

CURRICULLUM VITAE

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Degree	CGPA/Percentage	Year	Institution
Ph. D		2016	Indian Institute of Technology Roorkee
M. Plan.	8.4	2006	Indian Institute of Technology Roorkee
B. Arch.	69 %	1994	Malaviya Regional Engineering College, Jaipur

1. Professional Experience:

Address of the Office/ Organization/ Institution	Post Held	Pay Scale	Duration	
			From (Date)	To (Date)
MNIT Jaipur	Associate Professor	9500 13A2	14/05/18	Till date
MNIT Jaipur	Assistant Professor	15600-39100	19/01/14	13/05/18
MNIT Jaipur	Lecturer Senior scale	10000-325-15200	1/07/05	18/01/14
MREC Jaipur	Lecturer	2200-75-2800-100-4000	04/03/99	30/06/05

2. Administrative Responsibilities

Sl. No	Responsibilities	Duration	
		From	To
1.	Associate Dean Architecture	16-07-2024	Till date
2.	Faculty In-Charge Procurement of Library Resource	20-12-2022	Till date
3.	Convenor of Parking Committee for Panna Block	14-08-2024	09-09-2024

4.	DPGC member	25-07-2024	10-09-2024
5.	Department Infrastructure Coordinator	25-07-2024	10-09-2024
6.	Convenor of Physical Verification Committee	30-04-2024	24-07-2024
7.	Convenor of Physical Verification Committee	01-05-2023	29-04-2024
8.	Member of Student Welfare Committee	20-12-2022	13-01-2023
9.	Library Coordinator	03-08-2022	15-06-2024
10.	Associate Dean Alumni Affairs	17-07-2022	15-07-2024
11.	DSC Member	07-06-2022	31-07-2023
12.	Departmental Space Committee Member	03-06-2022	24-07-2024
13.	Member of Net Zero Energy Campus Committee	31-05-2022	13-01-2023
14.	Library Coordinator for Procurement of Library Resources	05-03-2022	19-12-2022
15.	Proctor	28-01-2022	13-01-2023
16.	UG Practical Coordinator	11-12-2021	30-06-2022
17.	Member of Committee to Examine Modified Assured Career Progression Scheme (MACPS)	08-10-2021	07-10-2022
18.	Lab Coordinator System Dynamics	06-10-2021	30-06-2022
19.	DSC Member	23-08-2021	24-08-2024
20.	Member of DSC	05-07-2021	04-07-2022
21.	PG Dissertation Coordinator	01-07-2021	30-06-2022
22.	Course Revision Committee of NEP Member	18-12-2020	17-12-2021
23.	New UG and PG Programme Committee Member	18-12-2020	17-12-2021
24.	Hostel Maintenance Warden	01-09-2020	31-12-2020
25.	Lab Coordinator of Climatology	24-07-2020	23-07-2021
26.	Lab Coordinator of System Dynamics	24-07-2020	24-07-2021
27.	Member of DUGC and DPGC Committee	16-07-2020	09-01-2023
28.	Member of Campus Planning and Master Plan Committee	29-06-2020	28-06- 2021
29.	Head Department of Architecture and Planning	11-06-2020	11-06-2022
30.	Member of Committee to Prepare the Code of Conduct for Students	06-11-2019	05-11-2020

31.	Warden of Aurobindo Hostel	06-11-2019	31-08-2020
32.	DSC Member	16-11-2018	15-11-2019
33.	Faculty in-Charge of Educational Tour	13-09-2018	01-04-2019
34.	Member of Committee to Prepare the PG Curriculum Revision	24-01-2018	23- 01-2019

3. Registration and Membership of Professional Bodies

- i. Council of Architecture- 1996/20369
- ii. Institute of Town Planners, India- 2009/078
- iii. Indian Institute of Architects, India- 2000/A-13009
- iv. ASHRAE, BOG member of Rajasthan chapter- 2022

4. Consultancy Projects:

S. No.	Title of the Project	Role	Funding Agency	Consultancy fee (Rs)	Status
1.	Group Housing Scheme Todi Nagar, Sikar	PI	Sikar Nagar Parishad	1,75,00,000/-	Ongoing
2.	Preparation of Structural and Architectural Work of Residential Apartment for MNIT Employee, Sector 26, Pratap Nagar, Jaipur	PI	Rajasthan Housing Board, Jaipur	23,93,000/-	Ongoing
3.	Preparation of Sikar Master Plan 2041	PI	Nagar Parishad, Sikar	29,503,344/-	Ongoing
4.	Preparation of Zonal Development Plan of A, B, C, D, and E Zones of Bhilwara City	PI	UIT, Bhilwara, Raj.	4,02,84,100/-	Ongoing
5.	Vetting of Structural Drawing for Rain Basera Construction Work at in Takhatgarh Area	PI	Municipal Board, Pali	1,18,000/-	Completed
6.	Checking and Vetting of Drawing and Design o WTP- "Water Supply Scheme for Augmentation of UWSS Hanumangarh, Tibbi, Pilibanga, Sangria, Nohar and Rawaatsar	PI	M/S SBCC-GRG - Hanumangarh	1,84,745/-	Completed
7.	Planning, Landscaping and Design of Raja Ji ka Park, Hanumangarh	PI	Nagar Parishad Hanumangarh	4,50,000/-	Completed
8.	Preparation of Zonal Development	PI	UIT,	1,40,47,800/-	Completed

	Plan of Sri Ganganagar City		Sriganga Nagar, Raj.		
9.	Vetting of DPR of Nehru Bal Bhawan, Sikar	PI	Nagar Parishad, Sikar	3,64,500/-	Completed
10.	Checking and Vetting of EPC Mode Bid Document for the Work of Construction of RHB Greenwood Mansions and Shopping Arcade at Sector 28 Pratap Nagar, Sanganer Jaipur	PI	Rajasthan Housing Board, Jaipur	6,37,874/-	Completed
11.	Entry Gate, Sikar	PI	Nagar Parishad, Sikar	3,00,000/-	Completed
12.	Checking and Vetting of DPR A P J Abdul Kalam Science Park in Nagar Parishad Sikar	PI	Nagar Parishad, Sikar	3,46,275/-	Completed
13.	Checking and Vetting of EPC Mode Bid Document for the Work of Construction Work of CLUB 21, NRI Colony, Pratap Nagar, Jaipur	PI	Rajasthan Housing Board, Jaipur	4,19,175/-	Completed
14.	Vetting of DPR for Waste Water, Rainwater and Drainage System of Deedwana City	PI	Nagar Parishad, Deedwana	4,50,000/-	Completed
15.	Central Park near RoB Rawatsar Road, Hanumangarh	PI	Nagar Parishad, Hanumangarh	2,50,000/-	Completed
16.	Provide Consultancy for Design and Drawing for Construction of Chemical Laboratory at GWD Jaipur	PI	Ground Water Department, Jaipur	1,69,490/-	Completed
17.	Preparation of Zonal Development Plan of Churu City	PI	Nagar Parishad, Churu, Raj.	14,017,600/-	Completed
18.	Preparation of Zonal Development Plan of Sikar City	PI	Nagar Parishad, Sikar, Raj.	3,58,40,000/-	Completed
19.	Preparation of Zonal Development Plan of Sujangarh City	PI	Nagar Parishad Sujangarh, Rajasthan	1,45,80,493/-	Completed
20.	Preparation of Zonal Master Plan of ESZ Nahargarh Wildlife, Jaipur	PI	DFO, Nahargarh, Jaipur	3,220,399/-	Completed

21.	DPR Preparation for Development of Ecological Park at Laxmangarh, Sikar	PI	DFO, Sikar, Rajasthan	1,685,000/-	Completed
22.	Vetting of DPR for Tourist Interpretation Cum Cultural Center at Nathdwara, Rajsamand	PI	Nagar Palika, Nathdwara,	2,75,000/-	Completed
23.	Checking and Vetting of EPC Bid Documents for the Work of Finishing Works And Maintenance of all these Works in Complete Campus of Vidhyayak Aawas Project	PI	Rajasthan Housing Board, Jaipur	5,00,000/-	Completed
24.	Technical Vetting of In-House Prepared Architectural and Structural Designs and Drawings for the Construction of Oil Executive Residential Complex – Jodhpur	PI	Oil India Ltd. Jodhpur, Rajasthan	4,40,000/-	Completed
25.	Vetting of Structural Drawing of Proposed Auditorium in Sikar	PI	Nagar Parishad, Sikar	3,00,000/-	Completed
26.	Detailed Project Report Preparation for Watershed Development Using Remote Sensing and GIS	CO-PI	WDSC , Govt of Rajasthan	7,00,000/-	Approved
27.	Preparation of DPR for Stormwater drainage of urban area in Sikar City and Reuse plan for treated wastewater	CO-PI	Municipal Corporation, Sikar	4,07,10,000/-	Ongoing
28.	Consultancy services for investigating the hydraulic efficacy of an existing pipeline for conveying treated wastewater and preparation of DPR for the additional pipeline from Padampur bypass circle to Kodyawali Puli	CO-PI	Urban Improvement Trust , Sri Ganganagar	5,90,000/-	Completed
29.	Third Party quality inspection and assurance	CO-PI	Rajasthan Housing Board	16,52,000/-	Completed
30.	Third Party Inspection and Verification of Legacy waste remediation at Nani Beed, Sikar	CO-PI	Municipal council Sikar	3,52,800/-	Completed
31.	Preparation of PPR for Development of Ropeway at Trinetra Ganesh Ji Temple, Sawaimadhopur and	CO-PI	Department of Tourism , Govt. of	10,00,000/-	Completed

