

Biodata



Dr. Harpal Singh

Professor

Department of Civil Engineering
Guru Nanak Dev Engineering College

Ludhiana. Ph.:+91-98884-68687

Email: 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

Experience:

| S. No. | Name Of the Employer | Position | Grade | Nature Of Work | Date Of Joining | Date Of Leaving | Total Exp. | Reason For Leaving |
|--------|--|----------------------------|------------|---------------------------------|-----------------|-----------------|------------|---------------------|
| 1 | GNDEC, LDH | Professor | UGC | Teaching, Research, Consultancy | 17.11.1998 | working | 14 yr | na |
| 2 | GNDEC LDH | Principal | UGC | Administration | 01.10.2017 | 13.11.2017 | 1.5m | na |
| 3 | GZSCET, BTI | Principal | UGC | Teaching, Research, Consultancy | 11.05.2005 | 31.03.2010 | 5 yr | Completion of teure |
| 4 | GNDEC, LDH | Professor & Head | UGC | Teaching, Research, Consultancy | 31.07.2003 | 10.05.2005 | 2 yr | higher post |
| 5 | GNDEC, LDH | Professor & Dean Academics | UGC | Teaching, Research, Consultancy | 05.12.2001 | 10.01.2003 | 2 yr | rotation |
| 6 | TIET, PTA | Asstt. Professor | UGC | Teaching, Research, Consultancy | 09.08.1994 | 16.11.1998 | 4.5 yr | Pormotion |
| 7 | CET, BTI | Asstt. Prof. | UGC | Teaching, Research, Consultancy | 01.01.1993 | 08.08.1994 | 1 yr 8m | na |
| 8 | TIET, PTA | Lecturer | UGC | Teaching, Research, Consultancy | 03.01.1986 | 31.12.1992 | 7yr | promotion |
| 9 | 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 | 3.57 | 0045-7949 | (15+5+15)0.6=21 |
| 2 | Inelastic Dynamic Response of Reinforced Concrete Infilled Frames | Paul DK, Sastry | Computer & Structures | 69, 1998 | 685-693 | 3.57 | 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 | | | | |

| | | | | | | | | |
|----|---|-----------------------------------|--|---|---------|-------|--|-----------------|
| 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 | | | | |
| 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 | | | | |
| 16 | Inelastic dynamic response of 3D reinforced concrete infilled frames | Singh, H., Paul, D.K. | WIT Transactions on the Built Environment 197 ,pp.379 | 2008 | | | | |
| 17 | Response of 3-D framed structures under floor excitations | Singh, H., Kumar, R. | Journal of Structural Engineering (Madras) 25 (4) ,pp.251 | 1999 | | | | |
| 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 | 2022 | | | | |
| 19 | Study on sulphate and chloride resistance of self-compacting concrete | Kotwal, S. Singh H., Kumar R. | Materials Today | 2022 | | | | |
| 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: 476-08 Issue: 481 09 Sep 2021 | 476-481 | 7.529 | e-ISSN: 2395-0056 p-ISSN: 2395-0072 | (15+5+15)0.6=21 |

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 Large Openings, | Agarwal V | ASCE (IS) | 8(5),Sept-Oct 1994 | 11-15 | - | - | (5+5+0)0.6=12 |
| 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 Earthquake Failure Investigation of a Building | Paul DK | Tenth Symposium on Earthquake Engineering, UOR, Roorkee. | 1, 16-18, Nov 1994 | 381-387 | - | | (10+5+10)0.6 =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 | Paul | 12th Symposium on | 1, 16-18, | 1028- | - | | (10+5+10)0.6 |

