

<b>Paper ID</b>	<b>Paper Title</b>	<b>Podium/Poster</b>	<b>Author Names</b>
3	Exploring Indigenous Innovation Practices and Relationships to Drivers of Start-Up Success in a Multicultural Context	Podium Presentation	Dipanka Boruah*, Indian Institute of Technology Guwahati; Gareth Loudon, Cardiff Metropolitan University, UK
12	What the statistics tell us - how to use empiric data in design for emotional impressions	Podium Presentation	Susan Kett*, Friedrich-Alexander-Universität Erlangen-Nürnberg; Sandro Wartzack, "Technical University of Erlangen, Germany"; Benedikt Schmitt, Friedrich-Alexander-Universität Erlangen-Nürnberg
27	Design Week: A challenge for designers and medical students	Podium Presentation	Juan Carlos Briede*, Universidad del Bío-Bío; Cristhian Pérez, Universidad de Concepción
29	Hedonic design. Contributing factors in generating emotional ties. The shape as a contributing factor in generating a hedonic design.	Podium Presentation	Jorge Gil Tejeda*, Universidad Autónoma Metropolitana; Lorena Olmos Pineda, Instituto Tecnológico de Estudios Superiores Monterrey; Velmar Ulises Hernández González, Universidad Autónoma Metropolitana; Monica Yahel Atamoros González, Universidad Autónoma Metropolitana; Rafael Alejandro Acosta Sámano, Universidad Autónoma Metropolitana
36	MODULARITY IN ASSISTING DEVICES FOR THE ELDERLY PEOPLE	Poster + Brief Podium	Swati Sarkar, IIT Guwahati; Prof. Amarendra Das*, IIT Guwahati
40	A Research and Design Initiative for the Informal Sector of Street Food Vending in India	Podium Presentation	Vaishnavi Walvekar*, Academy of Art University
41	An Example of Embedding Sustainable Design Practices in Design Education: A Solar Powered Pool Skimmer	Podium Presentation	Vukica Jovanovic, Old Dominion University; Otilia Popescu, Old Dominion University; Alok Verma*, Old Dominion University, USA; Daniel Hynst, Brenco, Inc, Petersburg, Virginia, U.S.A.; Laura Livanec, Newport News Shipbuilding, Huntington Ingalls Industries, Newport News, Virginia, U.S.A.; Jason Kash, U.S. Navy

42	Supporting Environmentally-benign Design - Environmental Impact estimation and Uncertainty categories with respect to Life Cycle assessment during Conceptual Design	Podium Presentation	Shakuntala Acharya*, Indian Institute of Science; Amaresh Chakrabarti, "Indian Institute of Science, India"
44	Visual Design considerations for evoking an emotional response towards non – personalized information to encourage object loyalty amongst users	Poster + Brief Podium	priyanka bharti*, IIT Kanpur
47	Design intervention for terrace cultivation in the Hilly Region of North Eastern India	Poster + Brief Podium	Angelus Khoh*, Dept. of Design, IIT Guwahati; Prof. Amarendra Das, IIT Guwahati
49	Preferences in recall of pleasant and unpleasant images	Podium Presentation	Mritunjay Kumar*, Indian Institute of Technology kanpur; Braj Bhushan, Indian Institute of Technology kanpur; Ahmed Sameer, Indian Institute of Technology kanpur; Rajesh Ranjan, University of Melbourne
50	Design Thinking and Creative Problem Solving for Undergraduate Engineering Education in India: Its Need and Relevance.	Podium Presentation	Tigmanshu Bhatnagar*, TU Delft; Petra Badke-Schaub, "Delft University of Technology, The Netherlands"
52	Attributes and Emotions in Product Form Design: A Survey of Professional Industrial Designers	Podium Presentation	Santosh Jagtap*, "Lund University, Sweden"; Sachin Jagtap, Maharashtra State Board of Secondary and Higher Secondary Education, India
53	Inspiration in Product Form Design: A Survey of Professional Industrial Designers	Podium Presentation	Santosh Jagtap*, "Lund University, Sweden"; Sachin Jagtap, Maharashtra State Board of Secondary and Higher Secondary Education, India

56	Supporting Sustainable Service-System Design : A Case Study on Design with InDeaTe Tool and Template for sustainable improvement in Stormwater Management in Syracuse, New York	Podium Presentation	Shakuntala Acharya*, Indian Institute of Science; Kiran Ghadge, Indian Institute of Science; Praveen Uchil, Indian Institute of Science; Carli Denyse Flynn, Syracuse University; Alexander James Johnson, Syracuse University; Mallory Nicole Squier, Syracuse University; Yige Yang, Syracuse University; Cliff Ian Davidson, Syracuse University; Gaurav Ameta, Washington State University; Sudarsan Rachuri, DOE; Amaresh Chakrabarti, "Indian Institute of Science, India"
57	Methods to capture and model craftsmen's tacit knowledge in traditional designs	Podium Presentation	Sai Ojha*, IIT Guwahati; Pradeep Yammiyavar, "Indian Institute of Technology - Guwahati"
59	Modeling Design Strategies for Package Graphics: A Study of Hair Care Products among Young Indian Users	Podium Presentation	Toney Sebastian*, IIT Guwahati; Pradeep Yammiyavar, "Indian Institute of Technology - Guwahati"; Stevan D. Jones, Procter and Gamble Singapore
61	WIT- 'WHAT IDEALITY TOOL' FOR PRODUCT DESIGN- Crossing from a Static flowchart model forward a Dynamic Tool	Podium Presentation	Alon Weiss*, IITG-SCE; Iko Avital, SCE; Amarendra Kumar Das, Indian Institute of Technology Guwahati; Pratul Ch. Kalita , IITG
64	Syncretism 5.0: Could Design Become a Meta-religion for Global Communion?	Podium Presentation	Chitra Chandrashekhar*, Mographies
71	Holistic Socio-Environmental Design: Practices through Making, Craft and Historicity	Podium Presentation	Saurabh Tewari*, Indian Institute of Technology Kanpur; Aurgho Jyoti, SOM California
85	Adaptable mechatronic engineering design processes: Process reference model and methodology	Podium Presentation	Christoph Hollauer*, Institute of Product Development; Nepomuk Chucholowski, Institute of Product Development, Technische Universität München