	Rameshwar Mahadeo Temple, Bundi		Rajasthan		
32.	Third Party Quality Assurance of IAS Flats.	CO-PI	Rajasthan Housing Board, Jaipur	3,54,000/-	Completed
33.	Checking & Vetting of EPC Mode Bid Document	CO-PI	Rajasthan Housing Board, Jaipur	2,32,000/-	Completed
34.	Appointment of TPI for Construction of MLA Flats at Vidhayak Nagar (West).	CO-PI	Rajasthan Housing Board, Jaipur	3,54,000/-	Completed
35.	Checking & Vetting of the EPC Mode Bid Document & Process for the Work of Construction of MLA Flats at Vidhayak Nagar [West], Jyotinagar, Jaipur	CO-PI	Rajasthan Housing Board, Jaipur	9,28,000/-	Completed
36.	Third Party inspection of 1000 MM Dia. RCC NP-4 Pipe line	CO-PI	Department of Tourism, Govt. of Rajasthan	3,54,000/-	Completed
37.	Third party quality inspection of town hall at Sikar	CO-PI	Municipal Council Sikar	4,13,000/-	Completed
38.	Third party site visit to coaching hub project	CO-PI	Rajasthan Housing Board	2,27,000/-	Completed
39.	Preparation of Techno-Economic Feasibility Report for Proposed Khelgaon-Sports Village – Project at Indira Gandhi Nagar Extension Scheme, Jaipur.	CO-PI	Rajasthan Housing Board, Jaipur	11,79,656/-	Completed
40.	Redesigning, Remodeling and Refurbishment of the Heritage Train Palace on Wheel.	CO-PI	Rajasthan Housing Board, Jaipur	5,90,000/-	Completed
41.	Provide Consultancy Source for Design of Bus Stand at Deedwana	CO-PI	Nagar Parishad, Deedwana	17,70,000/-	Completed
42.	Vetting of Architectural Design Proposal and Financial Viability Report for Setting Up of Coaching Hub in Sector 16 Pratap Nagar Sanganer Jaipur	CO-PI	Rajasthan Housing Board, Jaipur	4,64,000/-	Completed

43.	Drafting of Lease Document for Club 21 at Raj Angan Yojana, NRI Colony, Pratap Nagar, Sanganer Sector 24, Jaipur	CO-PI	Rajasthan Housing Board, Jaipur	2,36,000/-	Completed
44.	Proof Checking of Design Drawing of RES & LIG Houses in Sector 28, Pratap Nagar Jaipur	CO-PI	Rajasthan Housing Board, Jaipur	8,38,596/-	Completed
45.	Preparation of Initial Environmental Examination (IEE) Report including Environmental Management Plan for the Project of Development of Residential Colony for Affected Persons of Village Pur, Bhilwara	CO-PI	Urban Improvement Trust, Bhilwara	6,90,000/-	Completed
46.	Checking and Vetting of EPC Mode Bid Document for the Work of Constitutional Club at Vidhayak Nagar (East) Jyoti Nagar Jaipur	CO-PI	Rajasthan Housing Board, Jaipur	4,64,000/-	Completed

5. Research Projects:

S. No.	Title of the Project	Role	Funding Agency	Sanctioned Amount (Rs)	Status
1.	AMRUT Funded Centre of Urban Planning for Capacity Building	Team Leader	MoHUA, New Delhi	10,00,00,000/-	Ongoing
2.	Creation of Sponge City, Jaipur	PI	AMRUT Center, MNIT Jaipur	32,61,600/-	Proposed
3.	Preparation of Heritage Impact Assessment (HIA) Report for Jaipur Walled City Area & Monuments	PI	AMRUT Center, MNIT Jaipur	1,550,000/-	Proposed
4.	Research study for design, drawing and beautification work of Gol circle , Hanumangarh	PI	Nagar Parishad Hanumangarh	13,50,000/-	Ongoing
5.	GIS based Master Plan for Class II and Class III towns of Uttarakhand	PI	Town and Country Planning Department, Govt. of Uttarakhand	2,02,00,000/-	Ongoing
6.	Crowd Management Plan for Khatu Shyamji	PI	Nagar Palika Khatu	66,00,000/-	Ongoing

7.	Proposal on Preparation of Village Master Plan	PI	AMRUT Center, MNIT Jaipur	15,65,000/-	Ongoing
8.	Documentation of Ancient Planning Principles and Concepts: Jaisalmer, Bikaner, Shekhawati, Ajmer & Pushkar, Jodhpur, Udaipur	PI	AMRUT Center, MNIT Jaipur	18,50,000/- (For each Town)	Ongoing
9.	TOD Policy, Identification of zone and TOD Plan	PI	AMRUT Center, MNIT Jaipur	54,95,840/-	Ongoing
10.	Development of Greywater Disposal Site in Surajgarh	PI	Nagar Palika, Surajgarh	5,16,000/-	Ongoing
11.	Revitalization of Government Hostel/Hathroi Garhi/Gopal Badi Area, Jaipur	PI	AMRUT Center, MNIT Jaipur	46,36,300/-	Ongoing
12.	Integrated Urban and Water Planning for Nawalgarh District	PI	AMRUT Center, MNIT Jaipur	5,48,0800/-	Ongoing
13.	Identifying Street Level Barriers to Mobility	PI	AMRUT Center, MNIT Jaipur	9,50,000/-	Ongoing
14.	Estimating the spatial distribution of population and economic activity in Jaipur	PI	AMRUT Center, MNIT Jaipur	6,75,000/-	Ongoing
15.	Estimating Public Transport Accessibility in Jaipur	PI	AMRUT Center, MNIT Jaipur	9,50,000/-	Ongoing
16.	Study on Ease of Doing Business (EoDB) for Rajasthan State	PI	AMRUT Center, MNIT Jaipur	14,04,320/-	Ongoing
17.	Neighborhood Improvement Scheme: Bapu Nagar	PI	Jaipur Nagar Nigam Greater & AMRUT Centre MNIT Jaipur	39,42,400/-	Ongoing
18.	Integrated Multi Modal Transportation System in Jaipur City	PI	AMRUT Center, MNIT Jaipur	56,90,400/-	Ongoing
19.	A Pathway for Net Zero Building Design in Jaipur City	PI	AMRUT Center, MNIT Jaipur	73,48,000/-	Ongoing
20.	Design for Bharat	PI	Ministry of Youth Affairs & Sports - New Delhi	2,50,000/-	Completed
21.	Effectiveness of DAY-NULM: Challenges, Opportunities & Impact on Urban Poverty Alleviation & Livelihood Enhancement	PI	MoHUA, New Delhi	18,08,268/-	Completed

22.	Assessing the Entrepreneurial Impact of the PM SVANidhi Scheme on Street Vendors in India: A Comprehensive Evaluation	PI	MoHUA, New Delhi	18,08,268/-	Completed
23.	Documentation of Ancient Planning Principles and Concepts of Jaipur city	PI	MoHUA, New Delhi	25,22,835/-	Completed
24.	Research Study of Udaipur Smart City Infrastructure Projects of Under SAAR Compendium 2.0	PI	Smart city limited, Udaipur	4,80,000/-	Completed
25.	Research Study of Udaipur Smart City Planning and Design Projects under SAAR Compendium 2.0	PI	Smart city limited, Udaipur	6,60,000/-	Completed
26.	Study/ Case study of Kota Smart City Projects under SAAR Compendium 2.0.	PI	Kota Smart City Ltd. Kota	4,80,000/-	Completed
27.	Economic Impact on Real Estate of Area Based Development (ABD) areas due to the development undertaken through the Smart Cities Mission	PI	MoHUA	6,00,000/-	Completed
28.	Preparation of District Environmental Management Plan for Sikar	PI	DFO, Sikar	9,96,000/-	Completed
29.	Preparation of District Environmental Management Plan for Hanumangarh	PI	DFO, Hanumangarh	9,96,000/-	Completed
30.	Preparation of District Environmental Management Plan, Alwar	PI	DFO, Alwar	9,96,000/-	Completed
31.	Mission Amrit Sarovar – Jal Dharovar Sanrakshan	PI	MoHUA	2,00,000/-	Completed
32.	Smart Cities & Academia Towards Action & Research.	PI	MoHUA	1,00,000/-	Completed
33.	Mapping of Urban Heat Islands and Impact Assessment of Mitigation Strategies	CO-PI	AMRUT Centre	59,36,520/-	Ongoing
34.	Comprehensive Cost Analysis of Water Supply Systems in India	CO-PI	AMRUT Centre	28,51,840/-	Ongoing
35.	Multi-Hazard Risk Assessment for Bhiwadi City	CO-PI	AMRUT Centre	29,42,560/-	Ongoing
36.	Benchmarking of Wastewater Technologies in India using Multi-Criteria Decision Making for	CO-PI	AMRUT Centre	10,10,640/-	Ongoing

	Sustainable Operations				
37.	Assessing BIPV integration impact on energy, thermal performance, scalability for a locality	CO-PI	AMRUT Centre	8,96,040/-	Ongoing
38.	Development of AI-Based Tool for Illegal Waste Dumping and Construction Site Identification	CO-PI	AMRUT Centre	5,47,360/-	Ongoing
39.	CityGen-Centric Digital Twin for Next Generation Smart City	CO-PI	AMRUT Centre	67,38,240/-	Ongoing
40.	Optimizing Waste Handling in Udaipur: Analyzing Waste Streams, Innovative Treatment Methods, and reducing GHG potential	CO-PI	Udaipur Smart City Ltd	15,00,000/-	Ongoing
41.	Enhancing Employee Well Being and Happiness at Ananta Institute of Medical Science and Research Centre	CO-PI	Medical College Ananta	5,04,000/-	Completed
42.	Study of requirements for street and public facility cleaning services	CO-PI	Bureau of Indian Standards	2,31,120/-	Completed
43.	Resource recovery from municipal solid waste in Sujangarh municipality	CO-IP	Sujangarh Nagar Parishad	4,85,000/-	Completed
44.	Research Study for Identification of Potential & Scope of Renovation & Optimum Planning and Design of Renovation of Bhagat Singh & Bharat Mata Chowk, in Hanumangarh	CO-PI	Rajasthan Housing Board Jaipur	1,32,000/-	Completed
45.	Study for Identification of Potential & Scope of Renovation and Optimum Planning & Design of Renovation of Collectorate Chowk, Lal Chowk, Karni Chowk, Ambedkar Chowk Junction & Chowk Near Govt Hospital, Chowk Near Bishnoi Dharmshala in Hanumangarh.	CO-PI	Rajasthan Housing Board Jaipur	2,88,000/-	Completed
SPARC Projects					
1.	A Framework of Net-Zero Energy Building Design in Composite Climate of India	PI	SPARC	77,28,000/-	On going
2.	A Smart City Geospatial data catalogue representing complex urban mobility challenges in India	PI	SPARC-UKIERI	40,50,000/-	Ongoing

3.	Energy Nexus: Decolonial and Simulation-Driven Retrofitting Strategies for Energy Efficiency and Thermal Comfort in Chandigarh's Government Housing, Project	Co-PI	SPARC	1,50,70,000/-	Ongoing
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6. Research Guidance

