NICMAR University of Construction Studies, Hyderabad

Position: Vice-Chancellor

Name: Shamsher Bahadur Singh
Email: sbsingh@pilani.bits-pilani.ac.in
Mobile: 9414648283
Gender: Male
Date of Birth: 01-Aug-1963

Education Detail

Education Level	Board / University	Institute / School / College	Marks	CGPA	Year
Secondary	U.P. Board	Government Inter College Ballia, U.P.	80.60	0.00	1979
Subjects / Specialization: Science, Maths, Hindi, Sanscrit, English					
Higher Secondary	U.P. Board	Government Inter College Ballia, U.P.	73.40	0.00	1981
Subjects / Specialization: Physics, Chemistry, Mathematics, Hindi, English					
Graduation	Kakatiya University, Warangal	Regional Engineering College Warangal	69.72	0.00	1986
Subjects / Specialization: Civil Engineering					
Post Graduation	Allahabad University	Motilal Nehru Regional Engineering College Allahabad	84.30	0.00	1989
Subjects / Specialization: Analysis and Design of Process Equipment					
PhD	Indian Institute of Technology Kanpur	Indian Institute of Technology Kanpur	0.00	0.00	1998
Subjects / Specialization: Structural Engineering					
Other	Lawrence Technological University	Lawrence Technological University, USA	0.00	0.00	2004
Subjects / Specialization: Postdoctoral Research Engineer					

Work Experience (Total: 33Y 1M)

#	Organization	Designation	From	To	Duration
1	Birla Institute of Technology and Science Pilani, Rajasthan	Senior Professor	Feb 2013	Present	13Y 7M
2	Motilal Nehru Regional Engineering College Allahabad	Lecturer/Senior Lecturer	Sep 1988	Nov 1999	11Y 1M
3	National Institute of Technology Warangal	Visiting faculty member	Sep 2004	Jul 2005	0Y 10M
4	Birla Institute of Technology and Science Pilani, Rajasthan	Assistant Professor	Aug 2005	Jul 2008	2Y 11M
5	Birla Institute of Technology and Science Pilani, Rajasthan	Associate Professor	Aug 2008	Feb 2013	4Y 6M

Research Publication

#	Title	Journal	Year
1	Postbuckling Response of Natural Fiber-Based Functionally Graded Hybrid Composites: Experiments, Simulations, and Cutout Optimization Under In-Plane Shear	Polymer Composites, DOI: 10.1002/pc70804.	Jan-2026
2	Structural Behavior and Failure Characteristics of Fiber-Reinforced Polymer-Concrete Composite Beams Incorporating Glass Roving Tied GFRP Shear Connectors	Polymers, https://doi.org/10.3390/polym17233201	Oct-2025
3	Thermo-Mechanical Characterization of Phenolic Woven Composite Laminates for Use in Fire/Blast-Prone Aircraft Baggage Structures	Polymer Composites, https://doi.org/10.1002/pc.70568	Oct-2025
4	Machine Learning-based Prediction of Axial Load and Strain Capacities for Circular FRP-Concrete-Steel Double-Skin Tubular Columns	Mechanics of Advanced Materials and Structures, 33(1). https://doi.org/10.1080/15376494.2025.2585510	Dec-2025
5	Experimental investigation for the determination of stress-strain relationship for sintered flyash lightweight aggregate concrete	Construction and Building Materials, https://doi.org/10.1016/j.conbuildmat.2025.142339.	Aug-2025
6	Numerical Parametric Study on the Flexural Response and Failure Characteristics of GFRP-Concrete Composite Beams with GFRP Dowel Shear Connectors	Discover Applied Sciences, Vol 7, Article No. 337 | https://doi.org/10.1007/s42452-025-06819-3	Apr-2025
7	Experimental and numerical study on postbuckling response of natural fiber based functionally graded hybrid composite plates under uniaxial compression	Polymer Composites; https://doi.org/10.1002/pc.29588	Feb-2025
8	Structural behavior and failure characteristics of E-glass roving tied GFRP-concrete interfacial shear connections in push-out tests	Innovative Infrastructure Solutions, 10, 524, https://doi.org/10.1007/s41062-025-02329-8	Oct-2025
9	Pollutant Removal From Paint, Mortar, and Reinforced Composite and Evaluating the Engineering Properties by Incorporate the Photocatalyst: BaTiO3	International Journal of Photoenergy; https://doi.org/10.1155/ijph/6625582	Jul-2025
10	Experimental Investigation of Physical and Mechanical Characteristics of Pultruded/Hand Lay-Up GFRP Thin-Walled Structural Sections and GFRP Pultruded Ribbed Rebars	Arab J Sci Eng (2024). https://doi.org/10.1007/s13369-024-09787-9	Nov-2024