89	An initial study of function switching for design of adaptable-function mechanical products	Podium Presentation	Chang-Wu Zou*, Ningbo University, China; Yi-Min Deng, Ningbo University; Hua-Bo He, Ningbo University
96	Advanced Piston Technologies for Gasoline and Diesel Engine applications to meet EU6 Emission Norms	Poster + Brief Podium	Selvaraji Muthu*, Mahle Engine Components India Pvt. Ltd.; Pramod Kawade, Mahle Engine Components India Pvt. Ltd., Chennai; Sathishbabu Sankarachary, Mahle Engine Components India Pvt. Ltd., Chennai; Rajkumar Mani, Mahle Engine Components India Pvt. Ltd., Chennai; Qi Li, Mahle Engine Components India Pvt. Ltd., Chennai; Shaobo Zeng, MAHLE Technologies Holding (China) Co., Ltd, Shanghai; Haixiao Chai, MAHLE Technologies Holding (China) Co., Ltd, Shanghai
100	Smart-Cities for Developing India: Why not Open-Source Villages?	Podium Presentation	Paul Varghese*, intelliarch
109	A Study on 'Design Thinking' for Constructability	Podium Presentation	S P SREENIVAS PADALA*, Indian Institute of Technology, Delhi; J.Uma Maheswari, IIT DELHI; Harish Hirani, Indian Institute of Technology, Delhi
113	Design and development of a novel sit-to-stand and mobility assistive device for ambulation and elderly	Poster + Brief Podium	Mohammed Rajik Khan*, Department of Industrial Design, National Institute of Technology Rourkela, India; Biswaksen Patnaik, Department of Industrial Design, National Institute of Technology Rourkela, India ; Sonalisa Patel, Department of Industrial Design, National Institute of Technology Rourkela, India
117	UX in 'Practice' for starters - A guided & simplified approach to live projects in the industry	Podium Presentation	Shaon Sengupta*, Philips Design
118	Physiological Effects of Backpack Packing, Wearing & Carrying on School Going Children	Poster + Brief Podium	ishant gupta*, PEC University of Technology
124	Design Intervention for Livelihood and Hygiene for Street Vending of Panipuri	Podium Presentation	Pratul Ch. Kalita *, IITG; Supradip Das, Indian Institute of Technology Guwahati; Amarendra Kumar Das, Indian Institute of Technology Guwahati

125	Life Cycle Assessment (LCA) to assess Energy Neutrality in Occupancy Sensors	Podium Presentation	Tarun kumar*, Indian Institute of Science; Monto Mani, Indian Institute of Science
136	Evaluating modularity and complexity of alternate product architectures	Podium Presentation	Nikhil Joshi*, John Deere India Private Limited
141	Formation of Inter-subjectivity as a Basis of Sustainable Collaborative Innovation	Podium Presentation	Akane MATSUMAE*, JAIST; Yukari Nagai, "Japan Advanced Institute of Science and Technology, Japan"
167	Structural Optimisation of Wind Turbine Gearbox Deployed in Non-conventional Energy Generation	Poster + Brief Podium	Sourabh Mandol*, Indian Institute of Technology, Kharagpur; Debraj Bhattacharjee, Indian Institute of Technology, Kharagpur; Pranab Kumar Dan, "IIT Kharagpur, India""
170	Semiotic analysis of digital medium of education	Poster + Brief Podium	priyanka bharti*, IIT Kanpur; Jivtesh Aulakh , IIT kanpur
201	TRANSMUTATIVE VISUAL CULTURE OF FOLK FESTIVALS IN A SEMI-URBAN SCENARIO: A study and exploration of 'Magh Bihu' in Assam	Poster + Brief Podium	Anusmita Das*, IIT Guwahati; Sri Harsha Andukuri, IIT Guwahati; Umme Hani, Indian Institute of Technology, Guwahati; Utpal Barua, IIT Guwahati
220	Parameter Management, A Novel Approach In Systems Engineering	Podium Presentation	Ferdinand Toepfer*, Daimler AG; Thomas Naumann, Daimler AG
221	Engineering Change Management within agile Product Development – A Case Study	Podium Presentation	Lucia Becerril*, Technische Universität München; Veronika Heinrich, Technische Universität München; Annette Böhmer, Technische Universität München; Sebastian Schweigert, Technical University of Munich, Institute of Product Development; Udo Lindemann, Technical University of Munich, Institute of Product Development

238	A conceptual model for introducing design thinking in management schools	Podium Presentation	Cedric Serpes*, Goa Institute of Management; GAYATRI MENON, N.I.D.
241	OPTIMAL ASSEMBLY SEQUENCE PLANNING TOWARDS DESIGN FOR ASSEMBLY	Podium Presentation	Bala Murali Gunji*, national institute of technology Rourkela; M V A Raju Bahubalendruni, NIT Rourkela; V L Deepak B B , NIT Rourkela; Bibhuti Bhusan Biswal , NIT Rourkela
242	Implementation of Ergonomic Design Interventions to Improve Workplace Amenities for Assam Policewomen	Poster + Brief Podium	SHILPI BORA*, IIT GUWAHATI; Dr Abhirup Chatterjee, IIT GUWAHATI; SOUGATA KARMAKAR, IIT GUWAHATI; Debkumar Chakrabarti, "IIT Guwahati"
256	Study on User-Interface Problem-Finding Based on Flow-Line Analysis	Poster + Brief Podium	Satoshi Kadomatsu*, Japan Advanced Institute of Science and Technology; Yukari Nagai, "Japan Advanced Institute of Science and Technology, Japan"
262	Consumer Preferences & Value Proposition Disconnect - Assam Rattan and Bamboo Furniture Industry	Podium Presentation	Prarthana Majumdar*, Indian Institute of Technology Guwahati (IITG); Shiva Ji, Indian Institute of Technology Guwahati; Sharmistha Banerjee, IIT Guwahati
268	Managing User Experience (UX) Design Practice: Approaches & Considerations	Poster + Brief Podium	Anshuman Sharma*, LnT Infotech
269	Constraints for Gamification of Data Intensive & Analytics Applications: A Case Study	Poster + Brief Podium	Anshuman Sharma*, LnT Infotech
280	Insights from user testing of Jellow: A communication aid for children with developmental disabilities	Poster + Brief Podium	Sudha Srinivasan, Indian Institute of Technology Bombay; Ravi Poovaiah*, "Indian Institute of Technology Bombay"; Ajanta Sen, Visiting Senior Scientist, Center for Social Media Innovation for Communities (COSMIC), NTU, Singapore and International Director, Solar project, India

