2022 IEEE
28TH ICE/ITMC & 31ST IAMOT
JOINT CONFERENCE

CONFERENCE AGENDA

TECHNOLOGY, ENGINEERING, AND INNOVATION MANAGEMENT COMMUNITIES AS ENABLERS FOR SOCIAL-ECOLOGICAL TRANSITIONS

JUNE 19-23, 2022
NANCY, FRANCE

https://ice-iamot-2022-conference.org/

Find all the information about the conference on
https://ice-iamot-2022-conference.org/

Find the papers and make you own agenda on (use your conftool account)
https://www.conftool.pro/ice-iamot-2022/

Update 19/06/2022

Date: Monday, 20/June/2022

8:00am - 9:00am	**Regist. D1: Registration** Location: **Entrance / Registration Desk - Centre Prouvé** Join ICE-IAMOT conference at **Prouvé Convention Center - 1, place de la République CS 60663 - 54063 NANCY Cedex** Venue on the ICE-IAMOT website / How to join us - move in Nancy (google map)
9:00am - 10:30am	**Plenary01: Opening & Keynote speakers 1-2** Location: **Auditorium 300 - Centre Prouvé** **Laure MOREL, Mauricio CAMARGO, Laurent DUPONT** - Welcome address by the local organizers of the ICE-IAMOT conference **Karl TOMBRE -** Vice-president for European and International Strategy at Université de Lorraine, Executive director of LUE initiative Keynote speakers: **Osman AHMED** (Pacific Northwest National Laboratory, USA) - "Digitalization, De-carbonization, and Innovation"- What we need for a Sustainable Planet - see more **Dominique JOLLY** - China's Rapid Technological Transformation: Good news for Ecological Transition? - see more Remote Link: Auditorium
10:30am - 11:00am	**Coffee Break** Location: **Foyer 850 (Hall) - Centre Prouvé**

11:00am - 12:30pm	**IE5: Intrapreneurship & Corporate Venturing** Location: **Room 103 - Centre Prouvé** Chair: **Fabio Cruz Sanchez**, Université de Lorraine, France Remote link: Room 103 on Microsoft Teams	**IE6-1: Living-Labs & Open-Innovation** Location: **Room 104 - Centre Prouvé** Chair: **Laure Morel**, University de Lorraine, France Remote link: Room 104 on Microsoft Teams	**IE11-3: Sustainability in Innovation & Entrepreneurship** Location: **Room 105 - Centre Prouvé** Chair: **Manon Enjolras**, Université de Lorraine - ERPI, France Remote link: Room 105 on Microsoft Teams	**TEC8: Robotics & Autonomous Systems / Cyber Physical Systems (CPS)** Location: **Room 106 - Centre Prouvé** Chair: **Klaus-Dieter Thoben**, BIBA - Bremer Institut für Produktion & Logistik, Germany Remote link: Room 106 on Microsoft Teams
	TEC3-1: Technology on Education and Training Location: **Room 202 - Centre Prouvé** Chair: **Raphaël BARY**, Université de Lorraine, France Remote link: Room 202 on Microsoft Teams	**ENG2: Energy Supply and Energy Utilities** Location: **Room 204 - Centre Prouvé** Chair: **Yacine Rezgui**, Cardiff University, United Kingdom Remote link: Room 204 on Microsoft Teams	**ENG12-1: SCM 4.0** Location: **Room 205 - Centre Prouvé** Chair: **Kulwant Pawar**, Nottingham University, United Kingdom Remote link: Room 205 on Microsoft Teams	

12:30pm - 1:30pm	**Lunch** Location: **Foyer 850 (Hall) - Centre Prouvé**
1:30pm - 2:30pm	**Plenary02: Keynote speaker 3** Location: **Auditorium 300 - Centre Prouvé** **Alice de Casanove** (Airbus) - Return of experience regarding Innovation management ISO 56000 series: Implementation in a large organization - see more Remote Link: Auditorium

2:30pm - 4:00pm	**IE4-1: Human, Socio-Economic and Culture Issues** Location: **Room 103 - Centre Prouvé** Chair: **Fedoua KASMI**, Université de Lorraine, France Remote link: Room 103 on Microsoft Teams	**IE6-2: Living-Labs & Open-Innovation** Location: **Room 104 - Centre Prouvé** Chair: **Laurent DUPONT**, Université de Lorraine, France Remote link: Room 104 on Microsoft Teams	**IE11-1: Sustainability in Innovation & Entrepreneurship** Location: **Room 105 - Centre Prouvé** Chair: **Brunelle MARCHE**, Université de Lorraine, France Remote link: Room 105 on Microsoft Teams	**TEC3-2: Technology on Education and Training** Location: **Room 202 - Centre Prouvé** Chair: **Raphaël BARY**, Université de Lorraine, France Remote link: Room 202 on Microsoft Teams
	ENG4-1: Sustainable Engineering Location: **Room 203 - Centre Prouvé** Chair: **Alaa Hassan**, Université de Lorraine, France Remote link: Room 203 on Microsoft Teams	**ECTP1: Smart Construction & Built Environment** Location: **Room 204 - Centre Prouvé** Chair: **Alain ZARLI**, ECTP & R2M Solution, France Chair: **Sylvain Kubicki**, Luxembourg Institute of Science and Technology, Luxembourg Remote link: Room 204 on Microsoft Teams	**ENG12-2: SCM 4.0** Location: **Room 205 - Centre Prouvé** Chair: **Mauricio Camargo**, University of Lorraine, France Remote link: Room 205 on Microsoft Teams	

4:00pm - 4:30pm	**Coffee Break** Location: **Foyer 850 (Hall) - Centre Prouvé**

Time				
4:30pm - 6:00pm	**IE4-2: Human, Socio-Economic and Culture Issues** Location: **Room 103 - Centre Prouvé** Chair: **DEYCY JANETH SANCHEZ PRECIADO**, Halmstad University, Sweden Remote link: Room 103 on Microsoft Teams	**IE6-3: Living-Labs & Open-Innovation** Location: **Room 104 - Centre Prouvé** Chair: **Marc Pallot**, Arts & Metiers ParisTech, France Remote link: Room 104 on Microsoft Teams	**IE11-2: Sustainability in Innovation & Entrepreneurship** Location: **Room 105 - Centre Prouvé** Chair: **Dominique Jolly**, France Remote link: Room 105 on Microsoft Teams	**TEC1: Advance manufacturing & Factories of the Future** Location: **Room 106 - Centre Prouvé** Chair: **Alaa Hassan**, Université de Lorraine, France Remote link: Room 106 on Microsoft Teams
	TEC6: Green Tech Location: **Room 202 - Centre Prouvé** Chair: **Giovanny Arbelaez-Garces**, Université de Lorraine, France Remote link: Room 202 on Microsoft Teams	**ENG4-2: Sustainable Engineering** Location: **Room 203 - Centre Prouvé** Chair: **Luke Maki**, The Boeing Company, United States of America Remote link: Room 203 on Microsoft Teams	**ECTP2: Smart Construction & Built Environment** Location: **Room 204 - Centre Prouvé** Chair: **Alain ZARLI**, ECTP & R2M Solution, France Chair: **Yacine Rezgui**, Cardiff University, United Kingdom Remote link: Room 204 on Microsoft Teams	
6:00pm - 7:45pm	**Free time**			
7:00pm	**Social Event: Visit & Welcoming Cocktail** Location: **Musée des Beaux-Arts**			

19:00 - 20:30 - Visit Musée des Beaux-Art Nancy (visits will start at 19:00)

20:30 - 21:45 - Welcome speeches by the IAMOT and ICE Presidents / representatives & Cocktail
(*Access by registration only*) How to join us / move in Nancy
https://www.google.com/maps/d/edit?mid=1qYCByo6cg4Meqk1aQow9rfPGgsUOtV_9&usp=sharing

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Date: Tuesday, 21/June/2022

Time				
8:00am - 8:30am	**Regist. D2: Registration** Location: **Entrance / Registration Desk - Centre Prouvé** Join ICE-IAMOT conference at **Prouvé Convention Center - 1, place de la République CS 60663 - 54063 NANCY Cedex** Venue on the ICE-IAMOT website / How to join us - move in Nancy (google map)			
8:30am - 9:30am	**Plenary03: Keynote 4** Location: **Auditorium 300 - Centre Prouvé** Alexander Brem (University of Stuttgart, Germany) - Frugal Innovation: Constraint-based thinking as a solution for sustainability? - see more Remote Link: Auditorium			
9:40am - 10:40am	**IE2-2: Digital Innovation Management** Location: **Room 103 - Centre Prouvé** Chair: **Frédérique Mayer**, Université de Lorraine, France Remote link: Room 103 on Microsoft Teams	**IE13-1: Technology Foresight and Forecasting** Location: **Room 104 - Centre Prouvé** Chair: **Breno Nunes**, University of Aston, United Kingdom Remote link: Room 104 on Microsoft Teams	**IE3: Digital Social Networks** Location: **Room 105 - Centre Prouvé** Chair: **Sophie Boutillier**, University of Littoral Côte d'Opale, France Remote link: Room 105 on Microsoft Teams	**IE7-4: R&D, Innovation and Entrepreneurship** Location: **Room 106 - Centre Prouvé** Chair: **Ferney Osorio**, UNIVERSITÉ DE LORRAINE, France Remote link: Room 106 on Microsoft Teams
	ENG5-2: Rethinking Project Management Location: **Room 202 - Centre Prouvé** Chair: **Brunelle MARCHE**, Université de Lorraine, France Remote link: Room 202 on Microsoft Teams	**ENG1-1: ICT for health care** Location: **Room 204 - Centre Prouvé** Chair: **James Fleck**, University of Edinburgh Business School, United Kingdom Remote link: Room 204 on Microsoft Teams	**TEC7: Commercializing Technology** Location: **Room 205 - Centre Prouvé** Chair: **Joe Amadi-Echendu**, University of Pretoria, South Africa Remote link: Room 205 on Microsoft Teams	
10:40am - 11:00am	**Coffee Break** Location: **Foyer 850 (Hall) - Centre Prouvé**			
11:00am - 12:30pm	**IE2-1: Digital Innovation Management** Location: **Room 103 - Centre Prouvé** Chair: **Eric Bonjour**, Université de Lorraine, France Remote link: Room 103 on Microsoft Teams	**IE13-2: Technology Foresight and Forecasting** Location: **Room 104 - Centre Prouvé** Chair: **Roland Ortt**, Delft University of Technology, Netherlands, The Remote link: Room 104 on Microsoft Teams	**TEC2-1: Industry 4.0** Location: **Room 105 - Centre Prouvé** Chair: **Adriana Simona Mihaita**, UNIVERSITY OF TECHNOLOGY SYDNEY, Australia Remote link: Room 105 on Microsoft Teams	**IE7-1: R&D, Innovation and Entrepreneurship** Location: **Room 106 - Centre Prouvé** Chair: **Paulo Antônio Zawislak**, UFRGS, Brazil Remote link: Room 106 on Microsoft Teams
	ENG5-1: Rethinking Project Management Location: **Room 202 - Centre Prouvé** Chair: **Robert Bierwolf**, IEEE TEMS, Netherlands, The Remote link: Room 202 on Microsoft Teams	**ENG3-2: Service Design and Engineering** Location: **Room 203 - Centre Prouvé** Chair: **Abdul Rahman Abdel Razek**, FARO Technologies Europe GmbH, Germany Remote link: Room 203 on Microsoft Teams	**ENG1-2: ICT for health care** Location: **Room 204 - Centre Prouvé** Chair: **Imke De Kock**, Stellenbosch University, South Africa Remote link: Room 204 on Microsoft Teams	**ENG14: Smart Services and Software Platforms** Location: **Room 205 - Centre Prouvé** Chair: **Frédérique Mayer**, Université de Lorraine, France Remote link: Room 205 on Microsoft Teams
12:30pm - 1:30pm	**Lunch** Location: **Foyer 850 (Hall) - Centre Prouvé**			
1:30pm - 2:30pm	**Plenary04: Keynote 5** Location: **Auditorium 300 - Centre Prouvé** Joshua Pearce (Western University, Canada) - Open source appropriate technology (OSAT): Finding collaborative solutions to problems in sustainability and poverty reduction Remote Link: Auditorium			
	RT-01: Innovation in public Administration	**IE8: Regional competitiveness policy and**	**TEC2-2: Industry 4.0: Digital Innovation**	**IE7-2: R&D, Innovation and**

2:30pm - 4:00pm

Location: **Auditorium 300 - Centre Prouvé**
Chair: **Vincent BOLY**, Université de Lorraine / ERPI, France
Chair: **Fedoua KASMI**, Université de Lorraine, France
Round table on Innovation in public Administration with 5 stakeholders: Deputy Mayor (City of Nancy), Engineer (City of Nancy), SME, Departmental Fire and Emergency Service, Academics
Supported by the City of Nancy, Territoria, RNI
Remote Link: Auditorium

smart specialization strategies
Location: **Room 103 - Centre Prouvé**
Chair: **Paulo Antônio Zawislak**, UFRGS, Brazil
Remote link: Room 103 on Microsoft Teams

management and applications of AI
Location: **Room 105 - Centre Prouvé**
Chair: **Giovanny Arbelaez-Garces**, Université de Lorraine, France
Remote link: Room 105 on Microsoft Teams

Entrepreneurship
Location: **Room 106 - Centre Prouvé**
Chair: **Matjaz Vidmar**, The University of Edinburgh, United Kingdom
Remote link: Room 106 on Microsoft Teams

ENG10-1: Industrial Internet & Industry 4.0
Location: **Room 202 - Centre Prouvé**
Chair: **Abdul Rahman Abdel Razek**, FARO Technologies Europe GmbH, Germany
Remote link: Room 202 on Microsoft Teams

ENG3-1: Service Design and Engineering
Location: **Room 203 - Centre Prouvé**
Chair: **hakim boudaoud**, Université de Lorraine, France
Remote link: Room 203 on Microsoft Teams

ENG8-1: Innovation on Education and Learning
Location: **Room 204 - Centre Prouvé**
Chair: **Alex Gabriel**, Université de Lorraine, France
Remote link: Room 204 on Microsoft Teams

4:00pm - 4:30pm

Coffee Break
Location: **Foyer 850 (Hall) - Centre Prouvé**

4:00pm - 6:00pm

Serious Game: "L'année de l'innovation"
Location: **Foyer 850 (Hall) - Centre Prouvé**
Chair: **Alice de Casanove**, Universite Lorraine, United States of America
animated by: Johan Claire, CEO Innovation Way & ISO; Alice de Casanove, Airbus & ISO
Max 36 people (add to your Conftool agenda)

4:30pm - 6:00pm

RT-03: Meet the Editors
Location: **Auditorium 300 - Centre Prouvé**
Chair: **Breno Nunes**, University of Aston, United Kingdom
Chair: **Manon Enjolras**, Université de Lorraine - ERPI, France

- Technology Forecasting and Social Change – Scott Cunningham – virtually
- IEEE Technology and Engineering Management – Alexander Brem – in person
- Technovation - Stelvia Matos - virtually
- Technology Analysis & Strategic Management – James Fleck – in person
- Regional studies – David Bailey – virtually
- RNI editions - Laurent Adatto – in person
Remote Link: Auditorium

IE10: Responsible Research and Innovation
Location: **Room 103 - Centre Prouvé**
Chair: **Geerten van de Kaa**, Delft University of Technology, Netherlands, The
Chair: **Fedoua KASMI**, Université de Lorraine, France
Chair: **Vincent BOLY**, Université de Lorraine / ERPI, France
Remote link: Room 103 on Microsoft Teams

IE9: Research and Innovation in Creative Industries
Location: **Room 104 - Centre Prouvé**
Chair: **BHUKYA KOTESWARARAO NAIK**, NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING, India
Remote link: Room 104 on Microsoft Teams

TEC5: Artificial Intelligence & Big Data
Location: **Room 105 - Centre Prouvé**
Chair: **Monticolo Davy**, Université de Lorraine, Réunion (France)
Remote link: Room 105 on Microsoft Teams

IE7-3: R&D, Innovation and Entrepreneurship
Location: **Room 106 - Centre Prouvé**
Chair: **Matjaz Vidmar**, The University of Edinburgh, United Kingdom
Remote link: Room 106 on Microsoft Teams

ENG10-2: Industrial Internet & Industry 4.0
Location: **Room 202 - Centre Prouvé**
Chair: **Regina Negri Pagani**, Federal University of Technology, Paraná (UTFPR), Brazil
Remote link: Room 202 on Microsoft Teams

ENG8-2: Innovation on Education and Learning
Location: **Room 204 - Centre Prouvé**
Chair: **Alex Gabriel**, Université de Lorraine, France
Remote link: Room 204 on Microsoft Teams

6:30pm - 8:00pm

IAMOT Board Meeting 02 (closed meeting Board members only)
Location: **Lorraine Fab Living Lab**
Lorraine Fab Living Lab - 49 Boulevard d'Austrasie - 54000 NANCY
How to access (google map)? or from Congress center

Free evening – Fête de la musique – Enjoy the musique in the City center and the old city center of Nancy

Date: Wednesday, 22/June/2022

8:00am - 9:00am	**Regist. D3: Registration** Location: **Entrance / Registration Desk - Centre Prouvé** Join ICE-IAMOT conference at **Prouvé Convention Center - 1, place de la République CS 60663 - 54063 NANCY Cedex** Venue on the ICE-IAMOT website / How to join us - move in Nancy (google map)
9:00am - 10:30am	**Plenary05: EU projects Round Table** Location: **Auditorium 300 - Centre Prouvé** Chair: **Laurent DUPONT**, Université de Lorraine, France "Open innovation, technologies & communities as enablers of socio-economical transition" Context: • Climate change! Limits and challenges of our current societal model – An introduction. Mauricio Camargo - Université de Lorraine • New trends in the EU context and the Society: What responsibility of Science and Innovation in societal transitions? Introduction to RRI by DigiTeRRI - Marianne Hoerlesberger - Austrian Institute of Technology • Transforming European industry with DIY and open manufacturing facilities - Mehera Hassan – Technische Universität Berlin Short presentation of five European projects (DIY4U, iProduce, INEDIT, OpenNext, Climate Labs), results and perspectives + focus: • Definitions of (open) communities and open innovation • Engagement strategy to transform European Industry in line with Responsible Research and Innovation and Circular Economy Remote Link: Auditorium
10:30am - 11:00am	**Coffee Break** Location: **Foyer 300 (small Hall) - Centre Prouvé**

