

## Biodata

---



**Dr. Harpal Singh**

Principal

Swamy Sarvanand Institute of Engineering and Technology

Gurdaspur. Ph.:+91-98884-68687

Email: [hps\\_bhoday@yahoo.com](mailto:hps_bhoday@yahoo.com)

Web: <https://harpalsingh62.github.io/Profile/>

Name: Harpal Singh

Father's Name: Ajaib Singh

Date Of Birth: 25.12.1962

### Academic Qualifications:

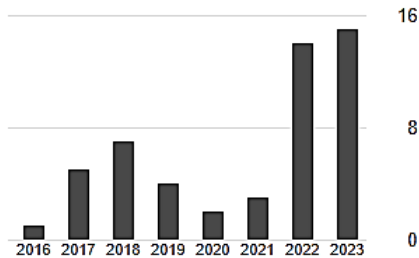
S. No.	Degree / Exam Passed	Name Of Board / University	College	Year Of Passing	Obt. Marks / Total Marks	Percentage	Subjects
1	Matric	PSEB, CHD	VK, Hr. Sec School, LDH	1978	890/1200	74.17	All
2	Hr. Sec.	PSEB, CHD	VK Hr. Sec. School, LDH	1979	615/800	76.88	Non-Medical
3	Pe. Engg.	PU, CHD	Govt. College for Men, LDH	1980	503/650	77.38	Non-Medical
4	B.E.	PU, CHD	GNDEC, LDH	1984	6108/8000	76.35	Civil Engg.
5	M.E.	TIET, PTA	TIET, PTA	1986	1127/1600	70.44	Structures
6	Ph.D.	TIET, PTA	TIET, PTA	1996	-	-	Structures

**Ph.D.** Topic:- Response of R.C. Frames with Infilled Panels Under Earthquake Excitation.  
Guides:-Dr. D.K.Paul, Prof. V.V.Sastry, Dr. M.L.Gambhir

**M.E.** Topic:- Behavior of Skew Box Girder Bridges  
Guide:- Prof. V.V. Sastry

# Google Scholar

Cited by	VIEW ALL	
	All	Since 2019
Citations	101	38
h-index	4	3
i10-index	3	2



Co-authors EDIT

No co-authors

# Scopus

<https://orcid.org/0000-0002-1311-5574>

Scopus Author ID: 57218964847

Scopus Author ID: 57218797851

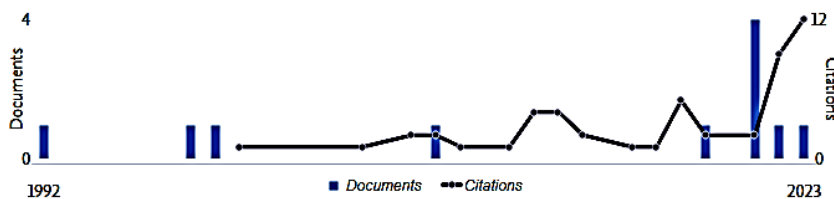
## Singh, Harpal

① Guru Nanak Dev Engineering College, Ludhiana, Ludhiana, India    © 57218964847    <https://orcid.org/0000-0002-1311-5574>

50 Citations by 49 documents	11 Documents	3 h-index <a href="#">View h-graph</a>	<a href="#">View all metrics &gt;</a>
---------------------------------	-----------------	---	---------------------------------------

Set alert    Edit profile    More

### Document & citation trends



### Scopus Preview

Scopus Preview users can check your institution's access features.

[Check access](#)

**Experience:**

S. No.	Name Of the Employer	Position	Grade	Nature Of Work	Date Of Joining	Date Of Leaving	Total Exp.	Reason For Leaving
1	SSIET, Gurdaspur	Principal	UGC	Administration	22.06.2024	Till date	06m	na
2	GNDEC, LDH	Professor	UGC	Teaching, Research, Consultancy	17.11.1998	31.12.2022	25 yr	Retired
3	GNDEC LDH	Principal	UGC	Administration	01.10.2017	13.11.2017	1.5m	na
4	GZSCET, BTI	Principal	UGC	Teaching, Research, Consultancy	11.05.2005	31.03.2010	5 yr	Completion of tenure
5	GNDEC, LDH	Professor & Head	UGC	Teaching, Research, Consultancy	31.07.2003	10.05.2005	2 yr	higher post
6	GNDEC, LDH	Professor & Dean Academics	UGC	Teaching, Research, Consultancy	05.12.2001	10.01.2003	2 yr	rotation
7	TIET, PTA	Asstt. Professor	UGC	Teaching, Research, Consultancy	09.08.1994	16.11.1998	4.5 yr	Promotion
8	CET, BTI	Asstt. Prof.	UGC	Teaching, Research, Consultancy	01.01.1993	08.08.1994	1 yr 8m	na
9	TIET, PTA	Lecturer	UGC	Teaching, Research, Consultancy	03.01.1986	31.12.1992	7yr	promotion
10	M/s Ahuja Builders, X-3, Hauz Khas, N. Delhi	Civil Engineer	Rs. 1003/-	Construction	20.07.1984	27.01.1985	6m	higher study

## Research Papers Published in

R- basic reference score as per table

I-score for indexed journal

IF- Impact factor

A-Author's share

### Referred Journals

#### Publications in International Journals

S. No.	Title	Co-Authors, if any	Name Of Journal	Volume & Year	Pages	Impact Factor	ISSN/ISSN No.	API Score (R+I+IF)A
1	Nonlinear analysis of Frames	Singh GM	Computer & Structures	44 (6), 1992	1377-1379	5.372	0045-7949	(15+5+15)0.6=21
2	Inelastic Dynamic Response of Reinforced Concrete Infilled Frames	Paul DK, Sastry VV	Computer & Structures	69, 1998	685-693	5.372	0045-7949	(15+5+15)0.6=21
3	Relative Study of Solvers for Finite Element Analysis	-	International Journal of Computers & Technology	4(2), 2013	Online	1.532	2277-3061	(15+5+10)1.0=30
4	Elasto-Plastic Analysis of 3D Frames with Generalized Yield Function	-	International Journal of Computers & Technology	14(1), 2014	Online	1.532	2277-3061	(15+5+10)1.0=30
5	Physical & Analytical Investigation of Concrete with Replacement of Cement with Egg Shell Powder & Coal Powder Ash	Er. Varinder Singh,	IJSTE - International Journal of Science Technology & Engineering	3( 01) July 2016	446-449	3.905	2349-784X	(15+5+15)0.6=21
6	Effect of Super Plasticizer on the Mechanical and Durable Properties of High Volume Cementitious Concrete	Er. Prem Gandhi	IJSTE - International Journal of Science Technology & Engineering	3( 01) July 2016	450-453	3.905	2349-784X	(15+5+15)0.6=21

