


Faculty Profile

Name	Dr. RAJESH KUMAR			
Designation	Professor			
Pay Scale				
Department	Civil Engineering			
Qualification	Ph. D.			
Date of joining	Institute	Present Post		
02-01-2015	CCET, Chandigarh	Professor		
Experience (<i>in years</i>)	Total	Teaching	Industry	
	29 years	29 years	---	
Research Interests	Self Compacting Concrete, Recycled Aggregates Concrete, Construction Materials etc.			
Contact Details:	Email	Mobile/Phone		
	rajshaastha@ccet.ac.in	+919478548248		
Research Publications	International Journals	National Journals	International Conferences	National Conferences
	21	04	12	12
Books/Chapters Published	--			
Research Guidance	Ph. D.	04	Masters	14
Research Projects	Completed	03	Inprogress	---
Consultancy Projects	Completed	24	Inprogress	---
Seminar/Conference/STTPs	Attended	26	Organized	09
Professional Affiliations	02			
Awards/ Fellowships etc.	---			
List of Publications	Annexure-I through Annexure-IV			
Research Project Detail	Annexure-V			
Patent Detail	Annexure-VI			
Consultancy	Annexure-VII			
Ph.D Scholars Name	Annexure-VIII			
Institute Responsibility	Annexure-IX			
Department Responsibility	Annexure-X			
Any Other Information	Annexure-XI			



Signature of faculty

LIST OF PUBLICATIONS

International Journals:

1. Rajesh Kumar, Bhupinder Singh and Pradeep Bhargava, “**Behaviour of Confined Over-reinforced Self-compacting Concrete Beams**”, *Structural Concrete: the journal of fib*, Thomas Telford Publishing 2009 pp. 181- 191. Impact Factor: 1.492. (Thomson Reuter) **(Scopus Indexed)**.
2. Bhupinder Singh, Rajesh Kumar, and, Abhishek Singh Mukati, “**SCC mixes with limestone and chalk powder – the Indian experience**”, *The Indian Concrete Journal*, ISSN: 0019-4565, Dec. 2009, V 83, 12, pp. 09-17. Impact Factor: 1.156, Citations 06 **(Scopus Indexed)**.
3. Pradeep Bhargava, Rajesh Kumar and Bhupinder Singh, “**Flexural capacity predictions of self-compacting concrete beams using stress–strain relationship in axial compression**”, *Magazine of Concrete Research*, Thomas Telford Publishing, ISSN: 0024-9831 2011, V 63, 01, pp. 49-59. (Co-authors: Singh, Bhupinder and Bhargava, Pradeep)., Impact Factor: 1.227. (Thomson Reuter) **(Scopus Indexed)**.
4. Pinal C. Khergamwala, Jagbir Singh & Rajesh Kumar, “**Effect of Recycled Coarse Aggregates on Characteristic Strength of Different Grades of Concrete**” *International Journal of Civil Engineering & Technology (IJCIET)*, Volume 4, Issue 6, November- December 2013, pp. 186- 192, Impact factor- 5.33 by GISI, Print ISSN 0976 – 6308, Online ISSN 0976 – 6316. **(Scopus Indexed)**
5. Pinal C. Khergamwala, Jagbir Singh & Rajesh Kumar, “**Experimental Study on Shear Behavior of Reinforced Recycled Aggregate Concrete Beams**” *International Journal of Civil Engineering & Technology (IJCIET)*, Volume 7, Issue 2, March- April 2016, pp. 128- 139, Impact factor- 9.78 by GISI, Print ISSN 0976 – 6308, Online ISSN 0976 – 6316. **(Scopus Indexed)**
6. Pinal C. Khergamwala, Jagbir Singh & Rajesh Kumar, “**Investigating Fresh and Hardened Properties of Concrete made with Laboratory Waste as Coarse Recycled Aggregates**”, *International Journal of Scientific Research in Science, Engineering and Technology (IJSRSET)* ISSN: 2395-1990, Volume 3, Issue 5, Jul-Aug 2017, pp. 615–621. **(UGC)**

7. Pinal C. Khergamwala, Jagbir Singh & Rajesh Kumar, “**Effect of variables on Shear Strength of Recycled Aggregate Concrete Beams**”, *International Journal of Scientific Research Engineering & Technology (IJSRET)*, ISSN: 2278-0882 , Volume 6, Issue 8, Aug 2017, pp. 857–866. (UGC)
8. Kanwar Jeet Singh, Rajesh Kumar, S. P. Singh & Harvinder Singh, “**Shear strength characteristics of lightly reinforced self-compacting concrete beams**”, *International Journal of Research in Engineering and Applied Sciences*. 2017, Vol. 2, Issue 12, PP 95-102. (UGC)
9. Kanwar Jeet Singh, Rajesh Kumar, S. P. Singh & Harvinder Singh, “**Shear failure analysis of high strength self-compacting concrete beams**”, *International Journal of Research in Engineering and Applied Sciences*. 2018, Vol. 3, Issue 2, PP 58-65. (UGC)
10. Parveen Chander, Rajiv Chauhan & Rajesh Kumar, “**Geotechnical data analysis using GIS: a case study**”, *International Journal of Interdisciplinary Research and Innovations* Vol. 6, Issue 2, pp: (438-445), Month: April - June 2018, ISSN 2348-1218 (print), ISSN 2348-1226 (UGC).
11. Parveen Chander, Rajiv Chauhan & Rajesh Kumar, “**Engineering Properties of Soil in Sri Muksar Sahib District of Punjab (India) - Statistical Analysis**”, *International Journal of Advanced Scientific Research and Management*, Volume 3 Issue 6, June 2018, ISSN 2455-6378. (UGC)
12. Amandeep Singh and Dr. Rajesh Kumar, “**Effect of Glass Power on Hardened Properties of Concrete**”, *International Journal of Technical Innovation in Modern Engineering & Science (IJTIMES)*, Volume 5 Issue 01, Jan. 2019, Pp 184-191, E0ISSN: 2455-2585 (UGC).
13. Parveen Chander, Rajiv Chauhan & Rajesh Kumar, “**Engineering Classification of Soil in Shri Muksar Sahib District of Punjab State (India)**”, *International Journal of Innovations in Engineering and Technology (IJJET)*, Volume 14, Issue 3, October 2019, pp. 28- 36, ISSN: 2319-1058.
14. Sunita Kotwal, Harpal Singh & Rajesh Kumar, “**Experimental investigation of Steel Fibre reinforced Self Compacting Concrete (SCC) using recycled aggregates as partial replacement of coarse aggregates**”, *Materials Today: Proceedings* 48 (2022) 1032–1037. (Elsevier), (Scopus Indexed)
15. Sunita Kotwal, Harpal Singh & Rajesh Kumar, “**Study on sulphate and chloride resistance of self-compacting concrete**”, *Materials Today: Proceedings* 48 (2022) 1044–1047. (Elsevier), (Scopus Indexed)