Published Books / Chapters

#	Book Title	Publisher	Institution
1	Analysis and Design of FRP Reinforced Concrete Structures	McGraw-Hill Education Pvt. Ltd., New York, USA; (ISBN#978-0-007-84789-6, MHID 0-07-184789-8)	Birla Institute of Technology and Science Pilani, LTU (USA), and other Global Institutions
2	Stability and Failure of High Performance Composite Structure	978-981-19-2423-1, ebook ISBN: 978-981-19-2424-8,https://doi.org/10.1007/978-981-19-2424-8, https://link.springer.com/book/10.1007/978-981-19-2424-8	Birla Institute of Technology and Science Pilani, LTU (USA), and other Global Institutions
3	Analysis and Design of Prestressed Concrete Structures	Wiley India Pvt Ltd., New Delhi, ISBN: 978-93-5464-415-3; ISBN: 978-93-5464-416-0 (ebk).	BITS Pilani and other institutions in the world
4	Stability and Failure of High Performance Composite Structure	Springer nature, Composites Science and Technology ISBN 978-981-16-1687-7 ISBN 978-981-16-1688-4 (eBook) https://doi.org/10.1007/978-981-16-1688-4	Birla Institute of Technology and Science Pilani
5	Fiber Reinforced Polymeric Materials and Sustainable Structures	Springer nature, Composites Science and Technology, ISBN 978-981-19-8978-0	Birla Institute of Technology and Science Pilani, LTU (USA), and other Global Institutions

Administrative Experience (Total: 12Y 8M)

#	Post	Institution	From	To	Duration
1	Dean of Infrastructure and Planning	Birla Institute of Technology and Science Pilani	Jun 2024	Sep 2026	2Y 2M
2	Head of Department of Civil Engineering	Birla Institute of Technology and Science Pilani	Jan 2007	Aug 2012	5Y 7M
3	Warden of Hostel	Motilal Nehru Regional Engineering College Allahabad, U.P.	Jan 1997	Nov 1999	2Y 10M
4	Officer-in-Charge of National cadet Corps (NCC)	Motilal Nehru Regional Engineering College Allahabad, U.P.	Jul 1991	Jun 1992	0Y 11M
5	Assistant Hostel warden	Motilal Nehru Regional Engineering College Allahabad, U.P.	Jul 1991	Jun 1992	0Y 11M

Major Research

#	Project Title	Value	Agency	From	To	Duration
1	Response and Micromechanics Based Design of Engineered Cementitious Composite Structures	17.7 Lakhs	SERB-DST, New Delhi	Apr 2007	Mar 2010	2Y 11M
2	Structural Health Assessment and Rehabilitation Framework based on Cyber Physical System	70 Lakhs	DST New Delhi	Apr 2018	Mar 2021	2Y 11M
3	Polyethylene Engineered Cementitious Composites (PE-ECC) for High Resilient Infrastructure	71 Lakhs	the Mission Steering Group (MSG) of Ministry of Textiles, Government of India, Collaborative project with NIT Puducherry	Sep 2022	Sep 2025	3Y 0M
4	Development of Fire Resistant Natural FRP for Structures	5 Lakhs	US-INDIA EDUCATIONAL FOUNDATION (USIEF) for hosting US Fulbright Specialist at BITS Pilani	Aug 2021	Oct 2021	0Y 2M
5	UGC-SAP Project for Structural and Transportation Engineering Research Lab Developments	70 Lakhs	UGC, New Delhi	Apr 2012	Mar 2017	4Y 11M
6	DST-FIST Project for Development of Structural Engineering Lab	80 Lakhs	DST New Delhi	Apr 2012	Mar 2017	4Y 11M
7	Flexural Strengthening of Concrete Structures using Near Surface Mounted (NSM) Fiber Reinforcements	9.3 Lakhs	UGC, New Delhi	Apr 2008	Mar 2011	2Y 11M
8	Sustainable Concrete Infrastructure	British £337003	UKIERI Collaborative Research Award	Apr 2008	Mar 2011	2Y 11M
9	Failure and Stability of Laminated Composite Plates with Cutouts	4.5 Lakhs	K. K. Birla Academy	Apr 2007	Mar 2010	2Y 11M
10	Experimental Investigation of Failure and Stability of Laminated Composite Plates with Cutouts	6 Lakhs	CSIR, New Delhi	Apr 2007	Mar 2012	4Y 11M
11	Design/ Civil Engineering (including Structural Engineering)' under National Technical Textiles Mission (NTTM) of Ministry of Textiles (MoT,) Government of India	2.16 Crore	Ministry of Textiles (MoT,) Government of India	Apr 2025	Mar 2028	2Y 11M
12	Development and Usage of Innovative Ductile Composite Materials for Repair and Retrofitting of Masonry Structures	10 Lakhs	Aditya Birla Group	Feb 2011	Mar 2014	3Y 1M
13	Development and Usage of Innovative Ductile Composite Materials for Repair and Retrofitting of Concrete and Masonry Structures	25.93 Lakhs	SERB, Department of Science and Technology (DST), New Delhi	Apr 2013	Mar 2016	2Y 11M
14	Study of Structural Response and Strengths of Thin-Walled FRP Composite Girders	18 Lakhs	Council of Scientific and Industrial Research (Extra Mural Research Division), CSIR Complex, Pusa, New Delhi	Apr 2014	Mar 2017	2Y 11M
15	Structural Health Assessment and Rehabilitation Framework based on Cyber Physical System	15.543 Lakhs	SERB-DST, New Delhi	Apr 2018	Mar 2021	2Y 11M

