendent	Conducting the online test for recruitment of Clerks, Data entry Operators, Programmers, Assistant Security Officers
18	MRSPTU Recruitment Test Conduct Committee	Centre Superintendent & Evaluation Controller	Conducting the online test for recruitment of Assistant Registrar, Deputy Registrar, and Deputy Controller of Examination
18	MRSPTU Distance Education Programme Committee	Member	Preparation of DPR for commencing Distance Education Programmes at MRSPTU
19	MRSPTU University Research Board	Member	Regulation of PhD and Research in the University
20	MRSPTU Advertising Agency Empanelment Committee	Chairman	Empanelment of Advertising Agencies for publication of advertisements of MRSPTU
21	SLIET Selection Committee	Subject Expert	Selection of Assistant Professors in Civil Engineering
22	Bahra University Selection Committee	Subject Expert	Selection of Assistant Professors in Civil Engineering
23	MRSPTU Selection Committee	Subject Expert	Selection of Assistant Professors in Civil Engineering
24	SLIET DPR Preparation Committee	Subject Expert	Preparation of DPR for starting BE Civil Course at SLIET Longowal
25	SLIET Estimation Committee	Technical Expert	Civil Construction Works at SLIET Longowal

15. Examination Duties

Sr. No.	Examination Duties Assigned	Duties Performed
1.	Head Examiner (Civil Engineering)	December 2008, May 2012, December 2012, May 2013, December 2013, May 2014, and December 2014 examinations
2.	Centre Superintendent	PTU December 2008 Examinations at Adesh Institute of Pharmacy and Biomedical Sciences, Bathinda
3.	Observer	PTU December 2009 Examinations at Baba Farid College of Engineering & Technology, Bathinda
4.	Observer	PTU May 2010 Examinations at Shri Guru Gobind Singh College of Engineering & Technology, Talwandi Sabo
5.	Centre Superintendent	PTU December 2010 Examinations at Giani Zail Singh College of Engineering & Technology, Bathinda
6.	Controller of Examination	MRSPTU, May 2018 Examination at GZSCET, Bathinda
7.	Controller of Examination	ITI January 2018 Examination at GZSCET, Bathinda

16. Organizational Activities

- (i) Convener of the Organizing Committees of the National Seminar on Trends in Geotechnical Engineering, held at GZS College of Engineering & Technology, Bathinda in 1997.
- (ii) Convener of one of the Organizing Committees of the National Conference on Futuristic Trends in Mechanical and Materials Engineering, held at GZS College of Engineering & Technology, Bathinda in 2008.
- (iii) General Secretary of the GZSCET Teachers Association by all faculty members of the College for the year 2006 and 2007.
- (iv) Vice President of the GZSCET Teachers Association of the College for the year 2008.
- (v) Organized National Programme for Capacity Building of Engineers in Earthquake Risk Management (NPCBEERM) for the field engineers of various departments of Govt. of Puniab.
- (vi) Organizing team member of National Conference on "Innovative Challenges in Civil Engineering", PTUGZS Campus, Bathinda, March 15-16, 2012.
- (vii) Co Chairman of National Conference on Advancement in Sustainable Practices & Innovations in Renewable Energy (ASPIRE-2013), Giani Zail Singh Punjab Technical University Campus, Bathinda, October 10-11, 2013.
- (viii) General Secretary of GZSCCET Staff Welfare Association since 2016.

17. List of Publications

A) Published Papers in Journals

- 1. Jain, S.S., Parida, M., and S. Aggarwal (2001) "Emerging Trends in Development of Road Maintenance Management System", Civil Engineering & Construction Review, Trendset Engineers Private Ltd., New Delhi, November 2001, pp 39-46.
- 2. Aggarwal, S., Jain S.S., and M. Parida (2002) "A Critical Appraisal of Pavement Management Systems" Vol. 63 No.2, IRC Journal, Indian Roads Congress, New Delhi, pp 327-403.
- 3. Aggarwal, S., Jain S.S., and M. Parida (2002) "Maintenance Management of Highway Infrastructure in India", Transport Track Journal, Impressions India Group, New Delhi, Vol. 2, No. 1, pp 31-35.