7.	Analytic Study on Electro-mechanical Properties of Reusable Industrial Waste Material (RIWM) in Self Compacting Concrete (SCC)	Salman	Journal of Civil Engineering and Environmental Technology	4(1), January-March, 2017	106-111	4.5208	2349	(15+5+15)0.6 =21
8	Parametric Study of Multi-storey R/C Building with Plan Irregularity	Akash Aneja	International Journal of Science and Research (IJSR)	Volume 8(6), June 2019	online	7.426	2319-7064	(15+5+15)0.6 =21
9	Performance of Different Shear Wall Positions in Building using Pushover Analysis	Asna Yani	Journal of Civil Engineering and Environmental Technology	6(3), April-June, 2019	123-127	4.5208	2349	(15+5+15)0.6 =21
10	Study of RC Wrapped Beam with Polymers and Metal Matrix Composites	Amandeep Kaur	International Research Journal of Engineering and Technology (IRJET)	Volume: 07 Issue: 05   May 2020	4185-4198	7.529	ISSN: 2395-0056	(15+5+15)0.6 =21
11	Assessment on Polymer and Metal Matrix Composites in Structural Applications	Amandeep Kaur	International Journal of Creative Research Thoughts (IJCRT)	Volume 8, Issue 6 June 2020	2132-2135	7.97	ISSN: 2320-2882	(15+5+15)0.6 =21
12	A Review on Metal and Polymer Matrix Composites	Amandeep Kaur	IJSRD - International Journal for Scientific Research & Development	Vol. 8, Issue 4, 2020	394-397	4.396	ISSN (online): 2321-0613	(15+5+15)0.6 =21
13	Minimizing Weight of Frames by Adopting Built-up Sections Over Hot-Rolled Sections for Sustainable Construction	Singh, S., Singh, H.	Lecture Notes in Civil Engineering	2021				(15+5+15)0.6 =21

14	To investigate the mechanical and durability properties of cement mortar incorporating agrowaste	Aneja, A., Sharma R.L., Singh, H.	Journal of Green Engineering 11 (1) ,pp.54	2021	54-71.	1.577		(15+5+15)0.6 =21
15	Durability property of self compacting concrete with recycled aggregate and silica fume	Singh, H., Ishfaq, M.	Lecture Notes in Civil Engineering 21 LNCE ,pp.250	2019				(15+5+15)0.6 =21
16	Inelastic dynamic response of 3D reinforced concrete infilled frames	Singh, H., Paul, D.K.	WIT Transactions on the Built Environment 97 ,pp.379	2008				(15+5+15)0.6 =21
17	Response of 3-D framed structures under floor excitations	Singh, H., Kumar, R.	Journal of Structural Engineering (Madras) 25 (4) ,pp.251	1999				(15+5+15)0.6 =21
18	Experimental investigation of Steel Fibre reinforced Self Compacting Concrete (SCC) using recycled aggregates as partial replacement of coarse aggregates	Kotwal, S. Singh H., Kumar R.	Materials Today	Volume 48, Part 5, 2022,	1032-1037			(15+5+15)0.6 =21
19	Study on sulphate and chloride resistance of self-compacting concrete	Kotwal, S. Singh H., Kumar R.	Materials Today	Volume 48, Part 5, 2022,	1044-1047			(15+5+15)0.6 =21
20	Seismic Analysis of Multistorey Building Frame Resting on Plane and Sloping Ground	Puri S., Singh H., Kaur M.	International Research Journal of Engineering and Technology (IRJET)	Volume: 08 Issue: 09   Sep 2021	476-481	7.529	e-ISSN: 2395-0056 p-ISSN: 2395-0072	(15+5+15)0.6 =21

21	Mechanical and durability properties of biochar concrete	Akash Aneja, R.L. Sharma, Harpal Singh	Materials Today: Proceedings <a href="https://doi.org/10.1016/j.matpr.2022.06.371">https://doi.org/10.1016/j.matpr.2022.06.371</a>	65, July 2022	3724–3730	2.3		
22	Nonlinear time history analysis on irregular RC building on sloping ground.	Singh, L., Singh, H. & Kaur, I.	Innov. Infrastruct. Solut. <a href="https://doi.org/10.1007/s41062-023-01049-1">https://doi.org/10.1007/s41062-023-01049-1</a>	8, 85 (2023).		2.848		
23	Advancements and Challenges in Building Information Modelling (BIM) in Structural Analysis: A Comprehensive Review	Kaur M. & Singh H.	Library Progress International DOI: <a href="https://doi.org/10.52710/lpi.44.1s.6">https://doi.org/10.52710/lpi.44.1s.6</a>	Vol.44, No.1s, January-June 2024:	67-75	5.968	Print version ISSN 0970 1052 Online version ISSN 2320 317X	

### Publications in National Journals

S. No.	Title	Co-Authors, if any	Name Of Journal	Volume & Year	Pages	Impact Factor	ISSN/ISSN No.	API Score (R+I+IF)A
1	Structural Response of Frames Subjected to Torsion	Bedi RBL	Indian Concrete Institute	32, Sept. 1990	43-46	-	0972-2998	(5+5+0)0.6=12
2	Finite Element Analysis of Skew Box Girder Bridges	Garg K	Indian Highways	Feb. 1992	33-37	-	0376-7256	(5+5+0)0.6=12
3	A Simplified Mathematical Model for Skew Bridge Analysis	Sastry VV	ASCE (IS)	Oct-Dec 1993	2-5	-	-	(5+5+0)0.6=12
4	Finite Element Analysis of Shear wall Frame System.	Singh G.	ASCE (IS)	July Sep 1993	3-7	-	-	(5+5+0)0.6=12
5	Finite Element Analysis of Shear walls with	Agarwal V	ASCE (IS)	8(5),Sept-Oct 1994	11-15	-	-	(5+5+0)0.6=12

	Large Openings,							
6	Saw Tooth Stairs - An Experimental Study	Sharm S.	Indian Concrete Institute	50, Jan-Mar 1995	11-14	-	0972-2998	(5+5+0)0.6=12
7	Response of 3-D Frames with Panels	Singla S	ASCE (IS)	14(2), Mar-Apr 2000	3-9	-	-	(5+5+0)0.6=12
8	Rating and Retrofitting & Bridges	Singh A.	Indian Concrete Institute	3(2), 2002	39-44	-	0972-2998	(5+5+0)0.6=12
9	Rating and Retrofitting of Bridges	Singh A.	Master Builder	2002	44-49	-	2291-8337	(5+5+0)0.6=12
10	Tackling Vulnerability in Bridges	-	IRC Highway Research Board	30, 2002-3	88-89		0970-2598	5+5+0)0.6=12
11	Tackling Vulnerability in Bridges	-	IRC Highway Research Board	31, 2003-4	103-104		0970-2598	5+5+0)0.6=125+5+0)0.6=12
12	Analysis and Design of Prestressed Concrete Continuous Beams	Kukreja CB	Indian Concrete Institute	Oct-Dec 2006	35-40	-	0972-2998	(5+5+0)0.6=12