A. Ph.D. Thesis guidance

S. No.	Thesis Title	Name of Student	Session of Registration	Status	Role
Ph.D. Thesis Awarded					
1.	Community based Disaster Management Plan formulation for Indian Metropolitan Area - A case of Jaipur	Bansari Sharma	2020-25	Awarded	Supervisor
2.	Decision Making Framework for Planning Urban Green Spaces in Indian Cities	Akanksha Sangwan	2019-24	Awarded	Supervisor
3.	Comprehensive Framework for Sustainability Assessment of Group Housing	Parul Bhyan	2019-24	Awarded	Co-Supervisor
4.	Decision-Making Framework for Design Quality Assessment of Rural Houses in India	Priya Tyagi	2021-24	Awarded	Co-Supervisor
5.	Planning Strategies for an Energy-Efficient Urban Transportation System - A Case of Lucknow City	Abdur Raoof Khan	2016-25	Awarded	Supervisor
6.	Strategies to Strengthen Urban Water Resilience at Household Level, A Case of Jaipur City, India	Manish Sharma	2016-21	Awarded	Co-Supervisor
7.	Energy Efficiency Assessment of Indo-Saracenic Buildings in Jaipur, Rajasthan	Shweta Choudhary	2016-20	Awarded	Co-Supervisor
8.	Strategies for Energy Efficiency in Technical Institutes of Hot and Dry Climatic Zone, India	Sunil Sharma	2016-20	Awarded	Co-Supervisor

Ph.D. Thesis Submitted					
9.	Multi - objective Optimization Approach for Residential Net- Zero Energy Buildings in Composite Climate, Jaipur City	Pushpendra Chaturvedi	2020-25	Submitted	Supervisor
10.	Techno-Economic Study for Comfort & Energy Performance of Historic Residential Buildings- Jaipur, India	Somya Mahlawat	2017-25	Submitted	Supervisor
Ongoing Ph.D. Thesis					
11.	Water cycle management	Anchal Choudhary	2024-25	Ongoing	Supervisor
12.	Urban Planning Strategies for Mitigating Urban Heat Island effect	Priya Mohindru	2024-25	Ongoing (Part Time)	Supervisor
13.	OCCUPANT'S COMFORT CENTRIC POST OCCUPANCY EVALUATION OF GREEN OFFICE BUILDING	Sandeep Kumar	2024-25	Ongoing (Part Time)	Supervisor
14.	Planning for a residential high-rise building as a Net Zero Energy Building	Priyanka Kumawat	2023-24	Ongoing (Part Time)	Supervisor
15.	INDOOR ENVIRONMENTAL QUALITY ASSESSMENT OF BUILT SPACES FOR EDUCATIONAL BUILDINGS IN COMPOSITE CLIMATE	Sunita Doddamani	2021-22	Ongoing (Part Time)	Co-Supervisor (Supervisor Bhawana Shirvastava)

Ph.D. Thesis Evaluated

S. No.	Thesis Title	Name of Student	Name of Institute	Session of registration	Role
1.	A Critical Evaluation of Last-Mile Connectivity as an Integral Component of Urban Mobility in Tod Zone, Case of Delhi NCR	Snigdha	Amity University Uttar Pradesh	Nov. 2025	Examiner

2.	Impact of Physical Planning on Social- Sustainability: A Study of Residential Neighborhoods of Jaipur, Rajasthan.”	Manjari Rai	Amity University Uttar Pradesh	Aug 2025	Examiner
3.	Contextualization of SDG 11 for Tier II Indian Cities: Ameliorating Local Area Planning Strategies for the Case of Dehradun	Neeharika Kushwaha	Amity University Uttar Pradesh	Aug 2025	Examiner
4.	Financing Framework for Residential Development Projects: An Analysis of Indian Real Estate Market	Mr. Shiv Prasad Singh	Amity University Uttar Pradesh	July 2025	Examiner
5.	Role of fenestration for daylight performance in government offices of Hamirpur	Rohit Thakur	NIT Hamirpur	Sept 2024	Examiner
6.	Modelling Urban Physics for Sustainable Development	Manoj Kumar	IIT Roorkee	April 2024	Examiner
7.	Critical Analysis of Existing Affordable Housing Policies and Proposed Integrated Approach for the Effective Implementation in India	Shagun Agarwal	Amity University Uttar Pradesh	March 2024	Examiner
8.	Street Vendors in Kerala - Vulnerability, Capability and Potentials	Pramod P.	Mar Thoma College Chungathara	Aug 2023	Examiner
9.	Application of Transit Oriented Development in Indian Cities	Deepshikha Jain	Amity University Uttar Pradesh	Oct. 2022	Examiner

B. PG. Dissertation & Thesis Guidance

S. No.	Thesis Title	Name of Student	Session
1.	Assessment of City Bus Transportation System of a metropolitan city- Jaipur, Rajasthan	Raja Ram Meena	2023-2025
2.	Enhancing urban water resilience through rainwater harvesting: a study of Tirupati	Rachan Sahith Sadari	2022-2024
3.	Assessment of urban green spaces: A case of Ajmer city	Garima Singh	2022-2024
4.	Implementation of Rain Water Harvesting for Bhilwara City, Rajasthan	Satyam Kumawat	2021-2023

5.	Route Optimization Using ArcGIS for Tourism in Walled City, Jaipur, Raj.	Gaurav Panchal	2021-2023
6.	Significance of Public Open Spaces in Walled City Jaipur	Diksha Bankar	2021-2023
7.	Strategies For Improving Urban Mobility in AUNDH, Pune City	Rituja Giramkar	2020-2022
8.	Strategy For The Orderly Placement of Street Vendors	Tanvi Gupta	2020-2022
9.	Approaches for Planning Pandemic Adaptive City Mohali, Punjab	Pallavi Rani	2019-2021
10.	Study of Urban Sprawl Dynamics of Patna	Arpana Kumari	2019-2021
11.	Impact of Tourism: A Case of Pushkar City	Preeti Sinha	2018-2020
12.	Planning For Tourism Infrastructure in Mathura City	Kanchana Agarwal	2018-2020
13.	Planning For NMT in Vijayawada City	S. Venkata Sai	2017-2019
14.	Investigation of Energy Consumption Pattern In Residential Neighbourhood, Chitrakot Jaipur	Abhimanyu Chaudhary	2017-2019
15.	Urban Growth Assessment using Remote Sensing and GIS in Kishangarh, Ajmer	Aditi Mathur	2017-2019
16.	Planning For Transportation in Guwahati City	Kirat Kungksa Naizary	2016-2018
17.	Assessment of Mass Rapid Public Transportation System in Jaipur City	Sagar Kumar Chetiwal	2015-2017
18.	Impact of Urbanization on Urban Water Bodies in Hyderabad City	R Anjani	2014-2016
19.	Assessment Of Infrastructure Facilities in Residential Area of Surat City.	Mehul Kumar	2014-2016
20.	Planning Guidelines for Development of Industrial Areas in Jaipur	Ankit Kashmiri Gupta	2013-2015
21.	Impact of Urban Development on Water Supply: A Case Study of Jaipur City (J.M.C Limit)	Pragya Kotia	2009-2011
22.	Slum Improvement Initiatives in Jaipur.	Ritu Sharma	2008-2010
23.	Impact of Urban Infrastructure due to Activity Change in Raja Park Area, Jaipur	Jaswant Singh	2008-2010

C. UG. Thesis Guidance

S. No.	Thesis Title	Name of Student	Session
1.	Aravalli Wellness Resort- Bhairanpura Jaipur	Akhil K U	2024-2025
2.	Integrated Textile Handicrafts Hub	Snigdha Soti	2024-2025
3.	Kendriya Vidyalaya, Ramgarh	Rahul Rawat	2023-2024
4.	Group Housing Project at Noida	Akshat Gupta	2023-2024
5.	International Convention Center, Jodhpur	Nitin Jangid	2023-2024
6.	Fashion Hub	Siri Reddy Palle	2023-2024
7.	450-Bedded Cancer Hospital Design	Kriti Bansal	2022-2023
8.	Development of Wellness Resort in Madan Negi, Tehri, Uttarakhand	Divyansh Soni	2022-2023
9.	Greenfield Group Housing Project at Ahmedabad	Shah Vatsal Minesh	2022-2023
10.	Central University of Gujrat (CUG)	Supriya Shaw	2021-2022
11.	Urban Center for Excellences	Harsh Khandelwal	2021-2022
12.	IT Office Building, Sector 66, Gurugram	Shambhav Jain	2020-2021
13.	Kendriya Vidhalaya, CRPF, Kadarapur	Monika	2020-2021
14.	Lake Side Wellness Resort at Gorean, Tehri, Uttarakhand	Abhishek Kumar	2020-2021
15.	K-12 School, Dwarka	Shivangi Bhateja	2019-2020
16.	Proposed Group Housing, Ganganagr	Chanderdeep Singh Brar	2019-2020
17.	Tech Park, Bangalore	Aditya Srivastava	2019-2020
18.	Cultural Center, Gurugram	Aditya Ranajan Sinha Roy	2019-2020
19.	Freedom Fighter Museum Chhindwara	Akash Paredkar	2018-2019
20.	College of Agriculture, Fatehpur, Rajasthan	Varsha Verma	2018-2019
21.	Beach Resort Goa	Saiyam Garg	2017-2018
22.	Institute of Fine Art Noida	Sajal Sahu	2017-2018
23.	Metro Station, Pushp Vihar, Delhi	Zothanzuala	2017-2018
24.	Group Housing at Jaipur	Yashwant Bajiya	2017-2018
25.	College of Architecture, Fathepur, Rajasthan	Varsha Verma	2017-2018
26.	Residential High School, Bikaner	Ajay Kumar	2016-2017

