

# PARTNERSHIP DEVELOPMENT WORKSHOP

Urbanisation and Resilience against Natural and Man-made Disasters- Developing a Roadmap for Building Resilient Cities in India

**13<sup>th</sup> – 16<sup>th</sup> Dec 2021 | Wolverhampton | Science Park,  
University of Wolverhampton, UK**

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**Lead Partner Universities:**

Dates	Online links
13 <sup>th</sup> Dec 2021	Morning session – <a href="#">Click here to join the meeting</a>
	Afternoon session – <a href="#">Click here to join the meeting</a>
14 <sup>th</sup> Dec 2021	Morning session – <a href="#">Click here to join the meeting</a>
	Afternoon session – <a href="#">Click here to join the meeting</a>
15 <sup>th</sup> Dec 2021	Morning session – <a href="#">Click here to join the meeting</a>
	Afternoon session – SITE VISIT
16 <sup>th</sup> Dec 2021	Morning session – <a href="#">Click here to join the meeting</a>
	Afternoon session – <a href="#">Click here to join the meeting</a>

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## PROGRAMME SCHEDULE

Date: 13 <sup>th</sup> Dec 2021		
Time	Activity	Resource Person
9:00-9:30	Registration	
9:30-9:50	Welcome address	Lead coordinators (Dr Shashank Gupta, Prof Vasant Matsagar, Head of SoABE of UoW)
9:50-10:05	Overview of UKIERI and PDW	Representative from British Council & DST
<b>SESSION 1 (Chair: Prof Chaminda Pathirage, Co-chair Dr. Shashank Gupta)</b>		
10:05-10:45	Opening Keynote – Mainstreaming the Uptake of Low Cost Flood Resilience Measures in UK Homes: Lessons for India	Prof David Proverbs (Dean of FSE of University of Wolverhampton)
10:45-11:05	Networking and Tea break	
11:05-11:30	Assessing the earthquake resilience of urban areas: the 2014 Ludian Earthquake	Dr Konstantinos Skalomenos – University of Birmingham
11:30-11:55	Virtual presentation – An overview of Steel-Reinforced Grout (SRG) Jacketing Application	Dr Georgia Thermou – University of Nottingham
11:55-12:20	Resilience-Based Design of Precast Post-tensioned segmental bridge piers	Dr Ehsan Ahmadi – Birmingham City Univeristy
12:20-13:30	Networking Lunch	
<b>SESSION 2 (Chair: Dr Marina Bock and Co-chair Dr Adhikari)</b>		
13:30-14:10	Virtual Keynote – A holistic approach to building resilient and sustainable cities	Amy Macdonald – Principal and Resilience Practice lead at Thornton Tomasetti (Industrial speaker)
14:10-14:35	Virtual Presentation - A Probabilistic Seismic Risk Assessment Framework: case study Adapazari, Turkey	Dr Zuhal Ozdemir – University of Sheffield
14:35-15:00	Virtual Presentation - Resilience and vulnerability-based infrastructure interdependencies	Dr Donya Hajjalizadeh – University of Surrey
15:00-15:20	Networking and Tea Break	
15:20-15:45	Multihazard retrofit of steel and steel-concrete composite structures	Dr Georgios Papavasileiou - University of Wolverhampton
<b>SESSION 3 (Group discussion)</b>		
15:45-16:45	Discussion of emerging themes on day 1 with applicability to Indian context – Resilience of cities in Indian context	Leads - Prof Matsagar, Prof. Kapuria, Dr. Shashank Gupta, Dr Suresh Renukappa
16:45-17:00	Close	All participants (online and in-person)

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## PROGRAMME SCHEDULE

Date: 14<sup>th</sup> Dec 2021

Time	Activity	Resource Person
9:00-9:10	DAY 1 Recap	Shashank Gupta and Vasant Matsagar
<b>SESSION 4 (Chair: Dr Ehsan Ahmadi and Co-chair Dr Suresh Renukappa)</b>		
9:10-9:50	Virtual Keynote – The use of technology as a catalyst for strengthening stakeholder collaboration in building disaster resilience	Prof Terrance Fernando – University of Salford
9:50-10:30	Virtual Keynote – Title awaited	Prof Sriman Kumar Bhattacharyya– IIT Kharagpur
10:30-10:50	Networking and Tea break	
10:50-11:15	Application of Bayesian networks for assessment of disruption to school systems under combined flood and seismic hazards	Ahsana Parammal Vatteri – Unversity College London
11:15-11:40	New development on sustainability and durability of reinforced concrete structures	Dr Meini Su – University of Manchester
11:40-12:05	Developing design guidelines for structural aluminium	Dr Marina Bock – University of Wolverhampton
12:05-12:30	Structural performance of concrete-filled aluminium alloy columns under axial compression	Dr Georgios Kamaris – Liverpool John Moores University
12:30-13:30	Networking Lunch	
<b>SESSION 5 (Chair: Dr Irwanda Laory and Co-chair Dr Konstantinos Skalomenos)</b>		
13:30-14:10	Keynote – Improving the seismic performance of new and existing buildings through dynamic interaction with secondary structures	Dr Alessandro Palmeri – Loughborough University
14:10-14:50	Keynote - Title awaited	Prof Matsagar - IITD, India
14:10-14:35	Multi-hazard assessment of building facades and their enhancement using smart materials.	Dr Shashank Gupta – University of Wolverhampton
14:35-15:00	Behaviour of Underground Structures against Man-Made Disaster and their Mitigation Strategy	Prof M.D Goel - VNIT
15:00-15:20	Networking and Tea Break	
15:20-15:45	Enhance robustness of steel connections by improving bolts contribution	Mohamad Shaheen – Loughborough University
<b>SESSION 6 (Round table discussion)</b>		
16:00-17:00	Round table disucssions on theme 2 – focus on seismic excitation and extreme loading on city infrastructure	Lead – Prof. Matsagar, Prof Kapuria, Dr. Shashank Gupta, Dr. Palmeri