302	Risk factors for the development of Pressure Sores among People with Spinal Cord Injury: Results of a Case study	Poster + Brief Podium	Priyanka Rawal*, IIT Bombay; Gaur Gray Ray, IDC, IIT Bombay
326	Form and Colour – two basic elements of design	Poster + Brief Podium	Saleem Ahmed*, CPDM
329	Rigid Frames and Flexi Frames – Matchstick Cellular Architecture – A Hands- on Experience	Podium Presentation	Ranjan De*, Sushant School of Design
346	A Novel Frame Work of Design Realization Course at IIITDM Kancheepuram: Critical Evaluation	Podium Presentation	M Sreekumar*, Indian Institute of Information Technology Design & Manufacturing Kancheepuram; Deepak Padhi, Indian Institute of Information Technology, Design & Manufacturing, Kancheepuram; Adeline Mellita, Indian Institute of Information Technology, Design & Manufacturing, Kancheepuram
354	Students' Feedback into Enriching Learning Experiences for Design of Smart Devices and Applications	Podium Presentation	Anmol Srivastava*, IIT Guwahati; Pradeep Yammiyavar, "Indian Institute of Technology - Guwahati"
16	A TOOL FOR GENERATING NEW AND APPROPRIATE METHODS FOR SUPPORTING VARIOUS DESIGN PROCESSES	Podium Presentation	Bijendra Kumar, IIT Ropar; Prabir Sarkar*, IIT Ropar
18	Learning Aid in Braille and typography	Poster + Brief Podium	Siddhesh shirsekar*, Sir J.J Institute of Applied Art
21	Review and Classification of Types of Knowledge in Engineering Design	Podium Presentation	Cristina Carro Saavedra*, Technical University of Munich; Teresa Serrano Villodres, Technical University of Munich; Udo Lindemann, Technical University of Munich
26	Mindblower: Designing experiences for inventive thinking	Poster + Brief Podium	Karla Paniagua*, CENTRO

30	EXPLORING DESIGNERS' COGNITIVE LOAD WHEN VIEWING DIGITAL REPRESENTATIONS OF SPACES	Podium Presentation	Rongrong Yu*, Northeast Forestry University; John Gero, University of North Carolina at Charlotte and George Mason University
37	Improvised concept development process in design through product ingredients	Podium Presentation	PRABHAT KUMAR, PDPM IITDM JABALPUR; Puneet Tandon*, "IITDM Jabalpur"
39	Influence of Creative thinking and Playfulness on Creative Styles of the Individuals	Podium Presentation	Mritunjay Kumar*, Indian Institute of Technology kanpur; Satyaki Roy, Indian Institute of Technology, Kanpur, India; Ahmed Sameer, Indian Institute of Technology kanpur
51	Different Rationalities of Creative Design – A Comparative Case Study	Poster + Brief Podium	Christoph Richter*, University of Kiel; Heidrun Allert, University of Kiel
65	An Exploration of Design: Based on Pan-Asian Semiotics and Semantics	Podium Presentation	Tanima Bhattacharya*, Indian Institute of Technology, Kharagpur; Joy Sen, "IIT Kharagpur, India""
68	People, Chair, and Value(s): A Qualitative Inquiry into the material lives	Poster + Brief Podium	Saurabh Tewari*, Indian Institute of Technology Kanpur; Kumar Ravi Priya, Indian Institute of Technology Kanpur
72	Design for innovation: toys for sustainable play	Poster + Brief Podium	Luciana Pereira*, Federal University of ABC
75	Approaches to Parameterization in Architectural Design	Podium Presentation	Anil Kumar Kasichainula*, IIT Roorkee PhD Scholar; Prabhjot Singh Chani, IIT Roorkee
98	Cultural construction: Design aesthetics, semiotics and semantics associated with Masks of Assam- A Study of its Design Aspects in the Island of Majuli, India.	Podium Presentation	Prof. charu Monga*, Department of Design, Indian Institute of Technology Guwahati; Amarendra Kumar Das, Department of Design, IIT Guwahati



99	A story of languishing doll: Revival of cloth dolls of India	Poster + Brief Podium	Satyaki Roy, Indian Institute of Technology, Kanpur, India; Satyendra Mishra*, IIT Kanpur
114	IDEA INSPIRE 3.0 – A TOOL FOR ANALOGICAL DESIGN	Podium Presentation	Amaresh Chakrabarti, "Indian Institute of Science, India"; L Siddharth*, Indian Institute of Science ; Madhuri Dinakar , Indian Institute of Science ; Megha Panda, Indian Institute of Science ; Neha Palegar, Indian Institute of Science ; Sonal Keshwani, Indian Insitute of Science, Centre for Product Design and Engineering, Bangalore
119	A matrix framework proposal for evaluating innovation criteria of a design process output during product conceptualization	Podium Presentation	Ravi Lingannavar*, IIT guwahti; Sai Ojha, IIT Guwahati; Pradeep Yammiyavar, "Indian Institute of Technology - Guwahati"
121	A real time automatic ergonomic measure in identifying postural deviation for the assessment of manual assembly	Podium Presentation	Santhi Balaraman*, Indian Institute of Science, Bangalore; Amaresh Chakrabarti, "Indian Institute of Science, India"; Gurumoorthy B, "Indian Institute of Science, India"
126	Solar Micro Energy Systems: Product Design Intervention Facilitating Sustainable Development while Addressing Basic Energy Requirement for Rural North East India.	Podium Presentation	Brajesh Dhiman*, Indian Institute of Technology Guwahati; Mrinal Krishna Chaudhury, Assam Energy Development Agency, Guwahati; Sudip Kumar Deb, Assam Engineering College, Guwahati; Debkumar Chakrabarti, "IIT Guwahati"
127	Design for Communities: An entrepreneurial approach to solve the problems of society and environment fuelled by product design	Podium Presentation	Eshan Sadasivan*, IIT Kanpur; Shantanu Bhattacharya, IIT Kanpur; Mainak Das, IIT Kanpur
128	Bollywood on Television: A backbone for creating social connect with Indian Auditoriumence	Podium Presentation	Paritosh Singh*, Indian Institute of Technology Kanpur; Saptarshi Kolay, Indian Institute of Technology, Roorkee