27.	Group Housing at Sikar Road	Yatin Ghera	2016-2017
28.	IIM in Amritsar	Malvika Choudhary	2016-2017
29.	India Habitat Centre, Gurgaon	Mrinalini Prahlad	2016-2017
30.	Shopping Complex at Gurgaon	Ankit Malik	2016-2017
31.	Socio-Cultural Center, Dwarka, New Delhi	Aishwarya Dwivedi	2016-2017
32.	200 Bedded General Hospital, New Delhi	Gaurav Jain	2015-2016
33.	Film Institute Noida	Rahul Jangid	2015-2016
34.	NIFT Panchkula	Tarun Varma	2015-2016
35.	Housing High Rise Residential Apartments	Dherya Mehta	2015-2016
36.	Museum of Modern Art Kolkata	Sanghita Bhowmick	2014-2015
37.	International Sport Academy at Raigarh, Bihar	Piyush Kumar Pandey	2014-2015
38.	Center for Music Experience Bangalore	Shubham Jangir	2014-2015
39.	International Cricket Stadium and sport complex Lucknow	Vikas Saini	2014-2015
40.	Indian Institute of Information Technology, Lucknow	Anil Kumar	2014-2015
41.	Engineering College at Jaipur	Ashok Kumar Meena	2010-2011
42.	Formula One Race Circuit at Noida	Hitesh Shrishimal A	2010-2011
43.	National Institute of Design Bhopal	Udai Singh Verma	2010-2011
44.	Museum of Independence, New Delhi	Sneha	2009-2010
45.	Engineering College at Jagatpura, Jaipur	Jaivardhan Khandelwal	2008-2009
46.	5-Star Hotel, Nagpur	Prasad A. Kawadkar	2008-2009
47.	Mohali Integrated Passenger Terminal	Nidhi Gulati	2007-2008
48.	300 Bedded Hospital at Dwarka, New Delhi	Deepika Jamwal	2007-2008
49.	Engineering College at kuchaman	Abhishek Agarwal	2007-2008
50.	Institute of Hotel Management, Greater Noida	Vandana Singh	2006-2007
51.	Engineering College at Bikaner	Vikas Jonwal	2006-2007
52.	Five Star Deluxe Hostel Radisson at Jaipur	Manish Maurya	2006-2007
53.	Jaipuria Institute of Management, Ghaziabad	Sanjeev Kr. Verma	2002-2003
54.	International Center, Greater Noida	Rashmi Gupta	2002-2003
55.	National Institute of Fashion Technology,	Sudhir Kain	2001-2002

	Navi Mumbai		
56.	Museum of Indology at Jaipur	Vandana Gupta	1999-2000
57.	Convention Centre at Bangalore	Prem Sagar	1999-2000

7. PATENTS

1. Indian Patent Filed on “A System and Method for Facilitating the Provision of Urban Green Spaces in Urban Planning” Dr. Akanksha Sangwan, Dr Nand Kumar, Dr. Ashwani Kumar, Dr. Mahesh Kumar Jat (in process App. No. 202511032452) concept submitted on 01st April 2025 (Stage: Patent Published on 27th June 2025)
2. Indian Patent granted on ‘A System and method for Conducting Fire Risk Assessments (FRAS) and Prevention in Historic Core Areas’, by Ms. Shipra Goswami, Mr. Rushikesh Kolte, Dr. Ashwani Kumar, Dr. Satish Pipralia , Dr. Nand Kumar (Patent No. 553323, App. No. 202311088247) awarded on 28.10.2024
3. German Patent granted on ‘An Urban Sustainability Assessment Classification System’ (Ein städtisches Nachhaltigkeitsbewertungs-Klassifizierungssystem)’ by Ms. Anjali Saraswat, Dr. Satish Pipralia, Dr. Ashwani Kumar, Dr. Nand Kumar, 2024 no. 202024100071 filed on 09th January 2024 and granted on 08th February 2024, German Patent Office
4. German Patent granted on ‘A rating system for fire risk assessment (Ein Bewertungssystem zur Brandrisikobewertung)’ by Ms. Shipra Goswami, Mr. Rushikesh Kolte, Dr. Ashwani Kumar, Dr. Satish Pipralia , Dr. Nand Kumar, 2023 application I.D. 202023105932.5. filed on 13th October 2023 and granted on 24th February 2024, German Patent Office
5. "A Decision-Making System for Urban Green Spaces Planning (IPC: G06Q 50/08)", Dr Ashwani Kumar, Dr Nand Kumar, Dr Mahesh Kumar Jat, Dr Akanksha Sangwan, Reg.No. 202024106161 [The President of the German Patent and Trademark Office] Dt.11-11-2024, filing dt. 28-10-2024
6. Copyright Registered on “Identification of Suitable Land Parcels for the allocation of Urban Greenspaces in Indian cities” By Dr. Akanksha Sangwan, Dr. Ashwani Kumar Dr. Mahesh Kumar Jat, Dr Nand Kumar, Mr. Vijay Anand (Roc Number: L-155916/2024) on 25th October 2024
7. Copyright Registered on “Development of Model for Ascertaining Urban Greenspaces Requirement in Indian Cities” By Dr. Akanksha Sangwan, Dr. Ashwani Kumar Dr. Mahesh Kumar Jat, Dr Nand Kumar, Mr. Vijay Anand (Roc Number: L-156288/2024) on 04th November 2024

8. List of Research Publications

A. Research Papers Published in Journals:

1. Chaturvedi, P. K., Kumar, N., Toftum, J., Andersen, R. K., Lamba, R., & Mehta, K. (2025). Exploring influential parameters affecting residential building energy use: advancing energy efficiency through machine learning: PK Chaturvedi et al. Clean Technologies and Environmental Policy, 1-22.
2. Bansari Sharma, Manish Sharma, Nand Kumar, Ashwani Kumar, 2025, Public Engagement Processes in Urban Development Programmes in India: A Critical Review, accepted for publication in International Review for Spatial Planning and Sustainable Development
3. Singh, D., Tiwari, A., Mahajan, R., & Kumar, N. (2025). Healing the healers: How empathy, active coping and mindfulness drive well-being and happiness of healthcare employees. International Journal

4. Tyagi, P., Bhyan, P., Shrivastava, B., & Kumar, N. (2025). Enhancing rural well-being: A comprehensive analysis of housing design quality and typologies in India's composite climate. *Environment, Development and Sustainability*, 1- 40. <https://doi.org/10.1007/s10668-025-06888-9>
5. Tyagi, P., Shrivastava, B., Kumar, N. (2025). Optimizing Rural Housing Design Quality: Indicators and Parameters for Comprehensive Assessment. In *Environment, Development and Sustainability*. Springer Netherlands. <https://doi.org/10.1007/s10668-025-06277-2>
6. Akanksha Sangwan, Sudesh Vijay Ananad, Nand Kumar, Ashwani Kumar, Mahesh Jat, Rayees Ahmed, 2024, Development of Site Suitability Framework for Urban Greenspace: A case study of Sikar city, Rajasthan, India, Accepted in *Environmental Earth Sciences* 83:634 <https://doi.org/10.1007/s12665-024-11898-3> [SJ2023 Q2]
7. Priya Tyagi; Bhavna Shrivastava; Nand Kumar "A Comprehensive Investigation of Rural and Low-Rise Housing Design Quality: A Thematic and Bibliometric Analysis" 2024 vol. pp. DOI:10.1007/s10901-024-10122-9
8. Sanjay Choudhary, Harshita Kaur, Nand Kumar, Virendra Kumar Saharan "Examining the locational approach towards optimal siting of air quality monitoring stations in India, vol. pp." 2024
9. Pushpendra Kumar Chaturvedi; Nand Kumar; Ravita Lamba "Finding the gaps in design strategies and technological advancements for net-zero energy buildings development in India" 2024 vol. pp. DOI: doi.org/10.1177/0958305X2412560
10. Chaturvedi, P. K., Kumar, N., Lamba, R., & Mehta, K. (2024). Multi-objective optimization of glazing and shading configurations for visual, thermal, and energy performance of cooling dominant climatic regions of India. *Clean Technologies and Environmental Policy*, 1-24.
11. Chaturvedi, P. K., Kumar, N., & Lamba, R. (2024). Finding the gaps in design strategies and technological advancements for net-zero energy buildings development in India. *Energy & Environment*, 35(7), 3880-3920.
12. Pushpendra Chaturvedi; Nand Kumar; Ravita Lamba "Identification of Climate Adaptive Multivariate Optimization Methodologies for Design of NZEB in India -A Holistic Review" 2024 vol. pp. DOI:10.3389/fenef.2024.1430647
13. Pushpendra Kumar Chaturvedi; Nand Kumar; Ravita Lamba "Multi-objective optimization for visual, thermal, and cooling energy performance of building envelope design in the composite climate of Jaipur (India)" 2024 vol. pp. 0958305X241228513 DOI:10.1177/0958305X2412285
14. Monitoring of Municipal Solid Waste Operations in Urban Areas: A Review Kumar A.; Choudhary Y.; Kumar A.; Kumar S.; Kumar N. *Lecture Notes in Civil Engineering*, Vol. 430 LNCE (2024), pp. 295-310
15. Sharma, M. & Sharma, B. & Kumar, N. & Kumar, A. (2024). A framework to assess urban water resilience in developing countries like India: Looking beyond water utilities and networked cities. *Water Policy*. 27. 88-103. DOI:10.2166/wp.2024.221
16. Tyagi, P., Shrivastava, B., & Kumar, N. (2023). Investigating Rural Housing Quality Indicators in the Indian Scenario for Inclusive Imageability. *Environment, Development and Sustainability* (Issue 0123456789). Springer Netherlands. <https://doi.org/10.1007/s10668-023-03699-8> (SJ2022: 0.84, Q1).
17. Agarwal, K., Tyagi, P., & Kumar, N. (2023). Analysis of Public Awareness about District Disaster

Management Plan: A Case of Dehradun City. Sustainability, Agri, Food and Environmental Research. 11. <https://doi.org/10.7770/safer.v11i1.2977>