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## PROGRAMME SCHEDULE

Date: 15<sup>th</sup> Dec 2021

Time	Activity	Resource Person
9:00-9:05	RECAP	Workshop chair – Shashank Gupta and Vasant Matsagar
<b>SESSION 7 (Chair: Dr Alessandro Palmeri, Co-chair Dr Georgios Kamaris)</b>		
9:05-9:30	GLOSI (Global Library of School Infrastructure): Tools and guidelines for improving the disaster resilience of school infrastructure	Dr Rohit Adhikari – University College London
9:30-9:55	Artificial Intelligence and Structural Health Monitoring for Improving Disaster Resilience	Dr Irwanda Laory – Warwick University
9:55-10:25	Keynote – Measuring Disaster Resilience at Community Level: MOBILISE Approach	Prof Chamina Pathirage – University of Wolverhampton
10:25-10:45	Networking and Tea Break	
10:45-11:15	Resilient Building design against Fire Hazard	Dr RuiRui Sun – Director Fire Safety Division at Hydrock (Industrial speaker)
11:15-11:40	Understanding the behaviour of buildings in hilly regions under multiple hazards	Professor Sandip Saha – IIT Mandi
<b>SESSION 8 (Group discussion)</b>		
11:40-12:30	panel discussion on the research themes and ideas for developing roadmap for resilient cities in Indian	Lead – Prof Pathirage, Dr Shashank Gupta, Prof Matsagar, Prof Kapuria
12:30-13:30	Networking lunch	
13:30-17:00	Visit/tour to the National Brownfield Institute (underconstruction) and the Springfield Campus – Europe’s largest Architecture and Built Environment campus	
18:00-21:00	Networking and Workshop Dinner	Molinieux

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## PROGRAMME SCHEDULE

Date: 16<sup>th</sup> Dec 2021

Time	Activity	Resource Person
9:00-9:15	RECAP	Workshop chair – Shashank Gupta and Vasant Matsagar
<b>SESSION 9 (Chair: Dr Shashank Gupta and co-chair Dr Georgios Papavasileiou)</b>		
9:15-9:55	Keynote – Baseline Signal-Free Structural Health Monitoring of Critical Infrastructure Towards Robust Resilience	Prof Santosh Kapuria
9:55-10:25	what is impact, pathways to create impact, Challenges and drivers and opportunity within Disaster/ Emergency Management	Chris Wyatt – Research office at University of Wolverhampton
10:25-10:45	Networking and Tea Break	
10:45-11:10	Business Resilience During COVID-19 pandemic	Dr Suresh Renukappa – University of Wolverhampton (guest lecture)
11:10-11:35	A method to evaluate community resilience in the face of multiple threat kinds which can inform intervention design decisions	Dr Tim Ferris – Cranfield University
11:35-12:05	UK Research base, funding opportunities and International cooperations	Rupert Avis – Project support office at the University of Wolverhampton
12:05-12:25	Research base and funding opportunities in India	Prof Vasant Matsagar or someone from Indian delegation
12:25-13:30	Networking lunch	
<b>SESSION 10 (Break-out session)</b>		
13:30-14:45	Break-out sessions to discuss research collaborations and develop research proposals addressing the theme of the workshop	
<b>SESSION 11 (Research proposals/ideas presentations)</b>		
14:45-15:30	Propopsal and research idea presentations for discussion – feedback on research themes, enhancing research impact, building collaboration with stakeholders.	Lead – Prof Matsagar, Prof Kapuria, Prof. Pathirage, Dr Shashank Gupta
15:30--15:50	Networking and tea break	
15:50-16:45	Key highlights and discussions on take aways from the workshop. Roundable discussion on research roadmap – feedback and concluding remarks	All Participants
16:45-17:00	Closing – Certificate distribution	

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