11:00am - 12:30pm	**WS01: Co-designing Open innovation, technologies & communities to enable socio-economical transition - Pratices and actions with EU projects** Location: **Auditorium 300 - Centre Prouvé** Chair: **Ivo Zeller**, Steinbeis Europa Zentrum, Germany Workshop open to all - Transforming industry and territories by engaging the international ICE-IAMOT community in European projects: DIY4U, iProduce, INEDIT, OpenNext. Practical information on the Octroi Nancy demonstrators to prepare your living lab experience in the immersive design factory Remote Link: Auditorium	**Climate Labs** **(closed event members only)** Location: **Room 103 & 104 - Centre Prouvé**	**IE12: Tech- & Digital Entrepreneurship** Location: **Room 105 - Centre Prouvé** Chair: **Clarice Bertin**, ICN Business School & BETA Research Center, France Remote link: Room 105 on Microsoft Teams	**WS03: Responsible digitalization: the example of the DigiTeRRI project** Location: **Room 106 - Centre Prouvé** Chair: **Monticolo Davy**, Université de Lorraine, Réunion (France) Chair: **Vincent BOLY**, Université de Lorraine / ERPI, France •RRI definition •Implementation of Responsible Digitalization: the necessary adaptation to the context •Territorial strategy for Responsible Digitalization implementation: the methodologies (roadmapping and vision definition) and the roadmap presentation of three european territories •Practices and actions to stimulate Responsible Digitalization in 3 regions: Styria / Vârmland / Grand Est Remote link: Room 106 on Microsoft Teams

12:30pm - 1:30pm	**Lunch** Location: **Foyer 300 (small Hall) - Centre Prouvé**
1:30pm - 6:00pm	**Climate Labs (closed event – project member only)** Location: **Room 103 & 104 - Centre Prouvé** 3:30pm - 4:30pm **Coffee Break** Location: **Foyer 300 (small Hall) - Centre Prouvé**
1:30pm - 2:00pm	HyValue at Centre Prouvé	**Commune to Octroi Nancy** Location: **Petite Halle - Octroi Nancy** map on the website - Here the link for Google Maps by walking and visiting Nancy allow 25 min by tram: request a transport ticket from the registration desk

1:30pm - 6:00pm	**WS02: HyValue Workshop**	**Exhibition (EU projects): Innovative Design Factory in the city by INEDIT, DIY4U, iPRODUCE, OPEN_NEXT**

WS02: HyValue Workshop
Location: **Auditorium 300 - Centre Prouvé**
Chair: **Robert Bierwolf**, IEEE TEMS, Netherlands, The
Chair: **Monticolo Davy**, Université de Lorraine, Réunion (France)

- 13:30 Robert Bierwolf - Towards PM2030 – Research through Project Management
- 13:45 Anna Schidek - Agilization in MedTech
- 14:00 Phillip Hansen - Fuzzy Expert System for Estimation
- 14:15 Markus Schmidtner - PM Context Modeling
- 14:30 Holger Timinger - Weighting of project management process parameters

14:40 coffee Break

- 15:00 1 Hour HyValue Presentation (20 Min incl. 5 min discussion each)
- 15:00 Markus Schmidtner - Interorganizational Project Management in the automotive Industry
- 15:20 Alexander Ziegler- From Cooperation to Collaboration: Sociological Insights into Digital Collaboration Platforms in the Automotive Value Chain
- 15:40 Kirsten Hentschl & Andreas Trautheim-Hofmann - Digital Transformation of Project Schedule Management and Synchronization (PSMS) in Collaboration Networks
- 16:00 Open Discussion
- 16:15 End of Workshop

Remote Link: Auditorium

4:15pm - 4:40pm

Commune to Octroi Nancy (after HyValue WS)
Location: **Petite Halle - Octroi Nancy**
map on the website - Here the link for Google Maps
by walking and visiting Nancy allow 25 min
by tram: request a transport ticket from the registration desk

Exhibition (EU projects): Innovative Design Factory in the city by INEDIT, DIY4U, iPRODUCE, OPEN_NEXT

Location: **Petite Halle - Octroi Nancy** (20 min from the congress center)

Chair: **Laurent DUPONT**, Université de Lorraine, France
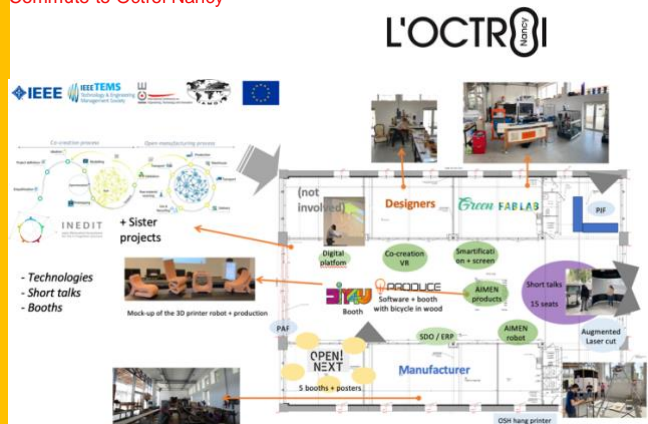Chair: **Robert Mies**, Technische Universität Berlin, Germany
Chair: **Chandana Ratnayake**, SINTEF AS, Norway
Chair: **Manuel Sánchez de la Asunción**, AIDIMME, Spain

Demonstrator in Living lab mode at Octroi Nancy (Cultural and creative third place) + networking (open to all & citizens & local industries / SMEs)
•Do It Together process: from Co-creation to open manufacturing
•Open_Next pilots & booth
•iProduce software & booth
•DIY4U booth

Commute to Octroi Nancy

Exhibition at Octroi Nancy

6:00pm - 7:45pm	Free time	
7:45pm	**Social Event 2: GALA DINNER**	

Social Event 2: GALA DINNER
Location: **Hotel de Ville de Nancy (City Hall)**

Speech by the Mayor of Nancy / Awards / Sound and light "Rendez-vous Place Stanislas"

Dishes made with local producers

(*Access by registration only*)

How to join us / move in Nancy
https://www.google.com/maps/d/edit?mid=1qYCByo6cg4Meqk1aQow9rfPGgsUOtV_9&usp=sharing

Date: Thursday, 23/June/2022

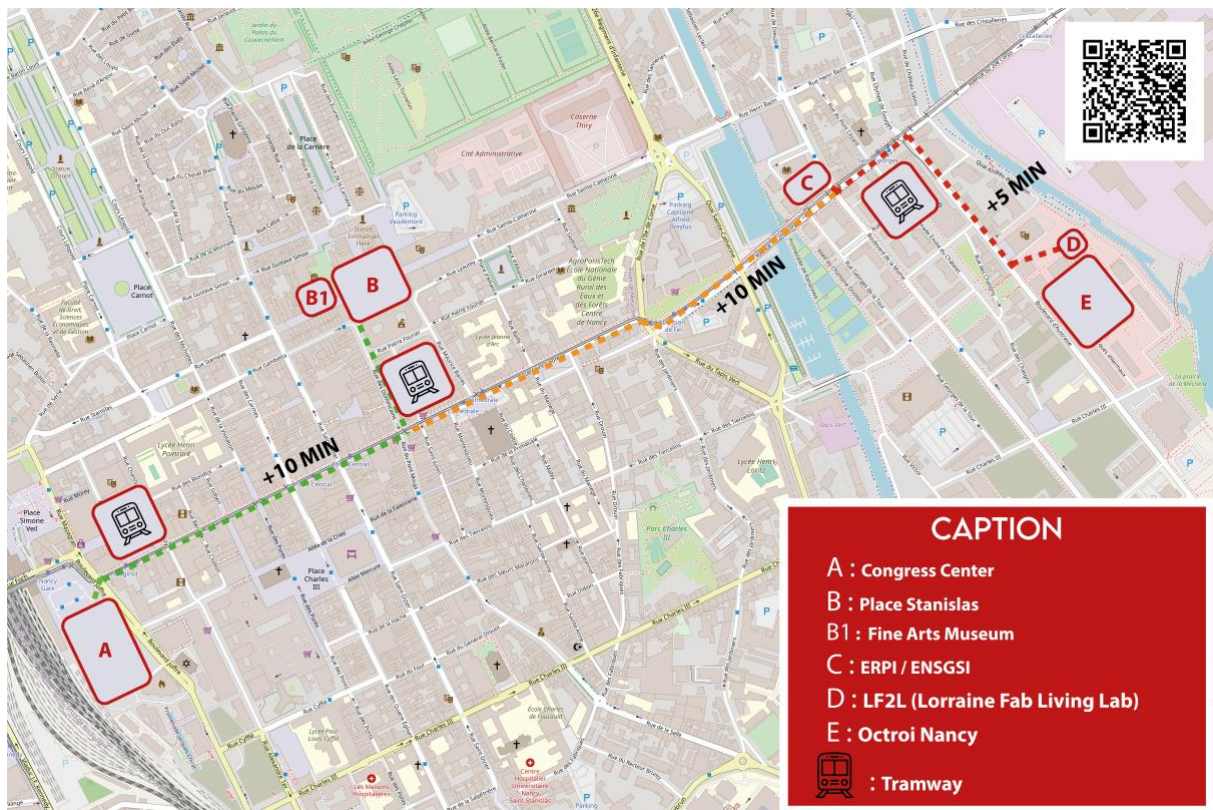| 9:00am - 11:30am	**EU Workshop: INEDIT (closed event project member only)** Location: **Lorraine Fab Living Lab**
9:30am - 11:00am	**Immersive Conf: Social innovation labs to mitigate and adapt to climate change** Location: **Petite Halle - Octroi Nancy** Chair: **Fabio Cruz Sanchez**, Université de Lorraine, France Chair: **Ferney Osorio**, UNIVERSITÉ DE LORRAINE, France Chair: **Laure Morel**, University de Lorraine, France Strengthening applied research and innovation capacities in Latin-America through co-creation labs for mitigation and adaptation to Climate Change Climate Labs Posters + Networking session + Scientific demonstrators
11:00am - 12:30pm	**Plenary06: ICE-IAMOT closing session** Location: **Petite Halle - Octroi Nancy** General Assembly: Future of Technology, Engineering, and Innovation Management Communities Special Guest: Hélène Boulanger, présidente de l'Université de Lorraine.

Venues ICE-IAMOT Conference

CAPTION

A : Congress Center
B : Place Stanislas
B1 : Fine Arts Museum
C : ERPI / ENSGSI
D : LF2L (Lorraine Fab Living Lab)
E : Octroi Nancy
: Tramway

Detailed Agenda

Date: Monday, 20/June/2022

8:00am - 9:00am

Regist. D1: Registration
Location: **Entrance / Registration Desk - Centre Prouvé**
Join ICE-IAMOT conference at **Prouvé Convention Center - 1, place de la République CS 60663 - 54063 NANCY Cedex**
Venue on the ICE-IAMOT website / How to join us - move in Nancy (google map)

9:00am - 10:30am

Openning & Keynote 1
Location: **Auditorium 300 - Centre Prouvé**
Welcome address by the local organisers of the ICE-IAMOT conference
Karl TOMBRE - Vice-president for European and International Strategy at Université de Lorraine, Executive director of LUE initiative
Keynote speakers:
Osman AHMED (Pacific Northwest National Laboratory, USA) - "Digitalization, De-carbonization, and Innovation"- What we need for a Sustainable Planet - see more
Dominique JOLLY - China's Rapid Technological Transformation: Good news for Ecological Transition? - see more
Remote Link: Auditorium

10:30am - 11:00am

Coffee Break
Location: **Foyer 850 (Hall) - Centre Prouvé**

11:00am - 12:30pm

IE5: Intrapreneurship & Corporate Venturing	IE6-1: Living-Labs & Open-Innovation	IE11-3: Sustainability in Innovation & Entrepreneurship	TEC8: Robotics & Autonomous Systems / Cyber Physical Systems (CPS)
Location: **Room 103 - Centre Prouvé**	Location: **Room 104 - Centre Prouvé**	Location: **Room 105 - Centre Prouvé**	Location: **Room 106 - Centre Prouvé**
Chair: **Fabio Cruz Sanchez**, Université de Lorraine, France	Chair: **Laure Morel**, University de Lorraine, France	Chair: **Manon Enjolras**, Université de Lorraine - ERPI, France	Chair: **Klaus-Dieter Thoben**, BIBA - Bremer Institut für Produktion & Logistik, Germany
Remote link: Room 103 on Microsoft Teams	Remote link: Room 104 on Microsoft Teams	Remote link: Room 105 on Microsoft Teams	Remote link: Room 106 on Microsoft Teams
Organizational and Personal Self-Concept and their Moderating Relationships as Determinant to Entrepreneurial Orientation	**Unfolding innovation lab services in public hospitals: a hospital FabLab case study**	**Evaluating the drivers of frugal innovation and its relation to sustainability – A Systematic Literature Review**	**Digitization technologies in transport logistics: A systematic literature review protocol**
Charl David Theron, Elma Van der Lingen University of Pretoria, South Africa	**Ambre Scarmoncin**[1], **Clothilde Portelli**[2], **Ferney Osorio**[3], **Guillaume Eckerlein**[1] 1: APHP Paris Saclay; 2: Humaniteam Design; 3: ERPI, Université de Lorraine	**Tsireledzo Maliehe**, Schalk Grobbelaar Department of Engineering and Technology Management, University of Pretoria, South Africa	**John-Dean Kasher**, Simon Riedle, Navid Julian Sardarabady DHBW Ravensburg Campus Friedrichshafen, Germany
Why Companies Implement Multiple Corporate Entrepreneurship Units	**On the Use of Low-Code and No-Code Tools for Teaching Data Science in Applied Industrial and University Settings**	**The influence of circular economy implementation on competitiveness in manufacturing companies**	**Validation of vehicles with automated features through the detection of behavioral differences between humans and machines**
Nicolai Heinzelmann[1], **J. Roland Ortt**[2], **Guido H. Baltes**[1] 1: HTWG Konstanz, Germany; 2: Delft University, Netherlands	**Martin Dobler**[1], **Jürg Meierhofer**[2], **Klaus Frick**[3], **Marcus Bentele**[1] 1: Vorarlberg University of Applied Sciences, Austria; 2: ZHAW School of Engineering; 3: OST Eastern Switzerland University of Applied Sciences	**Ulla Anneli Saari**[1], **Matthias Schneider**[2], **Svenja Damberg**[2], **Leena Aarikka-Stenroos**[1], **Minna Lanz**[3], **Cornelius Herstatt**[2], **Christian M. Ringle**[4] 1: Industrial Engineering & Management, Tampere University, Finland; 2: Institute for Technology & Innovation Management, Hamburg University of Technology, Germany; 3: Automation Technology & Mechanical Engineering, Tampere University, Finland; 4: Institute of Human Resource Management &	**Manuel Schwarz**, Luc Rolland, James Bruce Johnston University of West Scotland, United Kingdom
Uncovering goals of corporate entrepreneurship: A classification based on literature review	**Collaborative networks between innovation spaces**		**Identifying real-world problems with automated vehicles by detecting behavioral differences in steering movements between**
Christina Lang[1], Isabella Fitzky[1], J. Roland Ortt[2], Guido H. Baltes[1] 1: Institute for Strategic Innovation & Technology Management, HTWG	**Fanny Pruvot**, Laurent Dupont, Laure Morel Laboratoire ERPI, France		

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Konstanz, Germany; 2: Faculty of Technology, Policy and Management, Delft University of Technology

Intrapreneurship and corporate entrepreneurship: an integrated operational and strategic model from dynamic capabilities approach
JOSE CARLOS CURIEL FRANCO, MIRIAM DELGADO VERDE
UNIVERSIDAD COMPLUTENSE DE MADRID, Spain

The Integration of Industrial Design in the Fuzzy Front-End – FFE
Lilian Schreiner Módolo[1], Paulo Tromboni de Souza Nascimento[2]
1: USP, Brazil; 2: USP, Brazil

Organizations, Hamburg University of Technology, Germany

Identification of Critical Success Factors for Circular Start-ups 4.0: A literature review
Bruno Alcantara Rodrigues, Fernanda Tavares Treinta, Fabio Neves Puglieri
Federal University of Technology (UTFPR) - Paraná, BR, Brazil

A Research Framework for B2B Green Marketing Innovation: the Design of Sustainable Websites
Pauline Lacom[1,2], Sylvain Sagot[2,3]
1: LISI Automotive, Grandvillars 90600, France; 2: ERCOS Research Group, ELLIADD Laboratory (E.A. 4661), UBFC; 3: ESTA Belfort, School of Business and Engineering, Belfort 90000, France

the human driver and machine
Manuel Schwarz, Luc Rolland, James Bruce Johnston
University of West Scotland, United Kingdom

A Model for Selecting Emerging Technologies Apps for Intelligent ERP
Ahmed Mohamed Abdelrahman Fayed, Mohamed Omar Ezzat
Nile Universty, Egypt

TEC3-1: Technology on Education and Training
Location: **Room 202 - Centre Prouvé**
Chair: **Raphaël BARY**, Université de Lorraine, France
Remote link: Room 202 on Microsoft Teams

ENG2: Energy Supply and Energy Utilities
Location: **Room 204 - Centre Prouvé**
Chair: **Yacine Rezgui**, Cardiff University, United Kingdom
Remote link: Room 204 on Microsoft Teams

A Conceptualisation for the Integration and Evaluation of Gender Mainstreaming in Energy Project Development
Lelani Oosthuizen, Imke H. De Kock, Josephine K. Musango
Stellenbosch University, South Africa

Case study on the impact of engineering changes during power plant construction
Phetheni Mhlongo, Megashnee Munsamy, Jan-Harm Christiaan Pretorius
University of Johannesburg, South Africa

Overview of challenges and requirements for sustainable energy transition in Western

ENG12-1: SCM 4.0
Location: **Room 205 - Centre Prouvé**
Chair: **Kulwant Pawar**, Nottingham University, United Kingdom
Remote link: Room 205 on Microsoft Teams

Modelling manufacturing process flexibility: A systematic review
Marike Spamer, Louzanne Bam
Stellenbosch University, South Africa

IoT system for the validation of conditions in shipping couriers
Pedro Miguel Moreira Filipe[1], Bruno Mataloto[2], Carlos Coutinho[2]
1: ISCTE - Instituto Universitário de Lisboa, Portugal; 2: Information Sciences, Technologies and Architecture Research Center (ISTAR-IUL), Portugal

Security Inspection Framework and its Application to Use Cases

Balkans with focus on BH: A literature review
Damir Androsevic, **Mauricio Camargo, Noureddine Takorabet, Mustafa Music**
Universite de Lorraine