133	Design fixation & Creativity blocks in Architecture design Studies	Poster + Brief Podium	purva Mange*, VNIT ; Vinayak Adane, VNIT
137	A framework for component selection based on multi-attribute evaluations	Podium Presentation	Stueti Gupta*, John Deere India
139	Supporting Social Innovation: Application of InDeate Tool for Sustainable Service Design - Case Study of Community Workshop	Podium Presentation	Suman Devadula*, Indian Institute of Science; Kiran Ghadge, Indian Institute of Science; Saritha Vishwanathan, IIM Ahmedabad; Shuk Han Chan, University of California, Berkeley; Quinn Langfitt, Washington State University; David Dronfeld, University of California, Berkeley; Anil Gupta, Indian Institute of Management, Ahmedabad; Sudarsan Rachuri, DOE; Gaurav Ameta, Washington State University; Amaresh Chakrabarti, "Indian Institute of Science, India"
148	Enhancing sustainability of products through Hotspot analysis in LCA	Poster + Brief Podium	Jitender ., NIT Srinagar; Prabir Sarkar*, IIT Ropar
153	'Koti Banal' Architecture of Uttarakhand: Indigenous Realities and Community Involvement	Poster + Brief Podium	Smriti Saraswat*, IIT Roorkee; Gautam Mayuresh, IIT Roorkee
157	Assessment of GRIHA and LEED on the parameters of Sustainable Design and Development of Buildings	Podium Presentation	Shiva Ji*, Indian Institute of Technology Guwahati; Sharmistha Banerjee, IIT Guwahati; Ravi Puneekar, "IIT Guwahati"
163	Demonstrating the effectiveness of the use of smell on drivers attention	Podium Presentation	Marina Carulli*, Politecnico di Milano; Monica Bordegoni, Politecnico di Milano; Yuan Shi, Politecnico di Milano
168	Representing the Effects of Product Architecture for Decision-Making in Conceptual Design	Poster + Brief Podium	Timo Richter*, Technische Universität Braunschweig, Institut für Konstruktionstechnik; David Inkermann, Technische Universität Braunschweig, Institut für Konstruktionstechnik; Thomas Vietor, Technische Universität Braunschweig, Institut für Konstruktionstechnik

169	Evolution of Design Briefs: Expressions from Professional Design Practice	Poster + Brief Podium	Mamata Rao*, National Institute of Design; Prasad Onkar, Indian Institute of Technology Hyderabad; Deepak Mathew, Indian Institute of Technology Hyderabad
177	Selecting and weighting sustainability indicators - the Sustainability Diamond	Poster + Brief Podium	Daniel Kammerl*, Technical University of Munich; Roland Zink, Deggendorf Institute of Technology; Udo Lindemann, Technical University of Munich, Institute of Product Development
187	Domestic and Global Designs in Hair Care: A Study of Aesthetic Preferences of Indian Users	Podium Presentation	Toney Sebastian*, IIT Guwahati; Pradeep Yammiyavar, "Indian Institute of Technology - Guwahati"; Stevan D. Jones, Procter and Gamble Singapore
211	Understanding the Hope Harbingers –ASHA, the women foot soldiers of India's National Rural Health Mission	Poster + Brief Podium	VYSAK A S*, IIT Guwahati; Needa Jamil, IIT Guwahati; Aditya Parihar , IIT Guwahati; Sharmistha Banerjee, IIT Guwahati
213	Supporting Sustainable Product Design : A Case Study of designing a product with InDeaTe Tool and Template, for sustainable improvement in Wooden-fibre Board forming at Washington State University, Pullman, WA	Podium Presentation	Shakuntala Acharya*, Indian Institute of Science; Kiran Ghadge, Indian Institute of Science; Quinn Michael Langfitt, Washington State University, Pullman; Charles Pezeshki, Washington State University; Gaurav Ameta, Washington State University; Sudarsan Rachuri, DOE; Amaresh Chakrabarti, "Indian Institute of Science, India"
216	Look at that Sound! – Visual Representation of Sound Symbolic Words in Indian Comic Books	Podium Presentation	Subir dey*, IIT GUWAHATI; Prasad Bokil, Indian Institute of Technology Guwahati
222	Designs Role in Transitioning to Futures of Cultures of Repair	Podium Presentation	Tristan Schultz*, Griffith University
224	The Making Affect: a Co-Created Community Methodology	Podium Presentation	Fiona Hackney *, Wolverhampton University, UK; Hannah Maughan , Falmouth University