**Sub Total A=186+168=354**

Non referred but recognized and reputable journals and periodicals having ISBN/ISSN numbers

Sub Total B=0

Conference proceedings as full papers etc. (Abstracts not to be included)

**Papers accepted in International Conferences**

S. No.	Title	Co-Authors, if any	Name Of Conference	Date / Year	Pages	Impact Factor	ISSN/ISSN No.	API Score (R+I+IF)A
1	Finite Element Analysis of Shear wall Frame system	Bedi, RBL	Asia-Pacific Conference on Masonry, Singapur	14-15, March, 1991		-		(10+5+10)0.6=15
2	Post	Paul DK	Tenth Symposium on	1, 16-18,	381-	-		(10+5+10)0.6



	Earthquake Failure Investigation of a Building		Earthquake Engineering, UOR, Roorkee.	Nov 1994	387			=15
3	Response of 3D Framed Structures under Floor Excitations.	-Kumar R.	2nd Asia -Pacific Conference on Shock and Impact Loads on Structures, Melbourne CI-Premier Conference Organisation, Singapore	25-27 Nov., 1997	489-498	-	ISBN: 981-00-8906-6	(10+5+10)0.6=15
4	NIFAP: Software for the Analysis of 3D Reinforced Concrete Infilled Frames Subjected to Earthquake Excitation	Paul DK	11th Symposium on Earthquake Engineering, UOR, Roorkee.	1, 17-19 Dec. 1998	397-407	-		(10+5+10)0.6=15
5	Rating and Retrofitting of Bridges.	Paul DK, Singh A.	12th Symposium on Earthquake Engineering, IIT, Roorkee	1, 16-18, Dec. 2002	1028-1035	-		(10+5+10)0.6=15
6	Inelastic Dynamic Response of 3D Reinforced Concrete Infilled Frames	Paul DK	HPSM 2008 Fourth International Conference on High Performance Structure and Materials, The Algarve Portugal. Organised by Wessex Institute of Technology, UK. WIT Transactions on The Built Environment, WIT Press www.witpress.com, (online)	97, 2008	379-387	-	ISSN 1743-3509	(10+5+10)0.6=15
7	Influence of Heat ingredients on Specific Heat: An Experimental Study	Rai HS	International UKIERI Concrete Congress for 21st Century, IIT Delhi, India	8-10 March 2011.	254-266	-		(10+5+10)0.6=15

8	Comparative study of conventional method and finite element analysis for overhead water tank	Amninder Singh, Hardeep Singh Rai	Concrete Research Driving Profit and Sustainability, International UKIERI Concrete Congress, NIT, Jalandhar, India	2-5 November, 2015	1713-1717			(10+5+10)0.6=15
9	Study of behaviour of a building L-shaped in plan	-	Concrete Research Driving Profit and Sustainability, International UKIERI Concrete Congress, NIT, Jalandhar, India	2-5 November, 2015	1510-1518			(10+5+10)0.6=15
10	Analysis of underground water tank	Ravinder Maurya, Hardeep Singh Rai,	Concrete Research Driving Profit and Sustainability, International UKIERI Concrete Congress, NIT, Jalandhar, India	2-5 November, 2015	1718-1723			(10+5+10)0.6=15
11	Inelastic Response of 3D Reinforced Concrete Infilled Frames Subjected to Earthquake	Paul D.K.	The Thirteenth International Conference on Computational Structures Technology, Sitegs Spain	4-6 Sept., 2018				(10+5+10)0.6=15
12	Post Earthquake Damage/Failure Studies of Reinforced Concrete Infilled Frames	Paul D.K.	Eight Internationals Conference on Engineering Failure Analysis 2018, Budapest, Hungary.	8-11, July 2018				(10+5+10)0.6=15
13	Durability Property of Self Compacting Concrete with Recycled Aggregate and Silica Fume	Mohd Ishfaq	International Conference on Sustainable Waste Management through Design (IC_SWMD) © Springer Nature Switzerland AG 2019 H. Singh et al. (Eds.): ICSWMD 2018, LNCE 21, pp. 250–263, 2019. <a href="https://doi.org/10.1007/978-3-030-02707-0_31">https://doi.org/10.1007/978-3-030-02707-0_31</a>	21, 250–263, 2-3, Nov. 2018				(10+5+10)0.6=15

14	Parametric study of multi storey RC building with plan irregularity	Akash Aneja	UKIERI Concrete Congress, Concrete: The Global Builder, BR NIT, Jalandhar-144011, (Punjab) India	5-8 March 2019,				(10+5+10)0.6 =15
15	Minimizing Weight of Frames By Adopting Built-Up Sections Over Hot-Rolled Sections For Sustainable Construction	Singh S.	Sustainable Development through Engineering Innovations, Guru Nanak Dev Engineering College, Ludhiana	17- 19 Sept., 2020				(10+5+10)0.6 =15

**Papers accepted in National Conference Papers accepted in National Conference**

S. No.	Title	Co-Authors, if any	Name Of Conference	Date / Year	Pages	Impact Factor	ISSN/ISSN No.	API Score (R+I+IF)A
1	Flexural Behavior of Ferro-Cement Beams under Quasi-cyclic Loading	Singh S	Proc. of First National Symp. on Const. Engg. and Mangmt., College of Engineering, Anna University, Madras	9-10, March, 1992	107-112	-	-	(10+5+10)0.6 =15
2	Mapping congestion Patterns on Urban Highways Network using Computer Graphics	Singh G	National workshop on Road Safety, T.I.E.T., Patiala	April 10-11, 1992		-		(10+5+10)0.6 =15
3	Earthquake Resistant Design of Brick Masonry Structures	Rai HS	Workshop on International Day of Natural Disasters Redressal, Pb. Bhawan Chandigarh	13th. Oct. 1993		-	-	(10+5+10)0.6 =15
4	Safety Aspect of Brick Masonry Buildings in the Context of Earthquake	Rai HS	NSSE95, GZSCET Bathinda	1993		-	-	(10+5+10)0.6 =15
5	Nonlinear Analysis of	Rai HS	National Conf. on Comp. Applications	April 1994		-	-	(10+5+10)0.6