Yuto Nakano, **Yasuaki Kobayashi, Takao Kojima, Yutaka Miyake, Shinsaku Kiyomoto**
KDDI Research, Japan

INFRASTRUCTURE PROJECTS IN SUB SAHARAN AFRICA, SENSITIVITY TO POLITICAL RISKS
Noah Ogano[1], Leon Pretorius[2]
1: Strathmore University, Kenya; 2: University of Pretoria, South Africa

Time				
12:30pm - 1:30pm	**Lunch** Location: **Foyer 850 (Hall) - Centre Prouvé**			
1:30pm - 2:30pm	**Keynote 2** Location: **Auditorium 300 - Centre Prouvé** **Alice de Casanove** (Airbus) - Return of experience regarding Innovation management ISO 56000 series: Implementation in a large organization - see more Remote Link: Auditorium			

2:30pm - 4:00pm	**IE4-1: Human, Socio-Economic and Culture Issues** Location: **Room 103 - Centre Prouvé** Chair: **Fedoua KASMI**, Université de Lorraine, France Remote link: Room 103 on Microsoft Teams	**IE6-2: Living-Labs & Open-Innovation** Location: **Room 104 - Centre Prouvé** Chair: **Laurent DUPONT**, Université de Lorraine, France Remote link: Room 104 on Microsoft Teams	**IE11-1: Sustainability in Innovation & Entrepreneurship** Location: **Room 105 - Centre Prouvé** Chair: **Brunelle MARCHE**, Université de Lorraine, France Remote link: Room 105 on Microsoft Teams	**TEC3-2: Technology on Education and Training** Location: **Room 202 - Centre Prouvé** Chair: **Raphaël BARY**, Université de Lorraine, France Remote link: Room 202 on Microsoft Teams
	Turnover Intention of High-Tech Industry Managers: A Push-Pull-Mooring Model Chih-Hung Hsieh, **Cheng-Ru Hu, Chu-Yun Teng** College of Management, Yuan Ze University, Taiwan	**User-centered prototypes-insights from a design thinking workshop series** Laura Christina Rehberg University of Stuttgart, Germany	**Contributing to monitoring and evaluation practices by conceptualizing a Valuable Insights from Log Analysis (VILA) Framework.** Ane van Schalkwyk[1], **Sara Grobbelaar[2], Euodia Vermeulen[3], Marlien Herselman[4]** 1: Department of Industrial Engineering, Stellenbosch University, South Africa; 2: Department of Industrial Engineering, Stellenbosch University AND DSI-NRF Centre of Excellence in Scientometrics and Science, Technology and Innovation Policy (SciSTIP) Stellenbosch University; 3: Department of Industrial Engineering, Stellenbosch University, South Africa, 4. Department of Industrial Engineering Stellenbosch University AND Next Generation Enterprises and Institutions CSIR Pretoria, South Africa	**An Investigation into the Challenges and Solutions of e-learning in Tertiary Institutions during the COVID-19 Pandemic** Chandini Singh, **Schalk Grobbelaar** Department of Engineering and Technology Management, University of Pretoria, South Africa
	Implementing the systemic approach supporting territorial resilience: the case of the 'Toile' tool. **Mathilde SCHWOB[1], Fedoua KASMI[1], Laurent DUPONT[1], Jean-François VEREECKE[2], Claudine GUIDAT[1]** 1: Université de Lorraine, ERPI Laboratory, France; 2: Agence d'Urbanisme et de Développement de la Région Flandre-Dunkerque (AGUR), France	**An investigation of design in virtual reality across the variation of training degree and visual realism** Sylvain Fleury[1], **Laurent Dupont[2], Noémie Chaniaud[1], Saadallah Tamazart[2], Benjamin Poussard[1], Geoffrey Gorisse[1], Simon Richir[1]** 1: Arts & Metiers Institute of Technology LAMPA, HESAM University F-53810 Change, France; 2: Université de Lorraine ERPI F-54 000 Nancy, France		**Experiences and challenges with pandemic online learning** **Acelya Özkan, Katja Josenhans, Layana Berendt, Ludwig Martin** Pforzheim University, Germany
	THE MAKING OF SOCIAL ENTREPRENEURS:	**Designing a group decision-making tool under Living Lab project**		**A Framework for Outsourcing Maintenance in the Era of Industry 4.0 within the**

EMPIRICALLY TESTING THE SOCIAL ENTREPRENEURIAL INTENTION MODEL.

Preeti Tiwari[1], B. KOTESWARA RAO Naik[2]
1: Jindal Global Business School; 2: NITIE Mumbai

A literature-based categorization model of individual innovation capabilities to boost organizations' innovation capacities

Mariela Martinez, Laure Morel, Manon Enjorlas
Univerisité de Lorraine, Costa Rica

ENG4-1: Sustainable Engineering
Location: **Room 203 - Centre Prouvé**
Chair: **Alaa Hassan**, Université de Lorraine, France
Remote link: Room 203 on Microsoft Teams

The Forest Industry and Development Within South Africa and Other Southern African Development Community Countries

Karen Louise Schmidt[1], Wouter Gideon Bam[1], Philani Nduna Zincume[1], Karolien De Bruyne[1,2]
1: Stellenbosch University, South Africa; 2: KU Leuven, Belgium

Impact of automation during innovative remanufacturing processes in circular economy

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mode: The case of ConsensUs

Maxence Arnould[1], Manon Enjolras[2], Mauricio Camargo[2]
1: AgroParisTech - INRAE - UMR SILVA, Nancy, France; 2: Université de Lorraine - ERPI, Nancy, France

ECTP1: Smart Construction & Built Environment
Location: **Room 204 - Centre Prouvé**
Chair: **Alain ZARLI**, ECTP & R2M Solution, France
Chair: **Sylvain Kubicki**, Luxembourg Institute of Science and Technology, Luxembourg
Remote link: Room 204 on Microsoft Teams

Designing Out the Risk of Infections via Aerosols by Updating Restrictions on Indoor Environments Depending on Local Incidence Rates and the Dominant SARS-CoV-2 Strain

Ruth Wallace, Yacine Rezgui, Ali Ghoroghi
Cardiff University, United Kingdom

Evidencing the correlation between training and energy efficiency through a

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Building PSS-based circular business model canvases: an application in the waste from electrical and electronic equipment context

Claudio Sassanelli[1], Paolo Rosa[2], Sergio Terzi[2], Giorgio Mossa[1]
1: Politecnico di Bari, Italy; 2: Politecnico di Milano, Italy

Household support to adopt preventive innovations to mitigate climate change: A case of Finnish apartment buildings

Deborah Karen Kuperstein-Blasco[1], Jussi Valta[1], Saku Mäkinen[2]
1: Tampere University, Finland; 2: University of Turku, Finland

Enabling the citizen-driven renewable energy transition

Antonia Krebs, Björn Koch
COAST Centre for Environment and Sustainability Research, University of Oldenburg, Germany

ENG12-2: SCM 4.0
Location: **Room 205 - Centre Prouvé**
Chair: **Mauricio Camargo**, University of Lorraine, France
Remote link: Room 205 on Microsoft Teams

Quantifying the Environmental Impacts of Battery Electric Vehicles from a Criticality Perspective

Fernando Penaherrera V.[1], Maria Fernanda Davila Restrepo[1], Dr. Ing. Alexandra Pehlken[1], Björn Koch[2]
1: OFFIS e.V. - Institut für Informatik, Germany; 2: Carl von Ossietzky Universität Oldenburg

Design of an optimised value creation network for zero emission ferries

Jan-Philipp Disselkamp[1], Tobias Seidenberg[1], Harald Anacker[1], Roman Dumitrescu[2]

Petrochemical Industry

Sello Mollo[1], Leon Pretorius[2], Jan Harm C Pretorius[1]
1: University of Johannesburg, South Africa; 2: University of Pretoria, South Africa

Adoption of mobile applications to improve the reading habits of rural readers in southern Africa's secondary schools.

Nkomo Sifundo[1], Walter Matli[2]
1: University of South Africa; 2: University of South Africa

Is there education with the closed school? Long-term impacts on Emergency Remote Education (ERE)

Lilian Schreiner Módolo[1], Luiz Augusto Módolo[2], Edna Barbosa dos Santos[3]
1: USP, Brazil; 2: USP, Brazil; 3: Faculdades Dom Bosco, Brazil

Perla Nohra[1], Helmi Ben Rejeb[2], Swaminath Venkateswaran[3]
1: Grenoble INP, CNRS University of Grenoble Alpes, France; 2: Grenoble INP, CNRS University of Grenoble Alpes, France; 3: Leonard de Vinci Pole Universitaire, France

sociotechnical perspective: use cases and measurable scenarios
Professor Yacine Rezgui[1], Dr. Ioan Petri[2], Irini Barbero[3]
1: Cardiff University; 2: Cardiff University; 3: Cardiff University

1: Fraunhofer Research Institute for Mechatronic Systems Design IEM, Germany; 2: Heinz Nixdorf Institute, University of Paderborn

Integrated Digital System in Planning, Scheduling and Logistics Processes at a Petroleum Company
Buhle Sihlali, **Arnesh Telukdarie**
University of Johannesburg, South Africa

Design of Circular Economy Enhancing Journeys for Automotive Manufacturing Industry
Siro Dell'Ambrogio, Silvia Menato, Jennifer Nika, Luca Canetta, Marzio Sorlini
SUPSI

Implementation of a digital twin framework in the modular housing industry
Anne Fischer[1], Jorge Rodriguez Llorens[1], Zhen Cai[1], Michael Wilke[2], Stephan Kessler[1], Johannes Fottner[1]
1: Technical University of Munich, Germany; 2: Max Bögl Modul AG, Germany

Sustainable Gardens for Smart Cities using Low-Power Communications
Bruno Mota, Bruno Mataloto, Carlos Coutinho
ISCTE-IUL, Lisbon, Portugal

| 4:00pm - 4:30pm | **Coffee Break** Location: **Foyer 850 (Hall) - Centre Prouvé** |

4:30pm - 6:00pm

IE4-2: Human, Socio-Economic and Culture Issues
Location: **Room 103 - Centre Prouvé**
Chair: **DEYCY JANETH SANCHEZ PRECIADO**, Halmstad University, Sweden
Remote link: Room 103 on Microsoft Teams

Determinants of Manpower Utilisation in Manufacturing Firms
Victor Oluwasina Sobanke
National Centre for Technology Management, Nigeria

ENABLING TRANSFER OF INTERMEDIATE TECHNOLOGIES - A RURAL BUSINESS PROJECT CASE IN RURAL COLOMBIA
DEYCY JANETH SANCHEZ PRECIADO
Centro Regional de Productividad e Innovación del Cauca - Halmstad University

Entrepreneurial Motivation: An

IE6-3: Living-Labs & Open-Innovation
Location: **Room 104 - Centre Prouvé**
Chair: **Marc Pallot**, Arts & Metiers ParisTech, France
Remote link: Room 104 on Microsoft Teams

Investigate Innovation Intermediary in civilian space industry innovation network: a grounded theory study
Vahid Mohammadi, Mohammad Abooyee Ardakan, Manouchehr Manteghi
University of Tehran, Iran, Islamic Republic of

Aligning Open Engineering Practices
Matjaz Vidmar
The University of Edinburgh, United Kingdom

What do we learn in a living lab ?
Valentine Labouheure, Raphaël Bary, Laure Morel
ERPI- Université de Lorraine, France

IE11-2: Sustainability in Innovation & Entrepreneurship
Location: **Room 105 - Centre Prouvé**
Chair: **Dominique Jolly**, France
Remote link: Room 105 on Microsoft Teams

Exploring the demands of energy management service for the manufacturing firms
Phil Yang[1], Yichang Yang[2]
1: National Taichung University of Education, Taiwan; 2: Shih Chien University, Taiwan

Implementing Lean Manufacturing as a Business Management Strategy to eliminate waste The case of an Automobile company
Eric Mikobi Bakama, Charles Mukwakungu Sambil, Nita Sukdeo
University of Johannesburg, South Africa

Towards a Strategic Decision Support Tool

TEC1: Advance manufacturing & Factories of the Future
Location: **Room 106 - Centre Prouvé**
Chair: **Alaa Hassan**, Université de Lorraine, France
Remote link: Room 106 on Microsoft Teams

Concept of a business-process-related digital twin based on systems theory and operational excellence
Markus Rabe, Emre Kilic
Technische Universität Dortmund, Germany

How can machine learning improve waste-to-energy plant operation
Alexandra Pehlken[1], Henriette Garmatter[2], Lisa Dawel[1], Fabian Cyris[3], Hendrik Beck[1], Fenja Schwark[1], Roland Scharf[2], Astrid Nieße[1]
1: OFFIS, Germany; 2: Leibniz University Hannover, Germany; 3: EEW - Energy from Waste, Germany

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Exploratory Study of Gender and Venture Types

Rebecca Off[1], Kevin Reuther[2], Guido Baltes[1]
1: Konstanz University of Applied Sciences; 2: University of Leipzig

Electricity Productivity in Socio-Economic Context: A Country-Level Analysis

Heidy Noelia Montero Teran[1], Matteo Bulleri[2], Diellza Salihu[2], Piotr Krawczyk[1], Marcin Topolewski[3], Marc Pallot[4]
1: JAMK University of Applied Sciences, Finland; 2: LUT University; 3: Warsaw School of Economics SGH; 4: Nottingham University Business School

TEC6: Green Tech
Location: **Room 202 - Centre Prouvé**
Chair: **Giovanny Arbelaez-Garces**, Université de Lorraine, France
Remote link: Room 202 on Microsoft Teams

Identification of sensor technologies with the potential to support roadside ecosystem services

Brice Corrigeux[1], Brunelle Marche[1], Mauricio Camargo[1], Christophe Bachmann[2], Clémence Chaudron[3]
1: Université de Lorraine, ERPI, F-54000 Nancy, France; 2: NOREMAT S.A, F-54710 Ludres, France; 3: UMR 1434 SILVA, Université de Lorraine, AgroParisTech, INRAE, Faculté des Sciences et Technologies, F-54506,Vandoeuvre les Nancy, France

Smart Campus: Concepts, development and future

Juan Arenas[1], Pedro Palominos[1], Rodrigo Martin[1], Mauricio Camargo[2], Raphael Bary[2], Héctor Kaschel[1]
1: Universidad de Santiago de Chile; 2: University of Lorraine, France

ENG4-2: Sustainable Engineering
Location: **Room 203 - Centre Prouvé**
Chair: **Luke Maki**, The Boeing Company, United States of America
Remote link: Room 203 on Microsoft Teams

The Impact of Total Productive Maintenance on Performance in The South-African Food Manufacturing Industry

Andre Vermeulen, Jacques Weidemann, Jan Harm C Pretorius
University of Johannesburg, South Africa

System Dynamics Modeling for Smart and Collaborative Last Mile Networks

Anna-Maria Nitsche[1,2], Bogdan Franczyk[1,3],

for Innovation Ecosystems Stakeholder Management

Luca Carinus[1], Chipo Nancy Ngongoni[1], Sara {Saartjie} Grobbelaar[1,2]
1: Department of Industrial Engineering, Stellenbosch University, South Africa; 2: DSI-NRF CoE in Scientometrics and Science, Technology and Innovation Policy (sciSTIP)

Digitalization and Sustainability in Strategic Management: Research Agenda toward Dual Transformation

Christian Kürpick[1], Roman Dumitrescu[2], Tommy Falkowski[1], Christian Fechtelpeter[1], Arno Kühn[1]
1: Fraunhofer Institute for Mechatronic Systems Design IEM, Germany; 2: Heinz Nixdorf Institute / University of Paderborn, Germany

ECTP2: Smart Construction & Built Environment
Location: **Room 204 - Centre Prouvé**
Chair: **Alain ZARLI**, ECTP & R2M Solution, France
Chair: **Yacine Rezgui**, Cardiff University, United Kingdom
Remote link: Room 204 on Microsoft Teams

Digital technologies to advance circular economy at territorial level: challenges and solutions

Ghada Bouillass, Michael Saidani, José Lameh, Bernard Yannou
Université Paris Saclay CentraleSupélec, Laboratoire Genie Industriel

Sustainable Renovation through Modular semantic prefabrication

Yacine Rezgui[1], Salima Hamini[2], Abdelkader Ramdani[2]

Using Data analytics to explore opportunities of Lean assessments

Rostyslav Pietukhov, Mujthaba Ahtamad
The University of Warwick, United Kingdom

A Resilience Framework for Digital Transformation in the Banking Sector: A Systems Thinking Approach

Dumisani Manzini, Rudolph Oosthuizen, Hilda Chikwanda
University of Pretoria, South Africa

BCCMS, Authorization Through an Approach for a Blockchain Based Electronic Cards Management System

Ahmed Mohamed Maghawry[1], Amr Elhadidi[2], Mohamed Kholief[3]
1: EFinance; 2: EFinance; 3: ESLSCA

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Green Technology: Consumer purchase intention of electric vehicles in India

Johnsi Priya[1], Bhukya Koteswararao Naik[2], Deepesh Kaushik[2]
1: Meston College of Education, Cennai, India; 2: National Institute of Industrial Engineering Mumbai, India

An Integrated Geographical Information and Road Asset Management System for road transport network sustainability in developing countries.