- 4. Jain, S.S., Aggarwal, S., and M. Parida (2002) "Using HDM-4 for Road Management in India", New Building Materials & Construction World, an International Journal of Trans-Asia Communications, New Delhi, Vol. 8, Issue 5, November 2002, pp 68-77.
- 5. Aggarwal, S., Jain S.S., and M. Parida (2003) "Intelligent Technologies for Traffic Management in Urban Areas", Urban Transport Journal, Institute of Urban Transport (India), Vol. 4, No. 1, March 2003, pp 248-257.
- Aggarwal, S., Jain S.S., and M. Parida (2003) "New Techniques and Technologies for Pavement Management Systems", New Building Materials & Construction World, an International Journal of Trans-Asia Communications, New Delhi, Vol. 9, Issue 6, September 2003, pp 98-114.
- 7. Aggarwal, S., Jain, S.S., and M. Parida (2004) "Development of Pavement Management System for Indian National Highway Network", Journal of Indian Roads Congress, New Delhi, Vol. 65, Issue 2, October 2004, pp 271-326.
- 8. Aggarwal, S., Jain, S.S., and M. Parida (2005) "Use of Pavement Management Systems in Developing Countries", Indian Highways, Indian Roads Congress, New Delhi, Vol. 33, Issue 4, April 2005, pp 5-15.
- 9. Parida, M., Aggarwal, S., and S.S. Jain (2005) "Enhancing Pavement Management System Using GIS", Transport Journal, Institution of Civil Engineers, London, U.K, Vol. 158, Issue 2, May 2005, pp 107-113.
- 10. Jain, S.S., Aggarwal, S., and M. Parida (2005) "HDM-4 Pavement Deterioration Models for Indian National Highway Network", Journal of Transportation Engineering, American Society of Civil Engineering (ASCE), USA, Vol. 131, Issue 8, pp 623-631.
- 11. Jain, M., Singh I.P., and S. Aggarwal (2010) "Eco Planning approach for Tourism", Indian Journal of Architecture (A+D), New Delhi, May, 2010, Vol. XXVII no. 5, pp 54-60.
- 12. Kaur, J., Kaur, P., and S. Aggarwal (2016) "Building Envelope Design from an Evolutionary Perspective", Journal of the Indian Institute of Architects, Mumbai, December 2016, Volume 81, Issue 12, pp 11-14.
- 13. Kaur, J., Kaur, P., and S. Aggarwal (2017) "Thermal Performance of a Building Envelope An Evaluative Approach", International Journal of Research and Analytical Review, Vol. 4, Issue 3, July Sept., 2017.
- 14. Kaur, J., Kaur, P., and S. Aggarwal (2017) "Integration of Energy Efficiency in Early Design Stage Architect's Perspective", International Journal of Scientific Research in Science and Technology, Vol. 3, Issue 6, July August, 2017.

B) Articles/Chapters published in Books

- "Design of Flexible and Rigid Pavements for Rural Roads in India", Proceedings of I.S.T.E Short Term Training Programme on Recent Advancement in Pavement Design including Low Volume Roads (RAPDLVR), Guru Nanak Dev Engineering College, Ludhiana, June 16-20, 2008.
- 2. "Pradhan Mantri Gram Sadak Yozna", Proceedings of I.S.T.E Short Term Training Programme on Recent Advancement in Pavement Design including Low Volume Roads (RAPDLVR), Guru Nanak Dev Engineering College, Ludhiana, June 16-20, 2008.
- 3. "Soil Stabilisation Techniques for Road Construction", Proceedings of AICTE sponsored Staff Development Programme on "Ground Improvement and Ground Control including Waste Containment with Geosynthetics", Guru Nanak Dev Engineering College, Ludhiana, December 22, 2011 January 5, 2012.
- 4. "Construction and Quality Control for Soil Stabilised Roads", Proceedings of AICTE sponsored Staff Development Programme on "Ground Improvement and Ground Control including Waste Containment with Geosynthetics", Guru Nanak Dev Engineering College, Ludhiana, December 22, 2011 January 5, 2012.

C) Papers Published in International Conference Proceedings

- 1. Aggarwal, S., Parida, M., and S.S. Jain (2001) "GIS Based Pavement Management System", Proceedings, IRC-PIARC International Seminar on Sustainable Development in Road Transport, New Delhi, November 17-18, 2001, pp 125-139.
- 2. Aggarwal, S., Parida, M., and S.S. Jain (2002) "Development of an Approach for Integration of PMS with GIS", Proceedings, 4th International Conference on Road and Airfield Pavement Technology, April 2002, Kunming, China, pp 1577-1585.
- 3. Aggarwal, S., Jain S.S., and M. Parida (2002) "Enhancing Pavement Management Process using GIS", Proceedings, International Seminar on Tunnels and Communications for Road Technology, November 2002, Beijing, China.
- 4. Jain S.S., Aggarwal, S., and M. Parida (2002) "Selection of Pavement Deterioration Models for PMS", Proceedings, International Seminar on Tunnels and Communications for Road Technology, November 2002, Beijing, China.
- 5. Aggarwal, S., Jain, S.S., and M. Parida (2003) "Integrating Pavement Management System with GIS A Case Study", Proceedings, Map India 2003, International Conference on GIS and GPS, New Delhi, January 27-31, 2003.
- 6. Aggarwal, S., Jain, S.S., and M. Parida (2003) "Calibration of HDM-4 Bituminous Road Deterioration Models for Indian Conditions", Proceedings, 21st ARRB and 11th REAAA Conference, Cairns, Queensland, Australia, May 18-23, 2003.
- 7. Jain S.S., Aggarwal, S., and M. Parida (2003) "Pavement Deterioration Models for PMS", Proceedings, International Conference on Highway Pavement Data, Analysis and Mechanistic Design Applications, Columbus, Ohio, USA, September 7-10, 2003.
- 8. Aggarwal, S., Jain, S.S., and M. Parida (2004) "Pavement Management System for a National Highway Network in India", Proceedings, 6th International Conference on Managing Pavements, Brisbane, Australia, October 19 –24, 2004.
- 9. Aggarwal, S., Jain, S.S., and M. Parida (2007) "Development of Pavement Management System for Urban Roads in New Delhi", Proceedings, 23rd World Road Congress, Paris, France, September 17-21, 2007.
- Aggarwal, S. (2010) "High Volume Fly ash Concrete From Waste to Wealth", Proceedings, International Conference on Environmental Research (ICER-10), University of Mauritius, September 16-18, 2010.
- Aggarwal, S. (2010) "Using HDM-4 for developing Pavement Management Programme for National Highway Network of India", Proceedings, 24th ARRB Conference, Melbourne, Australia, October 12-15, 2010.
- 12. Aggarwal, S. and M. Bansal (2011) "Passive Solar Design of Buildings A Case Study", Proceedings, TechConnect World Conference and Expo 2011' Boston, USA, June 13-16, 2011.
- 13. Aggarwal, S. (2017) An Appraisal of Using Steel Fibre Reinforced Concrete for Pavements", Proceedings of International Interdisciplinary Conference on Science, Technology, Engineering, Management, Pharmacy and Humanities (STEMPH 17), Nanyang Technological University, Singapore, April 22-23, 2017.

D) Papers Published in National Conference Proceedings

- 1. Aggarwal, S., Jain S.S., and M. Parida (2000) "Need of Pavement Management System in India", Proceedings, Technical Session, 80th AGM of Institution of Engineers, UP State Centre, Lucknow, December 21-22, 2000, pp 9-15.
- 2. Aggarwal, S., Jain S.S., and M. Parida (2001) "Structure of Pavement Management System for India", Proceedings, National Seminar on 'Challenges for Road Transportation in 21st Century: Leading to Fuel Economy', Thapar Institute of Engineering & Technology, Patiala, February 23-24, 2001, pp 228-239.

- 3. Aggarwal, S., Jain S.S., and M. Parida (2002) "Integrating HDM-4 Based Pavement Management System with GIS", Proceedings, National Conference on Transportation Systems (NCTS-2002), Indian Institute of Technology, New Delhi, April 23-25, 2002, pp 711-722.
- 4. Aggarwal, S., Jain S.S., and M. Parida (2002) "Calibration of HDM-4 Roughness Model for Indian Conditions", Proceedings, National Seminar on "Road Transport in India: Emerging Trends and Techniques (ROTRAN-2002)", Indian Institute of Technology, Kharagpur, September 11-13, 2002, pp 1.1 1.12.
- 5. Aggarwal, S., Jain, S.S., and M. Parida (2002) "Development of Road Transportation Infrastructure The Way Ahead", Proceedings, National Conference on "Construction The Way Ahead", Construction Industry Development Council, New Delhi, November 11-12, 2002.
- Aggarwal, S., Jain, S.S., and M. Parida (2002) "Private Sector Participation in the Development of National Highway Network", Proceedings, IRC National Seminar on "Financial Management and Institutional Reforms in Highway Sector", New Delhi, November 18-19, 2002.
- 7. Parida, M., Aggarwal, S., and S.S. Jain (2002) "Human Resource Development for Highway Sector", Souvenir, National Seminar on "Financial Management and Institutional Reforms in Highway Sector", Indian Roads Congress, November 2002, New Delhi.
- 8. Aggarwal, S., Jain, S.S., and M. Parida (2002) "Intelligent Technologies for Traffic Management", Proceedings, Annual Congress of Institute of Urban Transport (India), India Habitat Centre, New Delhi, December 10-11, 2002.
- 9. Bhattacharya, C.C., Jain, S.S., Parida M., and S. Aggarwal (2002) "Intelligent Transportation System for Congestion Management in a Metropolitan City", Proceedings, All India Seminar on "Improving Transportation in a Congested Metropolitan City", American Society of Civil Engineers (India Section), Kolkata, December 13-14, 2002.
- 10. Aggarwal, S., (2003) "Challenges for Construction Industries in Developing Countries", Proceedings, Sixth National Conference on Global Challenges in Project Design and Construction Management, Construction Industry Development Council (CIDC), India Habitat Center, New Delhi, November 11-12, 2003.
- 11. Aggarwal, S., Jain, S.S., and M. Parida (2003) "Need for Change in Rural Road Network Scenario of India", Proceedings, National Seminar on Integrated Development of Rural and Arterial Road Network for Socio-economic Growth, Indian Roads Congress, Vigyan Bhawan, New Delhi, December 5-6, 2003.
- 12. Aggarwal, S. and R. Singla (2004) "Ready Mixed Concrete The Construction Material of the Future", Proceedings, National Seminar on Advances in Concrete Technology, Thapar Institute of Engineering & Technology, Patiala, February 23-24, 2004.
- 13. Aggarwal, S., Jain, S.S., and M. Parida (2004) "Application of HDM-4 for Pavement Management of National Highway Network", Proceedings, National Seminar on Strategies in Traffic Engineering & Management, M.S. Ramaiah Institute of Technology, Bangalore, February 16-17, 2004.
- Aggarwal, S. (2004) "Intelligent Transport System For Urban Traffic Management", Proceedings, National Conference on Traffic Engineering & Road Safety in India", Traffic Engineers & Safety Trainers, Bangalore, November 26-27, 2004.
- 15. Aggarwal, S., Parida, M., and S.S. Jain (2005) "Development of Pavement Management System for Urban Roads", Proceedings, National Conference on Recent Trends in Highways and Bridges, Thapar Institute of Engineering & Technology, Patiala, February 19-20, 2005.
- 16. Aggarwal, S., Garg, Anmol, and Shamita Garg (2005) "Utilisation of Fly Ash in Civil & Environmental Engineering Projects", Proceedings, National Seminar on Trends in Geotechnical Engineering, GZS College of Engineering & Technology, Bathinda, April 30, 2005.
- 17. Aggarwal, Sanjiv (2005) "An Appraisal of Rural Road Network Scenario of India", Proceedings, National Seminar on Trends in Geotechnical Engineering, GZS College of Engineering & Technology, Bathinda, April 30, 2005.
- 18. Aggarwal, S. (2005) "Necessity of Pavement Management System for India", Souvenir, Institution of Engineers, Bathinda Local Centre, Bathinda, September 15, 2005.

- 19. Aggarwal, S., and R. Singla (2006) "Technological Innovations in Urban Transport Management", Proceedings, National Conference on Technologies of 21st Century, Punjab University, Chandigarh, April 8, 2006.
- 20. Aggarwal, S. (2006) "Utilization of Flyash in Concrete and oad Construction", Seminar, Institution of Engineers, Local Centre, Bathinda, August 30, 2006.
- 21. Aggarwal, S., and Singhal, D. (2006) "Varieties of Modern Concrete", Souvenir, Institution of Engineers, Local Centre, Bathinda, September 15, 2006.
- 22. Aggarwal, S. (2006) "Intelligent Transport System for Traffic Management in Urban Areas", Proceedings, International Conference on Construction INCITE 2006, Construction Industry Development Council, New Delhi, November 15 17, 2006.
- 23. Aggarwal, S. (2006) "Selection of Suitable Strategies for Rehabilitation of Flexible Pavements", Proceedings, National Conference on Civil Engineering: Meeting the Challenges of Tomorrow", Department of Civil Engineering, Guru Nanak Dev Engineering College, Ludhiana, November 24 25, 2006.
- 24. Aggarwal, S. (2006) "PMGSY The Changing Scenario of Rural Road Construction in India", Proceedings, National Conference on Civil Engineering: Meeting the Challenges of Tomorrow", Department of Civil Engineering, Guru Nanak Dev Engineering College, Ludhiana, November 24 25, 2006.
- 25. Aggarwal, S. (2008) "Strategies for Rehabilitation of Flexible Pavements", Proceedings, National Conference on Infrastructural Development in Civil Engineering, National Institute of Technology, Hamirpur, May 16-17, 2008.
- 26. Aggarwal, S. (2010) "Smart Concrete The Next Thing in Intelligent Buildings", Proceedings, National Conference on Smart, Electronic & Engineering Materials (SEEMs-10), Baba Farid College of Engineering & Technology, Deon, Bathinda, March 5-6, 2010.
- 27. Aggarwal, S. (2010) "Solar Passive Design of Buildings", National Seminar on Green Building Philosophy, conducted by Military Engineer Services, Bathinda Zone, in collaboration with Institution of Engineers, Local Centre, Bathinda, September 4-5, 2010.
- 28. Aggarwal, S. (2011) "Steel Fibre Reinforced Concrete for Pavements", Proceedings, National Seminar on Emerging Trends in Civil Engineering, NITTTR Chandigarh, November 16-17, 2011.
- 29. Aggarwal S. (2012) "Integrating HDM-4 Based Pavement Management System with GIS", Proceedings, National Conference on Innovative Challenges in Civil Engineering", PTUGZS Campus, Bathinda, March 15-16, 2012.
- 30. Singhal, D., Aggarwal, S., and J.S. Brar (2012) "A Comparative Study on Concrete Mix Deisgn by IS:10262", Proceedings, National Conference on Innovative Challenges in Civil Engineering", PTUGZS Campus, Bathinda, March 15-16, 2012.
- 31. Aggarwal, S. (2012) "Environment Friendly and Economical Use of High Volume Fly Ash Concrete for Construction Activities", Proceedings, National Conference on Global Upcomings in Environment, Science & Technology 2012 (GUEST'12), PTUGZS Campus, Bathinda, April 13-14, 2012.
- 32. Aggarwal S. (2012) "Pervious Concrete Pavement for Sustainable Development", Proceedings, National Conference on Innovations in Concrete Technology, Gulzar Group of Institutes, Khanna, Ludhiana, July 21, 2012.
- 33. Aggarwal S. (2013) "Pervious Concrete Pavement for Urban Development", Proceedings, 16th Punjab Science Congress, Baba Farid University of Health Sciences, Faridkot, February 7-9, 2013.
- 34. Aggarwal S. (2013) "Applications of Geotextiles in Civil and Transportation Engineering", Proceedings, National Conference on "Futuristic and Emerging Areas in Technology: Issues and Challenges", PTU Giani Zail Singh Campus, Bathinda, February 14-15, 2013.
- 35. Aggarwal S. (2013) "Selection of Suitable Strategies for Rehabilitation of Flexible Pavements", Proceedings, National Conference on "Geo-technical and Geo-environmental Aspects of Waste and their Utilization in Infrastructure Projects" Guru Nanak Dev Engineering College, Ludhiana, February 15-16, 2013.

- 36. Aggarwal S. (2013) "High Volume Fly Ash Concrete From Waste to Wealth", Proceedings, National Conference on Advancement in Sustainable Practices & Innovations in Renewable Energy (ASPIRE), Giani Zail Singh Punjab Technical University Campus, Bathinda, October 10-11, 2013.
- 37. Aggarwal S. (2013) "Passive Solar Design of Buildings An Indian Experience", Proceedings, National Conference on Advancement in Sustainable Practices & Innovations in Renewable Energy (ASPIRE), Giani Zail Singh Punjab Technical University Campus, Bathinda, October 10-11, 2013.
- 38. Aggarwal S. (2014) "Perpetual Pavements Redefining the Concept of Road Design and Construction", Proceedings, National Conference on "Geotechnical Engineering Practice and Sustainable Infrastructure Development (GEPSID 2014), Guru Nanak Dev Engineering College, Ludhiana, October 11-15, 2014.