### **Profile Page**



Name : Dr S P SINGH

Designation : Professor Hag

Department : Civil Engineering

Qualification : Post Doc (University of Dundee, UK)

PhD (University of Roorkee, India)

ME Structures (Thapar Institute of Engineering & Technology

Patiala, India)

BE Civil Engineering (Thapar Institute of Engineering &

Technology Patiala, India)

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#### **Research Interests:**

Structural Engineering, Fatigue of Concrete Composites, Reinforced Concrete Design, Earthquake Resistant Design, Recycling of Materials in Concrete, High Performance Concretes, Durability of Concrete and Sustainability.

#### **Other Profile Links:**

Google Scholar Link:

S P SINGH Click Here

Personal Web Link:

Scopus Id Click Here

Orcid Id Click Here

#### **Journal Publications:**

Year	Journal	Publication
2023	Journal of Building Engineering,	Amardeep Meena, Navdeep Singh, S P Singh, "High-volume fly ash Self
	Elsevier	Consolidating Concrete with coal bottom ash and recycled concrete
		aggregates: Fresh, mechanical and microstructural properties",
2023	Journal of Building Engineering,	Mudasir Nazeer, Kanish Kapoor, S P Singh, "Strength, durability and
	Elsevier	microstructural investigations on pervious concrete made with fly ash and
		silica fume as supplementary cementitious materials",

2023	European Journal of	Mudasir Nazeer, Kanish Kapoor, S P Singh, "Strength and
	Environmental and Civil	microstructural properties of pervious concrete made with different
	Engineering, Taylor & Francis	powder to aggregate ratios",
2022	Cleaner Materials, Elsevier	Vaibhav Sharma Sudheer Kumar, Kanish Kapoor, S P Singh, "A review
		on the properties of natural and recycled coarse aggregates concrete made
		with different coal ashes"
2022	Structures, Elsevier	B P S Saini, S P Singh, "Flexure fatigue strength and failure probability
		of self compacting concrete made with RCA and blended cements",
2022	Journal of Sustainable	B P S Saini, S P Singh, "Fatigue life prediction of self compacting
	Cement-Based Materials	concrete made with recycled concrete aggregates under flexural loading",
2022	Structural Concrete, Wiley	B P S Saini, S P Singh, "Fatigue Lives of Self Compacting Concrete
		containing Recycled Concrete Aggregates and Blended Cements",
2021	International Journal of Civil	Kanish Kapoor, S P Singh, Bhupinder Singh, "Improving the Durability
2021	Engineering	Properties of Self-Consolidating Concrete made with Recycled Concrete
	Engineering	Aggregates using Blended Cements",
2021	Frontiers of Structural and Civil	Jagmeet Singh, SP Singh, "Utilization of alkali-activated copper slag as
2021	Engineering Engineering	binder in concrete",
2020	Construction and Building	Evaluating the alkali-silica reaction in alkali-activated copper slag
2020	Materials, Elsevier (In press)	mortars
2020	Construction and Building	Flexural fatigue life analysis of self compacting concrete containing
2020	Materials, Elsevier (In press)	100% coarse recycled concrete aggregates
2020	Construction and Building	Babbanpreet Singh, S P Singh, "Flexural fatigue strength prediction of
2020	Materials, Elsevier, Vol. 264, 2020	self compacting concrete made with recycled concrete aggregates and
	(Available Online)	blended cements"
2020	Innovative Infrastructure	Dilraj Singh, S P Singh, "Influence of recycled concrete aggregates and
2020	Solutions, Springer, Vol 5, pp.	blended cements on the mechanical properties of pervious concrete"
	1-12	bronded centents on the incentained properties of pervious concrete
2020	Institution of Civil	Dilraj Singh, S P Singh, "Influence of grading recycled concrete
	Engineers-Construction Materials	aggregates on the properties of pervious concrete"
	(Available Online)	
2020	Journal of Sustainable	Kanish Kapoor, S P Singh, Bhupinder Singh, "Permeability of
	Cement-Based Materials, Taylor &	self-compacting concrete made with recycled concrete aggregates and
	Francis (Available Online)	Portland cement-fly ash-silica fume binder"
2020	Journal of Sustainable	Babbanpreet Singh, S P Singh, "Fatigue life prediction of self compacting
	Cement-Based Materials, Taylor &	concrete made with recycled concrete aggregates under flexural loading"
	Francis (Available Online)	
2020	Materials Today: Proceedings,	Kanish Kapoor, S P Singh, Bhupinder Singh, Paramveer Singh, "Effect of
	Elsevier (Available Online)	recycled aggregates on fresh and hardened properties of self compacting
		concrete"
2020	International Journal of Materials	Raman Bedi, S P Singh, "Flexural fatigue analysis of fibre reinforced
	and Structural Integrity,	polymer concrete composites under non-reversed loading"
	Inderscience Publishers (IEL)	
2020	Indian Concrete Journal (Accepted	Jagmeet Singh, S P Singh, "Utilization of copper metallurgical waste for
	for Special Issue)	alkali activated binder synthesis"
2019	Materials Letters, Elsevier	Synthesis of Alkali-activated Binder at Ambient Temperature using
		Copper Slag as Precursor
2019	Construction and Building	Probability of failure of RCA concrete with ternary blended cements
	Materials, Elsevier	
2019	Journal of Building Engineering,	Electrical Resistance of Self Consolidating Concretes Prepared with
	Elsevier, Vol 25, 2019 (Available	Reused Concrete Aggregates and Blended Cements
	online)	
2019	Construction and Building	Development of Alkali-activated Cementitious Material using Copper
		Slag