Raphael Kafui Natsui[1], Kingsford Kissi Mireku[2], Emmanuel Sasu[3], Gustave Kojo Gameli Amuzu[2]
1: Ghana Institute of Management and Public Administration; 2: Central University; 3: University of Ghana

Literature Development Trajectory of LED Smart Street Lighting by Main Path Analysis

Kuel-Kuel Lai, Adam Kao-Wen Weng*, Hsiao-Yun Chang
Chaoyang University of Technolog, Taiwan

Green Technology Readiness of Telecommunication Firms in India: An Exploratory Study

Shikha Sargam, Ruchita Gupta
NITIE, India

Christian-Andreas Schumann[2]
1: University of Leipzig, Germany; 2: University of Applied Sciences Zwickau, Germany; 3: Wrocław University of Economics, Poland

Applying a Sustainable Business Model for Companies Creating Manufacturing Shared Value with Base of the Pyramid Suppliers

Zviemurwi Johnny Chihambakwe[1], Sara {Saartjie} Grobbelaar[1,2], Stephen Matope[1]
1: Department of Industrial Engineering, Stellenbosch University, South Africa; 2: DSI-NRF Centre of Excellence in Scientometrics and Science, Technology and Innovation Policy (SciSTIP)

Risk management of the rehabilitation of a communal facility on dolomitic land: a South African case study

Tshepiso Mollo[1], Leon Pretorius[2], Jan Harm C Pretorius[1]
1: University of Johannesburg, South Africa; 2: University of Pretoria, South Africa

1: Cardiff University, United Kingdom; 2: Bureau d'Etudes Techniques, Algeria

SemanticLCA: A new generation of life cycle assessment methods applied to buildings

Abdulrahman Fnais, Ali Ghoroghi, Yacine Rezgui, Thomas Beach, Ioan Petri
Cardiff University, United Kingdom

Aligning IFC and SRI domains for BIM supported SRI assessement

Calin Boje, Sylvain Kubicki, Annie Guerriero, Sebastien Thomas
Luxembourg Institute of Science and Technology (LIST), Luxembourg

7:00pm	**Social Event: Visit & Welcoming Cocktail**

Location: Musée des Beaux-Arts

19:00 - 20:30 - Visit Musée des Beaux-Art Nancy

20:30 - 21:45 - Welcome speeches by the IAMOT and ICE Presidents / representatives & Cocktail

(*Access by registration only*) How to join us / move in Nancy

https://www.google.com/maps/d/edit?mid=1qYCByo6cg4Meqk1aQow9rfPGgsUOtV_9&usp=sharing

Date: Tuesday, 21/June/2022

Time				
8:00am - 8:30am	**Regist. D2: Registration** Location: **Entrance / Registration Desk - Centre Prouvé** Join ICE-IAMOT conference at **Prouvé Convention Center - 1, place de la République CS 60663 - 54063 NANCY Cedex** Venue on the ICE-IAMOT website / How to join us - move in Nancy (google map)			
8:30am - 9:30am	**Keynote 3** Location: **Auditorium 300 - Centre Prouvé** **Alexander Brem** (University of Stuttgart, Germany) - Frugal Innovation: Constraint-based thinking as a solution for sustainability? - see more Remote Link: Auditorium			

9:40am - 10:40am	**IE2-2: Digital Innovation Management** Location: **Room 103 - Centre Prouvé** Chair: **Frédérique Mayer**, Université de Lorraine, France Remote link: Room 103 on Microsoft Teams	**IE13-1: Technology Foresight and Forecasting** Location: **Room 104 - Centre Prouvé** Chair: **Breno Nunes**, University of Aston, United Kingdom Remote link: Room 104 on Microsoft Teams	**IE3: Digital Social Networks** Location: **Room 105 - Centre Prouvé** Chair: **Sophie Boutillier**, University of Littoral Côte d'Opale, France Remote link: Room 105 on Microsoft Teams	**IE7-4: R&D, Innovation and Entrepreneurship** Location: **Room 106 - Centre Prouvé** Chair: **Ferney Osorio**, UNIVERSITÉ DE LORRAINE, France Remote link: Room 106 on Microsoft Teams
	Scrum's Methodology adaptations to meet the teleworking needs experienced by Software Development Teams **Luís Fernando Gama[1], Ana Correia Simões[2]** 1: School of Economics and Management ,University of Porto, Porto, Portugal; 2: INESC TEC - Institute for Systems and Computer Engineering, Technology and Science, Centre for Enterprise Systems Engineering Porto, Portugal	**Linking innovation dynamics with scientific knowledge of climate change mitigation technologies** **Bhukya Koteswararao Naik[1], Rahul Mishra[1], Vasu Choudhary[2]** 1: NITIE, India; 2: IGNTU, India	**Transition to Remote Work: Peculiarities of Social Networks Use** **Vida Davidavičienė, Sigitas Davidavičius, Aurelija Burinskienė** Vilnius Gediminas Technical University, Lithuania	**Benefiting from the Power of the Crowd: Contribution of the Crowds to the Idea Evaluation Phase** **ahmet çubukcu[1], özlem akarçay[2], tuba ulusoy[1]** 1: necmettin erbakan university; 2: Kto karatay university
	Design or Redesign Business Models' Innovation in the Digital Transformation Context **Patrick Ratté, Elaine Mosconi, Leandro Feitosa Jorge** Université de Sherbrooke, Canada	**Under which conditions will "Flying Taxis" become relevant for inner-city passenger transport in the future?: Scenario Analysis** **Swarnalekha Khandker, Ahasan Ullah Shohag** Hochschule Harz, Germany	**The entrepreneurial function in digital entrepreneurial ecosystems. The resource potential of the innovative entrepreneur Analysis based on the founders of the top five digital social networks (Facebook, Youtube, Whatsapp, Messenger and Instagram)** **Sophie Boutillier[1], Dimitri Uzunidis[2]** 1: University of Littoral Côte d'Opale, France; 2: University of Littoral Côte D'Opale, France	**Understanding inclusive innovation in informal economy, a conceptual model** **Milena Legarda-López[1], María Luisa Villalba[2], Walter Ruiz-Castañeda[1]** 1: Facultad de Minas, Universidad Nacional de Colombia, Medellín, Colombia; 2: Facultad de Ciencias Económicas y Administrativas, Universidad Católica de Oriente, Rionegro, Colombia
	Innovation Management in Firms: A Review and Research Agenda **Surabhi Singh, Sanjay Dhir, Mayur Chikhale** Indian Institute of Technology Delhi, India	**Technology Roadmapping and 4IR in Defence: Case of Command and Control Systems** **Andries Linda Malinga[1,2], Alwyn Strauss[3], Petrus Letaba[1], Marthinus W. Pretorius[1]** 1: University of Pretoria, South Africa; 2: Council for Scientific and Industrial Research (CSIR), South Africa; 3: Private Consultancy, South Africa	**Customers' Purchasing Behavior: Persuasion of Online Food Delivery System Based on Hedonic and Utilitarian Features** **Nor Aziati Abdul Hamid, Zainal Ainul Nabihah, Tasmin Rosmaini, Abdullah Norhazana** Universiti Tun Hussein Onn Malaysia, Malaysia	**A Research on Iterability of Value Dimension Change in New Product Development Process** **Kiyohiro Yamazaki** Tohoku University, Japan
	ENG5-2: Rethinking Project Management Location: **Room 202 - Centre**	**ENG1-1: ICT for health care** Location: **Room 204 -**	**TEC7: Commercializing Technology** Location: **Room 205 -**	

Prouvé
Chair: **Brunelle MARCHE**, Université de Lorraine, France
Remote link: Room 202 on Microsoft Teams

Comparison of Manufacturing/Remanufacturing CO2 emissions balance: application to a mowing machine

Brunelle MARCHE[1], Diego Nicolas PARRADO RODRIGUEZ[1], Olivier CHERY[1], Mauricio CAMARGO[1], Christophe BACHMANN[2]
1: Université de Lorraine, ERPI F-54000 Nancy, France; 2: NOREMAT S.A, F-54710 Ludres, France

Collaborative capacity of open source hardware communities: A cross-sectional study

Robert Mies[1], Jérémy Bonvoisin[2]
1: Technische Universität Berlin, Institute for Machine Tools and Factory Management, Germany; 2: Without affiliation

Joint-design of products and supply chain in a context of innovation

Brunelle MARCHE[1], Vincent BOLY[1], J. Roland ORTT[2], Laure MOREL[1]
1: Université de Lorraine, ERPI F-54000 Nancy, France; 2: Delft University of Technology Faculty of Technology Policy and Management, Delft, Netherlands

Centre Prouvé
Chair: **James Fleck**, University of Edinburgh Business School, United Kingdom
Remote link: Room 204 on Microsoft Teams

Sustainable Design of IT Systems with Digital Twins – Principles, Application Areas and Advantages

Rainer Lutze
Dr.-Ing. Rainer Lutze Consulting, Germany

DESIGN OF AN ULTRASOUND IMAGE GUIDED ROBOT THAT DRAWS BLOOD FROM VEINS

Tawanda Mushiri[1], Victor Pavari[2], Habib Noorbhai[1]
1: University of Johannesburg, South Africa; 2: University of Zimbabwe

The benefits and challenges of Implementing Smart hospital projects: A systematic review

Eveth Nkeiruka Nwobodo-Anyadiegwu, Mira Ditend, Alice Kabamba Lumbwe
University of Johannesburg, South Africa

Centre Prouvé
Chair: **Joe Amadi-Echendu**, University of Pretoria, South Africa
Remote link: Room 205 on Microsoft Teams

Technology backcasting: Retrospective case studies from mining and mineral processing

Joe Amadi-Echendu, Pavlen Govender, Magretha Vlok
University of Pretoria, South Africa

IPR ECOSYSTEM IN DEVELOPING COUNTRIES: A CASE STUDY OF AN INSTITUTE OF EMINENCE

Shubham Anand, Priyadarshini Singh, Gouri Ashok Gargate
IIT Kharagpur, India

The adoption of Scaled Agile Framework (SAFe) in non-agile organizations.

Kwete Mwana Nyandongo, Mmammule Grace Madumo
University of Johannessburg, South Africa

10:40am - 11:00am	**Coffee Break** Location: **Foyer 850 (Hall) - Centre Prouvé**

11:00am - 12:30pm

IE2-1: Digital Innovation Management
Location: **Room 103 - Centre Prouvé**
Chair: **Eric Bonjour**, Université de Lorraine, France
Remote link: Room 103 on Microsoft Teams

Ethical Considerations of Artificial Intelligence: Ensuring Fairness, Transparency, and Explainability

Haroon Abbu[1], Paul Mugge[2], Gerhard Gudergan[3]
1: Bell and Howell; 2: NC State University; 3: RWTH Aachen University

Becoming Holy Grail of Health on the Move: Identifying and Prioritizing Factors Affecting

IE13-2: Technology Foresight and Forecasting
Location: **Room 104 - Centre Prouvé**
Chair: **Roland Ortt**, Delft University of Technology, Netherlands, The
Remote link: Room 104 on Microsoft Teams

Identification and evaluation of development paths for technology-oriented industrial companies in structural transformation processes

Alessandro Sala, Arko Steinwender, Peter Schieder, Wilfried Sihn
Fraunhofer Austria Research GmbH, Austria

TEC2-1: Industry 4.0
Location: **Room 105 - Centre Prouvé**
Chair: **Adriana Simona Mihaita**, UNIVERSITY OF TECHNOLOGY SYDNEY, Australia
Remote link: Room 105 on Microsoft Teams

Evolution of Industrial Symbiosis scientific field in Brazil: Insights from a systematic literature review and a bibliometric analysis

Emilia de Oliveira Faria, Cristiane Barreto, Armando Caldeira-Pires, Alisson Lima-Silva
University of Brasilia, Brazil

IE7-1: R&D, Innovation and Entrepreneurship
Location: **Room 106 - Centre Prouvé**
Chair: **Paulo Antônio Zawislak**, UFRGS, Brazil
Remote link: Room 106 on Microsoft Teams

P2B Methodology: from patents to business

Gabriela Fernandes[1,2], Pedro Lucas[1], Ana Correia Simões[3], Gustavo Dalmarco[3]
1: University of Coimbra, Department of Mechanical Engineering; 2: CEMMPRE, Department of Mechanical Engineering Coimbra, Portugal; 3:

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the Commercialization of m-Health

Saeedeh Ghoochkanloo, Mohammad Naghizadeh, Mehdi Goodarzi
Allameh Tabataba'i University, Iran, Islamic Republic of

Digital Technology and the Stages of Digital Business Transformation

Irmak Mutlu, Erik den Hartigh, Caglar Ucler
Ozyegin University, Turkey

Coopetition: A Critical Review and Directions for Future Research

Abhilasha Meena, Sanjay Dhir, Sushil Sushil
Indian Institute of Technology Delhi, India

ENG5-1: Rethinking Project Management
Location: **Room 202 - Centre Prouvé**
Chair: **Robert Bierwolf**, IEEE TEMS, Netherlands, The
Remote link: Room 202 on Microsoft Teams

UNCERTAINTIES MANAGEMENT FROM THE HARD AND SOFT APPROACH, IN PROJECTS OF BRAZILIAN AEROSPACE SECTOR

Teresa Raquel Domingos[1,2]**, Milton Chagas**[1]
1: INPE - Instituto Nacional de Pesquisas Espaciais, Brazil; 2: EMBRAER S.A

Towards a Framework to Assess the Impact of Innovative Transportation Technologies

Heiko Duin
BIBA - Bremer Institut für Produktion und Logistik GmbH, Germany

Socio-technical Transitions and the Fourth Industrial Revolution: The need for an integrated analysis.

Martha Mukama Asiimwe, Prof. Imke H. de Kock
Stellenbosch University, South Africa

The constitution of technology as an institutional order

Alana Bauer Lacerda, Fernando Lopes
Universidade Federal do Rio Grande do Sul, Brazil

ENG3-2: Service Design and Engineering
Location: **Room 203 - Centre Prouvé**
Chair: **Abdul Rahman Abdel Razek**, FARO Technologies Europe GmbH, Germany
Remote link: Room 203 on Microsoft Teams

Analysis of Failure Mode Effects of the Traction Motor

Bayanda Kunene, Arnesh Telukdarie
University of Johannesburg, South Africa

Multi-objective modelling of a roadside mowing problem: a case study in France

Adriana-Simona MIHAITA[1]**, Brunelle MARCHE**[2]**, Mauricio CAMARGO**[2]**, Iman RAHIMI**[1]**, Christophe BACHMANN**[3]
1: University of Technology Sydney, Sydney, Australia; 2: Université de Lorraine, ERPI F-54000 Nancy, France; 3: NOREMAT S.A.

The use of 4IR technologies to improve the IT auditor's job function

KM Nyandongo, SS Pillay
University of Johannesburg, South Africa

Speech Assistance: Use cases in Industry

Manfred Langen
Siemens AG, Germany

ENG1-2: ICT for health care
Location: **Room 204 - Centre Prouvé**
Chair: **Imke De Kock**, Stellenbosch University, South Africa
Remote link: Room 204 on Microsoft Teams

Development of a leanness assessment tool for hospitals

Bronwyn Joubert, Wouter Bam
Stellenbosch University, South Africa

INESC TEC - Institute for Systems and Computer Engineering, Technology and Science Centre for Enterprise Systems Engineering Porto, Portugal

INNOVATION CAPABILITIES IN PANDEMIC TIMES: EVIDENCE FROM RESILIENT MANUFACTURING FIRMS IN BRAZIL

Ariane Melo Silva Ávila, Denise Barbieux, Ricardo Machado Leo, Guilherme Freitas Camboim, Paulo Antônio Zawislak
Federal University of Rio Grande do Sul, Brazil

Leapfrogging into the Fourth Industrial Revolution: Lessons from Promising Practices

Evah Phago, Petrus Letaba
Department of Engineering and Technology Management, University of Pretoria, South Africa

Dauntless Research and Development Investments of Deficit Senior-Star Biotech Firms in the Valley of Death

Takao Fujiwara
Toyohashi University of Technology, Japan

ENG14: Smart Services and Software Platforms
Location: **Room 205 - Centre Prouvé**
Chair: **Frédérique Mayer**, Université de Lorraine, France
Remote link: Room 205 on Microsoft Teams

A Study of Adoption and Effects of DevOps Practices

Tyron Offerman, Robert Blinde, Christoph Johann Stettina, Joost Visser
LIACS, Leiden University, Niels

The Integration of Industry 4.0 on Corporate Social Responsibility (CSR) Projects: A Systematic Review

Eveth Nkeiruka Nwobodo-Anyadiegwu, Sikhakhane Z, Alice Kabamba Lumbwe

University of Johannesburg, South Africa

Managing Projects More Successful: Evaluation of a Concept for Implementing Critical Success Factors in Practice

Maximilian Schöberl[1], Simone Tuyisabe[1], Christoph Hollauer[2], Johannes Fottner[1]

1: Technical University of Munich, Germany; 2: Wacker Neuson SE, Germany

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Managing structural integrity of pipelines utilizing inline inspection data

Cynthia Ntombizanele Mbele, Humna Hassan Malik, Jan Harm Pretorius

Rand Water, South Africa

Developing a Rapid Service Prototyping Framework

Daniela Fehrenbach[1], Abdul Rahman Abdel Razek[2], Christian van Husen[1]

1: Hochschule Furtwangen University, Germany; 2: FARO Technologies

From need to requirement: a methodological contribution

Vincent BOLY, Brunelle MARCHE, Davy MONTICOLO, Manon ENJOLRAS, Frédérique MAYER

Université de Lorraine / ERPI, France

Co-Design for Gender Equality in an AI-Based Virtual Assistant for Intensive Care Units

Nicola Marsden[1], Suchanda Bhattacharyya[2], Janine Meyer-Christodoulou[2], Lukas Martin[2], Arne Peine[2]

1: Heilbronn University, Germany; 2: Clinomic GmbH, Aachen, Germany

The Healthcare Data Management Maturity Model (HDM3) for the assessment of healthcare data management in developing countries

Laubscher van der Merwe[1,2], Imke de Kock[1], Wouter Bam[1]

1: Stellenbosch University, South Africa; 2: CSIR, South Africa

Investigating the integration of public and private pharmaceutical supply chains

Jessica Botes, Wouter Bam, Imke de Kock

Stellenbosch University, South Africa

Bohrweg 1, 2333 CA Leiden, The Netherlands

Cyclical Transformation of Value Creation for Smart Services

Jannik Reinhold[1], Christian Koldewey[1], Roman Dumitrescu[2]

1: University of Paderborn, Germany; 2: Fraunhofer IEM, Paderborn, Germany

A Systematic Review of Concepts and Future Directions of Platform Ecosystem Development

Chibuike Cornelius Mbanefo[1,3], Sara Saartjie Grobbelaar[1,2]

1: Department of Industrial Engineering, Stellenbosch University, Stellenbosch, South Africa; 2: DSI-NRF CoE in Scientometrics and Science, Technology and Innovation Policy (sciSTIP), Stellenbosch University Stellenbosch, South Africa; 3: Institute for Biomedical Engineering, Stellenbosch University, Stellenbosch, South Africa

Measures for Integrated Product Support (IPS) in Early Life Cycle of Aerospace and Defense Systems – Introduction of New IPS Measures with Reference to the ASD IPS Suite

Ljubisa Vaskic[1], Kristin Paetzold[2]

1: HENSOLDT Sensors GmbH, Germany; 2: Technische Universität Dresden, Germany

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12:30pm - 1:30pm	**Lunch** Location: **Foyer 850 (Hall) - Centre Prouvé**
1:30pm - 2:30pm	**Keynote 4** Location: **Auditorium 300 - Centre Prouvé** **Joshua Pearce** (Western University, Canada) - Open source appropriate technology (OSAT): Finding collaborative solutions to problems in sustainability and poverty reduction Remote Link: Auditorium