	Circular Shells with Opening using Finite Element Method		in Civil Engg, TIET, Patiala					=15
6	Response of Frames with Staggered Panels using Finite Element Method	Sastry VV	National Conf. on Computer Aided Structural Analysis and Design, NC-CASAD, 96 ESCI, Hyderabad	3-5, Jan. 1996.		-	-	(10+5+10) 0.6 =15
7	Computer Aided Analysis and Design of Overhead Service Reservoir	Singh GM	Recent Trends in Computer Applications in Engg, College of Engg. & Tech., Bathinda	March 8-9, 1996		-	-	(10+5+10) 0.6 =15
8	Developments in Structural Steel Work	Singh S	National Seminar on Infra-Structure Development Role of Construction Industry, G.N.E.C., Ludhiana	June 03, 1996		-	-	(10+5+10) 0.6 =15
9	Soil Structure Interaction on the Response of Turbo-Generator Foundation	Kaur M	8th. Punjab Science Congress, Punjabi University Patiala	Feb. 7-9, 2005		-	-	(10+5+10) 0.6 =15
10	Soil Structure Interaction Analysis of Plane Frame using FEM	Singla S	Trends in Geotechnical Engineering, GZSCET, Bathinda	April-2005.		-	-	(10+5+10) 0.6 =15
11	Seismic Risk and Aseismic Design in Punjab	Kaur M	9th. Punjab Science Congress GNDCRI, Sunam	7-9 Feb., 2006.		-	-	(10+5+10) 0.6 =15
12	High Strength Silica Fume Concrete	Singh T	14th Punjab Science Congress, SLIET Longowal	7-9 Feb., 2011		-	-	(10+5+10) 0.6 =15
13	Web Based-Analysis of Reinforced Concrete	Rai HS, Gaba H	Innovative Challenges in Civil Engineering, PTU, Giani Zail Singh Campus Bathinda	15-16 March 2012		-	-	(10+5+10) 0.6 =15

14	Seismic Modeling In Soil Structure Interaction Continuum	-	Geotechnical And Geoenvironmental Aspects Of Wastes And Their Utilization In Infrastructure Projects, G.N.D.E.C., Ludhiana	15-16, February, 2013	290-295	-	-	(10+5+10) 0.6 =15
15	Measurement of Split Strength of Comparative Strength and Workability of Concrete		3rd National Conference on Advances in Metrology, AdMet-2014, TU, Patiala	19-21, Feb. 2014				(10+5+10) 0.6 =15
16	Numerical Analysis of Slabs with Opening	Kaur P. Singh H.	Geotechnical Engineering Practice and Sustainable Infrastructure Development (GEP SID), GNDEC, Ludhiana	11-12, Oct. 2014	451-461			(10+5+10) 0.6 =15
17	A Relative Study of Shear Wall Configuration in a Framed System of Multi-Storey Building	Kumar A. Rai H.	Geotechnical Engineering Practice and Sustainable Infrastructure Development (GEP SID), GNDEC, Ludhiana	11-12, Oct. 2014	400-409			(10+5+10) 0.6 =15
18	Experimental Study of Shear Strength of High Strength Reinforced Concrete Beams	Kaur B.	Geotechnical Engineering Practice and Sustainable Infrastructure Development (GEP SID), GNDEC, Ludhiana	11-12, Oct. 2014	333-340			(10+5+10) 0.6 =15
19	Effect of Steel Fibre on the Stress-Strain Behaviour of Fly ash concrete		Geotechnical Engineering Practice and Sustainable Infrastructure Development (GEP SID), GNDEC, Ludhiana	11-12, Oct. 2014				(10+5+10) 0.6 =15

**Sub Total C=540**

**Total A+B+C=354+0+540=894**

## List of Publications in SCI/Scopus

S. No.	Title	Authors	Date	Source Title
1	Minimizing Weight of Frames by Adopting Built-up Sections Over Hot-Rolled Sections for Sustainable Construction	Singh, S.,Singh, H.	2021	Lecture Notes in Civil Engineering 113 ,pp.591
2	To investigate the mechanical and durability properties of cement mortar incorporating agrowaste	Aneja, A.,Sharma, R.L.,Singh, H.	2021	Journal of Green Engineering 11 (1) ,pp.54
3	Durability property of self compacting concrete with recycled aggregate and silica fume	Singh, H.,Ishfaq, M.	2019	Lecture Notes in Civil Engineering 21 LNCE ,pp.250
4	Inelastic dynamic response of 3D reinforced concrete infilled frames	Singh, H.,Paul, D.K.	2008	WIT Transactions on the Built Environment 97 ,pp.379
5	Response of 3-D framed structures under floor excitations	Singh, H.,Kumar, R.	1999	Journal of Structural Engineering (Madras) 25 (4) ,pp.251
6	Inelastic dynamic response of reinforced concrete infilled frames	Singh, H.,Paul, D.K.,Sastry, V.V.	1998	Computers and Structures 69 (6) ,pp.685
7	Non-linear analysis of frames	Singh, H.,Singh, G.M.	1992	Computers and Structures 44 (6) ,pp.1377
8	Experimental investigation of Steel Fibre reinforced Self Compacting Concrete (SCC) using recycled aggregates as partial replacement of coarse aggregates	Kotwal, S. Singh H., Kumar R.	2022	Materials Today, Volume 48, Part 5
9	Study on sulphate and chloride resistance of self-compacting concrete	Kotwal, S. Singh H., Kumar R.	2022	Materials Today, Volume 48, Part 5
10	Mechanical and durability properties of biochar concrete	Akash Aneja, R.L. Sharma, Harpal Singh	2022	Materials Today: Proceedings <a href="https://doi.org/10.1016/j.matpr.2022.06.371">https://doi.org/10.1016/j.matpr.2022.06.371</a>
11	Nonlinear time history analysis on irregular RC building on sloping ground. .	Singh, L., Singh, H. & Kaur, I	2023	Innov. Infrastruct. Solut. <a href="https://doi.org/10.1007/s41062-023-01049-1">https://doi.org/10.1007/s41062-023-01049-1</a> 8, 85 (2023).
12	Advancements and Challenges in Building Information Modelling (BIM) in Structural Analysis: A Comprehensive Review	Kaur M. & Singh H.	2024	Library Progress International Vol.44, No.1s, January-June 2024: P.67-75 DOI:

			<a href="https://doi.org/10.52710/pi.44.1s.6">https://doi.org/10.52710/ pi.44.1s.6</a>
--	--	--	--

## Book Chapter

S. No.	Title	Authors	Date	Source Title
1	Minimizing Weight of Frames by Adopting Built-up Sections Over Hot-Rolled Sections for Sustainable Construction	Singh, S.,Singh, H.	2021	Lecture Notes in Civil Engineering, vol 113. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-15-9554-7_53">https://doi.org/10.1007/978-981-15-9554-7_53</a>
2	Durability property of self compacting concrete with recycled aggregate and silica fume	Singh, H.,Ishfaq, M.	2019	Lecture Notes in Civil Engineering 21 LNCE ,pp.250