232	Towards automatic classification of description of analogies into SAPPhIRE constructs	Podium Presentation	Sonal Keshwani*, Indian Institute of Science, India; Amaresh Chakrabarti, "Indian Institute of Science, India"
234	ICT technology for innovating the garment design process in fashion industry	Podium Presentation	Marina Carulli*, Politecnico di Milano; Andrea Vitali, Università degli Studi di Bergamo; Giandomenico Caruso, Politecnico di Milano; Monica Bordegoni, Politecnico di Milano; Caterian Rizzi, "University of Bergamo, Italy"; Umberto Cugini, "Politecnico di Milano"
252	Meghalaya Tourism: Inculcating Cultural Image in Developing Enroute Mini Halts	Poster + Brief Podium	Wanrisa Kharkongor*, Indian Institute of Technology, Guwahati; Arunita Paul, Indian Institute of Technology, Guwahati; SHILPI BORA, IIT GUWAHATI; Debkumar Chakrabarti, "IIT Guwahati"
261	Auditoriumence, Participant and Agency: Need for role definition in Interactive Visual Narratives	Poster + Brief Podium	Krishna Kumar*, IIT Bombay; Ravi Poovaiah, "Indian Institute of Technology Bombay"
265	Technological Assistance to Reduce Fall among Elderly: A Review	Podium Presentation	Nilakshi Yein*, IIT Guwahati; Swati Pal, IIT Guwahati
270	A Study on Product Display Design Using Eye-tracking Systems	Podium Presentation	Yukari Nagai*, "Japan Advanced Institute of Science and Technology, Japan"; Tomo Fukami, "Japan Advanced Institute of Science and Technology, Japan"; Akemi Tera, "Japan Advanced Institute of Science and Technology, Japan"
276	Embedding design descriptions using lattice structures: Technical requirements, user perspectives and implementation	Podium Presentation	Amar Kumar Behera*, University of Leeds; Alison Mckay, "University of Leeds"; Hau Hing Chau, University of Leeds; Alan de Pennington, University of Leeds; Mark A Robinson, University of Leeds
287	Towards an Automatized Generation of Rule-based systems for Architecting Eco-industrial Parks	Podium Presentation	Andreas Hein*, PS2E / CentraleSupélec; Bernard Yannou, CentraleSupélec; Marija Jankovic, CentraleSupélec; Romain Farel, PS2E
291	A methodological basis to assess and compare manufacturing processes for design decisions	Poster + Brief Podium	Manish Kumar*, IISc Bangalore; Monto Mani, Indian Institute of Science

321	Designing static visual narratives as prompts for practicing creative writing	Podium Presentation	Saurabh S*, IIT Bombay
340	The culture of innovation in SMEs: Proposal of a model of integration	Podium Presentation	Fabien Geniaux*, ENSAM; Nicolas Maranzana, ENSAM; Ahmed Cheriati, Kalidea
345	Percolation Framework and Monte Carlo Techniques for Improved Probabilistic Design of Variability in Products and Systems	Podium Presentation	NAGARAJAN RAGHAVAN*, Singapore University of Technology and Design (SUTD); Kin Leong Pey, Singapore University of Technology and Design (SUTD)
348	A software tool for the graph-based visualization of complex relations between product properties and characteristics	Podium Presentation	Thomas Luft*, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany; Patricia Schuh, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany; Sandro Wartzack, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
357	Challenges and some potential strategies for relating engineering issues with their causes in text	Podium Presentation	Madhusudanan N*, Indian Institute of Science; Amaresh Chakrabarti, "Indian Institute of Science, India"; Gurumoorthy B, "Indian Institute of Science, India"
358	Unlocking Design Teams' Experimentation and Go-No-Go Decision-Making: Case Study On Bangle Packaging Design Project	Podium Presentation	Gajanan Pratap Kulkarni*, Centre for Product Design and Manufacturing, Indian Institute of Science, Bangalore; Mary Matthew, Indian Institute of Science, Bangalore
360	Domain Specific Named Entity Extraction for Modeling and Populating Ontologies	Podium Presentation	Damayanthi Jesudas*, Indian Institute of Science; Gurumoorthy B, "Indian Institute of Science, India"
20	Anatomically Shaped Tool Handles Designed for Power Grip	Podium Presentation	Dhananjay Singh Bisht, Department of Industrial Design, National Institute of Technology Rourkela, India; Mohammed Rajik Khan*, Department of Industrial Design, National Institute of Technology Rourkela, India

24	Interactional Differences and Effects between Co-located and Distributed Design	Podium Presentation	A V Gokula Vijaykumar*, "University of Strathclyde, UK"; Hari Prakash Ramesh, IISc; Chandra Mouli Sugavanam, IISc; Amaresh Chakrabarti, "Indian Institute of Science, India"; Jonathan Corney, University of Strathclyde, UK; Andrew James Wodehouse, "University of Strathclyde, UK"
43	Framework of a KE Application Software Development for Emotive Design: A Computational Cognitive Science Perspective	Poster + Brief Podium	TANMOY GOSWAMI, MIT INSTITUTE OF DESIGN, PUNE; ANIRBAN CHOWDHURY*, Department of User Experience Design, MIT Institute of Design, Pune-412201, Maharashtra, India.; Sougata Karmakar, "IIT Guwahati, India"
46	Simulation of Roll over Protective Structure Testing of Earth Moving Equipment Cabin	Poster + Brief Podium	Gomathinayagam Arumugam*, Larsen & Toubro Limited; Antony Stephen P, Larsen & Toubro Limited; Prabhakaran K, Larsen & Toubro Limited; Suresh R, Larsen & Toubro Limited
48	Wayfinding Strategies and Challenges in Mumbai Local Trains and Stations	Podium Presentation	shikha agarwal*, Industrial Design Center, IIT Bombay; Abir Mullick, 3Navrachana University, Vadodra, Gujarat, India.; Gaur Gray Ray, IDC, IIT Bombay
63	Design Space Configuration Trough Analytical Parametrisation	Podium Presentation	Petter Krus*, "Linkoping University, Sweden"
74	Personal 3D printer: Self-Design and Manufacturing	Poster + Brief Podium	Zuk Turbovich*, IIT Guwahati; Amarendra Kumar Das, Indian Institute of Technology Guwahati; Pratul Ch. Kalita , IITG; Iko Avital, SCE
76	Design Dialogue at Design Tree	Podium Presentation	Anil Kumar Kasichainula*, IIT Roorkee PhD Scholar; Prabhjot Singh Chani, IIT Roorkee
78	Development of a precision experimental setup for a flexure based micro-motion amplifier	Podium Presentation	Bhagyesh Deshmukh*, Walchand Institute of Technology; Sujit Pardeshi, College of Engineering Pune
80	Mapping Chandernagore: A Collaborative Approach to Heritage Conservation	Podium Presentation	Aishwarya Tipnis*, Aishwarya Tipnis Architects; Chitra Chandrashekhar, Mographies