16. Haq, M. Z. U., Sood, H., & Kumar, R., "Effect of using plastic waste on mechanical properties of fly ash based geopolymer concrete", *Materials Today: Proceedings* 69 (2022): 147-152 (Elsevier)., (Scopus Indexed)
17. Haq, M. Z. U., Sood, H., Kumar, R. & Prakash Chandra Jena, "Optimizing the strength of geopolymer concrete incorporating waste plastic", *Materials Today: Proceedings* (2023) (Elsevier)., (Scopus Indexed)
18. Haq, M. Z. U., Sood, H., Kumar, R., Prakash Chandra Jena & Sanjeev Kumar Joshi, "Eco-friendly approach to construction: Incorporating waste plastic in geopolymer concrete", *Materials Today: Proceedings* (2023) (Elsevier)., (Scopus Indexed)
19. Haq, M. Z. U., Sood, H., & Kumar, R. (2024), "Scanning electron microscopy (SEM)-assisted mechanistic study: pH-driven compressive strength and setting time behavior in geopolymer concrete", *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering*, 09544089241259460. (SCI IF 2.3)
20. Haq, M. Z. U., Sood, H., Kumar, R. & Laura Ricciotti, "Sustainable geopolymers from polyethylene terephthalate waste and industrial by-products: a comprehensive characterisation and performance predictions", *Journal of Materials Science* (2024): 1-32 (Springer). (SCI IF 3.5)
21. Haq, M. Z. U., Sood, H., Kumar, R. & Ildiko Merta, "Taguchi-optimized triple-aluminosilicate geopolymer bricks with recycled sand: a sustainable construction solution", *Case Studies in Construction Materials* 20 (2024): e02780 (Elsevier). (SCI IF 6.5)

National Journals:

22. Satish Kumar and Rajesh Kumar, **“Bhuj Earthquake: Performance of Bridges”**, *Civil Engineering and Construction Review* (ISSN: 0975-9034), 2002, Pp 35-38. (UGC)
23. Rajesh Kumar, Jaychandra, P., Singh, Bhupinder and Bhargava, Pradeep, **“Strength and deformation characteristics of over-reinforced self-compacting concrete beams”**, *SERC Journal of Structural Engineering* (ISSN: 0970-0137), Vol. 35, No. 4, October-November 2008 pp. 264–270. (UGC)
24. Singh, Bhupinder, Akhlaq, M. Umair, Rajesh Kumar and Sahoo, Dipak Kumar, **“Shear Behaviour of Longitudinally Reinforced Self-compacting Concrete Beams”**, *SERC Journal of Structural Engineering* (ISSN: 0970-0137), Madras, Dec. 2010, Vol. 37, 5, pp. 316-322. (UGC)
25. Parveen Chander, Rajiv Chauhan, J. N. Jha & Rajesh Kumar, **“Geotechnical Assessment through Statistical Analysis of District Bathinda, Punjab, India”**, *i-manager’s Journal on Civil Engineering*, December - February 2019, 9(1), pp. 9-17.

International Conferences:

26. Jha, J.N., Kumar R. and Chaudhary, A., **“Experimental study on the improvement of bearing capacity of reinforced fly ash sub grade and soil fly ash mix”**, Proceedings of *fifth International Conference on the bearing capacity of Roads & Air Fields* to be held at Trondheim Norway, 1998, Pp. 1391-1400.
27. Satish Kumar & Rajesh Kumar. **“State of Art: Performance of tied R.C.C columns”**, Proceedings of *12th Symposium on Earthquake Engineering-2002*, at I.I.T., Roorkee, 2002.
28. Bhupinder Singh, Rajesh Kumar, and, Abhishek Singh Mukati, **“Flow and strength characteristics of SCC containing limestone and chalk powders”**, RELIM - 2nd International Symposium on Design, Performance and Use of Self-Consolidating Concrete SCC'2009, pp. 351-361.
29. Rajesh Kumar & Bhupinder Pal Singh, **“Retrofitting of concrete structures using self-compacting concrete”**, *Proceedings of the International conference on Urbanism and Green Architecture*, NIT Hamirpur, October 30-31, 2010, pp. 45-51.
30. Kanwar Jeet Singh, Rajesh Kumar & S. P. Singh, **“Shear Strength Characteristics of Longitudinally Reinforced Self Compacting Concrete Beams”**, Proceedings of International UKIERI Concrete Congress on Innovations in Concrete Constructions at NIT Jalandhar from 5-8 march 2013. Pp 216-222.
31. .Pinal C. Khergamwala, Jagbir Singh & Rajesh Kumar, **“Effect of Shear Span to Depth Ratio on Shear Strength of Recycled Aggregate Concrete Beams”** “Proceedings of the International Conference on Concrete Research Driving Profit and Sustainability, UKIERI concrete congress, 2-5 November 2015, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab, India. ISBN: 978-93-84869-82-3.
32. Zia ul Haq, Md, Hemant Sood, and Rajesh Kumar. **“AI-Assisted Geopolymer Concrete Mix Design: A Step Towards Sustainable Construction”**, *International Conference on Artificial Intelligence of Things*. Cham: Springer Nature Switzerland, 2023.