2:30pm - 4:00pm	RT-01: Innovation in public Administration	IE8: Regional competitiveness policy and smart specialization strategies	TEC2-2: Industry 4.0: Digital Innovation management and applications of AI	IE7-2: R&D, Innovation and Entrepreneurship
	Location: **Auditorium 300 - Centre Prouvé**	Location: **Room 103 - Centre Prouvé**	Location: **Room 105 - Centre Prouvé**	Location: **Room 106 - Centre Prouvé**
	Chair: **Vincent BOLY**, Université de Lorraine / ERPI, France	Chair: **Paulo Antônio Zawislak**, UFRGS, Brazil	Chair: **Giovanny Arbelaez-Garces**, Université de Lorraine, France	Chair: **Matjaz Vidmar**, The University of Edinburgh, United Kingdom
	Chair: **Fedoua KASMI**, Université de Lorraine, France	Remote link: Room 103 on Microsoft Teams	Remote link: Room 105 on Microsoft Teams	Remote link: Room 106 on Microsoft Teams
	Round table on Innovation in public Administration with 5 stakeholders: Deputy Mayor (City of Nancy), Engineer (City of Nancy), SME, Departmental Fire and Emergency Servic, Academics	**iops: a Python package for the Input-Output Product Space methodology**	**Human-in-the-loop: Explainable or accurate artificial intelligence by exploiting human bias?**	**Foreign direct investment and host firms' technology development: The moderating role of overall and STEM education**
	Supported by the City of Nancy, Territoria, RNI	**Michael Jacobus Du Plessis, Wouter Gideon Bam**	**Laura Valtonen[1], Saku J. Mäkinen[2]**	**Jihoon Shin[1], Miguel Amaral[2], Ana Cristina Barros[3], M. Granger Morgan[1]**
	Remote Link: Auditorium	Stellenbosch University, South Africa	1: Tampere University, Finland; 2: University of Turku, Finland	1: Carnegie Mellon University, United States of America; 2: Instituto Superior Técnico, Portugal; 3: INESC TEC, Portugal
		Technology transfer, productive restructuring, and reindustrialization processes. Experience of the Mexican Bajio region	**Assessing the effectiveness of the scrum framework and its successful implementation**	
		Lorena del Carmen Álvarez-Castañón[1], Pilar Arroyo-López[2], Rocío Alfonsina Lizarraga-Morales[1], Gema González-Romero[3]	**Mmule Rebecca Madumo, Kwete Mwana Nyandongo**	**The Difference between Exporter and Non-exporter Knowledge-based firms; Capabilities Analysis Approach Case study: Knowledge-based firms in the sector of chemical technology**
		1: Universidad de Guanajauto; 2: Tecnológico de Monterrey, EGADE Business School; 3: Universidad de Sevilla	University of Johannesburg, South Africa	**Mohammad Torabi Khargh[1], Seyed Reza Mirnezami[2], mitra samadi[3], Mohammad Sadegh Khayatian[4]**
			Towards a Protocol for Preference Evaluation of Cosmetic Products Using Physiological Sensors	1: University of Tehran, Iran, Islamic Republic of; 2: Sharif University of Technology, Iran, Islamic Republic of; 3: Sharif University of Technology, Iran, Islamic Republic of; 4: Shahid Beheshti University, Iran, Islamic Republic of
		Interconnection of freight delivery transport service networks	**Javier Miranda-Mellado[1], Juliana Serna[1], Giovanny Arbelaez-Garces[1], Javier A. Arrieta-Escobar[2], Véronique Sadtler[2], Mathieu Kacha[3]**	
		Aurelija Burinskienė	1: Equipe de Recherche des Processus Innovatifs (ERPI-ENSGSI), Université de Lorraine, France; 2: Laboratoire Réactions et Génie des Procédés (CNRS-LRGP-ENSIC), Université de Lorraine, France; 3: Centre Européen de Recherche en Économie Financière et Gestion des Entreprises (CEREFIGE), Université de Lorraine, France	
		Vilnius Gediminas technical university, Lithuania		**Management of Technological Convergence in New Technology-Based Firms**
		THE ROLE OF DEDICATED ORGANIZATIONS IN THE GOVERNANCE OF SMART CITY DEVELOPMENT: A MULTIPLE CASE STUDY		**Leandro Lepratte, Rafael Blanc, Daniel Hegglin, María Alejandra Rodriguez, Leonardo Ruhl**
		Guilherme Freitas Camboim, Nathália Amarante Pufal, Denise Barbieux, Paulo Antonio Zawislak	**Assessment Model to Support the Technological Integration within Industrial Companies**	Universidad Tecnológica Nacional, Argentine Republic
		NITEC/UFRGS, Brazil		

in the Context of Industry 4.0

Neal Widmer, Alaa Hassan, Davy Monticolo
Equipe de Recherche sur les Processus Innovatifs, Université de Lorraine, France

An Empirical Analysis of High Technology Manufacturing Segments of India's Export sector

Amrutha Mary Varkey
University of Warsaw, Poland

ENG10-1: Industrial Internet & Industry 4.0

Location: **Room 202 - Centre Prouvé**
Chair: **Abdul Rahman Abdel Razek**, FARO Technologies Europe GmbH, Germany
Remote link: Room 202 on Microsoft Teams

The Role of Data within The Service Prototyping Design Dimensions

Abdul Rahman Abdel Razek[3], Daniela Fehrenbach[1], Marc Pallot[2], Christian van Husen[1], Simon Richir[2]
1: Furtwangen University, Germany; 2: Arts et Métiers ParisTech; 3: FARO Technologies

The Integration of Industry 4.0 in Healthcare Quality Improvement

Eveth Nkeiruka Nwobodo-Anyadiegwu, Deborah Baraka Tambwe, Alice Kabamba Lumbwe
University of Johannesburg, South Africa

Collaborative Filtering for Mobile Application Recommendation with Implicit Feedback

Beatriz Paula[1,6], **João Coelho**[1,6], **Diogo Mano**[1,7], **Carlos Coutinho**[1,2,3], **João Oliveira**[2,3,4], **Ricardo Ribeiro**[3,5], **Fernando Batista**[3,5]
1: Caixa Mágica Software, S.A., Portugal; 2: Information Sciences, Technologies and Architecture Research Center (ISTAR-IUL); 3: Iscte - Instituto Universitário de Lisboa; 4: Instituto de Telecomunicações (IT); 5: INESC-ID; 6: Instituto Superior Técnico; 7: Faculdade de Ciências da Universidade de Lisboa

Digital platform user-centered impact: A Conceptual Evaluation Framework

fatima ezzahra hamdani, marie gribouval, barbara moissa, davy monticolo, vincent boly
erpi, France

ENG3-1: Service Design and Engineering

Location: **Room 203 - Centre Prouvé**
Chair: **hakim boudaoud**, Université de Lorraine, France
Remote link: Room 203 on Microsoft Teams

Analysis of Impact of Maintenance Practices on Road Infrastructure

Khumbelo Bele, Megashnee Munsamy, Arnesh Telukdarie
University of Johannesburg, South Africa

Assessment of the Effectiveness of Speed Humps as Traffic Calming for Accident Reduction in Durban, South Africa

Lemo Andrew Monyatsi
Road Traffic Management Corporation, South Africa

Evaluating the understanding of Personal Data Privacy in Brazilian financial institutions from the perspective of consultants

Marcelo T Okano[1], lamara Ferreira[2], Edson Luiz Ursini[3], Henry de Castro Lobo dos Santos[3]
1: UNIP, CEETEPS and FT UNICAMP, Brazil; 2: CEETEPS; 3: FT UNICAMP

Improving maintenance management of reservoir structures using smart systems

Lebogang Makama, Arnesh Telukdarie
University of Johannesburg, South Africa

ENG8-1: Innovation on Education and Learning

Location: **Room 204 - Centre Prouvé**
Chair: **Alex Gabriel**, Université de Lorraine, France
Remote link: Room 204 on Microsoft Teams

Contribute to Open Science with Research-based Learning: Explorative Research Action Study applied to Peer-to-Peer Energy Trading

Alex Gabriel, Laurent Dupont
Université de Lorraine, France

Gamification for Smart and Collaborative Last Mile Networks Knowledge Transfer

Anna-Maria Nitsche[1,2], **Bogdan Franczyk**[1,3], **Christian-Andreas Schumann**[2]
1: University of Leipzig, Germany; 2: University of Applied Sciences Zwickau, Germany; 3: Wrocław University of Economics, Poland

Assisted Reality as an enabler for resilient remote learning during COVID-19

Thomas Kogias[1], Adrian Butnaru[2], Frank Waszink[3], Jan Smallegange[2], Nikolaos Gavalakis[1], Elias Xidias[1], Dimitris Zissis[1]
1: Department of Product & Systems Design Engineering, Polytechnic School, University of the Aegean; 2: Innovation and Educational Development Department, STC Group; 3: Rotterdam Mainport Institute, STC Group

Virtual laboratory, a learning resource for distance education
<u>Daniel Galvez</u>, **Lorena Delgado, Christopher Caceres, Lucas Villarroel**
University of Santiago, Chili, Chile

Time				
4:00pm - 4:30pm	**Coffee Break** Location: **Foyer 850 (Hall) - Centre Prouvé**			
4:00pm - 6:00pm	**Serious Game: "L'année de l'innovation"** Location: **Foyer 850 (Hall) - Centre Prouvé** Chair: **Alice de Casanove**, Universite Lorraine, United States of America animated by: Johan Claire, CEO Innovation Way & ISO; Alice de Casanove, Airbus & ISO Max 36 people (add to your adgenda)			

4:30pm - 6:00pm

RT-03: Meet the Editors
Location: **Auditorium 300 - Centre Prouvé**
Chair: **Breno Nunes**, University of Aston, United Kingdom
Chair: **Manon Enjolras**, Université de Lorraine - ERPI, France

Meet 6 editors for 6 journals!
Remote Link: Auditorium

IE10: Responsible Research and Innovation
Location: **Room 103 - Centre Prouvé**
Chair: **Geerten van de Kaa**, Delft University of Technology, Netherlands, The
Chair: **Fedoua KASMI**, Université de Lorraine, France
Chair: **Vincent BOLY**, Université de Lorraine / ERPI, France
Remote link: Room 103 on Microsoft Teams

Responsible Research and Responsible Innovation: Have new concepts emerged?
<u>Akbar Mohammadi</u>[1], **Sahar Babaei**[2]
1: Tehran University; 2: Allameh Tabatabaei University

Analysis of innovation phases in the different AM future scenarios
<u>Marianne Hörlesberger</u>[1], **Brigitte Kriszt**[2], **Andrea Kasztler**[1]
1: AIT Austrian Institute of Technology, Austria; 2: Montanuniverstitaet Leoben, Austria

RRI and Digital Transformation in Grand Est Region
<u>Marianne Hörlesberger</u>[1], **Vincent Boly**[2], **Jean-Jacques Bernardini**[3], **Lucia Gonzalez**[4]
1: AIT Austrian Institute of Technology, Austria; 2: Université de Lorraine; 3: Grand E-nov+; 4: MATERALIA

IE9: Research and Innovation in Creative Industries
Location: **Room 104 - Centre Prouvé**
Chair: **BHUKYA KOTESWARARAO NAIK**, NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING, India
Remote link: Room 104 on Microsoft Teams

Towards an analytical framework to analyze the evolution of manufacturing innovation systems
<u>Michelle McClelland</u>[1], **Sara S Grobbelaar**[2], **Natasha Sacks**[1]
1: Department of Industrial Engineering University of Stellenbosch AND DSI-NRF Centre of Excellence in Strong Materials (CoE-SM); 2: Department of Industrial Engineering Stellenbosch University AND DSI-NRF Centre of Excellence in Scientometrics and Science, Technology, and Innovation Policy (SciSTIP)

An empirical study on the effects of leader behaviour and resilience on innovative work behaviour
<u>Kimaya Reddy</u>, **Kai-Ying Chan**
University of Pretoria, South Africa

A Teams Approach to Idea Generation: An Analysis of Personality

TEC5: Artificial Intelligence & Big Data
Location: **Room 105 - Centre Prouvé**
Chair: **Monticolo Davy**, Université de Lorraine, Réunion (France)
Remote link: Room 105 on Microsoft Teams

Telecommunications Customer Service Improvement Through Big Data Analytics
<u>Thabile Shongwe</u>[1], **Masike Malatji**[2], **Jan-Harm Christiaan Pretorius**[1]
1: Postgraduate School of Engineering Management, University of Johannesburg, South Africa; 2: Graduate School of Business Leadership, University of South Africa, South Africa

The Impact of Interactive technology by using Artificial Intelligence on the Formation of Social Interactions: A Study in Tourism Industry 4.0
Seyede Rojin Sobhani[1], <u>Negar Armaghan</u>[2], **Saeed Haghir**[1], **Ali Andaji Garmaroodi**[1]
1: School of Architecture, College of Fine Arts, University of Tehran, Iran; 2: Department of Technology Development Studies, Iranian Research Organization for Science

AI governance and ethics in public procurement: Bridging the gap between theory and practice

Timo Tapani von Behr, Mikko Siponen, Pekka Abrahamsson
University of Jyväskylä, Finland

Exploring extended outcomes of co-creation applied for Responsible Research and Innovation

Felicitas Schmittinger, Francesca Rizzo, Alessandro Deserti
Politecnico di Milano, Italy

and Team Learning on Creativity

Kai-Ying Chan, Precious Mokgala
University of Pretoria, South Africa

Research and scientific production in COVID - 19 in Argentina: analysis of bibliometric data

Miguel Guagliano, Adriana Sanchez Rico
Ministry of Science, Technology and Innovation - Argentina, Argentine Republic

Grass-root Innovation Ecosystem - an Indian case

Bhukya Koteswararao Naik[1], Ajit Kumar[1,2], Karuna Jain[3], Anil Kumar[4], Gautam Prakash[5]
1: National Institute of Industrial Engineering (NITIE) Mumbai; 2: JBS, JIIT NOIDA, India; 3: Shailesh J Mehta School of Management (SJSOM), IIT Bombay; 4: Tata Institute of Social Sciences (TISS) Mumbai; 5: Tata Consultancy Services NOIDA NOIDA, India

and Technology (IROST), Tehran, Iran

Supporting circular economy in healthcare through digital reverse logistics

Getnet Bogale Fanta, Leon Pretorius
Department of Engineering and Technology Management, University of Pretoria, South Africa

Big data Citizen-centred smart city governance. Evidence from Wuhan and the Coronavirus battle

DIDIER GRIMALDI
Ramon LLull University, Spain

The Role of Management of Technology (MOT) in Unlocking Nations' Competitiveness in Post Pandemic and Global Crises

Mohamed Azzam, Tarek Khalil
Nile University, Egypt

IE7-3: R&D, Innovation and Entrepreneurship
Location: **Room 106 - Centre Prouvé**
Chair: **Matjaz Vidmar**, The University of Edinburgh, United Kingdom
Remote link: Room 106 on Microsoft Teams

Systematic Literature Review on Corporate Accelerator: Benefits, Challenges and Critical Success Factors

Caroline Rodrigues da Silva, Thaynara Beatriz Vilela, Rodrigo Rodrigues Borges de Faria, Leonardo Breno Pessoa da Silva, Joseane Pontes, Luis Mauricio Martins de Resende, Rui Tadashi Yoshino, Fernanda Tavares Treinta
Federal University of Technology (UTFPR) - Paraná, Brazil

Enabling Entrepreneurs to build on their means: The Effectual Decision-Making Canvas

ENG10-2: Industrial Internet & Industry 4.0
Location: **Room 202 - Centre Prouvé**
Chair: **Regina Negri Pagani**, Federal University of Technology, Paraná (UTFPR), Brazil
Remote link: Room 202 on Microsoft Teams

Support from Governance, Leadership and Smart People in the context of Smart Cities Development

Marcia Sierdovski, Luiz Alberto Pilatti, Priscila Rubbo, Rosmeiri Aprª Ribeiro Ferras, Juliana Vitória M. Bittencourt, Regina N. Pagani
Federal Technological University of Paraná, Brazil

ENG8-2: Innovation on Education and Learning
Location: **Room 204 - Centre Prouvé**
Chair: **Alex Gabriel**, Université de Lorraine, France
Remote link: Room 204 on Microsoft Teams

Designing the curriculum of the packaging design course based on the active learning

Narucha Tanaiutchawoot
Suranaree University, Thailand

Determinants of e-Learning user satisfaction at a South African University of Technology

Nhlanhla W. B. Mlitwa, Oluwamayowa O. Ogundaini

	Marcos Antonio González[1,2]**, Orestis Terzidis**[1]**, Benedict Heblich**[1] 1: Karlsruhe Institute of Technology, Germany; 2: Universidad Austral de Chile	**Contribution of an IoT based cloud platform in the realization of data-driven in-house logistics**	University of South Africa Gradaute School of Business Leadership, South Africa
	Migrant Work Inclusion: Designing Research on Entrepreneurship Support **Yngve Dahle**[1]**, Kevin Reuther**[2]**, Dimitris Polychronopoulos**[1]**, Anh Nguyen Duc**[1]**, Lars Ueland Kobro**[1] 1: University of South-Eastern Norway; 2: Leipzig University, Germany	**Masoud Zafarzadeh**[1]**, Wajid Ali Khilji**[1]**, Jannicke Baalsrud Hauge**[1,2] 1: KTH Royal Institute of Technology, Sweden; 2: BIBA, Germany	**Components of digital assistants in higher education environments** **Sophie Henne, Vanessa Mehlin, Elena Schmid, Sigurd Schacht** University of Applied Science Ansbach, Germany
	Self-Assessment Model based on the ISO 56002:2019 Standard for Evaluating Iinnovation Management Systems of Science and Technology Institutions **MICHELLE SANTOS, MARIA F ALMEIDA** Pontifical Catholic University of Rio de Janeiro, Brazil	**Forward kinematic based approach using sensor fusion for tracking the human limb** **Arthur Johnson**[1]**, Aswin K Ramasubramanian**[2]**, Robins Mathew**[2]**, Brian Mulkeen**[1]**, Nikolaos Papakostas**[2] 1: School of Electrical and Electronic Engineering, University College Dublin, Ireland; 2: School of Mechanical and Materials Engineering, University College Dublin, Ireland	**Digital Learning Readiness of higher education institutions in the 4th industrial revolution era during the COVID-19 pandemic, Case of a University in South Africa** **Eric Mikobi Bakama, Charles Mukwakungu Sambil, Nita Sukdeo** University of Johannesburg, South Africa
		Preliminary approach to the functionality of a technical remote sensing platform applied to agriculture in the Colombian case **Sandra Cecilia Bautista-Rodríguez, Francy Pascagaza, Freddy Díaz, Victoria Vallejo** Universidad Central, Colombia	
6:30pm - 8:00pm	**IAMOT Board Meeting 02** Location: **Lorraine Fab Living Lab** Lorraine Fab Living Lab - 49 Boulevard d'Austrasie - 54000 NANCY How to access (google map)? or from Congress center		