81	STUDY OF WAYFINDING BEHAVIOURS IN AN OUTDOOR ENVIRONMENT	Podium Presentation	Irfan Khan*, Indian Institute of Technology, Roorkee; Saptarshi Kolay, Indian Institute of Technology, Roorkee
83	Sense of place - A tale of two recreational parks near the Solani aqueduct in Roorkee.	Podium Presentation	Rabi Mohanty*, Doctoral research Scholar, IIT Roorkee; Prabhjot Singh Chani, IIT Roorkee
86	Design process tailoring: A review and perspective on the literature	Poster + Brief Podium	Christoph Hollauer*, Institute of Product Development
91	Exploring distributed cognition as a conceptual framework for service design	Podium Presentation	Ravi Mahamuni, Tata Consultancy Services Limited; Pramod Khambete, Independent Consultant; Ravi Punekar*, "IIT Guwahati"
104	Development of an adjustable gang drilling attachment for Radial drilling machine	Poster + Brief Podium	Sourabh Chankeshwara*, Walchand Institute of Technology, Solapur.; Nikhil Patil, Walchand Institute of Technology, Solapur; Anil Ankulkar, Walchand Institute of Technology, Solapur; Bhagyesh Deshmukh, Walchand Institute of Technology, Solapur; Roohshad Mistry, Walchand Institute of Technology, Solapur
115	Determination of Most Preferred Mobile Phone Size Based on Hand Anthropometry and Mobile Handiness	Podium Presentation	ANIRBAN CHOWDHURY*, Department of User Experience Design, MIT Institute of Design, Pune-412201, Maharashtra, India.; MANASI KANETKAR , Department of Product Design, MIT Institute of Design, Pune-412201, Maharashtra, India.
122	Differences in sketches and mental imagery in ideation stage of novice designers	Podium Presentation	Mia Tedjosaputro*, University of Nottingham Ningbo China; Jeff Yi-Teng Shih, "University of Nottingham, Ningbo, China"; Chantelle Niblock, "University of Nottingham, UK"; Patrick Pradel, Loughborough University
142	Conceiving and applying relationship models for design strategy	Podium Presentation	Terence Fenn*, University of Johannesburg; Jason Hobbs, University of Johannesburg
143	Design Considerations for Personalized Learning	Poster + Brief Podium	Vimal Anand*, IIT Kanpur

144	From Design Thinking To Design Doing - A Procedural Approach Creating Socially Responsive Artifacts - A case of designing towards affordable dental care (for India).	Podium Presentation	Amit Kundal*, IIT Kanpur; Jayanta Chatterjee, "IIT Kanpur, India"; Shatarupa Thakurta Roy, IIT Kanpur
149	Ergonomic Design and Fabrication of Toothbrush Handle	Podium Presentation	Vibha Bhatia, PEC University of Technology; AMIT BHATIA*, PEC University of Technology; Parveen Kalra, PEC University of Technology; JS Randhawa, PEC University of Technology; Rahul Datta, PEC University of Technology
150	Role of HCI in building the user interaction layer for Citizen Centric Government Websites	Poster + Brief Podium	Amarendra Kumar Das*, Indian Institute of Technology Guwahati; Suchitra Pyarelal, NIC
154	Methodical Product Development in Medical Engineering – A Case Study on Radiography Systems	Podium Presentation	Sebastian Schweigert*, Technical University of Munich, Institute of Product Development; Udo Lindemann, Technical University of Munich, Institute of Product Development; Vera Seitz, Technical University of Munich, Institute of Medical and Polymer Engineering; Erich Wintermantel, Technical University of Munich, Institute of Medical and Polymer Engineering
155	Virtual Ergonomics Evaluation of a Design Concept of Manual Powered Portable Paddy Thresher Suitable for Hilly Region Agriculture	Poster + Brief Podium	Thaneswer Patel, NERIST; Sougata Karmakar*, "IIT Guwahati, India"
161	Empower the Future: the inside story of building creative space for sub-urban kampong's children	Podium Presentation	Martin Katoppo*, Universitas Pelita Harapan; Phebe Valencia, Universitas Pelita Harapan
176	The effect of idea representation techniques on design decisions during idea exploration phase: an	Podium Presentation	Purba Joshi*, IDC, IIT Bombay; Sharmila Sinha, NIMD, NSHM Knowledge Campus



	exploratory study of new product design		
184	Collaborative Research Model for Designing Sustainable Water Usage Solutions	Podium Presentation	Gareth Loudon*, Cardiff Metropolitan University; Clara Watkins, Cardiff Metropolitan University
188	Driver distraction : methodological review	Podium Presentation	Indresh Verma, Department of Design, IIT Guwahati; Sougata Karmakar*, "IIT Guwahati, India"
203	Weight reduction of Formula SAE (FSAE) student competition vehicle using TRIZ principle	Podium Presentation	Ankit Jinturkar*, Walchand Institute of Technology, Solapur; Rohan Channa, Walchand Institute of Technology, Solapur; Roohshad Mistry, Walchand Institute of Technology, Solapur; Bhagyesh Deshmukh, Walchand Institute of Technology, Solapur
204	DESIGN INTERVENTION IN THE HANDLOOM INDUSTRY OF ASSAM: In the Context of a Debate between Traditional and Contemporary Practice	Podium Presentation	Umme Hani*, Indian Institute of Technology, Guwahati; Anusmita Das, IIT Guwahati; Utpal Barua, Indian Institute of Technology, Guwahati
208	Design of Quick Jack cum Push Bar for Formula SAE (FSAE) student competition vehicle	Podium Presentation	Ankit Jinturkar*, Walchand Institute of Technology, Solapur; Shubham Shah, Walchand Institute of Technology, Solapur; Roohshad Mistry, Walchand Institute of Technology, Solapur; Bhagyesh Deshmukh, Walchand Institute of Technology, Solapur
217	Improving Aid Through Good Design: A Case study in Rural Zambia	Podium Presentation	Clara Watkins*, Cardiff Metropolitan University; Gareth Loudon, Cardiff Metropolitan University, UK; Steve Gill, Cardiff Metropolitan University; Judith Hall, Cardiff University
225	Optimizing Operation Research Strategy for Design Intervention: A framework for GOMS Selection Rule	Podium Presentation	Wricha Mishra, MIT ID; ANIRBAN CHOWDHURY*, Department of User Experience Design, MIT Institute of Design, Pune-412201, Maharashtra, India.; Debayan Dhar, Department of User Experience, MITID Pune
227	Degree of musculoskeletal pain and other discomforts experienced by	Podium Presentation	Dr Ajita DSingh*, Punjabi University Patiala