33. Md. Zia ul Haq, Hemant Sood, Rajesh Kumar, Saurav Dixit, T. Srinivas, Suniana Ahuja, B. Lingam & Kaushal Kumar, "**Circular Economy Enabler: Enhancing High-Performance Bricks through Geopolymerization of Plastic Waste**", *E3S Web of Conferences*. Vol. 430. EDP Sciences, 2023.
34. Md. Zia ul Haq, Hemant Sood, Rajesh kumar, Prashant Chaudhary, C Lavanya, Navdeep Dhaliwal, Sathish Singarapu & Kaushal Kumar, "**Waste Upcycling in Construction: Geopolymer Bricks at the Vanguard of Polymer Waste Renaissance**", *E3S Web of Conferences*. Vol. 430. EDP Sciences, 2023.
35. Md zia ul haq, Hemant Sood, Rajesh kumar, Sanjeev Kumar Joshi, V Mallikarjuna Reddy, Manish Gupta, Penta Samyuktha & Kaushal Kumar, "**Sustainable Infrastructure Solutions: Advancing Geopolymer Bricks via Eco-Polymerization of Plastic Waste**", *E3S Web of Conferences*. Vol. 430. EDP Sciences, 2023.
36. Md zia ul haq; Dr. Hemant Sood, Dr. Rajesh kumar, Vishal Sharma, Anuj Kumar, T. Srinivas, Dr. Monica Gulati, K. Hima Bindu & Kaushal Kumar, "**Eco-Friendly Building Material Innovation: Geopolymer Bricks from Repurposed Plastic Waste**", *E3S Web of Conferences*. Vol. 430. EDP Sciences, 2023.
37. Md zia ul haq, Vishal Sharma, Hemant Sood, Rajesh kumar, Kapil Joshi, Kumari Manisha, Sorabh Lakhanpal, M Rathna Chary & Kaushal Kumar, "**Geopolymerization of Plastic Waste for Sustainable Construction: Unveiling Novel Opportunities in Building Materials**", *E3S Web of Conferences*. Vol. 430. EDP Sciences, 2023.

Annexure-IV

National Conference:

38. "**Applications of Self Compacting Concrete in High Rise Buildings**", *Proceedings of the National Conference on High-Rise Buildings: Materials and Practices*, New Delhi, India, October 30-31, 2006, pp.29-38. (Co-authors: Singh, Bhupinder and Bhargava, Pradeep).
39. "**Self Compacting Concrete: An Overview**", *Proceedings of the National Conference on Civil Engineering: Meeting the Challenges of Tomorrow (CECMT-2006)*, GNDEC, Ludhiana, India, November 24-25, 2006, Allied Publishers Private Ltd., pp.411-416. (Co-authors: Singh, Bhupinder and Bhargava, Pradeep).

40. **"Fresh and Hardened Properties of Self-compacting Concrete"**, *Proceedings of the National conference on Trends and Challenges in Structural Engineering and Construction Technologies*, Central Building Research Institute, Roorkee, February 11-12, 2009, pp. 431-442. (Co-authors: Singh, Bhupinder and Bhargava, Pradeep).
41. **"A comparative study on the stress-strain behaviour of self-compacting concrete and conventional concrete"**, *Proceedings of the National conference on Recent Advances in Civil Engineering – RACE 2010*, Cochin University of Science & Technology, Cochin, September 16-18, 2010, pp. 56-63. (Co-authors: Singh, Bhupinder and Bhargava, Pradeep).
42. **"Numerical Study of Stability of Reinforced Fly Ash Slope"**, *Proceedings of the National conference RAMM2012*, VSSUT, Burla, 25-26 Feb., 2012, pp. 347-358. (Co-authors: Parveen Chander and J. N. Jha).
43. **"Soil Constitutive Models for Geotechnical Application"**, *Proceedings of the National conference on Innovative Challenges in Civil Engineering*, PTU GZS Campus, Bathinda, 15-16 March 2012, pp. 75-81. (Co-authors: J.N.Jha and Harvinder Singh).
44. **"Behaviour of Strip Footing on Reinforced Flyash Slope"**, *Proceedings of the National conference on Innovative Challenges in Civil Engineering*, PTU GZS Campus, Bathinda, 15-16 March 2012, pp. 99-108. (Co-authors: Parveen Chander and K.S. Gill).
45. **"Use of Rice Husk Ash as a Low Cost Pozzolanic Material in Self Compacting Concrete"**, *Proceedings of the National conference on Innovative Challenges in Civil Engineering*, PTU GZS Campus, Bathinda, 15-16 March 2012, pp. 75-81. (Co-authors: K.S. Bedi and J.N. Jha).
46. **"Effect of reinforcement on fly ash slope"** *Proceedings of the Two day National conference on Geotechnical and Geo-environmental Aspects of Wastes and their Utilization in Infrastructure Projects at Guru Nanak Dev Engg. College from 15-16 February, 2013.* (Co-authors: Er. Parveen Chander and Er. Jasbir Singh).
47. **"Shear Strength Characteristics of Self Compacting Concrete Using Fly Ash and Silica Fume"**, *Proceedings of National Conference on Geotechnical and Geo-environmental Aspects of Wastes and Their Utilization in Infrastructure Projects at Guru Nanak Dev Engg. College from 15-16 February, 2013.* Pp 400-411. (Co-authors: Er. Kanwarjit Singh Bedi and Er. Harpreet Kaur)