## M. Tech Thesis Guided

	Name	Year	Title
1	Bhargal R.S	1989	Behaviour of Frames subjected to Torsion
2	Aggarwal V	1989	Behaviour of Shear Wall Frame System
3	Garg K	1990	Skew Box Deck Analysis using FEM
4	Khaira G.S.	1990	Behaviour of Shear Wall Frame System
5	Singh A	1991	Nonlinear Analysis of Circular Shells with Openings using FEM
6	Singh G.M	1991	Comparative Study of First and Second Order Analysis of Frames
7	Singh S	1991	Flexural Behaviour of Ferro-Cement Beams under Cyclic Loading
8	Singh D	1991	Bond Properties of Fiber Reinforced Concrete
9	Verma K	1991	Elasto-Plastic Analysis of Plane Frames
10	Singla S	1992	Response of Frames with Infilled Panels using Finite Element Method
11	Kaur I.	1992	Behaviour of Frames with Infilled Panels
12	Sharma R.K.	1992	Elasto-plastic Analysis of 3D Frames with Generalised Yield Function
13	Sharma C.M	1992	Behaviour of Saw Tooth type Stair Case
14	Garg R	1993	Behaviour of 3D Frames with Infilled Panels
15	Shridhar S	1993	Elasto-plastic Analysis of Space Frames
16	Dhillon B.S	1993	Post Failure Analysis of a Building
17	Garg V.K	1995	Relative Study of Solvers for Finite Element Analysis
18	Pal P	1995	Three Dimensional Analysis of Building Systems
19	Singh V.K	1995	Analysis and Design of Prestressed Continuous Beams
20	Kumar R	1996	Response of 3D Framed Structures under Floor Excitations
21	Kumar P S.S	1996	Interactive Graphical Pre and Post Processor for 3D Building Frames
22	Kapla P	1997	NFEMRCS, An Interactive Software for Nonlinear Finite Element
23	Singh S	1997	IADIS, Interactive Analysis and Design of Industrial Structures
24	Singla S	1998	Soil- Structure Interaction Analysis of Frames using Finite Element
25	Kaur A	2000	Software Development for Design of Overhead Service Reservoirs
26	Singh T	2002	High Strength Silica Fume Concrete
27	Kaur H	2002	The Study of Tensile Behavior of Ferrocement with Fly Ash as an Admixture
28	Pooja	2002	Behavior of Ferrocement-Confined Concrete in Compression
29	Singh K	2003	Shear Strength Characteristics of High Strength Concrete
30	Singh G	2003	Studies on Flyash Steel Fibre Reinforced Concrete (Compressive
31	Singh A.P	2004	Study of a Behavior of a Building L-Shaped in Plan
32	Singh S	2004	Analysis and Experimental Behavior of R.C.C. Rectangular Slab Having Circular Opening by Yield Line Theory
33	Nagi,M.	2005	Dynamic Response of T-Shaped Building

34	Singh B.	2005	Study of Shear Strength of Fibre Reinforced Concrete with Fly
35	Kaur B.	2014	Experimental Study of Shear Strength Characteristics of High Strength Concrete Beams
36	Singh B.	2014	Flexural Properties in High Strength Concrete by Using Silica Fume with Superplasticizer
37	Kumar A.	2014	A Comparative Study of Shear Wall Location/configuration in a Framed System of Multi Storey Building
38	Kaur P.	2014	Numerical Analysis of Slabs with Different Types of Openings
39	Maurya R.	2014	Analysis & Design of underground Water Tank
40	Singh A.	2014	Analysis and Design of Overhead Water Tank
41	Singh N.	2014	Strees-Strain Behaviour of Flyash Concrete with Steel Fibre
42	Aneja A.	2015	Parametric study of multistory r/c building with plan irregularity
43	Sahni A.	2015	Corrosion Behaviour of Different Types of Steel Bars Embedded in Cement Mortar.
44	Kaur M.	2015	Study of Compressive and Flexural Strength of Steel Fibre Reinforced High Strength Concrete at Elevated Temperatures.
45	Mahajan A.	2015	Durability Study of Recycled Aggregate and Silica Fume Concrete.
46	Singh S.	2016	Effect Of Skew Angle On The Behaviour of RC T-Beam Bridge
47	Singh V.	2016	Physical And Analytical Investigation Of Concrete with Replacement Of Cement With Egg Shell And Coal Ash Powder
48	Gandhi P.	2016	Effect Of Super Plasticizer On The Mechanical And Durable Properties Of High Volume Cementitious Concrete
49	Dhaliwal RS	2016	Study of Shear Characteristics of Recycled Aggregate Concrete Beams
50	Kaur S.	2016	Experimental investigation of partial replacement of coarse aggregates with waste tiles in concrete.
51	Ishfaq M.	2016	Durability Property OF Self compacting Concrete With recycled aggregate And Silica Fume
52	Sharma H.	2016	Determination On Effects Of Percentage Replacement Of Cement And Sand In Concrete By Marble Powder
53	Singh K.	2016	Numerical Modelling of Concrete Containing Waste Tyre Rubber as Partial Replacement of Fine Aggregates
54	Kingra M.	2017	Analysis of Shear Wall with Different Configuration in Multi-Storey Building
55	Romila	2017	To Study the Effect of Number of Cells in 2-Lane And 4-Lane Pre-Stressed Box Girder Bridge
56	Salman	2017	Effect of Industrial Waste On SCC
57	Kaur G.	2017	Experiment Investigation of Concrete by Using Marble Powder and Steel Fibers
58	Sameeksha	2018	Effect Of Shear Wall On The Seismic Performance Of Irregular RC Buildings
59	Kaur A.	2019	Study Of Rc Wrapped Beam Using Polymers (Gfrp/Cfrp) And Metal Matrix Composites
60	Duggal A.	2019	Response and design chart of L and T shaped combined footing

61	Sharma A.	2019	Laboratory study on effects of crushed glass and metakaolin on mechanical properties of concrete
62	Yani A.	2019	Performance Of Different Shear Wall Positions In Building Using Pushover Analysis
63	Cheema G.	2019	Strength And Durability Of High Strength Concrete Incorporating Rice Husk Ash And Metakaolin
64	Khera G.	2020	Comparative Study of Industrial Bent Design as per IS: 1893 (Part 4): 2005 and 2015
65	Singh N.	2020	Effect of Replacement of Coarse Sand with Crumb Rubber Concrete
66	Prabhakar P.	2020	Comparative Study of 220 KV Transmission Tower for Codal Provision of IS 802-1995(Part1/Sec1) a d IS 802-2015(Part1/Sec1).
67	Abhishek Nandan	2021	Sustainable Geopolymer Concrete With Molarity Variation And Curing Effects
68	Amir Hussain Bhat	2021	Strength Determination of Fly-Ash/GGBFS Based Geopolymer Concrete Using Waste Foundry Sand As Fine Aggregate
69	Navpreet Singh	2021	Effect Of Replacement Of Coarse Sand With Crumb Rubber Concrete
70	Shagun Puri	2021	Seismic Analysis Of Multistorey Building Frame Resting On Plane And Sloping Ground
71	Lovpreet Singh	2022	Non-Linear Time History Analysis On Irregular Rc Building On Slopy Ground
72	Jindal Ayush	2022	Topic: Strength properties of Geopolymer mortar over cement mortar