	school children using different type of furniture during class.		
229	Can Interactive Installations bring about Behaviour Change? Using interactive installation to change food waste behaviours.	Podium Presentation	Jayati Bandyopadhyay*, IIT Bombay; Girish Dalvi, IIT Bombay
233	Machining Optimization of Nano-Structured Hardfaced Tool Insert in WEDM using MOORA method	Podium Presentation	Abhijit Saha, Haldia Institute of Technology, Haldia ; Subhas Mondal*, IEST Shibpur
235	Application of Genetic algorithm for the Optimization of process parameters in keyway milling	Podium Presentation	Subhas Mondal*, IEST Shibpur; Prosun Mandal, IEST Shibpur; Gourhari Ghosh, IEST Shibpur
240	A TIME BASED APPROACH TO REDUCE PRODUCT DEVELOPMENT TIME IN NEW PRODUCT DEVELOPMENT IN MACHINERY INDUSTRY	Poster + Brief Podium	Logesh Ranganathan, Larsen & Toubro Limited; Rammohan Subramaniam, Larsen & Toubro Limited; Gomathinayagam Arumugam*, Larsen & Toubro Limited; Narayana G S, Larsen & Toubro Limited
247	Legibility: same for all scripts!	Podium Presentation	Subhajit Chandra*, Indian Institute of Technology Guwahati; Prasad Bokil, Indian Institute of Technology Guwahati; Dharmalingam Udaya Kumar, Indian Institute of Technology Guwahati
248	Review on Sustainable Lighting Design in Art Galleries to Balance between Visibility and Conservation of Light Sensitive Art Exhibits	Podium Presentation	Amrita Bhattacharjee*, Indian Institute of Technology Guwahati; Swati Pal, Indian Institute of Technology Guwahati
251	Design Research and the Academy: research driven community facing work	Poster + Brief Podium	Diana Nicholas*, Drexel University; Debra Ruben, Drexel University; Kathleen Martin, Drexel University; Alphonso Mclendon, Drexel University

253	Art of designing an e-art gallery	Poster + Brief Podium	Anupam Chandra*, Kuliza Technologies Pvt. Ltd., Bangalore; Praveen Uchil, Indian Institute of Science, Bangalore
257	Systems design is needed for Smart manufacturing curriculum to India	Poster + Brief Podium	Vijayarangan Natarajan*, TCS Ltd & IIITDM; senthil kumar, Sethu Institute of Technology; siva kumar, Sethu Institute of Technology; murali kannan, Sethu Institute of Technology
260	A Thinking Process Model Based on the Perspective of Editing Constraints to Design Innovative Things	Podium Presentation	Masami Maekawa*, Japan Advanced Institute of Science and Technology
263	THERMO-STRUCTURAL DESIGN OF STRUT BASED FLAME HOLDER FOR SCRAMJET COMBUSTOR	Podium Presentation	Anupam Purwar*, IISc Bangalore
264	Challenges to Sustainable Growth of the Micro-Scale Kuhila Craft Industry of India	Podium Presentation	Prarthana Majumdar*, Indian Institute of Technology Guwahati (IITG); Sharmistha Banerjee, IIT Guwahati
267	A design evaluation framework for developing communities	Podium Presentation	Euan Coutts*, University of Strathclyde; Joey Ho, University of Strathclyde; Alex Duffy, "University of Strathclyde, UK"
271	Supporting Design : InDeaTe Tool and Template - Design Methods and Tools Database	Podium Presentation	Amaresh Chakrabarti, "Indian Institute of Science, India"; Shakuntala Acharya*, Indian Institute of Science; Ranjan B.S.C, Indian Institute of Science; Suman Devadula, Indian Institute of Science; Kiran Ghadge, Indian Institute of Science; Madhusudanan N, Indian Institute of Science; Praveen Uchil, Indian Institute of Science; Srinivasan V, Singapore University of Technology and Design; Gaurav Ameta, Washington State University; Sudarsan Rachuri, DOE
277	A preliminary semantic study on communication and perception of energy meter graphics	Podium Presentation	Venkateshwarlu Varala*, IIT Guwahati; Pradeep Yammiyavar, "Indian Institute of Technology - Guwahati"

278	Exploring purchase experience of Assam silk (as memento) by the tourist to strengthen the bond between visitors and native people	Poster + Brief Podium	Hitesh Sharma*, IIT Guwahati; Sougata Karmakar, "IIT Guwahati, India"; Debkumar Chakrabarti, "IIT Guwahati"
279	Applying Product Semantics to Benchmark Physical Properties of Product Characters Through Design Teaching: Strategies for Shape Coding	Podium Presentation	shujoy chakraborty*, University of Madeira- Portugal / Madeira Interactive Technologies Institute (M-ITI)
281	Application of InDeaTe design toolbox for designing sustainable products - case study of a natural water cooler	Podium Presentation	Kiran Ghadge, Indian Institute of Science; Suman Devadula, Indian Institute of Science; Saritha Vishwanathan, IIM Ahmedabad; Quinn Langfitt, Washington State University; Shuk Han Chan, University of California, Berkeley; Gaurav Ameta, Washington State University; Anil Gupta, Indian Institute of Management, Ahmedabad; Sudarsan Rachuri, DOE; Amaresh Chakrabarti*, "Indian Institute of Science, India"
282	Development and Validation of a Method for Assessment of Novelty and Requirement Satisfaction in Designing	Podium Presentation	Ranjan B.S.C, Indian Institute of Science; Amaresh Chakrabarti*, "Indian Institute of Science, India"
285	Nature Inspired Design – A review from an industrial design perspective	Podium Presentation	Shiv Kumar Verma*, Indian Institute of Technology Guwahati; Ravi Punekar, "IIT Guwahati"
290	Vastu-Purusha Mandala & Web Page Design: Comparison of Tradition and Modernity	Podium Presentation	Anshuman Sharma*, LnT Infotech
293	Application of InDeaTe design toolbox for designing sustainable manufacturing systems - case study of a Micro-Hydel Turbine innovator	Podium Presentation	Kiran Ghadge, Indian Institute of Science; Suman Devadula, Indian Institute of Science; Saritha Vishwanathan, IIM Ahmedabad; Shuk Han Chan, University of California, Berkeley; Quinn Langfitt, Washington State University; Gaurav Ameta, Washington State University; Anil Gupta, Indian Institute of Management, Ahmedabad; Sudarsan Rachuri, DOE; Amaresh Chakrabarti*, "Indian Institute of Science, India"