18. Priya Tyagi, Bhavna Shrivastava, Nand Kumar, "Towards Creating Inclusive Villages: The Types of Rural Settlements in India", Journal of the International Society for the Study of Vernacular Settlements 10/91-106/2023/0.281 DOI: https://isvshome.com/pdf/ISVSej_10.2.3_priya.pdf
19. Parul Bhyan, Bhavna Shrivastava, Nand Kumar, "Allocating Weightage to Sustainability Criteria's for Performance Assessment of Group Housing Developments: Using Fuzzy Analytic Hierarchy Process", Journal of Building Engineering, 65 // 2023 / 7.2 DOI: <https://doi.org/10.1016/j.jobbe.2022.105684>.
20. Akanksha Sangwan, Nand Kumar and Ashwani Kumar, "Defining the Urban Greenspaces in the Indian Context", Architecture and Urban Planning 19 // 2023 /0.59 DOI: <https://doi.org/10.2478/aup-2023-0008>.
21. Akanksha Sangwan; Sudesh Choudhary; Vijay Anand; Nand Kumar; Ashwani Kumar; Mahesh Kumar Jat; Rayees Ahmed "A mathematical model for temperature-reducing potential of urban greenspaces" 2023 vol. Pp
22. Akanksha Sangwan; Nand Kumar; Ashwani Kumar "Amorphous Nature of Green Spaces in Indian Urban Planning" 2023 vol. pp.
23. Shubham Rana; Amit Kumar; Nand Kumar; Mahesh Kumar Jat "A review of nitrogen flow in the anthroposphere to identify key control sectors" 2023 vol. pp. DOI:10.1007/s10098-023-02637-6
24. Parul Bhyan, Nand Kumar, Bhavna Shrivastava, "A Systematic Literature Review of Sustainability Assessment Methods in Residential Buildings: Using Bibliometric Analysis 2000-2020" Environment, Development and Sustainability (2022). <https://doi.org/10.1007/s10668-022-02636-5> (SCI-E and Scopus indexed).
25. Sharma B., Sharma S., Kumar A., Kumar N., Pipralia S., (2022) Analysis of Urban Development Plan Formulation in India with Special Reference to Public Participation accepted for publication in International Review for Spatial Planning and Sustainable Development on 30th August 2022 [SJR2021 Q2].
26. Manish Sharma, Bansari Sharma, Nand Kumar, Ashwani Kumar, 2022, Measuring Urban Water Resilience at Household Level: A Comparative Study through a Framework for Developing Countries, accepted for publication in Urban Water Journal [DOI:10.1080/1573062X.2022.2075767] [SJR 2019 Q1, SJR2020 Q2,
27. Manish Sharma, Bansari Sharma, Nand Kumar, Ashwani Kumar, 2022, Establishing Conceptual Components for Urban Resilience: Taking Clues from Urbanization through a Planner's Lens, accepted for publication in ASCE's Natural Hazards Review [SJR2021 Q1] [DOI: 10.1061/NHREFO/NHENG-1523].
28. S. Choudhary, S. Pipralia, N. Kumar (2020) Energy Efficiency Assessment of Indo- Saracenic Buildings Assessments and Material Evaluation of Historic Buildings, Materials Today: Proceeding (MATPR), Accepted for publication, Reference no. MATPR 19348, Elsevier, (ISSN-2214-7853).
29. S. Choudhary, S. Pipralia, N. Kumar (2020), "Need for Integrated Approach for Energy Efficiency Assessments and Material Evaluation of Historic Buildings", In Press: Materials Today: Proceedings, Elsevier (<https://doi.org/10.1016/14>).
30. P. Bhyan, N. Kumar, B. Srivastava, Cognitive Occupancy Appraisal for Sustainable Housing" International Journal of Recent Technology and Engineering (IJRTE) ISSN:2277-3878, Volume-9 Issue-1, May 2020 DOI: 10.35940/ijrte.F9597.059120.

31. S. Choudhary, N. Kumar, S. Pipralia (2019) Old Buildings, New Aspirations: The Future of Heritage in the Era of Sustainability-The Scenario in Rajasthan, 16, I J publication, India. May 2019, Vol 6, Issue 5. (ISSN-2349-5162).
32. S. Choudhary, S. Pipralia, N. Kumar (2018) Revisiting Architectural Heritage Towards a sustainable Environment, Advanced Science Engineering and Medicine (ASEM), Vol 10,01-5,02018, American Scientific Publishers, United states of America. (ISSN: 21646627).
33. Sharma, S., Kumar, A., Kumar, N. and Gupta, S., 2018. Developing a Net Zero Energy Building: A Case Study of an Institutional Library. Available at SSRN 3198651.
34. S. Choudhary, S. Pipralia, N. Kumar (2018). Energy Efficiency Assessment of Indo Sarascenic Buildings In India, conference publication of International Conference on Energy efficiency in Historic buildings (EEHB), Swedish Energy Agency, University, September 2018, Visby, Sweden.(isbn-978-91-519-0838-0).
35. Kumar, N., Kumar, A. and Sharma, S., 2018 “The Quest for Environmental Sustainability in Educational Institutions.” International journal of Engineering & Technology, 7(1.4), pp.33-38
36. Manish Sharma, Nand Kumar, Ashwani Kumar (2017) Need for Disaster Risk Resilience: A case of India, International Research Journal of Engineering and Technology (IRJET) Volume: 04 Issue: 11 pp 335-339.
37. Kumar, N., 2016, “A Household Based Analysis of Domestic Energy Consumption for Lighting in Jaipur City”, International Journal of Built Environment and Sustainability, IJBES 3(2), Pp 126-133 (Co-Author: Dr. V. Devadas).
38. Kumar, N., 2015, “Analysis of Residential Building Energy Consumption in Jaipur City, India”, Journal of the Indian Institute of Architects, Vol. 80, Issue 09, Pp 30-37 (Co-Author: Dr. V. Devadas).
39. Kumar, N., 2015, “Analysis of Energy Consumption for Personal Transportation System in Jaipur City”, Journal of the Institute of Town Planners, India, Vol. 12, No. 02, Pp 28-48 (Co-Author: Dr. V. Devadas).
40. Kumar, N., 2013, “Analysis of National Highway-47 in Kanyakumari District, Tamil Nadu”, Journal of the Institute of Town Planners, India, Vol. 10, No. 3, July- Sept 2013 (Co-Author: Dr. V. Devadas, Tejas Rawal).
41. Singh, D., Mahajan, R., Tiwari, A., & Kumar, N. What keeps us going: A phenomenological study of doctors’ lived experiences of well-being in an Indian private medical college. Journal of Human Values. (Manuscript under review).
42. Singh, D., Tiwari, A., Mahajan, R., & Kumar, N. Employee well-being in the service sector: A systematic review and future research directions. International Journal of Management Practice. (Manuscript under review).

B. Research Papers Presented in Conferences:

1. Chaturvedi, P., Kumar, N., Lamba, R., Retrofitting strategies towards enhancing visual comfort for an institutional building: Optimizing daylight, uniformity and glare in grasshopper. International Conference on Advances in Energy Research (ICAER 2025)- SPRINGER (Accepted)
2. Chaturvedi, P., Kumar, N., Lamba, R., Assessment of green rating system for sustainable urban development in India. International Conference on Advances in Energy Research (ICAER-2025)- SPRINGER (Accepted)
3. Chaturvedi, P., Kumar, N., Sandeep K, Akanksha K Sagwan, Parametric optimization for building envelope design by genetic algorithm in the composite climate of India, 2nd international conference on

innovations in smart and sustainable infrastructure (ISSI 2.0), PEDU, Ahmedabad India- SPRINGER (Accepted)

4. Tyagi, P., Bhyan, P., Shrivastava, B., Kumar, N. (2025). Rural Housing Sustainability in India: A Comprehensive Evaluation. EDMSET 2024. Sustainable Strategies in Architecture, Urbanism and Beyond. ISBN 978-3-031-99527-9. Springer Cham.
5. Tyagi, P., Shrivastava, B., & Kumar, N. (2025). Architectural Analysis of Rural Housing: A Case of Village in Uttar Pradesh, India. In International Geographical Union Thematic Conference (pp. 380-391). Springer Nature Singapore.
6. Pushpendra Chaturvedi, Dr. Nand Kumar, Multi-objective optimization for building envelope design by genetic algorithm in composite climate of India, "International conference on Climate Change, Culture Heritage & Sustainable Habitat" Place: NIT Patna 2024
7. Sourojee Dutta, Nand Kumar, A Comprehensive Understanding of the Research Themes, Trends and Future Directions of Vernacular Architecture using Bibliometric Analysis, "ICTAC 24" Place: Chandigarh University, 2024
8. Priya Tyagi, Parul Bhyan, Bhavna Shrivastava, Nand Kumar, Rural Housing Sustainability in India: A Comprehensive Evaluation, "International Conference on Environmental Design, Material Science, and Engineering Technologies" Place: Abu Dhabi University, Dubai 2024
9. Tyagi, P., Bhyan, P., Shrivastava, B., Kumar, N. (2024). Indicative Direction in Construction Materials for Indian Suburbs. IOP Conference Series: Earth and Environmental Science. <https://doi.org/10.1088/1755-1315/1326/1/012152>
10. Tyagi, P., Bhyan, P., Shrivastava, B., Kumar, N. (2024). Epistemological Approach to Ascertain Human Comfort in Rural Houses in the Indian Context. In: Nandineni, R.D., Ang, S., Mohd Nawawi, N.B. Sustainable Resilient Built Environments. SRBE 2022. Advances in 21st Century Human Settlements. Springer, Singapore.
11. Bhyan, P., Tyagi, P., Shrivastava, B., Kumar, N. (2024). Classification of Sustainability Assessment Parameters for Residential Building Materials Using Relative Importance Index. In: Nandineni, R.D., Ang, S., Mohd Nawawi, N.B. (eds) Sustainable Resilient Built Environments. SRBE 2022. Advances in 21st Century Human Settlements. Springer, Singapore.
12. Sourojee Dutta, Nand Kumar, Debendra Nath Dash, Land Use Land Cover (LULC) Mapping and Spatial Growth Analysis using GIS Techniques for Urban Clusters of Jammu & Kashmir Region, India, "Urban Innovation Conference 2024" Place: SPA Bhopal, internationally renowned Conference
13. Krishna Goala, Nand Kumar, "Comprehensive Assessment and Mitigation Strategies for Urban Air Pollution in Jaipur, Rajasthan: A Focus on PM and Health Implications" 2024 International Conference on Climate Change, Cultural Heritage and Sustainable Habitat
14. Parul Bhyan, Priya Tyagi, Bhavna Shrivastava, Nand Kumar, Sustainability of Construction Materials Used in Building Envelope: Bibliometric Analysis Using R-Tool 2002-2022., "7th International Conference on Civil Engineering for Sustainable" Place: KUET University, Bangladesh, Internationally renowned Conference 2024
15. Diksha Bakar, Gaurav Panchal, Pushpendra, Nand Kumar, Assessment of Public Open Spaces as a Cultural Heritage in Walled City Jaipur, " International conference on Climate Change, Culture Heritage & Sustainable Habitat " Place: NIT Patna Place: NIT Patna 2024
16. Sanjay Choudhary, Nand Kumar, Optimizing Energy Efficiency and Constraining Costs in Affordable Housing through Strategic Architectural Design: A Case Study in the Rajasthan Context, "International Conference Climate Change, Cultural Heritage & Sustainable Habitat Patna, India" Internationally renowned Conference 2024