## Swayam Arpit Online Course Certification

Date of Examination	Name of Subject	Scheme	Institute
16.02.2020	Sustainable Construction Materials & Techniques	CAS	NITTTTR Chennai

## Seminars/Short Term Courses/Summer Schools/Winter Schools attended

S. No.	From	To	Institute	Sponsored By	Name Of Course
1	09.06.1986	12.07.1986	UOR, Roorkee	QIP	Microprocessor and its Applications
2	22.06.1987	05.07.1987	UOR, Roorkee	QIP	Seismic Analysis and Design of Tall buildings
3	19.06.1988	02.07.1988	UOR, Roorkee	QIP	Finite Element Applications to Dynamic
4	08.12.1988	21.08.1988	IIT, Delhi	QIP	Dynamic Loadings on Structures and their Behaviour
5	18.06.1989	01.07.1989	UOR, Roorkee	QIP	Computer Aided Drafting in Mini and Micro
6	08.03.1991	08.03.1991	TIET, PTA.	QIP	Workshop on Water and Pollution Control
7	17.07.1991	30.07.1991	UOR, Roorkee	QIP	Finite Element Applications to Structural
8	10.04.1992	11.04.1992	TIET, PTA	QIP	National Workshop on Road Safety
9	23.06.1992	02.07.1992	UOR, Roorkee	QIP	Earthquake Hazards Evaluation for Design of Structures
10	22.06.1993	06.07.1993	UOR, Roorkee	QIP	Earthquake Resistant Design of Buildings
11	21.06.1994	05.07.1994	UOR, Roorkee	QIP	Application of Finite Element Method in Engineering
12	05.06.1995	09.06.1995	IIT, Kanpur	QIP	Random Response of Structures to Wind and Earthquake
13	03.01.1996	05.01.1996	ESCI, Hyderabad	QIP	National conference on computer Aided Design
14	19.06.1997	03.07.1997	UOR, Roorkee	QIP	Understanding Earthquake Disasters
15	10.12.1999	12.12.1999	Kongu Engg. College, Preundrai	AICTE	National Seminar on Management of Technical Education
16	09.07.2001	14.07.2001	BEC & INSDAG, Kolkatta	INSDAG	Structural Steel Design for University Faculty
17	03.01.2005	11.02.2005	NPCBEERM, IIT, Roorkee	MHRD	Disaster Management in Earthquake Engg
18	30.03.2007	30.07.2007	IIT, Delhi	QIP	Use and Deployment of Web & Video Cameras,

19	18.07.2006	20.07.2006	ESCI, Hyderabad	AICTE	Management of Engineering Colleges for Better Education
20	11.02.2006	12.02.2006	FICCI, Delhi	FICCI, UGC	The Higher Education Summit, Private Higher
21	27.04.2007	28.04.2007	IE (India)Delhi State Centre, NewDelhi	IE	Sustaining Quality in Technical Education in Engineering
22	25.07.2011	29.07.2011	NITTTR Chandigarh	NITTR	Student Evaluation
23	22.12.2011	05.01.2012	GNDEC, Ludhiana	IGS	Ground Improvement and Ground Control including Waste Containment with Geosynthetics
24	22.05.2012	23.05. 2012	GNDEC, Ludhiana	IGS	Learning Content Management System
25	16.12.2012	16.12.2012	GNDEC, Ludhiana	IGS	International Workshop
26	22.07. 2013	27.07.2013	GNDEC, Ludhiana	TEQIP II	Finite Element Method to Solve Engineering Problems
27	10.10.2015		GNDEC, Ludhiana	TEQIP II IGS	Numerical and Physical Modelling in Engineering
28	17.12.. 2018	21.12.2018	GNDEC, Ludhiana	NITTTR Chandigarh	Green Building and Techniques
29	21.05.2020		Online webinar	Hilti India Pvt. Ltd. Gurgaon	Why you should design MEP support fixings for Seismic Conditions?
30	09-04-2020		Online webinar	Hilti India Pvt. Ltd. Gurgaon	Be More Productive for Planned Rebaring Applications with Hilti Solutions
31	02-04-2020		Online webinar	Hilti India Pvt. Ltd. Gurgaon	Productivity and Efficiency in Designing Steel-to-Concrete Connections
32	09.05.2020		Online webinar	ISET, IITR	Earthquake Engineering and Technology
33	27.05.2020		Online webinar	ISET, IITR	Seismic Hazard Assessment
34	16.05.2020		Online webinar	ISET, IITR	Performance Based Seismic Design of Structures
35	23.05.2020		Online webinar	ISET, IITR	Relevance of Site Effect in Earthquake Resistant Construction
36	29.05.2020	31.05.2020	Online webinar	Indian Concrete Institute Ghaziabad	International Webinar on Durability, Design and Construction Aspects of Bridges
37	11.05.2020	16.05.2020	Online webinar	MIDAS, India	Short Course: Basic Conventional Bridges
38	18.05.2020	22.05.2020	Online webinar	MIDAS, India	Short Course: midas Civil Advanced Features
39	28.05.2020	12.06.2020	Online webinar	MIDAS, India	Short Course Numerical Solutions to Geotechnical Challenges

### Membership of Professional Bodies

S. No.	Name
1	Seismic Analysis and Design, USA, Group Member
2	American Society of Civil Engineers (ASCE) Group Member
3	Civil Engineer USA Group Member
4	Construction Management - Construction & Materials-Brijj.com Group Member
5	Life Member ABI, American Biographical Institute, USA.
6	Life Fellow (LF-42), Indian Society of Earthquake Technology, ISET, Dept. of Earthquake Engg. Building, IIT, Roorkee.
7	Life Fellow (F-110886/3H), Institute of Engineering (India), 8, Gokale Road Kolkatta.
8	Life Member (LM-16819), Indian Society of Technical Education (ISTE), Indian Society of Technical Education, IIT Campus, N. Delhi-110016.
9	Life Member (LM-928), Metrology Society of India, N. Delhi.
10	Life Member (LM-3716) Indian Geotechnical Society, N. Delhi.
11	Professional Engineer (India) (PE7001305), Institute of Engineering (India), 8, Gokale Road Kolkatta.

### Soft Skills:

FORTRAN, C, STAAD, ANSYS, AUTOCAD, MS Office etc.

### Membership of University / Institute Bodies

S. No.	Name
1	Chairman BOS, Chandigarh University, Chandigarh
2	Member BOS, Pbi. Uni. Patiala.
3	Member Academic Council, GNDEC, Ludhiana.

### Administrative Responsibilities held

S. No.	From	To	Position Held	Contribution
1	01.10.2017	13.11.2017	Principal GNDEC, Ludhiana	Administration
2	11.05.2005	31.03.2010	Principal GZSCET Bathinda	Administration
3	11.05.2005	31.03.2010	Coordinator Nodal Centre PTU	Administration
4	31.07.2003	10.05.2005	Head Deptt. of Civil Engg	Administration
5	05.12.2001	10.01.2003	Dean Academic	Administration
6	01.01.2018	31.08.2022	Chairman Grievances Cell	Administration

**Details of Ph. D. Students guided**

S. No.	Name	Year	Title
1	Mohinder Singh-1502007	2015-ongoing	High Strength Self Compacting Concrete With Recycled Aggregates Using Fly Ash
2	Sunita Kotwal-14022004	2014-ongoing	Fiber Reinforced Self-Compacting Concrete with Recycled Aggregates
3	Mandeep Kaur- 1802001	2018-ongoing	Machine Generated Structural Models
4	Prabhjot Singh-1802007	2018-ongoing	Relative Study of the IRC Loading and Actual Loading on Bridges
5	Akash Aneja- 41800100	2019-ongoing	Structural behavior of agro-waste based concrete

**Future Research Areas**

S. No.	Topics
1	High Strength Self Compacting Concrete With Recycled Aggregates Using Fly Ash
2	Fiber Reinforced Self-Compacting Concrete with Recycled Aggregates
3	Computational Structural Technology
4	Engineering Structures Technology
5	Bridge Rating, Analysis and Design

**Conferences Organised**

S. No.	Conference	Date
1	Sustainable Development through Engineering Innovations, Guru Nanak Dev Engineering College, Ludhiana	17- 19 Sept., 2020
2	International Conference on Sustainable Waste Management through Design (IC_SWMD) © Springer Nature Switzerland AG 2019 H. Singh et al. (Eds.): ICSWMD 2018, LNCE 21, pp. 250–263, 2019. <a href="https://doi.org/10.1007/978-3-030-02707-0_31">https://doi.org/10.1007/978-3-030-02707-0_31</a>	2-3, Nov. 2018
3	Geotechnical And Geoenvironmental Aspects Of Wastes And Their Utilization In Infrastructure Projects, G.N.D.E.C., Ludhiana	15-16, February, 2013
4	Geotechnical Engineering Practice and Sustainable Infrastructure Development (GEPSID), GNDEC, Ludhiana	11-12, Oct. 2014

**Seminars/Short Term Courses/Summer Schools/Winter Schools organized**

S. No.	From	To	Name	Sponsored By	No. Of Participants - from institute	No. Of Participants - from industry
1	16.12.2005	31.12,2005	Earthquake Resistant Design of Buildings	AICTE	25	5
2	16.08.20	31.08.20	Earthquake	MHRD	20	10

	09	09	Resistant Design of Buildings			
--	----	----	-------------------------------	--	--	--



**Sponsored Projects undertaken**

S. No.	Sponsoring Agency	Title	Area	Period	Amount	Whether Completed	Accomplishment
1	AICTE	Tackling Vulnerability in Bridges	Bridges	2000-02	Rs. 8.0 lac	yes	Published
2	TCRDC, PTA	PC Based Finite Element Analysis of Structures	FEM, CAD	Jan-Dec, 1992	Rs. 3.0 lac	yes	Software for structural Analysis

**Soft Skills:**

FORTRAN, C, STAAD, ANSYS, AUTOCAD, MS Office etc.

**Membership of University / Institute Bodies**

S. No.	Name
1	Chairman BOS, Chandigarh University, Chandigarh
2	Member BOS, Pbi. Uni. Patiala.
3	Member Academic Council, GNDEC, Ludhiana.

## Awards/Recognitions won

S. No.	Name
1	American Medal of Honor., 2003-American Biographical Institute-USA.
2	Man of the Year-2003, 2003-American Biographical Institute-USA.
3	Member-Research Board of Advisors, 2004-American Biographical Institute-USA.
4	2000 Outstanding Intellectuals of the 21st Century, 2004, 2004-American Biographical Institute-USA.
5	2000 Outstanding Intellectuals of the 21st Century, 2005, 2005-American Biographical Institute-USA.
6	World Medal of Freedom, 2006-American Biographical Institute-USA.
7	Glory of India Award and Certificate of Excellence, at London, 2007-India International Friendship Society, New Delhi.
8	International Gold Star Award, at London, 2007-India International Friendship Society, New Delhi.
9	International Achievers Award Bangkok (Thailand), 2008-India Achievers Forum, Delhi.
10	Nelson Mandela Peace International Award, 2013- Economic Growth Society of India, New Delhi.
11	Mother India Award for Education Excellence 2005, 2006-Economic and Human Resource Development Association, New Delhi.
12	Life Time Education Achievement Award 2005, 2006-Health and Education Development Association, New Delhi.
13	Rajiv Gandhi Excellence Award-2006, 2006-India International Friendship Society, New Delhi.
14	Vijay Rattan Award, 2005, 2006-India International Friendship Society, New Delhi.
15	Jewel of India Award-2006, 2006-Indian Solidarity Council New Delhi.
16	Certificate of Merit-2006, 2006-Indian Solidarity Council, New Delhi 2006
17	Jewel of India Award, 2006-Indian Solidarity Council, New Delhi.
18	Great Achiever of Education Excellence Award-2005, 2006-Intellectual People and Economic Growth Association, New Delhi.
19	Indira Gandhi Excellence Award-2006,2006-International Business Council, New Delhi.
20	Glory of India Award &Certificate of Excellence-2006,2006-International Inst. of Success Awareness.
21	Glory of India Gold Medal, 2005, 2006-International Inst. of Success Awareness, New Delhi.
22	Life Time Achievement Gold Medal Award-2006,2006-International Institute of education & Management, New Delhi.
23	Eminent Citizen of India Award & Certificate of Merit, 2006-International Institute of Education & Management, New Delhi.
24	Bharat Shiksha Ratan Award with Medal, 2007-Global Society for Health and Education Growth, New Delhi.
25	Bhartiya Shiksha Rattan Award 2006 with Medal, 2007-Health and Education Development Association New Delhi.
26	Jewel of India Award-2007 for Field of Education-2007, 2007-Health and Education Development Association, New Delhi.
27	National Status Award for Education Leadership 2007, with Medal, 2007-Health and Education Development Association, New Delhi.

