

COSVARD 2020 – 3rd International Conference on Smart Villages and Rural Development

*Organized by
Smart Villages Lab, The University of Melbourne
and
Assam Engineering College, Assam, India*

Online Webinar
Date: 07 - 08 December 2020

Webinar Link:

Please click the link below to join the webinar:

<https://unimelb.zoom.us/j/83222179841?pwd=YndtbEF5eEJVOVQ1U1BlcXgvZXdDZz09>

Webinar ID: 832 2217 9841

Password: cosvard20

Final Program Schedule (updated 07 Dec 2020)



Agenda for Opening Ceremony and Inauguration
Day 1 - Monday 07th December 2020
2:30pm (AEDT*) – 4:00pm (AEDT)
9:00am (IST#) – 10:30am (IST)

*Australian Eastern Daylight Time #Indian Standard Time

Anchored by: Dr Purobi Patowary (Assam Engineering College)

2:30pm (AEDT) 9:00am (IST)	Welcome and Introduction [A/Prof Hemanta Doloi, Chair] Director, Smart Villages Lab, The University of Melbourne
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One minute prayer showing respect for the Departed Soul of the Ex-CM of Assam Tarun Gogoi who pioneered the Smart Villages vision and provided unconditional support in our mission

2.40pm (AEDT) 9:10am (IST)	Welcome Speech [Prof Atul Bora, Co-Chair] (Principal, Assam Engineering College)
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2.50pm (AEDT) 9:20am (IST)	Inaugural Address, COSVARD 2020 [Prof Dhiraj Bora] Vice Chancellor, Assam Science and Technology University, Assam, India]
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3:00 pm (AEDT) 9:30am (IST)	International Perspective [Prof Mark Burry, AO] Swinburne University of Technology, Victoria, Australia
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3:10 pm (AEDT) 9:40am(IST)	National Perspective, COSVARD 2020 [Mr Samir Baruah] Top Ex-Banker, Mentor & Advisor, Laghu Udyug Bharti, NE
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3:20 pm (AEDT) 9:50am(IST)	National Perspective, COSVARD 2020 [Mr Mrinal Talukdar] Journalist, Film Maker, Author and Social Worker
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3:30 pm (AEDT) 10:00am (IST)	International Perspective [Assoc. Prof Robert Crawford] The University of Melbourne
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3:40pm (AEDT) 10:10am (IST)	Assam Perspective [Dr Arvind Phukon] Past Rotary District Governor Ph.D.,D.I.C.,P.E.,D.Sc. (Honorary), President/Founder, Core Professional Group for the Brahmaputra (CPGB), Former Professor of Civil Engineering, University of Alaska, Anchorage, USA, CEO/Founder , Phukan Inc., Consulting Engineering Company, Anchorage, Alaska (USA)
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3:50 pm (AEDT) 10:20am (IST)	International Perspective [Dr Hannah Robertson] The University of Melbourne
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3:55 pm (AEDT) 10:25am (IST)	Vote of Thanks [A/Prof Hemanta Doloi]
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Technical Session starts at 4:00pm (AEDT)
10:40am (IST)



Technical Session		
Time	Day 1 - Monday 07 th December 2020	
4:10pm (AEDT) 10:40am (IST)	Keynote 1: Prof Mark Burry, AO, Director (Smart Cities Research Institute) Swinburne University of Technology, Victoria, Australia <i>"Smart Village Digital Twins: First Steps to Meeting the Challenges"</i>	
4.40 pm 11:10am (IST)	Session 1: Housing - Resilience	
	Chair: A/Prof Robert Crawford	Authors
Paper 1	Design and fabrication of a flood proof house to overcome the flood hazards in rural areas of Assam, India	Manash Bhuyan, Imran Hussain Ahmed, Bappi Chamua, Manash Jyoti Medok, Raju Ronghang, Mousumi Gogoi <i>Assam Engineering College, Assam, India</i>
Paper 2	Ideation of Smart Village: A Framework to Make Indian Villages Self-Sustained	Navneet Munoth, Ekansh Jain <i>Maulana Azad National Institute of Technology, Bhupal, India</i>
Paper 6	Lack of Rural Infrastructure: The Impact on Economic Development, A Case Study of South Salmara region, Assam.	Noin Rifatul Khair Mazumder, Imtiaz Hussain <i>Assam Engineering College, Assam, India</i>
5.40pm (AEDT) 12:10pm (IST)	Break	
5.50pm (AEDT) 12:20pm (IST)	Session 2: Housing – Design	
	Chair: Dr Hannah Robertson	Authors
Paper 5	Thermal Analysis of Local jute-fiber as cavity insulation for tropics	Rezuana Islam, Sajal Chowdhury, Shajib Paul, Mofassera Jahan, Sumiaya Sultana, Angshuman Roy, Sadman Ali, Nazneen Sultana Nisu, Rahela Tabassum <i>Chittagong University of Engineering & Technology (CUET), Chittagong, Bangladesh.</i>
Paper 4	Creating Smart Villages through context specific workshops	Hemanta Doloi <i>The University of Melbourne, Australia</i>
Paper 7	Sustainable Livelihood Approach to Remodel Munda Homestead: Case Study of Shaym Nagar, Satkhira	Simita Roy, Shuvra Das, Anirudva <i>Bangladesh University of Engineering and Technology (BUET), Bangladesh</i>