17. Chaturvedi, P., Kumar, N., Lamba, R., & Nachan, P. (2023). Multi-Objective Optimization of Building Envelope for Daylight and Energy Performance in Hot and Dry Indian Climate;10.18086/swc.2023.06.04.
18. Chaturvedi, P., Kumar, N., Lamba, R., & Nachan, P. (2023). Effect of building form on daylight and energy efficiency for educational building in composite climate. International Solar Energy Society SWC 2023, 1-11.
19. Pushpendra K, Kumar N, Lamba R, Exploring the Status of Urban Greenspaces in Indian Cities: An Analysis of Master Plan Documents and Recommendations for Improvement, ICUT-2023: International Conference on Urban Transformation for Climate Change Adaptation- 15-16 June 2023.
20. Pushpendra K, Kumar N, Lamba R, Assessment of Green Rating Systems in India: Barriers to Urban Development, ICUT-2023, International Conference on Urban Transformation for Climate Change Adaptation- 15-16 June 2023.
21. Pushpendra K, Kumar N, Lamba R, Multi-Objective Optimization-Based Methodological Framework for Net Zero Energy Building Design in India- International Conference on Artificial Intelligence, Blockchain, Computing and Security, 24-25 Feb 2023.
22. Pushpendra K, Kumar N, Lamba R, Retrofitting Strategies Towards Enhancing Visual Comfort for An Institutional Building: Optimizing Daylight, Uniformity and Glare in Grasshopper- 2nd International Conference on Innovations in Clean Energy Technologies 8th to 10th April 2023- MANIT Bhopal.
23. Sangwan A., Kumar N, Kumar A., Agarwal k., Chaturvedi P., 2023 analysis of Greenspaces Provision in Urban Planning of Cities of India. International Conference on urban transformation for climate change adaptation (ICUT2023); COEP Conference Booklet at Pune
24. Somya Mahlawat, Nand Kumar, Satish Pipralia, "A Review of Sustainability Lessons by Revisiting Traditional Built Environments", International Conference on Future Cities by: IIT Roorkee at IIT Roorkee // 2022.
25. Pushpendra CK, Kumar N, Lamba R, Nirwal V., "A Parametric Optimization for Decision Making of Building Envelope Design: A Case Study of High-Rise Residential Building in Jaipur (India).," International Conference on Advances in Energy Research (ICAER) by: Springer at IIT Bombay (Online) 2022.
26. Kshitiz Agarwal, Priya Tyagi, Dr. Nand Kumar (2022). Analysis of Public Awareness about District Disaster Management Plan: A Case of Dehradun City. International Conference on Multidisciplinary Aspects of Design. Enhancing the Connections K.R. Mangalam University.
27. Sangwan Akanksha, Kumar Nand, Kumar Ashwani, 2022, Dialogues and Advocacy for Sustainable Urban Greenspaces in the Urban Planning Process, International Conference of Creative Future (ICCF'22), May 20-21, 2022 MU Jaipur.
28. Sharma Manish, Sharma Bansari, Kumar Nand, Kumar Ashwani, 2022, Water Stress: Vulnerable Urban Areas, International Conference of Creative Future (ICCF'22), May 20-21, 2022 MU Jaipur.
29. Sangwan Akanksha, Kumar Nand, Kumar Ashwani, 2022, Dialogues and Advocacy for Sustainable Urban Greenspaces in the Urban Planning Process, International Conference of Creative Future (ICCF'22), May 20-21, 2022 MU Jaipur
30. Sharma, Manish; Sharma, Bansari; Matwa, Nandkumar & Kumar, Ashwani. (2022). Urban Water Resilience in Landscape of Digitally Connected Built Environment: An Assessment Matrix for Cities of Developing Nations. ECS Transactions. 107. 10.1149/10701.18457ecst.
31. Khan Abdur Raoof, Nand Kumar, Tarush Chandra, "Examining the Potentialities of Intelligent Transportation System in Improving the Transportation Facilities of Lucknow City." The 1st International conference on infrastructure Development (ICID); Theory Practice and Policy, April 29-30, 2021, by Adani Institute of Infrastructure Management. ISBN; 978-81-952843-4-4(e Book)
32. Edited International Conference Proceedings on Cities-2050 Planning, Governance and Management (Reference Book); INSC International Publisher, 2021

33. Manish Sharma, Dr. Nand Kumar and Dr. Ashwani Kumar, 2021, Existing Resilience Framework for Disaster Risk Management in India, 5th World Congress on Disaster Management (WCDM), November 24-27, 2021 Delhi [ISBN 9781032355429].
34. S. Choudhary, S. Pipralia, N. Kumar (2020) Reforming significance of Historic buildings with Energy Efficiency Studies: A case study of Indo Saracenic buildings in Jaipur, Rajasthan. Preliminary acceptance received, 4th Edition CITTA 2020, IEREK's International conference.
35. Khan Abdur Raof, Nand Kumar, Tarush Chandra, "Case Study of Energy Consumption and Carbon Emissions in Lucknow City Based on System Dynamic Approach." The 38th International system dynamics conference of System Dynamic Society, 2020, New York USA
36. Sharma Manish, Kumar Nand, Kumar Ashwani (2019), A Quest for Networked City in Developing Countries by Spatial Assessment of the Status of Urban Water System: A Case of Jaipur City, Architecture and Civil Engineering Conference (ACE 2019) Singapore (DOI: 10.5176/2301-394X_ACE19.613).
37. Sharma Manish, Kumar Nand, Kumar Ashwani (2018), Need for Water Management: A Case of Jaipur, International Conference on Urban Sustainability: Emerging Trends, Themes, Concepts & Practices, MNIT Jaipur, March 16th – 18th, ISBN: 9789386238481.
38. Sharma Sunil, Kumar Ashwani, Kumar Nand, Gupta Sobhagyawati, (2018) Developing a Net Zero Energy Building: A Case Study of an Institutional Library, International Conference on Urban Sustainability: Emerging Trends, Themes, Concepts & Practices, MNIT Jaipur, March 16th – 18th, ISBN: 9789386238481
39. Manish Sharma, Nand Kumar, Ashwani Kumar (2017) Need for Disaster Risk Resilience: A case of India, International Research Journal of Engineering and Technology (IRJET) Volume: 04 Issue: 11 pp 335-339.
40. Kumar, N., Tyagi, R., & Gupta, P. (2017). Study of Change in Land Use/ Activity in Malaviya Nagar, Jaipur city. International Conference on Modern Research in Architecture, Civil Engineering, Environmental Science for Sustainable Development (pp. 537-539). New Delhi: Krishi Sanskriti.
41. Kumar, N., Sharma, Y., & Yogesh. (2017). Status of Solid Waste Management in Malaviya Nagar of Jaipur city. International Conference on Modern Research in Architecture, Civil Engineering, Environmental Science for Sustainable Development (pp. 534-536). New Delhi: Krishi Sanskriti.
42. Kumar, N., Kumar, T., & Chaudhary, A. (2017). A Spatial Temporal Analysis of a Commercial Area- A Case of Gaurav Tower, Jaipur. International Conference on Modern Research in Architecture, Civil Engineering, Environmental Science for Sustainable Development (pp. 518-522). New Delhi: Krishi Sanskriti.
43. Kumar, N., Doye, T., & Mathur, A. (2017). Assessment of Social Infrastructure in Malaviya Nagar, Jaipur city. International Conference on Modern Research in Architecture, Civil Engineering, Environmental Science for Sustainable Development (pp. 530-533). New Delhi: Krishi Sanskriti.
44. Kumar, N., Chandan, S., & Verma, N. (2017). Non-Motorized Transport- A Sustainable Way to Streamline traffic congestion in commercial areas. International Conference on Modern Research in Architecture, Civil Engineering, Environmental Science for Sustainable Development (pp. 526-529). New Delhi Krishi Sanskriti.
45. Kumar, N., & Varun, B. M. (2017). Urban Land Entitlement- A Case Study of Rajasthan. International Conference on Modern Research in Architecture, Civil Engineering, Environmental Science for Sustainable Development (pp. 494-499). New Delhi: Krishi Sanskriti.
46. Kumar, N., & Thapa, V. (2017). Study of Open and Green Spaces in an Urban Neighborhood: Case Study of Malaviya Nagar, Jaipur. International Conference on Modern Research in Architecture, Civil Engineering, Environmental Science for Sustainable Development (pp. 523-525). New Delhi: Krishi Sanskriti.
47. Kumar, N., & Singh, A. (2017). Master Plan and Land Use Proposals: An analysis of Malaviya Nagar area. International Conference on Modern Research in Architecture, Civil Engineering, Environmental Science for Sustainable Development (pp. 510-513). New Delhi: Krishi Sanskriti.

48. Kumar, N., & Preet, G. (2017). Stringent Traffic Policies: A study of Traffic Congestion in Commercial Areas of Malaviya Nagar Jaipur. International Conference on Modern Research in Architecture, Civil Engineering, Environmental Science for Sustainable Development (pp. 515-517). New Delhi: Krishi Sanskriti
49. Kumar, N., Kumar, A., & Varun, B. M. (2017). Review of Building Byelaws of Walled City of Jaipur. International Conference on Trends in Architecture and Construction. Chandigarh: University Institute of Architecture Chandigarh University.
50. Kumar, N., Gochar, S., Sachdeva, N., & Kirat K. Narzary, A. K. (2017). Appraisal of Social Infrastructure in Walled City, Jaipur. International Conference on Trends in Architecture and Construction. Chandigarh: University Institute of Architecture Chandigarh University.
51. Kumar, N., Gaur, J., Basist, K., Mohindru, P., & Kumar, A. (2017). Status of Solid Waste Management in Reference to Smart City Guidelines: A Case Study of Walled City Jaipur. International Conference on Trends in Architecture and Construction.
52. Kumar, N., Kashmiri, A., & Chandra, T. (2017). Assessing the Needs and Planning Provisions for Industrial Areas in India: Jaipur. National Conference on Urban Environmental Management in India: Problems and Prospects (pp. 470-474). Jaipur: International Journal of Emerging Technologies.
53. Kumar, N., Sharma, S., Paul, S. K., & Jawaid, M. F. (2017). Land Use Suitability Analysis for Zone K-1 (Urban Extension), New Delhi. National Conference on Urban Environmental Management in India: Problems and Prospects (pp. 478-484). Jaipur: International Journal on Emerging Technologies.
54. Kumar N., Kumar A, Sharma S., (2017) The Quest for Environmental Sustainability in Educational Institutions, International Conference on Trends in Architecture and Construction- 2017, Chandigarh India, 18th September 2017
55. Kumar N., Kumar A., Venkata S.S., Yadav K.G., Krishnani V., (2017) Need for Preserving Green Spaces, A Case of Walled City, Jaipur, International Conference on Trends in Architecture and Construction- 2017, Chandigarh India, 18th September 2017
56. Sharma M., Kumar N., Kumar A, (2017), Need for Disaster Risk Resilience: A Case of India, International Conference on Theory of Architectural Design: Global Practices amid Local milieu, 14th - 16th April 2017 SMVDU Katra, McGraw Hill Education (India) P. Ltd. (ISBN no. 978-93-5260-628-3) pages: 290-293
57. Impact of Urbanization on Urban Water Bodies in Hyderabad city, JNT University, Hyderabad, 2016
58. Kumar, N., Devadas, V., & Panwar, M. (2016). Energy Management for Smart Habitat. Seminar on Towards Building Smart & Sustainable Infrastructure in Urban Development (pp. 159-166). New Delhi: Journal of Indian Building Congress.
59. Kumar N., Kashmiri A, (2015), Analysis of Planning Provisions for Industrial Estates in India, International Conference on Recent Advances in civil engineering, architecture and environmental engineering for sustainable development, 11 th -12 th July 2015 JNU New Delhi
60. Kumar, N., & Devadas, V. (2007). Integrated Urban Development Plan: A Scientific Approach. Seminar on Integrated Development of Towns as New Growth Centres (pp. 35-42). New Delhi: Journal of Indian Building Congress. Waste- An Energy Substitute in Construction, MREC, Jaipur, 2002.