28	Shiksha Rattan Puraskar, 2007-India International Friendship Society, New Delhi.
29	Vikas Rattan Gold Award with Medal, 2007-Indian Organisation for Business Research & Development, New Delhi.
30	Jan Seva Sadbhavna Award 2006 with Medal, 2007-Indian Organisation for Business Research & Development, New Delhi.
31	Rashtriya Samman Purskar & Gold Medal-2007, 2007-Indian Society for Industry & Intellectual Development, New Delhi.
32	Rashtrya Samman Purskar & Gold Medal, 2007-Indian Society for Industry & Intellectual Development, New Delhi.
33	National status Award for Education Leadership 2006 with Medal,
34	National Status Award for Intellectual Development 2007 with Medal and A certificate of Merit, 2007-Intellectual Peoples and Economic Growth Association, New Delhi.
35	Education Acumen Award and Certificate of Merit, 2007-International Institute of Education & Management, New Delhi.
36	Rashtriya Vidya Gaurav Award and Certificate of Merit, 2007-International Institute of Education and Management, New Delhi.
37	National Status Award-2006 Excellence in Their Respective Field, 2007-The Economical Human Resource Development Association, New Delhi.
38	National Status Award-2006, 2007-The Economic and Human Resource Development Association, New Delhi.
39	Bharat Gaurav Award, 2008-All India Achievers Foundation, New Delhi.
40	Rashtriya Shiksha Jyoti Award 2008 & Gold Medal, 2008-Indian Society for Industry & Intellectual Development, New Delhi.
41	National Excellence Award for Study and Management 2007 with Medal and A certificate of Merit, 2008-Intellectual Peoples and Economic Growth Association, New Delhi.
42	Education Life Time Achiever Award (with Medal), 2008-Nations Economic for Health and Educational Growth, New Delhi.
43	Vidya Rattan Gold Medal Award, 2008-The Economic for Health and Educational Growth, New Delhi.
44	National Status Award for Education Leadership 2007 with Medal, 2008-Health and Education Development Association.
45	Guru Shrestha Award-2008 (with Medal), Nations Economic for Health and Educational Growth, Delhi.
46	Bharat Nav Nirman Ratan Award (with Medal), 2008-Nations Economic for Health and Educational Growth, Delhi.
47	Punjab Gaurav Ratan Award (with Medal), 2008-Intellectual People and Economic Growth Association, Delhi.
48	National Status Award for Intellectual Development & Gold Medal, N. Delhi
49	Bharat Jyoti Award, 2008-India International Friendship Society, New Delhi.
50	National Gold Star Award, 2008-International Institute of Education & Management, Delhi.
51	Hind Ka Gaurav Award (with Medal), 2008-Achiever's Institute of India, Delhi.
52	International Achievers Award for Education Excellence, 2008-India Achievers Forum, Delhi.
53	Guru Shrestha Award-2008 (with Medal), 2008-Nations Economic for Health and Educational Growth, Delhi.
54	Millennium Excellence Award for Education, 2009-Economic Growth Society of India, Delhi.
55	Rajiv Gandhi Excellence Award, 2010-Economic Growth Society of India, N. Delhi.

56	Indira Gandhi Unity Award, 2010-Economic Growth Society of India, N. Delhi.
57	Indira Gandhi Vidhya Gold Award, 2012- International Institute of Education and Management, N. Delhi
58	Shiksha Rattan Puruskar, 2013- India International Friendship Society, New Delhi
59	Indo-Thai Friendship Award, 2013- Economic Growth Society of India, New Delhi.

**Papers Reviewed:**

Service Load Response Prediction of Reinforced Concrete Flexural Members, Str. Engg. & Mech. (an International Journal), 1999.

**Number of different Courses/Subject Taught (UG/PG)**

Sr. No.	Title of Subject	UG/PG	Number of Time Tought
1	Finite Element Method in Engineering Analysis	PG	5
2	Theory and Design of Plates and Grids	PG	5
3	Computer Aided Design	PG	5
4	Structural Dynamics	PG	2
5	Theory and Design of Shells	PG	4
6	Bridge Engineering	PG	5
7	Numerical and Analytical Techniques	PG	1
8	Water Retaining Structures	PG	2
9	Design of Steel Structures -II	UG	10
10	Structural Analysis-III	UG	5
11	Structural Analysis-II	UG	2
12	Structural Analysis-I	UG	1
13	Design of Steel Structures-I	UG	2
14	Design of Reinforced Concrete Structures-II	UG	1

## Expert Lectures Delivered

s. No.	Topic	Place	Date
1	Finite Element Concepts	GNDEC, Ludhiana	22-26, July, 2013
2	Finite Element Modeling Techniques	GNDEC, Ludhiana	22-26, July, 2013
3	Bridges- World's Most Famous, World's Longest	LPU, Phagwara	29, March, 2013
4	Urban Sustainability and Infrastructure Development	GNDEC, Ludhiana	15-16, Feb, 2013
5	Sustainable Infrastructure	Global Institute of Management & Emerging Technologies, Amritsar	14, Oct, 2016
6	Finite Element Concepts	CU, CHD	8, July, 2015
6	Finite Element Modeling Techniques	CU, CHD	8, July, 2015
7	Finite Element Concepts	GNDEC, Ludhiana	31, Oct., 2013
8	FEA for waste minimization	NITTTR, Chandigarh	11, May, 2020
9	FEA for waste minimization	NITTTR, Chandigarh	08, June, 2020
10	Application of FEA in Mechanical manufacturing	NITTTR, Chandigarh	28, June, 2020
11	Basics of FEM	NITTTR, Chandigarh	14, Aug, 2020
12	FEM simulation in 3D engineering and biomedical science	NITTTR, Chandigarh	07, Oct., 2020
13	BRIDGES-World's Most Famous, World's Longest	Model Institute of Engineering and Technology Jammu, J&K	07, Sept. 2021
14	Role of Metrology in Earthquake Seismology	Thapar Institute of Engineering & Technology, Patiala	22, Feb. 2022

## Grants Received:

- International Travel Grant to present paper, "Inelastic Dynamic Response of 3D Reinforced Concrete Infilled Frames" HPSM-2008 Fourth International Conference on High Performance Structures and Materials, 13-15 May 2008, The Algarve Portugal. Organised by Wessex Institute of Technology, UK.  
AICTE RS.84.00 lac.
- AICTE sponsored R & D Project on 'Tackling Vulnerability of Bridges', 2000-03, Rs. 8.00 lac.
- AICTE sponsored short term course on 'Low Cost Housing', 2000, Rs. 0.84 lac.
- International travel grant to present paper- 'Response of 3D Framed structures under floor excitation', 2nd Asia Pacific Conference on Shock and Impact Loads on structures Melbourne, Australia, 25-27, Nov. 1997.

a.	AICTE	Rs. 0.29 lac
b.	DST	Rs.0. 22 lac
c.	CST	Rs. 0.15 lac
d.	INSA	Rs. 0.15 lac

**Consultancy Projects Undertaken:**

Numerous designs under the following categories are undertaken:-

1. Design of Highway Bridges.
2. Design of O.H.S.R. Circular, Intze and Conical Shell type resting on Columns or Shaft.
3. Design of Multistoreyed Frame Structures.
4. Design of Multistoreyed Framed Structures in Hilly Areas.
5. Concrete Mix designs.
6. Checking the Structural Safety of Structures.
7. Structural Testing.
8. Industrial Structures

DATED:

(Harpal Singh)  
Signature of the Applicant