48. **“Recycled Aggregate:- An Overview”**, Proceedings of National Conference on Geotechnical and Geo-environmental Aspects of Wastes and Their Utilization in Infrastructure Projects at Guru Nanak Dev Engg. College from 15-16 February, 2013. Pp 277-282. (Co-authors: Er. Pinal Saini and Dr. Jagbir Singh)
49. **“Using waste and recycled materials in construction”** Proceedings of the National Conference on emerging trends in engineering, technology and management (NCEETM), 31st January- 1st February 2014, Indus University, Ahmadabad, Gujarat, India. ISBN: 978-81-923049-9-1. (Co-authors: Er. Pinal Saini and Dr. Jagbir Singh)

Un-Referred Conferences:

50. **“Recycling of urban solid waste”** Proceedings, *National Seminar on Environment Management*, Ludhiana, 1996, Pp 11-16. (Co-authors: Pal, M. and Jha, J.N.)
51. **“General Guidelines for Earthquake Resistant Construction of Buildings”**, Proceedings of *Technology Camp* in Civil Engg. Deptt. G.Z.S.C.E.T., Bathinda from July12-July13, 1999, Pp 01-13.
52. **“Bhuj Earthquake: Performance of Masonry Buildings”** *Workshop on Recent Earthquake of Chamoli and Bhuj*, 2001, Pp 81-91. (Co-authors: Satish Kumar)
53. **“Performance of R.C.C Framed Buildings during Bhuj Earthquake Jan 26, 2001”** Workshop on Recent Earthquake of Chamoli and Bhuj, 2001, Pp 91-101. (Co-authors: Satish Kumar)
54. **“Lessons Learnt from Bhuj Earthquake”**, Proceedings of *National Seminar on Challenges to Civil Engineers in context to Natural Disasters- CCND 2002* at G.Z.S. C.E. T., Bathinda. 2002, Pp. 12-28. (Co-authors: Satish Kumar)
55. **“Shear Resistance of Partially filled panels in framed structures”**, Proceedings of *National Seminar on Challenges to Civil Engineers in context to Natural Disasters- CCND 2002* at G.Z.S. C.E. T., Bathinda, 2002, Pp. 258-267.
56. **“Guidelines for Earthen Buildings in Seismic Zone: IS 13827-1993”**, Proceedings of *Short Term Training Programme on Structures under Seismic Environment* from Dec 30, 2002 to Jan 10, 2003 at G.Z.S. C.E.T., Bathinda, 2003, Pp. 250-259.

57. **“Low Strength Masonry Buildings in Seismic Area”**, Proceedings of *Short Term Training Programme on Structures under Seismic Environment* from Dec 30, 2002 to Jan 10, 2003 at G.Z.S. C.E.T., Bathinda, 2003, Pp. 260-273.

LIST OF RESEARCH PROJECTS

Sr. No.	Sponsored Research/Projects Undertaken				
	Title of the Project	Cost	Duration	Funding Agency	PI(s)/Co-PI/I(s)
1.	Building Centre	5.0 Lac	3yrs	HUDCO	Dr. S.K. Bansal Dr. Rajesh Kumar Dr. Rakesh Kumar
2.	Modernization of Concrete Lab	9.0 Lac	01 yr	AICTE	Dr. S. K. Bansal Dr. Rajesh Kumar
3.	Multi Level Smart Parking System	3.0 Lac	01 yr	DST	Dr. Jatinder Madan Dr. Sunil Kumar Singh Dr. Rajesh Kumar Dr. D. S. Saini

PATENTS AWARDED/PUBLISHED

1. Dr. Sunita Kumari, Dr. Radhey Sham, Dr. Bharti, Dr. Ashwani Kumar, Mr. Vinodh Chauhan, Dr. Nidhi Gautam, Dr. Vineet Kumar, Dr. Rajesh Kumar Saluja, Dr. Rajesh Kumar, "A Device of Plaster of Paris (POP) Applicator and Methods Thereof", Application No. 202211030548 dated 27/05/2022 Patent No. 551336 dated 27/05/2022. Status: Granted.
2. Dr. Rajesh Kumar, "Antrag auf Eintragung eines Gebrauchsmusters" (Translation :- Support system for access to a railway bridge), A German Patent, Application Number G24554DE, dated October 01, 2024, Status: Granted.
3. Dr. Jatinder Madan, Dr. Radhey Sham, Dr. Ashwani Kumar, Dr. Agrim Sharma, Dr. Anshuman Kaushik, Dr. Rajesh Kumar, "3-D printable, spherical work envelope and 360 degree rotatable mobile/tablet holder", Application No. 202011043310 A, Publication of the patent office, the patent office journal no. 45/2020. (Application date: 06/10/2020. Publication date 06/11/2020, Issue date 01/07/2021). Status: published, under examination.
4. Dr. Jatinder Madan, Dr. Sunil K Singh, Dr. D S Saini, Dr. Rajesh Kumar, "A system of a modular automatic car parking system for a city marketplace", Application No. 202111008572 A, Publication of the patent office, the patent office journal no. 10/2021 dated 05/03/2021). Status: published, under examination.
5. Dr. Jatinder Madan, Dr. Rajesh Kumar, "Railway bridge access support system and vehicle", Application number 202311050225, publication date 17-11-2023. Status: published, under examination.
6. Dr. Jatinder Madan, Dr. Rajesh Kumar, Ms. Monika Puri, "An extendable holder", application number 202411041865, publication date June 14, 2024,. Status: published, under examination.
7. Dr. Rajesh Kumar, "Car Parking System", Application Number 433338-001, dated October 09, 2024, Status: under examination.