2019 Journal of Sustainable Cement Based Materials, Taylor and Francis, 2019, pp. 97-143  2019 Indian Concrete Journal, April 2019, pp. 46-60.  An Overview of Microstructural and Material Performance Concrete  Improving the Carbonation Resistance of Self Containing Recycled Concrete using Blended	Properties of Ultra High
Francis, 2019, pp. 97-143  2019 Indian Concrete Journal, April Improving the Carbonation Resistance of Self 2019, pp. 46-60.  Containing Recycled Concrete using Blended	
2019 Indian Concrete Journal, April Improving the Carbonation Resistance of Self Containing Recycled Concrete using Blended	
2019, pp. 46-60. Containing Recycled Concrete using Blended	
lana la	
2019 Construction Materials, Institution Flexural Fatigue Strength Prediction of Hybri	d Fibre Reinforced Self
of Civil Engineers (Accepted) Compacting Concrete	
Journal of Environmental Jagmeet Singh, S P Singh, "Geopolymerization of Environmental Jagmeet Singh, S P Si	on of Solid Waste of
Management, Elsevier, Vol. 151, Non-Ferrous Metallurgy – A Review"	
2019 (Available Online)	
2018 European Journal of Evaluating the Durability Properties of Self C	
Environmental and Civil with Coarse and Fine Recycled Concrete Agg	gregates
Engineering, Taylor and Francis	
2018 European Journal of Validation of Carbonation Behaviour of Self C	
Environmental and Civil with Recycled Aggregates using Microstructu	aral and Crystallization
Engineering, Taylor and Francis Investigations	
2018 Construction and Building Evaluating the Performance of Self Compacti	•
Materials, Elsevier Recycled Coarse and Fine Aggregates using N	Non Destructive Testing
Techniques	
2017 Magazine of Concrete Research, Fatigue Strength and Failure Probability of Co	oncrete made with RCA
Institution of Civil Engineers, UK	
2017 Journal of Sustainable Cement Permeability of Self Compacting Concrete ma	ade with Recycled Concrete
Based Materials, Taylor and Aggregates and Metakaolin	
Francis	
2016 Construction and Building Analysis of Flexural Fatigue Failure of Concr	rete made with 100% Coarse
Materials, Elsevier Science, Vol.   Recycled Concrete Aggregates	
102, 2016, pp. 782-791.	
2016 Magazine of Concrete Research, Fatigue Strength and Failure Probability of Co	oncrete made with RCA
Institution of Civil Engineers, UK	
(Accepted).	
2016 Construction and Building Carbonation and Electrical Resistance of Self	
Materials, Elsevier Sceince, Vol. Recycled Concrete Aggregates and Metakaoli	in
121, 2016, pp. 400-409.	
2016 International Journal of Civil Water Permeation Properties of Self Compact	•
Engineering, Springer (Accepted). Coarse and Fine Recycled Concrete Aggregat	
2016 Materials and Structures, RILEM, Influence of Mineral Additions on Flexural Fa	atigue Performance of Steel
2016. DOI Fibre Reinforced Concrete	
10.1617/s11527-015-0775-3.	
2015 Journal of Materials and Flexural Fatigue Analysis of Concrete made v	with 100% Recycled
Engineering Structures, Vol. 2, Concrete Aggregates	
pp.77-89.	
2015 Magazine of Concrete Research Mean and Design Fatigue Lives of SFRC Cor	ntaining Cement based
(Available online 21 July 2015), Materials	
http://dx.doi.org/10.1680/macr.15.	
00128.	
2014 International Scholarly Research   Experimental Study on the Strength Character	
Notices (ISRN), Vol. 2014, pp. Permeability of Hybrid Steel Fibre Reinforced	d Concrete
1-10.	
2014 ISRN Material Science, 2014, pp. Flexural Fatigue Life Assessment and Strengt	th Prediction of Glass Fibre
1-8. Reinforced Polymer Concrete Composites	