Paper 8	Research Methods to investigate occupants' domestic environmental experiences for EXD framework	Sajal Chowdhury, Masa Noguchi, Hemanta Doloi <i>The University of Melbourne, Australia</i>
7:10 pm (AEDT) 1:40pm (IST)	Break	
7.45pm (AEDT) 2:15pm (IST)	Keynote 2 (revised): Mr Samir Baruah , Top Ex-Banker, Mentor & Advisor, Laghu Udyug Bharti, NE <i>"Rural Development – need for a collaborative effort"</i>	
8.15pm (AEDT) 2:45pm (IST)	Session 3: Infrastructure	
	Chair: Dr Manjuri Hazarika	Authors
Paper 9	A Water Supply and Sanitation study of the Sundarbari village around Jalukbari, Assam	Sudeshna Purkayastha, Rimpi Sharma <i>Assam Engineering College, Assam, India</i>
Paper 10	Bamboo as a resource in making villages smart	Bipasha Das and Nayanmoni Chetia Jorhat Engineering College, Assam, India
Paper 13	Bankfiltration as water source: A case study of Phuentsholing, Bhutan	Medalson Ronghang, Partha Jyoti Sarma, Mun Mun Basumatary, Subham Shekhar Roy, Gitanjali Wary <i>Bineswar Brahma Engineering College, Assam, India</i>
9.15pm (AEDT) 3:45pm (IST)	End of Day 1	



Day 2 - Tuesday 08 th December 2020		
2:30pm (AEDT) 9:00am (IST)	Keynote 3: Prof KN Satyanarayan, Director (IIT Tirupati) <i>"Smart Villages - Role of Academic Institutions"</i>	
3.00pm (AEDT) 9:30am (IST)	Session 4: Sustainability	
	Chair: A/Prof Hemanta Doloi	Authors
Paper 14	Smart Rural Hub: A resilience approach in Bangladeshi 'Char' communities	Nabeela Nushaira Rahman ¹ , Md. Obidul Haque ² , Hassan Md. Mainul ³ ^{1,2} BRAC University, Bangladesh ³ Premier University Chittagong, Bangladesh
Paper 15	Implementation of alternative affordable materials in sustainable rural housing design	Md. Obidul Haque ¹ , Bibi Ummay Tasnim Munzarin ¹ , Shaswati Saikia ³ ^{1,2} Premier University Chittagong, Bangladesh ³ Kaizen Architecture & Design Studio, Bangladesh
Paper 18	Multiculturalism and Socio-cultural integration in the bottom-up approach to rural housing: A multi-case study in Assam, India	Velyne Katharpi and Hemanta Doloi <i>The University of Melbourne, Australia</i>
4.00pm (AEDT) 10:30am (IST)	Break	
4.15pm(AEDT) 10:45am (IST)	Keynote 4: Prof KC Iyer (IIT Delhi) <i>"Infrastructure, connectivity and growth of India"</i>	
4.45pm(AEDT) 11:15am (IST)	Session 5: Infrastructure	
	Chair: Prof Jayanta Pathak	Authors
Paper 11	A Smart Bi-Parametric Approach for Homogeneous Delineation of Rural Roads	Eddula, Sai Vighnesh, Peraka, Naga Siva Pavani, Biligiri, Krishna Prapoorna <i>Indian Institute of Technology Tirupati, India</i>
Paper 12	LCA Framework for Utilization of Excavated Granulates in Pavement Systems	Aman Singh, Avishreshth Singh, Krishna Prapoorna Biligiri, B. J. Ramaiah <i>Indian Institute of Technology Tirupati, India</i>
Paper 16	An evaluation of performance and well-being of users through biophilic indicators - A review	Anita Kavathekar, Shaila Bantanur <i>BMS School of Architecture, Bangalore, India</i>



5.45pm (AEDT) 12:15pm (IST)	Break	
6.00pm (AEDT) 12:30pm (IST)	Keynote 5: Prof Koshy Varghese (IIT Madras) in association with Adithya VS and Pranjali Kanchi <i>"Affordable Housing Through 3D Printing"</i>	
6.30pm (AEDT) 1:00pm (IST)	Session 6: Smart Villages Poster Design	
	Chair: A/Prof Krishna Prapoorna	Authors
Poster 1	Deconstructing PMAY-G: ICT 4 Nation Building	Harshal Kate ¹ and Garima Jain ² ¹ <i>Indian Institute of Technology Delhi, New Delhi, India</i> ² <i>World Resources Institute (WRI) India, New Delhi, India</i>
Poster 2	The revival of the tribal community by concept of S.M.A.R.T Village: A case of Sabar Tribe of Jharkhand, India	Nazish Abid ¹ , Ressel Ansari ² and Ginelle Lopes ³ ^{1,2} <i>REVA University Bangalore, India</i> ³ <i>XXI Architecture Pune, India</i>
Poster 3	Flood resistant housing in Assam	Dhiman Thakuria and Dhiman Kaskyap <i>Assam Engineering College, Assam, India</i>
7.30pm (AEDT) 2:00pm (IST)	Break	
7.45pm (AEDT) 2:15pm (IST)	Keynote 6: Prof Atul Bora, Principal (AEC) and Director (Technical Education) <i>"Linking Skill-building and Employability with the Roadmap for a Sustainable State"</i>	
8.15pm (AEDT) 2:45pm (IST)	Keynote 7: Dr Arvind Phukan, USA <i>"Design of Smart Villages in India – some reflections"</i>	
8:45pm (AEDT) 3:15pm (IST)	Special Talk: Dr Pranjali Phukan, D.Litt.(Hons), CEng, M.I.E, F.I.P.E, M.I.I.E, FMERC <i>"Startup opportunities, job creation and income enhancements in Smart Villages"</i>	
9.00pm (AEDT) 3:30pm (IST)	Best Papers and Posters Competition Results Closing Remarks	
9.15pm (AEDT) 3:45pm (IST)	<i>Remark by the Chairs</i> - End of Conference -	