LIST OF MAJOR CONSULTANCY PROJECTS

Year	Name of Client	Name of Project	Cost
99-00	National Fertilisers Ltd Bathinda	Structural Stability Testing of Five Major Structures of N.F.L. Bathinda.	Rs. 60,000/-
00-01	National Fertilisers Limited Panipat	Structural Stability Testing of Five major Structures	Rs. 75,000/-
09-10	Executive Engineer, Provn. Divn. PWD B&R, Faridkot	Structural Design of Modern Jail at Faridkot	Rs. 32000/-
	OMAXE Infrastructure and Const. Pvt. Ltd., Kalka Ji New Delhi	Checking of Structural design of Adman. Block of Modern Jail at Faridkot	Rs. 36,000/-
10-11	Punjab School Education Board, Mohali	Structural Design of Adarsh School at Enakhera	Rs. 80,000/-
11-12	M/s ARKCO structural Consultants, Jalandhar	Checking of Structural design of South city for Singla Builders and Promoters at Zirkepura	Rs. 1,87,000/-
	Ar. Jeena Singh, SJS Consultants, Amritsar	Checking of Structural design of Motherhood Apartments at Amritsar	Rs. 1,60,000/-
	Executive Engineer, Privn. Divn. PWD B&R Ferozepur	Checking of Structural design of Lecture Halls at SBS College of Engineering & Tech., Ferozepur.	Rs. 55,000/-
	General Manager, Milk Plant, Bathinda.	Structural Design of Boiler Foundation at Milk Plant Bathinda.	Rs. 50,000/-
	Executive Engineer, Privn. Divn. PWD B&R Bathinda	Structural Design of Girls Hostel at P.T.U. G.Z.S. Campus, Bathinda.	-----
12-13	Principal Director, Addl. Chief Engineer, Bathinda Zone	Str. Drawing of KLP OTM Accn for ASLT ENHR REGT9Ph-I at Bathinda Mil. Station	Rs. 55,000/-

	Principal Director, Addl. Chef Engineer, Bathinda Zone	Vetting of Str. Design of OTM Accn at Bathinda Mil. Station	Rs. 44,500/-
	Executive Engineer, Pronvl. Division PWD B&R, Ferozpur	Vetting of Str. Design for Girls Hostel S.B.S College Ferozpur	Rs. 49,000/-
	Mr Rohit Kumar Contactor C/o Ambuja Cement Bathinda Unit	Str. Design of Supporting system for Bag filter of Ambuja Cement Unit at Bathinda	Rs. 40,000/-
	Executive Engineer, Punjab Mandi Board, Bathinda.	Vetting of Str. Design for	Rs. 1,00,000/-
	M/s NNC Design International, New Delhi	Vetting of Str. Design for Punjab Institute of Technology, Nandgarh.	Rs 1,07,000/-
	M/s SJS Consultants, Amritsar.	Vetting of Str. Design for Mother Hood Apartments at Mullechak, Amritsar.	Rs. 1,78,000/-
13-14	M/s ARKCO structural Consultants, Jalandhar	Checking of Structural design of Khalsa Diwan Institution of Management & Tech. , Taran Taran.	Rs. 62,000/-
	The President, Bar Association, Bathinda	Structural design of Lawyer's Chambers Block-B (Phase-II) at Judicial Court Complex, Bathinda.	Rs. 90,000/-
	M/s Havitare Architects, Bathinda	Structural design of Panchyat Bhawan and Recreation Centre at Mansa.	Rs. 52,000/-
	M/s Gagan Associates, Jalandhar	Vetting of Structural design of Prov. Of Single Acc. & Parking Shed for DSC Personal at 28 ED AFS and DSC MESS & Single living Acc. For DSC Prov. At Gurgaon.	Rs. 37,000/-

M/s AROTECH Structural Consultants, Jalandhar.	Vetting of Structural design of Proposed Building for Extension of Engg. Block at Lyallpur Khalsa College of Engg., Jalandhar.	Rs. 56,000/-
The Registrar, Baba Farid Univ. of Health Sci., Faridkot.	Vetting of Structural design of Super-Specialty Block in GGS Hospital, Faridkot.	Rs. 1,25,000/-
M/s Ahluwalia Associates, Amritsar.	Structural Design of AGM at Babehali, Gurdaspur.	Rs. 1,50,000/-

Total Consultancy per year

Year	Total Consultancy
99-00	Rs. 98,850/-
00-01	Rs. 1,27,000/-
01-02	Rs. 62,250/-
02-03	Rs. 2,70,219/-
03-04	Rs. 1,60,400/-
04-05	Rs. 1,33,250/-
05-06	Rs. 1,92,950/-
09-10	Rs. 5,37,329/-
10-11	Rs. 6,53,768/-
11-12	Rs. 9,37,857/-
12-13	Rs. 10,80,506/-
13-14	Rs. 12,65,877/-
14-15	Rs. 13,20,022/-