295	Design as Culture: Understanding vernacular architecture of indigenous tribal community of India	Podium Presentation	harshitha raju*, acharya
297	Media Representation: Design for Positive Imaging	Podium Presentation	Payel Chakrabarti*, IIT Guwahati; Debkumar Chakrabarti, "IIT Guwahati"
299	Infusing Design Thinking Mindset in Engineering Education—A pioneering step towards excellence and sustainability	Poster + Brief Podium	Gagandip Singh Khanduja, SAL Institute of Technology and Engineering Research, Ahmedabad. Gujarat; Karmjitsinh Bihola*, Gujarat Technological University, Ahmedabad. Gujarat; Jaimin Dave, Gujarat Technological University, Ahmedabad. Gujarat
301	Supporting manufacturing system design: A Case Study on application of InDeaTe design tool for a smart manufacturing system design	Podium Presentation	Praveen Uchil*, Indian Institute of Science; Kiran Ghadge, Indian Institute of Science; Shakuntala Acharya, Indian Institute of Science; Raunak Bhinge, University of California, Berkeley ; Stefanie Robinson, University of California, Berkeley ; David Dronfeld, University of California, Berkeley; Sudarsan Rachuri, National Institute of Standards and Technology, Gaithersburg; Gaurav Ameta, Washington State University; Amaresh Chakrabarti, "Indian Institute of Science, India"
305	Exploring Visual Response on Form Features of the Autorickshaw	Podium Presentation	Susmita Sharma*, Industrial Design Centre, IITB
313	A Gandhian Framework for Social Design: The Work of Laurie Baker and Hunnarshala	Podium Presentation	Saurabh Tewari, Indian Institute of Technology Kanpur; nipun Prabhakar*, School of planning and architecture, Bhopal; Saurabh Popli, School of Planning and Architecture Bhopal
322	Closing the Loop: 'Systems Perspective' for the Design of Food Packaging to facilitate Material Recovery.	Podium Presentation	Amaltas Khan, PDPM Indian Institute of Information Technology, Design and Manufacturing Jabalpur; Puneet Tandon*, "IIITDM Jabalpur"
333	Sustainability Definitions - An Analysis	Podium Presentation	Srinivas Kota*, "BITS, Pilani"; Nikhat Waseem, BITS Pilani

336	Past, Present and Future of Collaborative design :From user centred to user driven design.	Podium Presentation	shanu sharma*, design programme; Koumudi Patil, Design programme IIT Kanpur
347	French education system organization from secondary school to university to prepare future engineers to sustainable development and eco-design	Podium Presentation	Catherine PERPIGNAN*, Bordeaux University; Vincent ROBIN, University of Bordeaux; Phillippe Girard, "University of Bordeaux, France"
349	Disassembly for Redesign	Podium Presentation	Serge Rohmer*, "UTT"; Paulina Moreno RODRIGUEZ, University of Technology of Troyes, France
353	Adaptation of Rapid Ethnography for Service Experience Design in Organisational Setting: Design of a Peer to Peer Social Micro-lending Service	Podium Presentation	Pramod Khambete*, Independent Consultant; Kiran Sabnis, Fiserv Global; Amit Jain , Fiserv Global
355	Spokes characters of Mascot and young consumers' perspective particular understanding	Podium Presentation	preeti yadav*, IITG; Dandeswar Bisoyi, IIT Guwahati; Debkumar Chakrabarti, "IIT Guwahati"
356	Welding Parameters Optimization in MMAW Assisted Nano-Structured Hardfacing Using Desirability Function Analysis Embedded With Taguchi Method	Poster + Brief Podium	Abhijit Saha*, Haldia Institute of Technology, Haldia ; Subhas Mondal, IEST Shibpur
359	Decision-making support in engineering design based on collaborative dashboards: integration of business intelligence techniques	Podium Presentation	Ahmed Fradi*, Sorbonne universités, Université de Technologie de Compiègne, France; Matthieu Bricogne, Université de Technologie de Compiègne; Magali Bosch, UTC; Borhen Louhichi, Laboratoire LIPPS, École de Technologie Supérieure, Montréal, Canada; Benoit Eynard, "Universite de Technologie de Compiegne"

361	Effect of Orientation and Position of Impact on the Lower Extremity Injuries during Car Pedestrian Crashes	Podium Presentation	Raghu Prakash *, Indian Institute of Technology Madras; Harikumar Payyur, Indian Institute of Technology Madra
362	A sustainable, eco-friendly charge storage device from bio-charred Jute: An innovative strategy to empower the Jute farmers of India	Podium Presentation	Amarish Dubey*, IIT Kanpur; Deepu Philip, IIT Kanpur; Mainak Das, IIT Kanpur
363	Connotations of ecodesign: A commentary on the state of the discourse	Podium Presentation	Ramani K*, CPDM, IISc; Kumari MC, CPDM, IISc
364	Inclusive Personalization of User Interfaces	Podium Presentation	Pradipta Biswas*, Indian Institute of Science; Ankit Halder, Manipal University; Khushboo Maheshwary, Freelance; Somnath Arjun, Indian Institute of Science