Date: Wednesday, 22/June/2022

8:00am - 9:00am	**Regist. D3: Registration** Location: **Entrance / Registration Desk - Centre Prouvé** Join ICE-IAMOT conference at **Prouvé Convention Center - 1, place de la République CS 60663 - 54063 NANCY Cedex** Venue on the ICE-IAMOT website / How to join us - move in Nancy (google map)				
9:00am - 10:30am	**RT-02: EU projects Round Table** Location: **Auditorium 300 - Centre Prouvé** Chair: **Laurent DUPONT**, Université de Lorraine, France "Open innovation, technologies & communities as enablers of socio-economical transition" Remote Link: Auditorium				
10:30am - 11:00am	**Coffee Break** Location: **Foyer 300 (small Hall) - Centre Prouvé**				
11:00am - 12:30pm	**WS01: Co-designing Open innovation, technologies & communities to enable socio-economical transition - Pratices and actions with EU projects** Location: **Auditorium 300 - Centre Prouvé** Chair: **Ivo Zeller**, Steinbeis Europa Zentrum, Germany Workshop open to all - Transforming industry and territories by engaging the international ICE-IAMOT community in European projects: DIY4U, iProduce, INEDIT, OpenNext. Practical information on the Octroi Nancy demonstrators to prepare your living lab experience in the immersive design factory Remote Link: Auditorium	**Climate Labs (closed event)** Location: **Room 103 - Centre Prouvé**	**Climate Labs (closed event)** Location: **Room 104 - Centre Prouvé**	**IE12: Tech- & Digital Entrepreneurship** Location: **Room 105 - Centre Prouvé** Chair: **Clarice Bertin**, ICN Business School & BETA Research Center, France Remote link: Room 105 on Microsoft Teams **Digital Fit(ness) – is 'being in a fit with' enough?** **Erich Heumüller, Julia Kossowski, Sebastian Richter** Baden-Wuerttemberg Cooperative State University Stuttgart, Germany **Local Ecosystem Open Innovation Intermediaries as Key Enablers for the Development of Incumbents' Digital Technology Partnerships** **Clarice Bertin[1,3], Véronique Schaeffer[2,3]** 1: ICN Business School; 2: University of Strasbourg; 3: BETA Research Center **The e.DO Cube Hackathon – Transitioning to Graduate School** **Brendan Sullivan[1], Monica Rossi[1], Lucia Ramundo[2], Paolo Rosa[1], Sergio Terzi[1]** 1: Politecnico di Milano, Italy; 2: EIT Manufacturing	**WS03: Responsible digitalization: the example of the DigiTeRRI project** Location: **Room 106 - Centre Prouvé** Chair: **Monticolo Davy**, Université de Lorraine, Réunion (France) Chair: **Vincent BOLY**, Université de Lorraine / ERPI, France •RRI definition •Implementation of Responsible Digitalization: the necessary adaptation to the context •Territorial strategy for Responsible Digitalization implementation: the methodologies (roadmapping and vision definition) and the roadmap presentation of three european territories •Practices and actions to stimulate Responsible Digitalization in 3 regions: Styria / Vârmland / Grand Est Remote link: Room 106 on Microsoft Teams
12:30pm - 1:30pm	**Lunch** Location: **Foyer 300 (small Hall) - Centre Prouvé**				

1:30pm - 2:00pm

Commune to Octroi Nancy
Location: **Petite Halle - Octroi Nancy**
map on the website - Here the link for Google Maps
by walking and visiting Nancy allow 25 min
by tram: request a transport ticket from the registration desk

1:30pm - 3:30pm

Climate Labs (closed event)
Location: **Room 103 - Centre Prouvé**

Climate Labs (closed event)
Location: **Room 104 - Centre Prouvé**

1:30pm - 4:15pm

WS02: HyValue Workshop
Location: **Auditorium 300 - Centre Prouvé**
Chair: **Robert Bierwolf**, IEEE TEMS, Netherlands, The
Chair: **Monticolo Davy**, Université de Lorraine, Réunion (France)

- 13:30 Robert Bierwolf - Towards PM2030 – Research through Project Management
- 13:45 Anna Schidek - Agilization in MedTech
- 14:00 Phillip Hansen - Fuzzy Expert System for Estimation
- 14:15 Markus Schmidtner - PM Context Modeling
- 14:30 Holger Timinger - Weighting of project management process parameters

14:40 coffee Break

- 15:00 1 Hour HyValue Presentation (20 Min incl. 5 min discussion each)
- 15:00 Markus Schmidtner - Interorganizational Project Management in the automotive Industry
- 15:20 Alexander Ziegler- From Cooperation to Collaboration: Sociological Insights into Digital Collaboration Platforms in the Automotive Value Chain
- 15:40 Kirsten Hentschl & Andreas Trautheim-Hofmann - Digital Transformation of Project Schedule Management and Synchronization (PSMS) in Collaboration Networks
- 16:00 Open Discussion
- 16:15 End of Workshop

Remote Link: Auditorium

Agilization of technical development processes for medical devices

Anna Schidek, Holger Timinger
University of Applied Sciences Landshut (Institute for Data and Process Science), Germany

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Concept of a Fuzzy Expert System for Story Point Estimations in Agile Projects

Philipp Hansen[1,2], Holger Timinger[1,2]
1: Landshut University of Applied Sciences, Germany; 2: Institute for Data and Process Science

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Supporting the Development of a Mobile Context-Aware Application by an MDA-based Approach

Julian Dörndorfer, Markus Schmidtner
University of Applied Sciences, Germany

Influence of Project Parameters on the Decision of an Agile or Plan-based Approach

Markus Schmidtner, Holger Timinger, Claudia Doering, Finn Reiche
HAW Landshut, Germany

From Cooperation to Collaboration: Sociological Insights into Digital Collaboration Platforms in the Automotive Value Chain

Alexander Ziegler, Eckhard Heidling
Institute for Social Science Research Munich, Germany

2:00pm - 6:00pm

Exhibition (EU projects): Innovative Design Factory in the city by INEDIT, DIY4U, iPRODUCE, OPEN_NEXT
Location: **Petite Halle - Octroi Nancy**
Chair: **Laurent DUPONT**, Université de Lorraine, France
Chair: **Robert Mies**, Technische Universität Berlin, Germany
Chair: **Chandana Ratnayake**, SINTEF AS, Norway
Chair: **Manuel Sánchez de la Asunción**, AIDIMME, Spain

Demonstrator in Living lab mode at Octroi Nancy (Cultural and creative third place) + networking (open to all & citizens & local industries / SMEs)

•Do It Together process: from Co-creation to open manufacturing
•Open_Next pilots & booth

•iProduce software & booth
•DIY4U booth

Commute to Octroi Nancy

3:30pm **-** **4:30pm**	**Climate labs: Coffee Break** Location: **Foyer 300 (small Hall) - Centre Prouvé**

4:00pm **-** **6:00pm**	**Climate Labs (closed event)** Location: **Room 103 - Centre Prouvé**	**Climate Labs (closed event)** Location: **Room 104 - Centre Prouvé**

4:15pm
-
4:40pm

Commune to Octroi Nancy (after HyValue WS)
Location: **Petite Halle - Octroi Nancy**

map on the website - Here the link for Google Maps

by walking and visiting Nancy allow 25 min

by tram: request a transport ticket from the registration desk

7:45pm

Social Event 2: GALA DINNER
Location: **Hotel de Ville de Nancy (City Hall)**

Speech by the Mayor of Nancy / Awards / Sound and light "Rendez-vous Place Stanislas"

Dishes made with local producers

(*Access by registration only*) How to join us / move in Nancy

https://www.google.com/maps/d/edit?mid=1qYCByo6cg4Meqk1aQow9rfPGgsUOtV_9&usp=sharing

Date: Thursday, 23/June/2022

9:00am **-** **11:30am**	**EU Workshop: INEDIT (closed event)** Location: **Lorraine Fab Living Lab**
9:30am **-** **11:00am**	**Immersive Conf: Social innovation labs to mitigate and adapt to climate change** Location: **Petite Halle - Octroi Nancy** Chair: **Fabio Cruz Sanchez**, Université de Lorraine, France Chair: **Ferney Osorio**, UNIVERSITÉ DE LORRAINE, France Chair: **Laure Morel**, University de Lorraine, France Strengthening applied research and innovation capacities in Latin-America through co-creation labs for mitigation and adaptation to Climate Change Climate Labs Posters + Networking session + Scientific demonstrators
11:00am **-** **12:30pm**	**Plenary: ICE-IAMOT closing session** Location: **Petite Halle - Octroi Nancy** General Assembly: Future of Technology, Engineering, and Innovation Management Communities Special Guest: Hélène Boulanger, presidente de l'Université de Lorraine.

Presentations

IE5: Intrapreneurship & Corporate Venturing

Time: Monday, 20/June/2022: 11:00am - 12:30pm · *Location:* Room 103 - Centre Prouvé
Session Chair: Fabio Cruz Sanchez, Université de Lorraine, France

Organizational and Personal Self-Concept and their Moderating Relationships as Determinant to Entrepreneurial Orientation

Charl David Theron, Elma Van der Lingen
University of Pretoria, South Africa

Why Companies Implement Multiple Corporate Entrepreneurship Units

Nicolai Heinzelmann[1], J. Roland Ortt[2], Guido H. Baltes[1]
[1]HTWG Konstanz, Germany; [2]Delft University, Netherlands

Uncovering goals of corporate entrepreneurship: A classification based on literature review

Christina Lang[1], Isabella Fitzky[1], J. Roland Ortt[2], Guido H. Baltes[1]
[1]Institute for Strategic Innovation & Technology Management, HTWG Konstanz, Germany; [2]Faculty of Technology, Policy and Management, Delft University of Technology

Intrapreneurship and corporate entrepreneurship: an integrated operational and strategic model from dynamic capabilities approach

JOSE CARLOS CURIEL FRANCO, MIRIAM DELGADO VERDE
UNIVERSIDAD COMPLUTENSE DE MADRID, Spain

IE6-1: Living-Labs & Open-Innovation

Time: Monday, 20/June/2022: 11:00am - 12:30pm · *Location:* Room 104 - Centre Prouvé
Session Chair: Laure Morel, University de Lorraine, France

Unfolding innovation lab services in public hospitals: a hospital FabLab case study

Ambre Scarmoncin[1], Clothilde Portelli[2], Ferney Osorio[3], Guillaume Eckerlein[1]
[1]APHP Paris Saclay; [2]Humaniteam Design; [3]ERPI, Université de Lorraine

On the Use of Low-Code and No-Code Tools for Teaching Data Science in Applied Industrial and University Settings

Martin Dobler[1], Jürg Meierhofer[2], Klaus Frick[3], Marcus Bentele[1]
[1]Vorarlberg University of Applied Sciences, Austria; [2]ZHAW School of Engineering; [3]OST Eastern Switzerland University of Applied Sciences

Collaborative networks between innovation spaces

Fanny Pruvot, Laurent Dupont, Laure Morel
Laboratoire ERPI, France

The Integration of Industrial Design in the Fuzzy Front-End – FFE

Lilian Schreiner Módolo[1], Paulo Tromboni de Souza Nascimento[2]
[1]USP, Brazil; [2]USP, Brazil

IE11-3: Sustainability in Innovation & Entrepreneurship

Time: Monday, 20/June/2022: 11:00am - 12:30pm · *Location:* Room 105 - Centre Prouvé
Session Chair: Manon Enjolras, Université de Lorraine - ERPI, France

Evaluating the drivers of frugal innovation and its relation to sustainability – A Systematic Literature Review

Tsireledzo Maliehe, Schalk Grobbelaar

Department of Engineering and Technology Management, University of Pretoria, South Africa

The influence of circular economy implementation on competitiveness in manufacturing companies

Ulla Anneli Saari[1], Matthias Schneider[2], Svenja Damberg[2], Leena Aarikka-Stenroos[1], Minna Lanz[3], Cornelius Herstatt[2], Christian M. Ringle[4]

[1]Industrial Engineering & Management, Tampere University, Finland; [2]Institute for Technology & Innovation Management, Hamburg University of Technology, Germany; [3]Automation Technology & Mechanical Engineering, Tampere University, Finland; [4]Institute of Human Resource Management & Organizations, Hamburg University of Technology, Germany

Identification of Critical Success Factors for Circular Start-ups 4.0: A literature review

Bruno Alcantara Rodrigues, Fernanda Tavares Treinta, Fabio Neves Puglieri

Federal University of Technology (UTFPR) - Paraná, BR, Brazil

A Research Framework for B2B Green Marketing Innovation: the Design of Sustainable Websites

Pauline Lacom[1,2], Sylvain Sagot[2,3]

[1]LISI Automotive, Grandvillars 90600, France; [2]ERCOS Research Group, ELLIADD Laboratory (E.A. 4661), UBFC; [3]ESTA Belfort, School of Business and Engineering, Belfort 90000, France

TEC8: Robotics & Autonomous Systems / Cyber Physical Systems (CPS)

Time: Monday, 20/June/2022: 11:00am - 12:30pm · *Location:* Room 106 - Centre Prouvé
Session Chair: Klaus-Dieter Thoben, BIBA - Bremer Institut für Produktion & Logistik, Germany

Digitization technologies in transport logistics: A systematic literature review protocol

John-Dean Kasher, Simon Riedle, Navid Julian Sardarabady

DHBW Ravensburg Campus Friedrichshafen, Germany

Validation of vehicles with automated features through the detection of behavioral differences between humans and machines

Manuel Schwarz, Luc Rolland, James Bruce Johnston

University of West Scotland, United Kingdom

Identifying real-world problems with automated vehicles by detecting behavioral differences in steering movements between the human driver and machine

Manuel Schwarz, Luc Rolland, James Bruce Johnston

University of West Scotland, United Kingdom

A Model for Selecting Emerging Technologies Apps for Intelligent ERP

Ahmed Mohamed Abdelrahman Fayed, Mohamed Omar Ezzat

Nile Universty, Egypt

ENG2: Energy Supply and Energy Utilities

Time: Monday, 20/June/2022: 11:00am - 12:30pm · *Location:* Room 204 - Centre Prouvé
Session Chair: Yacine Rezgui, Cardiff University, United Kingdom

A Conceptualisation for the Integration and Evaluation of Gender Mainstreaming in Energy Project Development

Lelani Oosthuizen, Imke H. De Kock, Josephine K. Musango

Stellenbosch University, South Africa

Case study on the impact of engineering changes during power plant construction

Phetheni Mhlongo, Megashnee Munsamy, Jan-Harm Christiaan Pretorius

University of Johannesburg, South Africa

Overview of challenges and requirements for sustainable energy transition in Western Balkans with focus on BH: A literature review

Damir Androsevic, Mauricio Camargo, Noureddine Takorabet, Mustafa Music

Universite de Lorraine

INFRASTRUCTURE PROJECTS IN SUB SAHARAN AFRICA, SENSITIVITY TO POLITICAL RISKS

Noah Ogano[1], Leon Pretorius[2]

[1]Strathmore University, Kenya; [2]University of Pretoria, South Africa

ENG12-1: SCM 4.0

Time: Monday, 20/June/2022: 11:00am - 12:30pm · *Location:* Room 205 - Centre Prouvé
Session Chair: Kulwant Pawar, Nottingham University, United Kingdom

Modelling manufacturing process flexibility: A systematic review

Marike Spamer, Louzanne Bam

Stellenbosch University, South Africa

IoT system for the validation of conditions in shipping couriers

Pedro Miguel Moreira Filipe[1], Bruno Mataloto[2], Carlos Coutinho[2]

[1]ISCTE - Instituto Universitário de Lisboa, Portugal; [2]Information Sciences, Technologies and Architecture Research Center
(ISTAR-IUL), Portugal

Security Inspection Framework and its Application to Use Cases

Yuto Nakano, Yasuaki Kobayashi, Takao Kojima, Yutaka Miyake, Shinsaku Kiyomoto

KDDI Research, Japan

IE4-1: Human, Socio-Economic and Culture Issues

Time: Monday, 20/June/2022: 2:30pm - 4:00pm · *Location:* Room 103 - Centre Prouvé
Session Chair: Fedoua KASMI, Université de Lorraine, France

Turnover Intention of High-Tech Industry Managers: A Push-Pull-Mooring Model

Chih-Hung Hsieh, Cheng-Ru Hu, Chu-Yun Teng
College of Management, Yuan Ze University, Taiwan

Implementing the systemic approach supporting territorial resilience: the case of the 'Toile' tool.

Mathilde SCHWOB[1], Fedoua KASMI[1], Laurent DUPONT[1], Jean-François VEREECKE[2], Claudine GUIDAT[1]
[1]Université de Lorraine, ERPI Laboratory, France; [2]Agence d'Urbanisme et de Développement de la Région Flandre-Dunkerque (AGUR), France

THE MAKING OF SOCIAL ENTREPRENEURS: EMPIRICALLY TESTING THE SOCIAL ENTREPRENEURIAL INTENTION MODEL.

Preeti Tiwari[1], B. KOTESWARA RAO Naik[2]
[1]Jindal Global Business School; [2]NITIE Mumbai

A literature-based categorization model of individual innovation capabilities to boost organizations' innovation capacities

Mariela Martinez, Laure Morel, Manon Enjorlas
Univerisité de Lorraine, Costa Rica

IE6-2: Living-Labs & Open-Innovation

Time: Monday, 20/June/2022: 2:30pm - 4:00pm · *Location:* Room 104 - Centre Prouvé
Session Chair: Laurent DUPONT, Université de Lorraine, France

User-centered prototypes-insights from a design thinking workshop series

Laura Christina Rehberg

University of Stuttgart, Germany

An investigation of design in virtual reality across the variation of training degree and visual realism

Sylvain Fleury[1], Laurent Dupont[2], Noémie Chaniaud[1], Saadallah Tamazart[2], Benjamin Poussard[1], Geoffrey Gorisse[1], Simon Richir[1]

[1]Arts & Metiers Institute of Technology LAMPA, HESAM University F-53810 Change, France; [2]Université de Lorraine ERPI F-54 000 Nancy, France

Designing a group decision-making tool under Living Lab project mode: The case of ConsensUs

Maxence Arnould[1], Manon Enjolras[2], Mauricio Camargo[2]

[1]AgroParisTech - INRAE - UMR SILVA, Nancy, France; [2]Université de Lorraine - ERPI, Nancy, France

IE11-1: Sustainability in Innovation & Entrepreneurship

Time: Monday, 20/June/2022: 2:30pm - 4:00pm · *Location:* Room 105 - Centre Prouvé
Session Chair: Brunelle MARCHE, Université de Lorraine, France

Contributing to monitoring and evaluation practices by conceptualizing a Valuable Insights from Log Analysis (VILA) Framework.