LIST OF PH. D. THESIS (COMPLETED/SUBMITTED/ON GOING)

Sr. No.	Name of Candidate	Title of thesis	University/Institute	Status of Work
1	Mr. Kanwarjeet Singh Bedi	Shear Strength Characteristics of Self Compacting Concrete Beams	IKGPTU, Jalandhar	Degree Awarded (2019)
2	Ms. Pinal Khergamwala	Study of Shear Characteristics of Recycled Aggregate Concrete Beams	IKGPTU, Jalandhar	Degree Awarded (2019)
3	Mr. Parveen Chander	Analysis of Soil Investigation Data and Development of Soil Design Charts of Punjab State	IKGPTU, Jalandhar	Degree Awarded (2023)
4	Ms. Sunita Kotwal	Performance Evaluation of Steel Fiber Reinforced Self-compacting Concrete with Recycled Aggregates	IKGPTU, Jalandhar	Thesis Submitted(2024)
5	Mr. Md. Zia Ul Haq	Development and Efficacy Assessment of Novel Geopolymer Brick Embedded with Plastic Waste	PU, Chandigarh/NITTTR, Chandigarh	Degree Awarded (2024)
6	Mr. Sayantan Ghosh	Experimental Investigation on SCC using Composite Cement and Treated Waste Water	PU, Chandigarh/NITTTR, Chandigarh	On going
7	Mr. Vevek Thanur	Experimental Investigation on Utilization of Treated Waste Water and Construction and Demolition Waste for Developing Self Compacting Concrete	PU, Chandigarh/NITTTR, Chandigarh	On going
8	Mr. Gaurav Nadda	Development of Sustainable Ultra High Performance Concrete Utilizing Waste Foundry Sand and	PEC, Chandigarh	On going

		Supplementary Cementitious Materials		
9	Ms. Poonam	Progressive Collapse Analysis of Flat Slab Buildings with Structural Irregularities	PU, Chandigarh/CCET, Chandigarh	On going

MAJOR DUTIES AT UNIV./INSTITUTION LEVEL

S.No.	Nature of Interaction	Instt. Name, address	Dates	Remarks
1.	Panel Discussion	National Conference on New Generation Concrete at NITTTR, Chandigarh	19 th Apr., 2017	Chairperson, Technical Session-II
2.	Industry Tours	Ambuja Cement, Bathinda		2 nd year B. Tech. Students
3.	Review of Book/Paper	Journal of Engineering & Education, NITTTR, Chandigarh	2017	02 Papers were reviewed.
4.	Committee Meeting	Directorate Office, Chandigarh	2013 to 2015	Building works committee
		Director, SBS State Tech. Campus, Ferozepur.	2013	Buildings inspection committee
		Department of Civil Engg., PU, Chandigarh	2016-till date	RDC committee.
		Department of Civil Engg., PU, Chandigarh	2016-till date	BOG of UG & PG courses.
		Department of Civil Engg., Bahra Univ. Shimla Hills, Wagnaghat.	2016	BOS of UG & PG courses.
		Office of Vice Chancellor, PU Chandigarh	2017-2018	Building Inspection Committee at PU, Chandigarh
		Department of Civil Engg., DCRUST, Murthal, Sonapat.	2017-2018	BOS of UG & PG courses.
		Department of Civil Engg., GCET, Chak Bhalwal, Jammu.	2018-2021	BOS of UG course.
		Department of Civil Engg., Beant College of Engg. & Tech., Gurdaspur.	2020	BOS of UG & PG courses.
Department of Civil Engg., MRSPTU, Bathinda.	2024	BOS of UG & PG courses.		

5.	Examination	GZSPTU Campus, Bathinda	May, Dec., 2010, 2011, 2012, 2013	Superintendent, Deputy Suptt., Invigilator etc. and Evaluation of Answer Sheets.
		CCET, Chandigarh	May, Dec., 2015, 2016, 2017.	Superintendent, Deputy Suptt., Invigilator etc. and Evaluation of Answer Sheets.
6.	Interview Panel	GZSPTU Campus, Bathinda	4 th Jan., 2013	Selection of faculty on Lecture basis for B. Tech. & Diploma (Civil).
		GZSPTU Campus, Bathinda	12 th Jul., 2013	Selection of faculty on Lecture basis for B. Tech. & Diploma (Civil).
		Office of Director, NITTTR, Chandigarh	29 th Oct., 2018	Expert of Selection Committee of the post of Professors.
		Office of Director, NITTTR, Chandigarh	14-18 th Nov., 2018	Expert of Selection Committee of the post of Professors.
		Department of Civil Engg., NITTTR, Chandigarh	26 th Nov., 2020	Expert of Selection Committee of Ph. D. Candidates.
		Office of Director, NITTTR, Chandigarh	15 th Feb., 2021	Nominee of the Ministry Expert of Selection Committee of the post of Professors.
		Office of Director, SBS State Technical Univ., Ferozepur.	17 th Feb., 2021	Screening – cum - evaluation committee for CAS.
		Department of Civil Engg., NITTTR, Chandigarh	18 th Dec., 2023	Expert of Selection Committee of Ph. D. Candidates.