16	Study of Postbuckling Response, Failure and Strength of Functionally Graded Composite Plates with and without Cutouts	18.5 Lakhs	Council of Scientific and Industrial Research (CSIR), New Delhi dated 24/7/2019 (Ref. no. 22(0781)/19/EMR-II.	Aug 2020	Jul 2023	2Y 11M
17	Development of Functionally-Graded Hybrid Fiber-Reinforced Polymer Composites for High-Strain Rate and Elevated Temperature Aeronautical Applications	91.056 Lakhs	ARDB-DRDO	Apr 2022	Mar 2026	3Y 11M
18	Study of Structural Behavior and Failure Characteristics of FRP-Concrete Composite Beams	24.43 Lakhs	SERB-DST, New Delhi	May 2023	Apr 2026	2Y 11M
19	Behavior of SHCC Elements under Shear Loading	8.22 Lakhs (INR)+ 2000000 (japanese Yen)	DST and JSPS	Aug 2023	Jul 2025	1Y 11M
20	Performance Evaluation of Sintered Fly Ash Lightweight Aggregate in Concrete	76.21 Lakhs	NBCC (India)	Apr 2024	Mar 2027	2Y 11M

International Experience

#	Organization / Body	Experience
1	American Society for Civil Engineers (ASCE)	Research and mentorship as a Fellow of ASCE
2	Coalition for Disaster Resilient Infrastructure (CDRI)	As fellow of CDRI executed collaborative India and UK project
3	Structural Engineering Institute (SEI) of ASCE	Collaborations in the field of structural Engineering and Execution of Activities of Graduate Student Chapter at BITS Pilani
4	International Standard Organization Technical Commitee ISO/TC71/SC6/WG1	Developing codes and standards for Non-mettalic Reinforcements
5	International Standard Organization Technical Commitee ISO/TC71/SC6/WG6	BIS Expert member of the committee related to FRP rebars and grids

Leadership Experience

#	Brief Description
1	Leader of Delegation for ISO/TC71/SC6 Committee
2	Indian Lead Team partner of UK-India Education Research Initiatives (UKIERI) Project

Statutory Authorities

#	Institution	Statutory Forum	From	To
1	Michigan Licensing Board	Professional Engineer (Civil) of Michigan State, USA	Jul 2002	Aug 2026
2	Andhra University	Advisor to the Andhra University, Vizag, Andhra	Jul 2012	Jun 2017
3	Institution of Engineers	Chartered Engineer	Aug 2018	Aug 2026

Quality Assurance Experience

#	Area	Institution	From	To	Achievements
1	Estate management and Infrastructure	Birla Institute of Technology and Science Pilani, LTU (USA), and other Global Institutions	Jun 2024	Sep 2026	Got 2nd award on 6th Water Award Ceremony by the Ministry of Water, Government of India
2	Faculty Appraisal	Birla Institute of Technology and Science Pilani, LTU (USA), and other Global Institutions	Aug 2022	Sep 2026	Chairperson of Departmental Level Faculty Progress Evaluation Committee
3	International Travel Grants for PhD Scholar	Birla Institute of Technology and Science Pilani, LTU (USA), and other Global Institutions	Aug 2022	Jul 2026	Selected optimum number of Research Scholars for International Travel Grants

PhD Student Guided

#	Guide No	Co-Guide No
1	10	2

Youth Development Experience

#	Activity	Institution	Achievements	From	To	Duration
1	Faculty Development Program	Birla Institute of Technology and Science Pilani, LTU (USA), and other Global Institutions	Trained Young Faculty members on Fiber Reinforced Polymer System on Sustainable Construction Technology	Jul 2021	Jul 2021	0Y 0M
2	AICTE Training and Learning (ATAL) Faculty Development Program (FDP) during July 25-29, 2021	Birla Institute of Technology and Science Pilani, LTU (USA), and other Global Institutions	Training of Young Professional	Jul 2021	Jul 2021	0Y 0M
3	Training Programs for ONGC Engineers	Birla Institute of Technology and Science Pilani, LTU (USA), and other Global Institutions	Trained manpower on Analysis and Design of FRP Reinforced Concrete Structures	Jul 2022	Jul 2022	0Y 0M