Ane van Schalkwyk[1], Sara Grobbelaar[2], Euodia Vermeulen[3], Marlien Herselman[4]

[1]Department of Industrial Engineering, Stellenbosch University, South Africa; [2]Department of Industrial Engineering, Stellenbosch University AND DSI-NRF Centre of Excellence in Scientometrics and Science, Technology and Innovation Policy (SciSTIP) Stellenbosch University; [3]Department of Industrial Engineering, Stellenbosch University, South Africa; [4]Department of Industrial Engineering Stellenbosch University AND Next Generation Enterprises and Institutions CSIR Pretoria, South Africa

Building PSS-based circular business model canvases: an application in the waste from electrical and electronic equipment context

Claudio Sassanelli[1], Paolo Rosa[2], Sergio Terzi[2], Giorgio Mossa[1]

[1]Politecnico di Bari, Italy; [2]Politecnico di Milano, Italy

Household support to adopt preventive innovations to mitigate climate change: A case of Finnish apartment buildings

Deborah Karen Kuperstein-Blasco[1], Jussi Valta[1], Saku Mäkinen[2]

[1]Tampere University, Finland; [2]University of Turku, Finland

Enabling the citizen-driven renewable energy transition

Antonia Krebs, Björn Koch

COAST Centre for Environment and Sustainability Research, University of Oldenburg, Germany

TEC3-2: Technology on Education and Training

Time: Monday, 20/June/2022: 2:30pm - 4:00pm · *Location:* Room 202 - Centre Prouvé
Session Chair: Raphaël BARY, Université de Lorraine, France

An Investigation into the Challenges and Solutions of e-learning in Tertiary Institutions during the COVID-19 Pandemic

Chandini Singh, Schalk Grobbelaar

Department of Engineering and Technology Management, University of Pretoria, South Africa

Experiences and challenges with pandemic online learning

Acelya Özkan, Katja Josenhans, Layana Berendt, Ludwig Martin

Pforzheim University, Germany

A Framework for Outsourcing Maintenance in the Era of Industry 4.0 within the Petrochemical Industry

Sello Mollo[1], Leon Pretorius[2], Jan Harm C Pretorius[1]

[1]University of Johannesburg, South Africa; [2]University of Pretoria, South Africa

Adoption of mobile applications to improve the reading habits of rural readers in southern Africa's secondary schools.

Nkomo Sifundo[1], Walter Matli[2]

[1]University of South Africa; [2]University of South Africa

Is there education with the closed school? Long-term impacts on Emergency Remote Education (ERE)

Lilian Schreiner Módolo[1], Luiz Augusto Módolo[2], Edna Barbosa dos Santos[3]

[1]USP, Brazil; [2]USP, Brazil; [3]Faculdades Dom Bosco, Brazil

ENG4-1: Sustainable Engineering

Time: Monday, 20/June/2022: 2:30pm - 4:00pm · *Location:* Room 203 - Centre Prouvé
Session Chair: Alaa Hassan, Université de Lorraine, France

The Forest Industry and Development Within South Africa and Other Southern African Development Community Countries

Karen Louise Schmidt[1], Wouter Gideon Bam[1], <u>Philani Nduna Zincume</u>[1], Karolien De Bruyne[1,2]
[1]Stellenbosch University, South Africa; [2]KU Leuven, Belgium

Impact of automation during innovative remanufacturing processes in circular economy

<u>Perla Nohra</u>[1], Helmi Ben Rejeb[2], Swaminath Venkateswaran[3]
[1]Grenoble INP, CNRS University of Grenoble Alpes, France; [2]Grenoble INP, CNRS University of Grenoble Alpes, France; [3]Leonard de Vinci Pole Universitaire, France

Design of Circular Economy Enhancing Journeys for Automotive Manufacturing Industry

<u>Siro Dell'Ambrogio</u>, Silvia Menato, Jennifer Nika, Luca Canetta, Marzio Sorlini
SUPSI

Sustainable Gardens for Smart Cities using Low-Power Communications

<u>Bruno Mota</u>, Bruno Mataloto, Carlos Coutinho
ISCTE-IUL, Lisbon, Portugal

ECTP1: Smart Construction & Built Environment

Time: Monday, 20/June/2022: 2:30pm - 4:00pm · *Location:* Room 204 - Centre Prouvé
Session Chair: Alain ZARLI, ECTP & R2M Solution, France
Session Chair: Sylvain Kubicki, Luxembourg Institute of Science and Technology, Luxembourg

Designing Out the Risk of Infections via Aerosols by Updating Restrictions on Indoor Environments Depending on Local Incidence Rates and the Dominant SARS-CoV-2 Strain

Ruth Wallace, Yacine Rezgui, Ali Ghoroghi
Cardiff University, United Kingdom

Evidencing the correlation between training and energy efficiency through a sociotechnical perspective: use cases and measurable scenarios

Professor Yacine Rezgui[1], Dr. Ioan Petri[2], Irini Barbero[3]
[1]Cardiff University; [2]Cardiff University; [3]Cardiff University

Implementation of a digital twin framework in the modular housing industry

Anne Fischer[1], Jorge Rodriguez Llorens[1], Zhen Cai[1], Michael Wilke[2], Stephan Kessler[1], Johannes Fottner[1]
[1]Technical University of Munich, Germany; [2]Max Bögl Modul AG, Germany

ENG12-2: SCM 4.0

Time: Monday, 20/June/2022: 2:30pm - 4:00pm · *Location:* Room 205 - Centre Prouvé
Session Chair: Mauricio Camargo, University of Lorraine, France

Quantifying the Environmental Impacts of Battery Electric Vehicles from a Criticality Perspective

Fernando Penaherrera V.[1], Maria Fernanda Davila Restrepo[1], Dr. Ing. Alexandra Pehlken[1], Björn Koch[2]

[1]OFFIS e.V. - Institut für Informatik, Germany; [2]Carl von Ossietzky Universität Oldenburg

Design of an optimised value creation network for zero emission ferries

Jan-Philipp Disselkamp[1], Tobias Seidenberg[1], Harald Anacker[1], Roman Dumitrescu[2]

[1]Fraunhofer Research Institute for Mechatronic Systems Design IEM, Germany; [2]Heinz Nixdorf Institute, University of Paderborn

Integrated Digital System in Planning, Scheduling and Logistics Processes at a Petroleum Company

Buhle Sihlali, Arnesh Telukdarie

University of Johannesburg, South Africa

IE4-2: Human, Socio-Economic and Culture Issues

Time: Monday, 20/June/2022: 4:30pm - 6:00pm · *Location:* Room 103 - Centre Prouvé
Session Chair: DEYCY JANETH SANCHEZ PRECIADO, Halmstad University, Sweden

Determinants of Manpower Utilisation in Manufacturing Firms

Victor Oluwasina Sobanke

National Centre for Technology Management, Nigeria

ENABLING TRANSFER OF INTERMEDIATE TECHNOLOGIES - A RURAL BUSINESS PROJECT CASE IN RURAL COLOMBIA

DEYCY JANETH SANCHEZ PRECIADO

Centro Regional de Productividad e Innovación del Cauca - Halmstad University

Entrepreneurial Motivation: An Exploratory Study of Gender and Venture Types

Rebecca Off[1], Kevin Reuther[2], Guido Baltes[1]

[1]Konstanz University of Applied Sciences; [2]University of Leipzig

Electricity Productivity in Socio-Economic Context: A Country-Level Analysis

Heidy Noelia Montero Teran[1], Matteo Bulleri[2], Diellza Salihu[2], Piotr Krawczyk[1], Marcin Topolewski[3], Marc Pallot[4]

[1]JAMK University of Applied Sciences, Finland; [2]LUT University; [3]Warsaw School of Economics SGH; [4]Nottingham University Business School

IE6-3: Living-Labs & Open-Innovation

Time: Monday, 20/June/2022: 4:30pm - 6:00pm · *Location:* Room 104 - Centre Prouvé
Session Chair: Marc Pallot, Arts & Metiers ParisTech, France

Investigate Innovation Intermediary in civilian space industry innovation network: a grounded theory study

Vahid Mohammadi, Mohammad Abooyee Ardakan, Manouchehr Manteghi
University of Tehran, Iran, Islamic Republic of

Aligning Open Engineering Practices

Matjaz Vidmar
The University of Edinburgh, United Kingdom

What do we learn in a living lab ?

Valentine Labouheure, Raphaël Bary, Laure Morel
ERPI- Université de Lorraine, France

Smart Campus: Concepts, development and future

Juan Arenas[1], Pedro Palominos[1], Rodrigo Martin[1], Mauricio Camargo[2], Raphael Bary[2], Héctor Kaschel[1]
[1]Universidad de Santiago de Chile; [2]University of Lorraine, France

IE11-2: Sustainability in Innovation & Entrepreneurship

Time: Monday, 20/June/2022: 4:30pm - 6:00pm · *Location:* Room 105 - Centre Prouvé
Session Chair: Dominique Jolly, France

Exploring the demands of energy management service for the manufacturing firms

Phil Yang[1], Yichang Yang[2]

[1]National Taichung University of Education, Taiwan; [2]Shih Chien University, Taiwan

Implementing Lean Manufacturing as a Business Management Strategy to eliminate waste The case of an Automobile company

Eric Mikobi Bakama, Charles Mukwakungu Sambil, Nita Sukdeo

University of Johannesburg, South Africa

Towards a Strategic Decision Support Tool for Innovation Ecosystems Stakeholder Management

Luca Carinus[1], Chipo Nancy Ngongoni[1], Sara {Saartjie} Grobbelaar[1,2]

[1]Department of Industrial Engineering, Stellenbosch University, South Africa; [2]DSI-NRF CoE in Scientometrics and Science, Technology and Innovation Policy (sciSTIP)

Digitalization and Sustainability in Strategic Management: Research Agenda toward Dual Transformation

Christian Kürpick[1], Roman Dumitrescu[2], Tommy Falkowski[1], Christian Fechtelpeter[1], Arno Kühn[1]

[1]Fraunhofer Institute for Mechatronic Systems Design IEM, Germany; [2]Heinz Nixdorf Institute / University of Paderborn, Germany

TEC1: Advance manufacturing & Factories of the Future

Time: Monday, 20/June/2022: 4:30pm - 6:00pm · *Location:* Room 106 - Centre Prouvé
Session Chair: Alaa Hassan, Université de Lorraine, France

Concept of a business-process-related digital twin based on systems theory and operational excellence

Markus Rabe, <u>Emre Kilic</u>

Technische Universität Dortmund, Germany

How can machine learning improve waste-to-energy plant operation

Alexandra Pehlken[1], Henriette Garmatter[2], <u>Lisa Dawel</u>[1], Fabian Cyris[3], Hendrik Beck[1], Fenja Schwark[1], Roland Scharf[2], Astrid Nieße[1]

[1]OFFIS, Germany; [2]Leibniz University Hannover, Germany; [3]EEW - Energy from Waste, Germany

Using Data analytics to explore opportunities of Lean assessments

<u>Rostyslav Pietukhov</u>, Mujthaba Ahtamad

The University of Warwick, United Kingdom

A Resilience Framework for Digital Transformation in the Banking Sector: A Systems Thinking Approach

<u>Dumisani Manzini</u>, Rudolph Oosthuizen, Hilda Chikwanda

University of Pretoria, South Africa

BCCMS, Authorization Through an Approach for a Blockchain Based Electronic Cards Management System

<u>Ahmed Mohamed Maghawry</u>[1], Amr Elhadidi[2], Mohamed Kholief[3]

[1]EFinance; [2]EFinance; [3]ESLSCA

TEC6: Green Tech

Time: Monday, 20/June/2022: 4:30pm - 6:00pm · *Location:* Room 202 - Centre Prouvé
Session Chair: Giovanny Arbelaez-Garces, Université de Lorraine, France

Identification of sensor technologies with the potential to support roadside ecosystem services

Brice Corrigeux[1], Brunelle Marche[1], Mauricio Camargo[1], Christophe Bachmann[2], Clémence Chaudron[3]

[1]Université de Lorraine, ERPI, F-54000 Nancy, France; [2]NOREMAT S.A, F-54710 Ludres, France; [3]UMR 1434 SILVA, Université de Lorraine, AgroParisTech, INRAE, Faculté des Sciences et Technologies, F-54506,Vandoeuvre les Nancy, France

Green Technology: Consumer purchase intention of electric vehicles in India

Johnsi Priya[1], Bhukya Koteswararao Naik[2], Deepesh Kaushik[2]

[1]Meston College of Education, Cennai, India; [2]National Institute of Industrial Engineering Mumbai, India

An Integrated Geographical Information and Road Asset Management System for road transport network sustainability in developing countries.

Raphael Kafui Natsui[1], Kingsford Kissi Mireku[2], Emmanuel Sasu[3], Gustave Kojo Gameli Amuzu[2]

[1]Ghana Institute of Management and Public Administration; [2]Central University; [3]University of Ghana

Literature Development Trajectory of LED Smart Street Lighting by Main Path Analysis

Kuel-Kuel Lai, Adam Kao-Wen Weng*, Hsiao-Yun Chang

Chaoyang University of Technolog, Taiwan

Green Technology Readiness of Telecommunication Firms in India: An Exploratory Study

Shikha Sargam, Ruchita Gupta

NITIE, India

ENG4-2: Sustainable Engineering

Time: Monday, 20/June/2022: 4:30pm - 6:00pm · *Location:* Room 203 - Centre Prouvé
Session Chair: Luke Maki, The Boeing Company, United States of America

The Impact of Total Productive Maintenance on Performance in The South-African Food Manufacturing Industry

Andre Vermeulen, Jacques Weidemann, Jan Harm C Pretorius
University of Johannesburg, South Africa

System Dynamics Modeling for Smart and Collaborative Last Mile Networks

Anna-Maria Nitsche[1,2], Bogdan Franczyk[1,3], Christian-Andreas Schumann[2]
[1]University of Leipzig, Germany; [2]University of Applied Sciences Zwickau, Germany; [3]Wrocław University of Economics, Poland

Applying a Sustainable Business Model for Companies Creating Manufacturing Shared Value with Base of the Pyramid Suppliers

Zviemurwi Johnny Chihambakwe[1], Sara {Saartjie} Grobbelaar[1,2], Stephen Matope[1]
[1]Department of Industrial Engineering, Stellenbosch University, South Africa; [2]DSI-NRF Centre of Excellence in Scientometrics and Science, Technology and Innovation Policy (SciSTIP)

Risk management of the rehabilitation of a communal facility on dolomitic land: a South African case study

Tshepiso Mollo[1], Leon Pretorius[2], Jan Harm C Pretorius[1]
[1]University of Johannesburg, South Africa; [2]University of Pretoria, South Africa

ECTP2: Smart Construction & Built Environment

Time: Monday, 20/June/2022: 4:30pm - 6:00pm · *Location:* Room 204 - Centre Prouvé
Session Chair: Alain ZARLI, ECTP & R2M Solution, France
Session Chair: Yacine Rezgui, Cardiff University, United Kingdom

Digital technologies to advance circular economy at territorial level: challenges and solutions

Ghada Bouillass, Michael Saidani, José Lameh, Bernard Yannou

Université Paris Saclay CentraleSupélec, Laboratoire Genie Industriel

Sustainable Renovation through Modular semantic prefabrication

Yacine Rezgui[1], Salima Hamini[2], Abdelkader Ramdani[2]

[1]Cardiff University, United Kingdom; [2]Bureau d'Etudes Techniques, Algeria

SemanticLCA: A new generation of life cycle assessment methods applied to buildings

Abdulrahman Fnais, Ali Ghoroghi, Yacine Rezgui, Thomas Beach, Ioan Petri

Cardiff University, United Kingdom

Aligning IFC and SRI domains for BIM supported SRI assessement

Calin Boje, Sylvain Kubicki, Annie Guerriero, Sebastien Thomas

Luxembourg Institute of Science and Technology (LIST), Luxembourg

IE2-2: Digital Innovation Management

Time: Tuesday, 21/June/2022: 9:40am - 10:40am · *Location:* Room 103 - Centre Prouvé
Session Chair: Frédérique Mayer, Université de Lorraine, France

Scrum's Methodology adaptations to meet the teleworking needs experienced by Software Development Teams

Luís Fernando Gama[1], Ana Correia Simões[2]

[1]School of Economics and Management ,University of Porto, Porto, Portugal; [2]INESC TEC - Institute for Systems and Computer Engineering, Technology and Science, Centre for Enterprise Systems Engineering Porto, Portugal

Design or Redesign Business Models' Innovation in the Digital Transformation Context

Patrick Ratté, Elaine Mosconi, Leandro Feitosa Jorge

Université de Sherbrooke, Canada

Innovation Management in Firms: A Review and Research Agenda

Surabhi Singh, Sanjay Dhir, Mayur Chikhale

Indian Institute of Technology Delhi, India

IE13-1: Technology Foresight and Forecasting

Time: Tuesday, 21/June/2022: 9:40am - 10:40am · *Location:* Room 104 - Centre Prouvé
Session Chair: Breno Nunes, University of Aston, United Kingdom

Linking innovation dynamics with scientific knowledge of climate change mitigation technologies

Bhukya Koteswararao Naik[1], Rahul Mishra[1], <u>Vasu Choudhary</u>[2]
[1]NITIE, India; [2]IGNTU, India

Under which conditions will "Flying Taxis" become relevant for inner-city passenger transport in the future?: Scenario Analysis

<u>Swarnalekha Khandker</u>, Ahasan Ullah Shohag
Hochschule Harz, Germany

Technology Roadmapping and 4IR in Defence: Case of Command and Control Systems

<u>Andries Linda Malinga</u>[1,2], Alwyn Strauss[3], Petrus Letaba[1], Marthinus W. Pretorius[1]
[1]University of Pretoria, South Africa; [2]Council for Scientific and Industrial Research (CSIR), South Africa; [3]Private Consultancy, South Africa