7.	Social Events	GZSPTU Campus, Bathinda	1996 to 2014	NSS Camps, Rallies, Blood Donation Camps etc
8.	Student Activity	GZSPTU Campus, Bathinda	1996 to 2014	Cultural Fest, Sports Meets etc.
		CCET, Chandigarh	2015 to 2022	President Students Council and Professor I/c Students welfare, Prof. I/c Antiraging Committee, Chairman UHV Committee etc.

MAJOR DUTIES AT DEPARTMENT LEVEL

S.No.	Nature of Interaction	Duty
1.	Administrative	Head of Department
2.	Academic	Lab I/c CAD Lab., Chairman Purchase Committee, Charman NBA Committee, Chairman Library Committee etc.
3.	Student Activities	<p>Two-day Workshop on the STAAD.Pro: Bentley Systems India Private Ltd. The Department of Civil Engineering organised this workshop during 18th - 19th August 2015. Mr. Rominder Singh Bedi and their team members from Bentley Systems India Private Ltd. imparted training to the students of third year. The students were trained to use the STAAD.Pro software for designing and analysis of structures. Almost 70 students participated in this workshop with full enthusiasm.</p> <p>Expert Lecture on "Modern Temples of India-Dams-Bhakra, Beas, Ranjit Sagar Dams" by Er. Narendar Sharma, Chief Engineer (Retd.) Bhakra & Beas Dams on 19.03.2015.</p> <p>Expert Lecture on "Basics of GIS" by Dr. L. N. Sharma, Retd. Professor, PEC Chandigarh on 23.03.2016</p> <p>Technical Quiz: AQUIZ-2016 was organized on 22.03.2016. It was an institute level quiz on Water held for the students of Civil Engineering.</p> <p>Autodesk Workshop: The Department of Civil Engineering-Student Council and Club Activities group of Technical Events-Department Level organized a 2-hour workshop on Auto Desk Software on 14.01.2016 in Seminar Hall, Block B. It was an eye opener for the third-year students as the workshop talked about the usage of AutoCAD in their respective field of interests and guided them about obtaining certification from Autodesk.</p> <p>A seminar on White Cement - Good Construction Practices: A seminar was organized by JK Cements Ltd. on "White Cement – Good Construction Practices" in the Department of Civil Engineering on 06-10-2016 (Thursday). Students of Civil Engineering (3rd and 5th semesters) attended the same along with faculty members. Mr. R.K. Jha was the key speaker of the event.</p> <p>Workshop on MIDAS: One-day Workshop on "Bridge Design using MIDAS-Civil" on 04-10-2016 in the Department of Civil Engineering. Faculty as well as the students of 3rd and 4th year participated in this workshop.</p>

		<p>Workshop on Water-proofing: One-day Workshop on "Advanced Water-proofing Technologies and Materials" by MAPEI Inc., Germany in collaboration with the Department of Civil Engineering on 08-11-2016. All the Civil Engineering students and faculty members participated in this workshop.</p>
		<p>Lecture on Construction Practices and Durability: Er. Ashish Kumar, General Manager, J. K. Cement Ltd. delivered a lecture on "Construction Practices and Durability of Concrete" on 26th March 2018 in the Department of Civil Engineering. The students benefitted from this lecture to a good extent.</p>
		<p>Expert Lecture on Chemicals in Construction: An expert lecture was delivered by Mr. Sanjay Bhalla, COO, MAPEI Construction Products India Pvt. Limited on the topic "Role of Construction Chemicals in Civil Engineering" on 27th April, 2018 for the students of Civil Engineering. The students were acquainted with the utilities and advancements of various chemicals used in the construction industry.</p>
		<p>Expert Talk on MX-Roads: An expert lecture was delivered by Er. Rominder Singh Bedi and his team from Bentley Inc. on "World's No. 1 Transportation Software, Open Roads (Formerly MX Roads)" on 18-10-2018. The third and final year students of B.E. Civil Engineering along with Civil Engg. Faculty members attended this lecture and got a good insight into the modern-day IT application tools in Transportation Engineering.</p>
		<p>Seminar on Career Prospective and Quiz Competition: On September 11, 2018, Tuesday, a seminar regarding career prospects followed by a quiz competition was organised by CIZ (Compete India Zone) in collaboration with CiviQ for Civil Engineering students. Students from 2nd and 3rd year of Civil Engg. Dept. of CCET (Degree Wing) attended the seminar and sat for the quiz competition. Around 80 students have participated in this event.</p>
		<p>Seminar on Durability of Concrete: On 16.10.2018, a seminar on "Durability of Concrete" by JK Cement was organised for the final year students of the Civil Engg. Dept. by CiviQ. Around 50 students attended the seminar. Mr. Vikas Malhotra, the representative from J.K. Cement, started the seminar by discussing the revisions of IS 456. He gave a brief introduction about JK cement which was first started in Nimbahera and Mangrol. He highlighted the fact that invention of "cement" was the 3rd greatest revolution of all time.</p>
		<p>Seminar on BIS Standards: On 30.11.2018, the Bureau of Indian Standards (BIS) organized a programme on "Educational Utilization of Indian Standards" for the students of Civil Engineering. The main speaker was Er. Renu Gupta, Scientist 'F' & Head, Chandigarh Branch Office-I, Northern Regional Office, BIS. The students were made aware of various Indian Standards pertaining to Civil Engineering. The procedure of formulation of codes by BIS was also discussed.</p>