| | | | | | | | | |
|----|--|-------------------------------------|--|--------------------|-----------|---|----------------|-----------------|
| | Retrofitting of Bridges. | DK, Singh A. | Earthquake Engineering, IIT, Roorkee | Dec. 2002 | 1035 | | | =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. Organised by Wessex Institute of Technology, UK. WIT Transactions on The Built Environment, WIT Press www.witpress.com, (on-line) | 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 | Paul D.K. | The Thirteenth International Conference on Computational Structures Technology, Sitegs Spain | 4-6 Sept., 2018 | | - | | (10+5+10)0.6=15 |

| | | | | | | | | |
|----|---|-------------|--|-----------------------------|--|--|--|-----------------|
| | Frames Subjected to Earthquake | | | | | | | |
| 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. https://doi.org/10.1007/978-3-030-02707-0_31 | 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 | Singh S | Proc. of First National Symp. on Const. Engg. and | 9-10, March, 1992 | 107-112 | - | - | (10+5+10)0.6=15 |

| | | | | | | | | |
|---|--|-----------|---|-------------------|--|---|---|-------------------------|
| | Beams under Quasi-cyclic Loading | | Mangmt., College of Engineering, Anna University, Madras | | | | | |
| 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 Circular Shells with Opening using Finite Element Method | Rai HS | National Conf. on Comp. Applications in Civil Engg, TIET, Patiala | April 1994 | | - | - | (10+5+10) 0.6 =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- | Kaur M | 8th. Punjab Science Congress, Punjabi University Patiala | Feb. 7-9, 2005 | | - | - | (10+5+10) 0.6 =15 |

| | | | | | | | | |
|----|--|------------------|--|-----------------------|---------|---|---|-------------------------|
| | Generator Foundation | | | | | | | |
| 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 (GEPSID), 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 (GEPSID), 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 (GEPSID), 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 (GEPSID), 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 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 | Study on Sulphate and Chloride Resistance of Self-Compacting Concrete | Kotwal, S. Singh H., Kumar R. | 2022 | Materials Today |
| 9 | 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 |

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 113 ,pp.591 |
| 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 | Bhangal 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 Desisgn of Overhead Service Reserviors |
| 26 | Singh T | 2002 | High Strength Silica Fume Concrete |
| 27 | Kaur H | 2002 | The Study of Tensile Behavior of Ferrocement with Fly Ash as on Admixture |
| 28 | Pooja | 2002 | Behavior of Ferrocement-Confined Concrete in Compression |
| 29 | Singh K | 2003 | Shear Strength Characterstics 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. Rectactangular 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 |

Swayam Arpit Online Course Certification

| Date of Examination | Name of Subject | Scheme | Institute |
|----------------------------|---|---------------|------------------|
| 16.02.2020 | Sustainable Construction Materials & Techniques | CAS | NITTTR 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 & INS DAG, Kolkatta | INS DAG | 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 | ISSET, IITR | Earthquake Engineering and Technology |
| 33 | 27.05.2020 | | Online webinar | ISSET, IITR | Seismic Hazard Assessment |
| 34 | 16.05.2020 | | Online webinar | ISSET, IITR | Performance Based Seismic Design of Structures |
| 35 | 23.05.2020 | | Online webinar | ISSET, 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 |

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 | 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

| | | |
|---|--|-----------------------|
| 1 | 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. https://doi.org/10.1007/978-3-030-02707-0_31 | 2-3, Nov. 2018 |
| 2 | Geotechnical And Geoenvironmental Aspects Of Wastes And Their Utilization In Infrastructure Projects, G.N.D.E.C., Ludhiana | 15-16, February, 2013 |
| 3 | 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 | 16.08.2009 | 31.08.2009 | Earthquake Resistant Design of Buildings | MHRD | 20 | 10 |

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 |

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 | Rashtriya 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 Taught |
|---------|---|-------|-----------------------|
| 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:

1. 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.
2. AICTE sponsored R & D Project on 'Tackling Vulnerability of Bridges', 2000-03, Rs. 8.00 lac.
3. AICTE sponsored short term course on 'Low Cost Housing', 2000, Rs. 0.84 lac.
4. 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