# **Book/Chapter Publications:**

Type	Title	Publisher	Authors	ISBN/ISS	Year
				N No.	
	Fatigue Studies on Glass Fibre Reinforced	LAMBERT	Raman Bedi,	978-3-659-	2013
	Composite Materials	Academic	Rakesh Chandra	45986-3	
		Publishing	and S P Singh		

## **Research Projects:**

Role	Project	Title	Funding	From	То	Amount	Status	Co-Investi
	Type		Agency					gator
Investigator	1.	Sustainable	UK India	2007	2011	GBP	Complete	
	Collaborativ	High	Education			128928.0	d	
	e Research	Performance	and			0		
	Project	Concrete	Research					
		Infrastructure	Initiative					
			(UKIERI)					
Coordinator	2.	Material	Department	2010	2016	Rs 102	Complete	
	DST-FIST	Characterizati	of Science			Lacs	d	
		on and Tesing	and					
		of Concrete	Technology					
			(DST)					

# **Events Organized:**

Category	Type	Title	Venue	From	To	Designation
1. Short	National	Sustainable Concrete	NIT Jalandhar	11-07-2016	15-07-2016	Coordinator
Term		Construction				
Course						
2. UKIERI	International	Concrete Research	NIT Jalandhar	02-11-2015	05-11-2015	Congress
Concrete		Driving Profit and				Secretary
Congress		Sustainability				
3. Short	National	High Performance	NIT Jalandhar	15-06-2015	19-06-2015	Coordinator
Term		Concrete: Past, Present				
Course		and Future				
4. Short	National	Recent Advances in	NIT Jalandhar	16-12-2013	20-12-2013	Coordinator
Term		Concrete Composites				
Course						
5. Short	National	Seismic Design of	NIT Jalandhar	08-07-2013	12-07-2013	Coordinator
Term		Reinforced Concrete				
Course		Buildings				
6. UKIERI	International	Innovations in Concrete	NIT Jalandhar	05-03-2013	08-03-2013	Congress
Concrete		Construction				Secretary
Congress						
7. Short	National	Earthquake Resistant	NIT Jalandhar	04-07-2011	08-07-2011	Coordinator
Term		Design of Reinforced				
Course		Concrete and Masonry				
		Buildings				
8. UKIERI	International	Concrete for 21st	IIT Delhi	08-03-2011	10-03-2011	Member,
Concrete		Century Construction				Organising
Congress						Committee

### **Professional Affiliations:**

Designation	Organization
Member	American Concrete Institute (ACI)
Senior Member International Union of Laboratories and Experts in Construction Materials, System	
	Structures (RILEM)
Life Member	Indian Concrete Institute (ICI)
Life Member	Indian Society for Construction Materials and Structures (ISCMS)
Member	American Society of Civil Engineers (ASCE)
Fellow	Institution of Engineers-India (IEI)

## PhD Supervised:

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Dilraj Singh	Properties of Pervious Concrete made with	Completed	2022	
	Recycled Concrete Aggregates and Cement			
	Additions			
Jagmeet Singh	Strength and Durability Properties of	Completed	2021	
	Alkali-Activated Copper Slag Concrete			
Shailja Bawa	Flexural Fatigue Performance of	Completed	2020	
	Steel-Polypropylene Hybrid Fibre Reinforced			
	Self Compacting Concrete			
K S Bedi	Shear Strength Characteristics of Self	Completed	2019	Dr Rajesh Kumar
	Compacting Concrete Beams			
Navdeep Singh	Carbonation Resistance of Self Compacting	Completed	2017	
	Concrete containing Recycled Concrete			
	Aggregates			
Kanish Kapoor	Durability Properties of Self Compacting	Completed	2017	Dr Bhupinder Singh
_	Concrete made with Recycled Concrete			
	Aggregates			
Sumit Arora	Flexural Fatigue Performance of Concrete made	Completed	2017	
	with Recycled Concrete Aggregates			
Maninder Pal	Water Permeability and Strength Characteristics	Completed	2015	Dr A P Singh
Singh	of Hybrid Steel Fibre Reinforced Concrete			
Harpreet Kaur	Structural Health Monitoring and Retrofitting of	Completed	2015	Dr H S Rai
Gaba	RCC Rectangular Slabs			
Roshan Lal	Investigations on Reinforced Concrete Corner	Completed	2015	Dr N P Devgan and Dr
	Joints under Opening Moments			Bhupinder Singh
Raman Bedi	Flexural Fatigue Studies on Fibre Reinforced	Completed	2014	Dr Rakesh Chandra
	Polymer Concrete Composites			
Gurbir Kaur	Flexural Fatigue Performance of Steel Fibre	Completed	2013	Dr S K Kaushik
	Reinforced Concrete Containing Cement			
	Additives			
Sanjay Goel	Flexural Fatigue of Plain and Steel Fibre	Completed	2012	Dr Partap Singh
	Reinforced Self Compacting Concrete			
Vineet Bajaj	Flexural Fatigue Strength of Steel -	Completed	2011	Dr A P Singh
	Polypropylene Hybrid Fibre Reinforced Concrete			
Babanpreet S	Flexural Fatigue of Self Compacting Concrete	In Progress		
Saini	made with Recycled Concrete Aggregates			