	<p>Webinar on ATENA Software: Two-day online Webinar on "Analysis of Structures by ATENA Software" was organized for the 3rd year students on 29-30 April 2019. The webinar were conducted online through Cisco-WebEx platform by Dr.-Ing. Dobromil Pyl, Consulting Engineer, Cervenka Consulting Ltd, Prague, Czech Republic.</p> <p>Lecture on Durability: On 07.11.2019, a seminar on "Durability of Concrete" by J.K. Cement Ltd. was organised for the third-year students of the Civil Engg. Dept. Sh. Vikas Malhotra, the DGM, Northern Region, J.K. Cement was the speaker started the seminar by discussing the revisions of IS-456 in the year 2002. He highlighted the fact that invention of "cement" was the 3rd greatest revolution of all time. He also gave emphasis on the use of PPC instead of OPC.</p> <p>Webinar on Green Buildings to Green Cities: An online webinar was held on 07-08-2019 on "Green Buildings to Green Cities" for B.E. Final year students. It was arranged by Aditya Birla Group, and presentation was delivered by a senior and experienced architect professional and consultant in Punjab state, Architect Sh. Jit Gupta. The webinar was broadcast in the Civil Engg. Seminar Hall (Room B-405). It had been very informative and beneficial to the students. The speaker emphasized that Civil Engineering industry is increasingly adopting usage of tools and materials to make green and energy efficient buildings making a good basis of smart and sustainable cities.</p> <p>Seminar on Advances in Cement Products: Online Technical Seminar on Advances in Cement Products by a senior and experienced Civil Engineer, Sh. Vikas Malhotra (Zonal Head, JK Cement Ltd.) on 26-08-2020.</p> <p>Lecture on World of Concrete: Online webinar on "World of Concrete" by Er. Dinesh Sharma (Zonal Head, Technical Service, JK Cement Ltd.) on 27-07-2020.</p> <p>Webinar on Bituminous Products: Online Webinar on "Bitumen and bituminous product along with their characteristics" by Indian Oil Corp. Ltd., Chandigarh. (by Shri Sanjeev Kundu, Chief General Manager, Shri Hardeep Singh Sohi, General Manager (Institutional business dept), Punjab state office, IOCL, Sh. Diljeet Singh Sidhu, SDE PWD, and Mr. Vikash, Manager (IB), Chandigarh, Indian Oil Corporation Limited) on 16-09-2020.</p> <p>Seminar on Value Added Cements: Organized a Seminar titled "Value Added Cement Products" delivered by Er. Vikas Malhotra (Zonal Head - Customer Technical Services Department) on 7th May 2021, Friday for the students of Civil Engineering.</p> <p>Seminar on Design of Bridges: Civil Engineering Dept. organized a seminar on "Advancements in Design of Bridges and Flyovers" on 26-04-2022. The speaker, Er. Varun Garg (Executive Director, Mortar Civil Solutions Pvt. Ltd. Mohali), interacted with the 3rd year Civil students about different opportunities in training and placements in this area. Eventually, MCSPL selected six students for 6-week training.</p>
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		<p>Industrial Visit to Cement Plant: An industrial visit to Ambuja Cement Plant, Rupnagar, Punjab was organized for the students of 2nd and 3rd year Civil on 18.05.2022 in association with the IIRC-CCET and Bureau of Indian Standards (BIS), Regional Office, Chandigarh. Students gained useful information on this visit.</p>
		<p>Expert Lecture on Watershed Management: Organized an Expert Talk on "Watershed Management & Importance of Water for the Globe" for the students on 22.08.2022 by Prof. Vikas Garg, Head of Dept. of Civil Engineering, Central University, Mahendergarh.</p>

OTHER WORKS/DUTIES

1. Organised and managed all the Academic and Administrative activities in the department of Civil Engineering from 2015 to till date.
2. Organised all the student activities in the Institution from 2015 to 2022
3. Finalized the Curriculum of B. E. (Civil Engineering) for Panjab University, time to time from 2015 to till date.
4. Finalized the Curriculum of Ph.D. (Civil Engineering) for Panjab University, Chandigarh from 2020 to till date.
5. Finalized the Curriculum of B. E. (Civil Engineering) for Bahra University Shimla Hills, Wahnaghat for the year 2018-19.
6. Finalized the Curriculum of B. E. (Civil Engineering) for DCRUST, Sonapat University. for the year 2018-19.
7. Finalized the Curriculum of B. E. (Civil Engineering) for BCET , Gurdaspur. for the year 2020-21.
8. Finalized the Curriculum of B. E. (Civil Engineering) for IKGPTU, Kapurthala University. for the year 2023-24.
9. Organized the Annual Techno-Cultural Mega Function "Apratim-2015 to 2021"
10. Successfully completed the Admission Process for the year 2017-18.
11. Successfully completed all the Purchases from the year 2015 to till date.
12. As Chairman of different committees, different proposals and guidelines were proposed for the development of the Institution from 2015 to till date.
13. Proposal for the better security provisions in the Institution was submitted in the year 2017-18.
14. Proposal for the Consultancy Rules in the Institution was prepared and submitted for approval in the year 2015.
15. Initiated the Consultancy Projects in the Department from 2015 and under taken the consultancy project till 2018.
16. Inspected Hostel buildings and other facilities in the Institution and Proposals were prepared for the betterment of the Institution and proposed the Rules/guidelines for Hostels in the year 2017.
17. Prepared a proposal for providing the basic facilities for disabled students, staff and faculty in the Institution in the years 2018-19.
18. Set the papers for entrance tests for admission for Ph. D. and PUMEET & PULEET etc at PU, Chandigarh.
19. Scrutinized various Institutions as member standing committee of AICTE.
20. Inspected various Institutions as EVC member of AICTE.
21. Delivered Expert Lectures in various Institutions/Universities.
22. Acted as Member Selection committees of various Institutions/Universities.