IE3: Digital Social Networks

Time: Tuesday, 21/June/2022: 9:40am - 10:40am · *Location:* Room 105 - Centre Prouvé
Session Chair: Sophie Boutillier, University of Littoral Côte d'Opale, France

Transition to Remote Work: Peculiarities of Social Networks Use

Vida Davidavičienė, Sigitas Davidavičius, Aurelija Burinskienė
Vilnius Gediminas Technical University, Lithuania

The entrepreneurial function in digital entrepreneurial ecosystems. The resource potential of the innovative entrepreneur Analysis based on the founders of the top five digital social networks (Facebook, Youtube, Whatsapp, Messenger and Instagram)

Sophie Boutillier[1], Dimitri Uzunidis[2]
[1]University of Littoral Côte d'Opale, France; [2]University of Littoral Côte D'Opale, France

Customers' Purchasing Behavior: Persuasion of Online Food Delivery System Based on Hedonic and Utilitarian Features

Nor Aziati Abdul Hamid, Zainal Ainul Nabihah, Tasmin Rosmaini, Abdullah Norhazana
Universiti Tun Hussein Onn Malaysia, Malaysia

IE7-4: R&D, Innovation and Entrepreneurship

Time: Tuesday, 21/June/2022: 9:40am - 10:40am · *Location:* Room 106 - Centre Prouvé
Session Chair: Ferney Osorio, UNIVERSITÉ DE LORRAINE, France

Benefiting from the Power of the Crowd: Contribution of the Crowds to the Idea Evaluation Phase

ahmet çubukcu[1], özlem akarçay[2], tuba ulusoy[1]

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Understanding inclusive innovation in informal economy, a conceptual model

Milena Legarda-López[1], María Luisa Villalba[2], Walter Ruiz-Castañeda[1]

[1]Facultad de Minas, Universidad Nacional de Colombia, Medellín, Colombia; [2]Facultad de Ciencias Económicas y Administrativas, Universidad Católica de Oriente, Rionegro, Colombia

A Research on Iterability of Value Dimension Change in New Product Development Process

Kiyohiro Yamazaki

Tohoku University, Japan

ENG5-2: Rethinking Project Management

Time: Tuesday, 21/June/2022: 9:40am - 10:40am · *Location:* Room 202 - Centre Prouvé
Session Chair: Brunelle MARCHE, Université de Lorraine, France

Comparison of Manufacturing/Remanufacturing CO_2 emissions balance: application to a mowing machine

Brunelle MARCHE[1], Diego Nicolas PARRADO RODRIGUEZ[1], Olivier CHERY[1], Mauricio CAMARGO[1], Christophe BACHMANN[2]

[1]Université de Lorraine, ERPI F-54000 Nancy, France; [2]NOREMAT S.A, F-54710 Ludres, France

Collaborative capacity of open source hardware communities: A cross-sectional study

Robert Mies[1], Jérémy Bonvoisin[2]

[1]Technische Universität Berlin, Institute for Machine Tools and Factory Management, Germany; [2]Without affiliation

Joint-design of products and supply chain in a context of innovation

Brunelle MARCHE[1], Vincent BOLY[1], J. Roland ORTT[2], Laure MOREL[1]

[1]Université de Lorraine, ERPI F-54000 Nancy, France; [2]Delft University of Technology Faculty of Technology Policy and Management, Delft, Netherlands

ENG1-1: ICT for health care

Time: Tuesday, 21/June/2022: 9:40am - 10:40am · *Location:* Room 204 - Centre Prouvé
Session Chair: James Fleck, University of Edinburgh Business School, United Kingdom

Sustainable Design of IT Systems with Digital Twins – Principles, Application Areas and Advantages

Rainer Lutze

Dr.-Ing. Rainer Lutze Consulting, Germany

DESIGN OF AN ULTRASOUND IMAGE GUIDED ROBOT THAT DRAWS BLOOD FROM VEINS

Tawanda Mushiri[1], Victor Pavari[2], Habib Noorbhai[1]

[1]University of Johannesburg, South Africa; [2]University of Zimbabwe

The benefits and challenges of Implementing Smart hospital projects: A systematic review

Eveth Nkeiruka Nwobodo-Anyadiegwu, Mira Ditend, Alice Kabamba Lumbwe

University of Johannesburg, South Africa

TEC7: Commercializing Technology

Time: Tuesday, 21/June/2022: 9:40am - 10:40am · *Location:* Room 205 - Centre Prouvé
Session Chair: Joe Amadi-Echendu, University of Pretoria, South Africa

Technology backcasting: Retrospective case studies from mining and mineral processing

Joe Amadi-Echendu, Pavlen Govender, Magretha Vlok

University of Pretoria, South Africa

IPR ECOSYSTEM IN DEVELOPING COUNTRIES: A CASE STUDY OF AN INSTITUTE OF EMINENCE

Shubham Anand, Priyadarshini Singh, Gouri Ashok Gargate

IIT Kharagpur, India

The adoption of Scaled Agile Framework (SAFe) in non-agile organizations.

Kwete Mwana Nyandongo, Mmammule Grace Madumo

University of Johannessburg, South Africa

IE2-1: Digital Innovation Management

Time: Tuesday, 21/June/2022: 11:00am - 12:30pm · *Location:* Room 103 - Centre Prouvé
Session Chair: Eric Bonjour, Université de Lorraine, France

Ethical Considerations of Artificial Intelligence: Ensuring Fairness, Transparency, and Explainability

Haroon Abbu[1], Paul Mugge[2], Gerhard Gudergan[3]

[1]Bell and Howell; [2]NC State University; [3]RWTH Aachen University

Becoming Holy Grail of Health on the Move: Identifying and Prioritizing Factors Affecting the Commercialization of m-Health

Saeedeh Ghoochkanloo, Mohammad Naghizadeh, Mehdi Goodarzi

Allameh Tabataba'i University, Iran, Islamic Republic of

Digital Technology and the Stages of Digital Business Transformation

Irmak Mutlu, Erik den Hartigh, Caglar Ucler

Ozyegin University, Turkey

Coopetition: A Critical Review and Directions for Future Research

Abhilasha Meena, Sanjay Dhir, Sushil Sushil

Indian Institute of Technology Delhi, India

IE13-2: Technology Foresight and Forecasting

Time: Tuesday, 21/June/2022: 11:00am - 12:30pm · *Location:* Room 104 - Centre Prouvé
Session Chair: Roland Ortt, Delft University of Technology, Netherlands, The

Identification and evaluation of development paths for technology-oriented industrial companies in structural transformation processes

Alessandro Sala, Arko Steinwender, Peter Schieder, Wilfried Sihn

Fraunhofer Austria Research GmbH, Austria

Towards a Framework to Assess the Impact of Innovative Transportation Technologies

Heiko Duin

BIBA - Bremer Institut für Produktion und Logistik GmbH, Germany

Socio-technical Transitions and the Fourth Industrial Revolution: The need for an integrated analysis.

Martha Mukama Asiimwe, Prof. Imke H. de Kock

Stellenbosch University, South Africa

The constitution of technology as an institutional order

Alana Bauer Lacerda, Fernando Lopes

Universidade Federal do Rio Grande do Sul, Brazil

TEC2-1: Industry 4.0

Time: Tuesday, 21/June/2022: 11:00am - 12:30pm · *Location:* Room 105 - Centre Prouvé
Session Chair: Adriana Simona Mihaita, UNIVERSITY OF TECHNOLOGY SYDNEY, Australia

Evolution of Industrial Symbiosis scientific field in Brazil: Insights from a systematic literature review and a bibliometric analysis

Emilia de Oliveira Faria, Cristiane Barreto, Armando Caldeira-Pires, Alisson Lima-Silva
University of Brasilia, Brazil

Multi-objective modelling of a roadside mowing problem: a case study in France

Adriana-Simona MIHAITA[1], Brunelle MARCHE[2], Mauricio CAMARGO[2], Iman RAHIMI[1], Christophe BACHMANN[3]
[1]University of Technology Sydney, Sydney, Australia; [2]Université de Lorraine, ERPI F-54000 Nancy, France; [3]NOREMAT S.A.

The use of 4IR technologies to improve the IT auditor's job function

KM Nyandongo, SS Pillay
University of Johannesburg, South Africa

Speech Assistance: Use cases in Industry

Manfred Langen
Siemens AG, Germany

IE7-1: R&D, Innovation and Entrepreneurship

Time: Tuesday, 21/June/2022: 11:00am - 12:30pm · *Location:* Room 106 - Centre Prouvé
Session Chair: Paulo Antônio Zawislak, UFRGS, Brazil

P2B Methodology: from patents to business

Gabriela Fernandes[1,2], Pedro Lucas[1], <u>Ana Correia Simões</u>[3], Gustavo Dalmarco[3]

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INNOVATION CAPABILITIES IN PANDEMIC TIMES: EVIDENCE FROM RESILIENT MANUFACTURING FIRMS IN BRAZIL

Ariane Melo Silva Ávila, Denise Barbieux, Ricardo Machado Leo, Guilherme Freitas Camboim, <u>Paulo Antônio Zawislak</u>

Federal University of Rio Grande do Sul, Brazil

Leapfrogging into the Fourth Industrial Revolution: Lessons from Promising Practices

Evah Phago, <u>Petrus Letaba</u>

Department of Engineering and Technology Management, University of Pretoria, South Africa

Dauntless Research and Development Investments of Deficit Senior-Star Biotech Firms in the Valley of Death

<u>Takao Fujiwara</u>

Toyohashi University of Technology, Japan

ENG5-1: Rethinking Project Management

Time: Tuesday, 21/June/2022: 11:00am - 12:30pm · *Location:* Room 202 - Centre Prouvé
Session Chair: Robert Bierwolf, IEEE TEMS, Netherlands, The

UNCERTAINTIES MANAGEMENT FROM THE HARD AND SOFT APPROACH, IN PROJECTS OF BRAZILIAN AEROSPACE SECTOR

Teresa Raquel Domingos[1,2], Milton Chagas[1]

[1]INPE - Instituto Nacional de Pesquisas Espaciais, Brazil; [2]EMBRAER S.A

The Integration of Industry 4.0 on Corporate Social Responsibility (CSR) Projects: A Systematic Review

Eveth Nkeiruka Nwobodo-Anyadiegwu, Sikhakhane Z, Alice Kabamba Lumbwe

University of Johannesburg, South Africa

Managing Projects More Successful: Evaluation of a Concept for Implementing Critical Success Factors in Practice

Maximilian Schöberl[1], Simone Tuyisabe[1], Christoph Hollauer[2], Johannes Fottner[1]

[1]Technical University of Munich, Germany; [2]Wacker Neuson SE, Germany

ENG3-2: Service Design and Engineering

Time: Tuesday, 21/June/2022: 11:00am - 12:30pm · *Location:* Room 203 - Centre Prouvé
Session Chair: Abdul Rahman Abdel Razek, FARO Technologies Europe GmbH, Germany

Analysis of Failure Mode Effects of the Traction Motor

Bayanda Kunene, Arnesh Telukdarie
University of Johannesburg, South Africa

Managing structural integrity of pipelines utilizing inline inspection data

Cynthia Ntombizanele Mbele, Humna Hassan Malik, Jan Harm Pretorius
Rand Water, South Africa

Developing a Rapid Service Prototyping Framework

Daniela Fehrenbach[1], Abdul Rahman Abdel Razek[2], Christian van Husen[1]
[1]Hochschule Furtwangen University, Germany; [2]FARO Technologies

From need to requirement: a methodological contribution

Vincent BOLY, Brunelle MARCHE, Davy MONTICOLO, Manon ENJOLRAS, Frédérique MAYER
Université de Lorraine / ERPI, France

ENG1-2: ICT for health care

Time: Tuesday, 21/June/2022: 11:00am - 12:30pm · *Location:* Room 204 - Centre Prouvé
Session Chair: Imke De Kock, Stellenbosch University, South Africa

Development of a leanness assessment tool for hospitals

Bronwyn Joubert, Wouter Bam

Stellenbosch University, South Africa

Co-Design for Gender Equality in an AI-Based Virtual Assistant for Intensive Care Units

Nicola Marsden[1], Suchanda Bhattacharyya[2], Janine Meyer-Christodoulou[2], Lukas Martin[2], Arne Peine[2]

[1]Heilbronn University, Germany; [2]Clinomic GmbH, Aachen, Germany

The Healthcare Data Management Maturity Model (HDM3) for the assessment of healthcare data management in developing countries

Laubscher van der Merwe[1,2], Imke de Kock[1], Wouter Bam[1]

[1]Stellenbosch University, South Africa; [2]CSIR, South Africa

Investigating the integration of public and private pharmaceutical supply chains

Jessica Botes, Wouter Bam, Imke de Kock

Stellenbosch University, South Africa

ENG14: Smart Services and Software Platforms

Time: Tuesday, 21/June/2022: 11:00am - 12:30pm · *Location:* Room 205 - Centre Prouvé
Session Chair: Frédérique Mayer, Université de Lorraine, France

A Study of Adoption and Effects of DevOps Practices

Tyron Offerman, Robert Blinde, Christoph Johann Stettina, Joost Visser

LIACS, Leiden University, Niels Bohrweg 1, 2333 CA Leiden, The Netherlands

Cyclical Transformation of Value Creation for Smart Services

Jannik Reinhold[1], Christian Koldewey[1], Roman Dumitrescu[2]

[1]University of Paderborn, Germany; [2]Fraunhofer IEM, Paderborn, Germany

A Systematic Review of Concepts and Future Directions of Platform Ecosystem Development

Chibuike Cornelius Mbanefo[1,3], Sara Saartjie Grobbelaar[1,2]

[1]Department of Industrial Engineering, Stellenbosch University, Stellenbosch, South Africa; [2]DSI-NRF CoE in Scientometrics and Science, Technology and Innovation Policy (sciSTIP), Stellenbosch University Stellenbosch, South Africa; [3]Institute for Biomedical Engineering, Stellenbosch University, Stellenbosch, South Africa

Measures for Integrated Product Support (IPS) in Early Life Cycle of Aerospace and Defense Systems – Introduction of New IPS Measures with Reference to the ASD IPS Suite

Ljubisa Vaskic[1], Kristin Paetzold[2]

[1]HENSOLDT Sensors GmbH, Germany; [2]Technische Universität Dresden, Germany

IE8: Regional competitiveness policy and smart specialization strategies

Time: Tuesday, 21/June/2022: 2:30pm - 4:00pm · *Location:* Room 103 - Centre Prouvé
Session Chair: Paulo Antônio Zawislak, UFRGS, Brazil

iops: a Python package for the Input-Output Product Space methodology

Michael Jacobus Du Plessis, Wouter Gideon Bam

Stellenbosch University, South Africa

Technology transfer, productive restructuring, and reindustrialization processes. Experience of the Mexican Bajio region

Lorena del Carmen Álvarez-Castañón[1], Pilar Arroyo-López[2], Rocío Alfonsina Lizarraga-Morales[1], Gema González-Romero[3]

[1]Universidad de Guanajauto; [2]Tecnológico de Monterrey, EGADE Business School; [3]Universidad de Sevilla

Interconnection of freight delivery transport service networks

Aurelija Burinskienė

Vilnius Gediminas technical university, Lithuania

THE ROLE OF DEDICATED ORGANIZATIONS IN THE GOVERNANCE OF SMART CITY DEVELOPMENT: A MULTIPLE CASE STUDY

Guilherme Freitas Camboim, Nathália Amarante Pufal, Denise Barbieux, Paulo Antonio Zawislak

NITEC/UFRGS, Brazil

TEC2-2: Industry 4.0: Digital Innovation management and applications of AI

Time: Tuesday, 21/June/2022: 2:30pm - 4:00pm · *Location:* Room 105 - Centre Prouvé
Session Chair: Giovanny Arbelaez-Garces, Université de Lorraine, France

Human-in-the-loop: Explainable or accurate artificial intelligence by exploiting human bias?

Laura Valtonen[1], Saku J. Mäkinen[2]

[1]Tampere University, Finland; [2]University of Turku, Finland

Assessing the effectiveness of the scrum framework and its successful implementation

Mmule Rebecca Madumo, Kwete Mwana Nyandongo

University of Johannesburg, South Africa

Towards a Protocol for Preference Evaluation of Cosmetic Products Using Physiological Sensors

Javier Miranda-Mellado[1], Juliana Serna[1], Giovanny Arbelaez-Garces[1], Javier A. Arrieta-Escobar[2], Véronique Sadtler[2], Mathieu Kacha[3]

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Assessment Model to Support the Technological Integration within Industrial Companies in the Context of Industry 4.0

Neal Widmer, Alaa Hassan, Davy Monticolo

Equipe de Recherche sur les Processus Innovatifs, Université de Lorraine, France

IE7-2: R&D, Innovation and Entrepreneurship

Time: Tuesday, 21/June/2022: 2:30pm - 4:00pm · *Location:* Room 106 - Centre Prouvé
Session Chair: Matjaz Vidmar, The University of Edinburgh, United Kingdom

Foreign direct investment and host firms' technology development: The moderating role of overall and STEM education

Jihoon Shin[1], Miguel Amaral[2], Ana Cristina Barros[3], M. Granger Morgan[1]

[1]Carnegie Mellon University, United States of America; [2]Instituto Superior Técnico, Portugal; [3]INESC TEC, Portugal

The Difference between Exporter and Non-exporter Knowledge-based firms; Capabilities Analysis Approach Case study: Knowledge-based firms in the sector of chemical technology

Mohammad Torabi Khargh[1], Seyed Reza Mirnezami[2], mitra samadi[3], Mohammad Sadegh Khayatian[4]

[1]University of Tehran, Iran, Islamic Republic of; [2]Sharif University of Technology, Iran, Islamic Republic of; [3]Sharif University of Technology, Iran, Islamic Republic of; [4]Shahid Beheshti University, Iran, Islamic Republic of

Management of Technological Convergence in New Technology-Based Firms

Leandro Lepratte, Rafael Blanc, Daniel Hegglin, María Alejandra Rodriguez, Leonardo Ruhl

Universidad Tecnológica Nacional, Argentine Republic

An Empirical Analysis of High Technology Manufacturing Segments of India's Export sector

Amrutha Mary Varkey

University of Warsaw, Poland

ENG10-1: Industrial Internet & Industry 4.0

Time: Tuesday, 21/June/2022: 2:30pm - 4:00pm · *Location:* Room 202 - