### **Profile Page**



Name : Dr Neelam Rani

Designation : Assistant Professor Grade-i

Department : Civil Engineering

Qualification : Ph. D Structural Engineering (Wind Engineering) (IIT

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M.Tech Structural Engineering (Wind Engineering) (IIT

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### **Research Interests:**

Structural Engineering, Wind Engineering

### **Other Profile Links:**

### Google Scholar Link:

Neelam Rani Click Here

### **Journal Publications:**

Year	Journal	Publication
2022	Wind and Structures An	Review of international wind codes and recent research on mono-slope
	International Journal	canopy roof

### **Conference Publications:**

Year	Conference	Publication
2022	Recent Trends in Civil Engineering, National Institute	Varun Aneja Neelam Rani, Interference Effect
	of Technology Silchar	Between Tall Buildings with Square Cross-Sections
2022	Recent Trends in Civil Engineering, NIT Silchar	Ankit Karan, Neelam Rani, M. Abdul Akbar,
		Structural and Economic Characteristics of Buildings
		with Different Fire Ratings as Per Indian Codes
2022	International Conference on Structural Engineering	Neelam Rani, Ajay Pratap, Ashok K. Ahuja, Wind
	and Construction, NIT Silchar	Pressure Distribution on Multi-span Semi-circular
		Canopy Roofs

2022	Third International Conference on Structural	Wind Load Effect on square and helical Buildings
	Engineering and Construction Management (Secon	
	22), FISAT, Kerala	
2022	4th International Conference on Trends and Recent	Vinayak Gautam, Neelam Rani, Numerically
	Advances in Civil Engineering(TRACE- 22), Amity	Investigating the effect of wind load on square and
	University	setback building
2022	ICRAMERD - 22 (3rd International Conference on	Bipul Sharma, Neelam Rani and M Abdul Akbar,
	Recent Advances in Mechanical Engineering	Finite Element Analysis of Cranked Beam with
	Research and Development):, NUSANDHAN	Reinforcement Detailing of SP 34 (1987)
	UNIVERSITY	
2022	7 th International Conference on Civil Structural and	Neelam Rani, Ajay Pratap Effects of varying roof
	Transportation Engineering (ICCSTE'22), -	slope and wind direction on single and multi-span
		mono-slope canopy roof
2022	International Conference on Structural Engineering	S. Hemanth, Neelam Rani, M. Abdul Akbar,
	and Construction Management, NIT Silchar	Strengthening of Deep Beam Using External Bonding
		of Carbon Fiber Reinforced Polymer
2022	Joint Conference of ICTACEM 2021, APCATS 2021,	Ajay Pratap, Neelam Rani, Turbulence model and
	AJSAE 2021 and AeSI 2021, IIT Kharagpur	grid sensitivity analyses of T-shape tall building using
		Computational Fluid Dynamics Technique
2021	International Conference on Advances in Structural	Ajay Pratap, Neelam Rani, CFD Simulation for Wind
	Mechanics and Applications, NIT Silchar	Loads on Multi–span Flat Canopy Roofs
2018	Urbanization Challenges in Emerging Economies	Rani, N. and Ahuja, A.K., (2017), "Effect of Wind
		Incidence Angle on Multi-Span Mono-Slope Canopy
		Roof",
2017	5th National Conference on Wind Tunnel Testing	Rani, N. and Ahuja, A.K., (2017), "Effect of Spacing
		on Wind Pressure Distribution on Flat Canopy Roofs
2017	13th Americas Conference on Wind Engineering,	Rani, N. and Ahuja, A.K., (2017), "Wind Loads on
	Gainesville, Florida, USA	Flat Canopy Roofs",
2017	The Ninth International Structural Engineering and	Rani, N. and Ahuja, A.K., (2017), "Wind Pressure
	Construction Conference (ISEC-9) Resilient	Distribution on Circular Canopy Roof",
	Structures and Sustainable Construction Valencia,	
	Spain	
2017	9th Asia-Pacific Conference on Wind Engineering,	Rani, N. and Ahuja, A.K., (2017), "Effect of Spacing
	Auckland, New Zealand	on Wind Pressure Distribution on Circular Canopy
		Roof",
2017	International Conference on Recent Advances in Civil	Rani, N. and Ahuja ,A.K.,"Effect of Blockage of
	Engineering	Wind Loads on Mono-slope Canopy Roofs",