C. Author/ Co-author of book chapter, reference material:

1. Tyagi, P., Bhyan, P., Shrivastava, B., Kumar, N. (2025). Urban Sprawl's Multifaceted Impact on Urban Areas: Insights from Indian Cities. In Sustainability and Urban Quality of Life: Research, Policy and Practice. (pp. 108–123). ISBN 9781032554754. Routledge, Taylor and Francis.
2. Monitoring of Municipal Solid Waste Operations in Urban Areas: A Review; Springer Nature Singapore 2024
3. Sangwan A, Chaturvedi P, Kumar N, Kumar A, Multi-level decision approach to evaluate the provision of urban green spaces in Rajasthan cities, "Restoring Urban Green Spaces: Reclaiming Nature for Resilient Cities" Springer Nature.2024

4. Sangwan A. Anand V. Kumar N. Kumar A. Jat M. Ahmed A., Development of Site Suitability Framework for Urban Greenspace: A case study of Sikar city, Rajasthan, India. *Environmental Earth Science* 10.1007/s12665-024-11898-3, Springer Nature 2024
5. Bhyan, P., Tyagi, P., Shrivastava, B., Kumar, N. (2024). Existing State of Group Housing Shortage and Household Quality of Life in India. In *Sustainability and Urban Quality of Life: Research, Policy and Practice*. (pp. 41–51). ISBN 9781032554754. Routledge, Taylor and Francis.
6. Bhyan, P., Tyagi, P., Doddamani, S., Kumar, N., & Shrivastava, B. (2023). Life Cycle Assessment of Lightweight and Sustainable Materials. *Elsevier* (pp. 117– 142). <https://doi.org/10.1016/B978-0-323-95189-0.00013-5>.
7. Akanksha Sangwan, Nand Kumar and Ashwani Kumar (2023). *Dialogues and Advocacy for Sustainable Urban Greenspaces in the Urban Planning Process*. Cambridge Scholars Publishing. ISBN- 1-5275-1253-3.
8. Sangwan A. Choudhary S. Anand V. Kumar N. Kumar A. Jat M. and Ahmed A.” A Mathematical Model for Temperature-Reducing Potential of Urban Greenspaces. *Earth Science Informatics*”10.1007/s12145-023-01166-6 2023 Springer Nature.
9. Sangwan A. Kumar N. Kumar A. Amorphous Nature of Green spaces in Indian Urban Planning, *Journal of International Review of Spatial Planning & Development J-Stage* 2187–3666-year 2023
10. Sangwan A. Kumar N. Kumar A., Defining the Urban Greenspaces in the Indian context, *Architecture & Planning Journal*, 10.2478/aup-2023-0008 Sciendo 2023
11. Chaturvedi, P. K., Kumar, N., & Lamba, R. (2023). Multi-objective optimization based methodological framework for net zero energy building design in India. In *Artificial Intelligence, Blockchain, Computing and Security Volume 1* (pp. 187-194). CRC Press.
12. Chaturvedi, P. K., Kumar, N., & Lamba, R. (2023, December). Multi-objective Optimization for Visual, Thermal, and Energy Performance of Glazing and Shading Assemblies in Temperate Climate Zone of India. *Advances in Clean Energy and Sustainability, Volume 1*, (pp. 209-220). Singapore: Springer Nature Singapore. iv
13. Chaturvedi, P. K., Kumar, N., & Lamba, R. (2023, December). Multi-objective Optimization Approach for Envelope Design in Naturally Ventilated Building of Jaipur City: A Case Study of Residential Building. *Advances in Clean Energy and Sustainability*, (pp. 221-235). Singapore: Springer Nature Singapore.
14. Manish Sharma, Bansari Sharma, Nand Kumar, Ashwani Kumar, 2023, *Water Stress: Vulnerable Urban Areas, The Future of the Creative Industries: A Global Perspective*, Cambridge Scholars Publishing PP 130-138 (ISBN: 9781527512535)2023
15. Shradha Chandan, Bansari Sharma, Satish Pipralia, Nand Kumar & Ashwani Kumar, 2023, *Mainstreaming Community Engagement and Participation in Urban Planning Education: A Case Study of MNIT, Jaipur, Community Engagement in Higher Education: From Theory to Practice*, Edited By Manju Singh, Purva Bhatt, Wafa Singh, Kumar Sambhav Pareek [ISBN no. 9781032195773]
16. Bhyan, P., Tyagi, P., Doddamani, S., Kumar, N., Shrivastava, B. (2023). Life cycle assessment of lightweight and sustainable materials. In *Elsevier* (pp. 117–142). <https://doi.org/10.1016/B978-0-323-95189-0.00013-5>.
17. Manish Sharma, Nand Kumar, Ashwani Kumar (2022). *Existing Resilience Framework for Disaster Risk Management in India*. Routledge Publication. 5th World Congress on Disaster Management: Volume I. ISBN- 9781003341956
18. Bhavna Shrivastava, Nand Kumar, Priya Tyagi (2022). *Expedition of Architectural Design to Virtual Reality and Digital Design*. ISBN: 978-93-5547-244-1, eBook ISBN: 978-93-5547-245-8. DOI: 10.9734/bpi/nvst/v10/5274F.
19. Parul Bhyan, Nand Kumar, Bhavna Srivastava, *Requisite Sustainable Development Contemplating Buildings: Economic and Environment Sustainability.” Addressing Environmental Challenges Through Spatial Planning* (pages 269-288).2022
20. Chaturvedi, P. K., Kumar, N., Lamba, R., & Nirwal, V. (2022, July). A Parametric optimization for

decision making of building envelope design: a case study of high-rise residential building in Jaipur (India). Green Energy and Technology; (pp. 453-465). Singapore: Springer Nature Singapore.

21. Parul Bhyan, Nand Kumar, Bhavna Srivasatava, (2021). Behavioral Factors Affecting the Adoption of Sustainable Housing Practices: Indian Context” in Advanced Aspects of Engineering Research Vol. 14, 20 May 2021, Page 92-97.

A. List of Books Published /Edited

1. Edited International Conference proceedings on Urban Sustainability: Emerging Trends, Themes, Concepts & Practices, MNIT Jaipur, March 16th – 18th, ISBN: 978-93-86238-48-1(co-editors Dr. Tarush Chandra, Dr. Ashwani Kumar, Dr. Nand Kumar and Dr. Pooja Nigam) published by Excellent Publishing House India.2018
2. Edited conference proceedings on ‘Urban Environmental Management in India: Problems and Prospects’ (2017), ISBN No. 978-93-86238-12-2(co-editors Dr. Tarush Chandra, Dr. Ashwani Kumar, Dr. Nand Kumar, Dr. Pooja Nigam and Ar. Niruti Gupta), published by Excellent Publishing house India.
3. Kumar, N., & Chetiwal, S. (2017). The Urban Challenge: An Assessment of Public Transportation Systems. Germany: LAP Lambert Academic Publishing, ISBN 978- 620-2-07877-1.
4. Kumar, N., & Devadas, V. (2017). Planning for Sustainable Development of Walled City Area of Jaipur. Germany: LAP Lambert Academic Publishing, ISBN 978-3-659-59680-3.
5. Kumar, N., & Kashmiri, A. (2017). Planning Guidelines for Developing Industrial Areas in Jaipur. Germany: LAP Lambert Academic Publishing, ISBN 978-620-2- 07124-6.

9. International and National Conferences Organized:

1. 1st International conference on “Urban Transformation for Climate Change Adaptation” from 6th -7th April 2023 at COEP technological university, Pune, India.
2. Organized National Conference on ‘CITIES 2050: Planning, Governance and Management’, from 23rd to 24th July 2021 at Department of Architecture and Planning, MNIT Jaipur.
3. International Level Conference on International Conference on Future Cities-2019 at IIT Roorkee, India from 11-12-2019 to 13-12-2019.
4. Organized International Conference on ‘Urban Sustainability: Emerging Trends, Themes, Concepts and Practices’, from 16th to 18th March, 2018 at Department of Architecture and Planning, MNIT Jaipur.
5. Organized National Conference on ‘Urban Environmental Management in India: Problems and Prospects’ on 20th and 21st January 2017 at Department of Architecture and Planning, MNIT Jaipur

10. Training, Workshop and Capacity Building Programmes Organized:

Sr. N.	Title of the Programme	Role	Funding Agency	Duration	Status
1.	Enabling City-Region Development: Strategic Frameworks for Regional Growth, Corridor Integration and Sustainable Urban Urbanization	PI	AMRUT Center MNIT Jaipur	18-12-205 to 19-12-2025	Completed
2.	Co-creating Inclusive Agricultural Finance System	PI	AMRUT Center, MNIT Jaipur	16-12-2025	Completed