### **PG Dissertation Guided:**

Student Name	Dissertation Title	Status	Year	Co-Supervisor
1				_

Baban Kumar	Effect of Alkali Activator Parameters on Strength and Durability Properties of Geopolymer Concrete	Completed	2019	-
A Maharishi	Strength and Durability of Slag Cement Concrete made with Copper Slag as Fine Aggregates	Completed	2019	-
P Tiwari	Effect of Silica Fume on Strength and Water Permeation of Self Compacting Concrete	Completed	2018	-
Onkar Mishra	Strength and Flexural Toughness of Hybrid Fibre Reinforced High Volume Fly Ash Concrete	Completed	2018	-
Harsh Kakkar	Strength and Durability Properties of Self Compacting Concrete containing Recycled Coarse Aggregates	Completed	2018	-
Sunny Gogna	Seismic Performance of RC Framed Structures with and without Masonry Infill Walls	Completed	2018	-
Nikhil Bhardwaj	Carbonation Evaluation of Concrete Containing Lime Stone Powder and Metakaolin	Completed	2017	-
Versha Garg	Shear Wall Response Effects on Reinforced Concrete Frames	Completed	2017	-
Ankita Garg	Response of Deep Beams with Ducts against Static Monotonic and Cyclic Loading using ABAQUS	Completed	2017	Dr Senthil K
L Pohti	Dynamic Analysis of Multi-storey RC Framed Building with Floating Columns subjected to External Blast Loading	Completed	2016	-
Akhil M	Carbonation Evaluation of Self Compacting Concrete Containing Coarse Recycled Concrete Aggregates	Completed	2016	-
Nikhil Sharma	Flexural Strength and Toughness Evaluation of Steel Fibre Reinforced Concrete made with Recycled Concrete Aggregates	Completed	2016	-
P D Shah	Validation of Design Procedure for Failure Control Mechanism of D and K Braced EBF: Pushover Analysis	Completed	2015	-
Agam	Strength Development and Water Permeation of Concrete Containing Steel Slag as Partial Replacement of Fine Aggregates	Completed	2015	-
Manpreet Singh	Optimizing Shear Wall Locations in Multistorey Buildings	Completed	2015	-

# Admin. Responsiblities:

Position Held	Organization	From	То
1. Head of Department	Dr B R Ambedkar National Institute of	2016	
	Technology Jalandhar, India		
2. Dean (Academic)	Dr B R Ambedkar National Institute of	2014	2015
	Technology Jalandhar, India		
3. Dean (Research &	Dr B R Ambedkar National Institute of	2013	2015
Consultancy)	Technology Jalandhar, India		
4. Head of Department	Dr B R Ambedkar National Institute of	2012	2013
	Technology Jalandhar, India		
5. Dean (Planning &	Dr B R Ambedkar National Institute of	2007	2010
Development)	Technology Jalandhar, India		

### **Award and Honours:**

Title	Activity	Given by	Year
Outstanding Concrete Technologist Award		Indian Concrete Institute,	2017
2017		Chandigarh Center	
Best Teacher Award 2016-2017		Dr B R Ambedkar National	2016-2017
		Institute of Technology,	
		Jalandhar	
1. Thomas Howard Medal	Best Research Paper	Institution of Civil Engineers,	2015
		UK	
2. Best PhD Thesis Award in Concrete	In Capacity as Supervisor	Indian Concrete Institute	2012
		Chennai, India	
3. Best Paper Award	Best Research Paper	Indian Concrete Institute	2012
		Chennai, India	
4. Commonwealth Academic Staff	Post Doctoral Research at the	Commonwealth Scholarship	2006
Fellowship	University of Dundee, UK	Commission, UK	
5. E P Nicolaides Medal	Best Research Paper	Institution of Engineers, India	2006
6. E P Nicolaides Medal	Best Research Paper	Institution of Engineers, India	2003
7. ISCMS-FOSROC Award	Best Research Paper	Indian Society for	2002
		Construction Materials and	
		Structures, IIT Roorkee, India	
8. E P Nicolaides Medal	Best Research Paper	Institution of Engineers, India	2001
9. ICFRCC Award	Best Research Paper	International Centre for Fibre	2000
		Reinforced Concrete	
		Composites, India.	
9. Senior Research Fellowship (SRF)	PhD Programme at the	Council of Scientific &	1995
	University of Roorkee, India	Industrial Research (CSIR),	
		India	