# **Book/Chapter Publications:**

Type	Title	Publisher	Authors	ISBN/ISS	Year
				N No.	
	Wind Pressure Distribution on Multi-span	Springer	Neelam Rani,		2022
	Mono-slope Canopy Roofs		Ashok Kumar		
			Ahuja, Bharat		
			Chauhan		
	Numerical Response Study of	Springer	Bharat Chauhan,		2022
	Rectangular Cross-Section Building		Ashok Kumar		
	Under Wind Interference Condition		Ahuja, Neelam		
			Rani		
	Response of T-shaped Tall Building	Springer	Priyadarsh,		2022
	Under Wind Load		Neelam Rani		

# **Events Organized:**

Category	Type	Title	Venue	From	То	Designation
STC	National	Prospects of Future	Online	07/09/2022	11/09/2022	
		Research in Structural				
		and Geotechnical				
		Engineering				
STC	National	Analysis and Design of	Online	15/02/2021	19/02/2021	
		Structures: Practices				
		and Challenges				

# PhD Supervised:

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Suraj Pathak		On Going	2023	
Vinayak Gautam	CFD Simulation of aerodynamic forces and wind pressure on tall buildings with various setback cases	On Going	2022	
Saumya Yadav		On Going	2021	
Aakarshan Uppal	Interference effect on tall building	On Going	2021	
Ajay Pratap	Wind Load Effects on Multi span Canopy Roofs	On Going	2020	

## **PG Dissertation Guided:**

Student Name	Dissertation Title	Status	Year	Co-Supervisor
Ayush Jain		On Going	2023	
Danish Raja		On Going	2023	
Danish Ahmad		On Going	2023	
Ashwar				
Mihir		On Going	2023	
Jafar Ali		On Going	2023	
Vinayak Gautam	CFD Simulation of Aerodynamic Forces and	Completed	2022	
	Wind Pressure on Tall Buildings with Various			
	Setback Configuration			
Sami Ul Lah Dar	Study on Impact of Cyclonic Importance Factor	Completed	2022	
	and offshore Factor on Telecom Towers			
Himanshu Tonk	CFD Simulation of wind aerodynamic and flow	Completed	2022	
	characteristics of helical shaped tall Buildings			
Bipul Sharma	Finite Element Analysis of cranked beam with	Completed	2022	
	reinforcement detailing of SP 34 (1987)			
PARTEEK	Finite Element Analysis of RCC Staircase	Completed	2022	
	Supported On Masonry Wall (2022)			
Hemant S	Strut and tie modelling of transfer girder in	Completed	2020	
	building			
Priyadarsh PG	Interference effects of wind induced pressure on	Completed	2020	
	mono-slope canopy roof.			
Varun Aneja	Optimization of foundation for horizontal axis	Completed	2020	
	wind turbines.			
Ankit Karan	Static and dynamic characteristics and economic	Completed	2020	
	impacts of building structures designed for			
	different fire rating			

## Admin. Responsiblities:

Position Held	Organization	From	То
Warden	MGH	05-01-2023	Till date
Member	IIC	05-04-2022	Till date
Faculty Co-coordinator	Standard Club	08-06-2022	Till date
Co-coordinator	Techniti 23	30-01-2023	Till date
Member	Technical Events	02-03-2021	Till date

### **Award and Honours:**

Title	Activity	Given by	Year
Mrs. Sushila Mital Memorial	Lawn Tennis	IIT Roorkee	2016
All India Rank-372	Exam	GATE	2010