3.	Draft Transit Oriented Development Policy 2025	PI	AMRUT Center MNIT Jaipur	22 nd Sept 2025	Completed
4.	Newly Recruited Executive Officers IV & Revenue Officers II	PI	AMRUT Center MNIT Jaipur	01 st Sept to 15 th Oct 2025	Completed
5.	Smart Cities and Mobility Research “Tools, Technology and Application from 04.08.2025 to 08.08.2025	PI	SPARC and AMRUT Center MNIT Jaipur	04.08.2025 to 08.08.2025	Completed
6.	Geospatial Technologies & AMRUT Guidelines for Master Plan Formulation	PI	AMRUT Center MNIT Jaipur	04 th August - 08 th August 2025	Completed
7.	Geospatial Technologies & AMRUT Guidelines for Master Plan Formulation	PI	AMRUT Center MNIT Jaipur	28 th July - 01 st August 2025	Completed
8.	Three training Programs on Geo spatial Technologies and Amrut Guidelines for GIS based Master Plan Formulation	PI	Indo-French Centre for the Promotion of Advanced Research (IFCPAR) Lodhi Road, Delhi	10-08-2025 to 30-08-2025	Completed
9.	International Workshop on “A data driven approach towards smart cities”	PI	SPARC	21st July - 25th July, 2025	Completed
10.	Geospatial Technologies & AMRUT Guidelines for Master Plan Formulation	PI	AMRUT Center MNIT Jaipur	21 st - 25 th July 2025	Completed
11.	A Data Driven Approach Towards Smart Cities	PI	AMRUT Center MNIT Jaipur	21 st July - 25 th July 2025	Completed
12.	Drainage Master Planning	PI	AMRUT Center MNIT Jaipur	25 th - 27 th June 2025	Completed
13.	Catchment restoration and conservation of water bodies in urban areas with community-based O & M	PI	AMRUT Center MNIT Jaipur	11 th - 13 th June 2025	Completed
14.	Urban Waste Management, Resource Recovery & Community Engagement	PI	AMRUT Center MNIT Jaipur	2 nd - 4 th June 2025	Completed
15.	Four Training Programs on 1. Waste Processing Techniques and community Participation from May 07-09,2025 2. Drainage Master	PI	RUDSICO Jaipur	May 07- 09,2025	Completed

	Planning - May 13-15 20253. Catchment Restoration and Conservation of Water Bodies in Urban areas with Community Based O & M			May 13-15 2025	
16.	Waste Processing Techniques & Community participation	PI	AMRUT Center MNIT Jaipur	7 th - 9 th May 2025	Completed
17.	Workshop on Technology Enabled Urban Development	PI	AMRUT Center MNIT Jaipur	24 th March 2025	Completed
18.	Effectiveness of DAY-NULM & Evaluating the Entrepreneurial Impact of the PM SVANidhi Scheme	PI	AMRUT Center MNIT Jaipur	9 th - 13 th March 2025	Completed
19.	Sustainable Building Planning, Design, Construction and Maintenance	PI	AMRUT Center MNIT Jaipur	21 st - 25 th January 2025	Completed
20.	Net Zero Buildings in India: Decarbonizing the Built Environment	PI	AMRUT Center MNIT Jaipur	20 th - 24 th January 2025	Completed
21.	Application of Remote Sensing and GIS in Urban Planning	PI	TEQIP-III sponsored at MNIT Jaipur	11 th – 15 th March 2021	Completed
22.	Formulation of City Master Plans and Use of Geospatial Technologies	PI	TEQIP-III sponsored at MNIT Jaipur	21 st – 25 th Feb. 2020	Completed
23.	System Dynamics Simulation & Research Techniques	PI	TEQIP-III sponsored at MNIT Jaipur	31 st Aug.- 4 th September 2019	Completed
24.	Indigenous Built Forms in Mountain Regions of India and Implementation of Building Codes	PI	HIA Ladakh	17 th – 21 st June 2019	Completed
25.	FDP on Sustainable and Energy Efficient Buildings; Council of Architecture (COA) funded	PI	MNIT Jaipur	25 th Feb. – 1 st March 2019	Completed
26.	Application of Remote Sensing and GIS in Preparation of Master Plan and Zonal Development Plan	PI	TEQIP-III sponsored at MNIT Jaipur	31 st Jan. - 4 th Feb. 2019	Completed
27.	Application of System Dynamics Modeling & Research Methodology	PI	TEQIP-III sponsored at MNIT Jaipur	4 th – 8 th Sept. 2018	Completed

28.	FDP on Vernacular Architecture and Traditional Constructional Practices in Hot and Dry Climate Region	PI	(COA) funded, MNIT Jaipur	21 st - 25 th May 2018	Completed
29.	FDP on Development Regulations and Built Environment	PI	(COA) funded, MNIT Jaipur	22 nd - 26 th Jan.2018	Completed
30.	FDP on Energy Efficient Building Design	PI	(COA) funded, MNIT Jaipur	18 th - 22 nd Dec. 2017	Completed

GIAN Programmes:

Sr. N.	Title of Programme	Role	Duration	Funding Agency	Status
1.	City Energy Management Modeling and Practice	PI	10-03-2018 to 14-03-2018	Ministry of Human Resource Development, Govt. of India	Completed
2.	Resource Sensitive Urban Design	PI	26-02-2018 to 02-03-2018	Ministry of Human Resource Development, Govt. of India	Completed
3.	Climate Responsive Design Development for Energy Efficient Buildings	PI	05-02-2018 to 09-02-2018	Ministry of Human Resource Development, Govt. of India	Completed

11. Summer/Winter Schools Attended

1. GIAN Program on Urban Analysis at IIT Roorkee in March 15-18, 2018
2. Urban Dynamics and Planning Techniques at IIT Roorkee in June 26-30, 2017.
3. GIAN Programme: Low Carbon Built Environments: Design approach and performance assessment at IIT Roorkee in April 9-18, 2017
4. Modeling Techniques for Sustainable Built Environment at IIT Roorkee in March 17-19, 2017
5. Energy Efficient Building Design at New Delhi in November 29-30, 2016
6. GIAN Programme: Housing for All: An urban districts and area-based approach towards sustainability at IIT Roorkee in November 4-10, 2016
7. GIAN Programme: Land Use / Land Cover Change Modelling and Prediction at MNIT Jaipur in July 4-8, 2016
8. Literature Review and Reference Management at MNIT Jaipur in July 1-2, 2016

9. Earthquake Resistant Design & Construction at MNIT in 2009
10. Application Orientation in Engineering Mathematics at MNIT in 2007
11. Urban Water Management at MNIT in 2007
12. Water Management: A Global perspective at MNIT in 2007
13. Contemporary Trends in Interior Design at IIT Roorkee in 2007
14. Remote Sensing and GIS Application Special at IIT Roorkee in 2005
15. Application for FEM for Structural Analysis at MNIT 2004
16. Techno-Economic Aspect of Land Filing and Recycling at MNIT Jaipur 2003

12. International Visit.

1. Visiting as Project PI at UCL London for lecture series on A smart city Geo- Spatial Data Catalogue representing complex Urban Mobility Challenges in India on 8-feb-2025 to 22-feb-2025.
2. Visiting Guest Lecturer at Technische University, Darmstadt, for lecture series on Urbano Course between 15-october-2018 and 19 October 2018.

22. Outreach Activities:

S. No	Category	Name of Activity	Organization	Place	Position	Date of Activity
1.	National	Regional Planning Studio (M.Plan-URP II year III Sem)	SPA Vijayawada	Andhra Pradesh	External Jury Member	09 th & 10 th Dec. 2025
2.	National	End Term Practical Examination of B.Arch. 3 rd Semester Course Architectural Design II discussion on possible research and consultancy collaborations under AMRUT Centre	NIT Hamirpur	Himachal Pradesh	External Expert	05 th Dec. 2025
3.	National	workshop titled "Impact Assessment and Scenario Building in Environmental Planning Analysis	SPA Vijayawada	Andhra Pradesh	Expert	8 th & 9 th Nov. 2024
4.	National	Master of Planning (URP) II year, III Semester Regional Planning Studio	SPA Vijayawada	Andhra Pradesh	External Jury Member	20 th Sept. 2024
5.	National	Short term course (e-STC) on 'Emerging Research Tools and Techniques in Architecture'	NIT Hamirpur	Hamirpur	Speaker	22-04-2024

6.	National	FDP - "Developmental Regulations and Built Environment	NIT Hamirpur	Himachal Pradesh	Lecture/ Expert Talk	22 nd -26 th Feb. 2024
7.	National	Energy Efficient Policies and Development Regulations	NIT Hamirpur	Himachal Pradesh	Guest Expert Lecture	24 th Feb. 2024
8.	National	Developmental Regulations and Built Environment	NIT Hamirpur	Hamirpur	Speaker	22-02-2024
9.	National	Board of Studies, VGU Jaipur	VGU Jaipur	Jaipur	Member	14-03-2022
10.	National	Workshop on Sustainable Practices in the Built Environment	NIT Hamirpur	Hamirpur	Speaker	26-12-2021
11.	National	E-workshop on Sustainable Built-Environment in Hill (SBH-2021)	NIT Hamirpur	Hamirpur	Speaker	11-09-2021
12.	National	Question Paper Formation	Jagannath University	Jaipur	Paper Settler	05-04-2021
13.	National	Board of Studies for Master of Planning, Faculty of Architecture and Planning, VGU	VGU Jaipur	Jaipur	Member	16-03-2021
14.	National	ICFC 2019	IIT Roorkee	Roorkee	Technical committee member	11-12-2019
15.	National	Editing Process for ICFC-2019	IIT Roorkee	Roorkee	Professional Activist	22-10-2019
16.	National	FDP	Shri Mata Vaishno Devi University	J & K	Speaker	01-08-2019
17.	National	Committee for Prevention of accidents at various traffic junctions	JDA Jaipur	Jaipur	Member	29-07-2019
18.	International	Visiting Lecturer	Technical University Darmstadt	Darmstadt	Visiting Lecturer	12-06-2018

19.	National	GIAN Programme on Urban Analytics	IIT Roorkee	Roorkee	Participant	06-06-2018
20.	National	Attending 10 th GRIHA Summit	TERI	New Delhi	Participant	May 2018

21. Advisory and Technical Committee Membership of Conferences

1. Co-chaired a session at International Conference on **Future Cities-2019**, 11th to 13th December 2019 IIT Roorkee
2. Member Technical committee and Review Committee for International Conference on **Future Cities-2019**, 11th to 13th December 2019 IIT Roorkee
3. Chaired a session International Conference on ‘**Urban Sustainability: Emerging Trends, Themes, Concepts and Practices**’, from 16th to 18th March, 2018 at Department of Architecture and Planning, MNIT Jaipur.
4. Chaired a session at National Conference on ‘**Urban Environmental Management in India: Problems and Prospects**’ on 20th and 21st January 2017 at Department of Architecture and Planning, MNIT Jaipur

For more information kindly visit following links:

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Web of Science Profile	https://www.webofscience.com/wos/author/record/39348341
Research Gate Profile	https://www.researchgate.net/profile/Nand-Kumar-19
Vidwan Profile	https://vidwan.inflibnet.ac.in/profile/108742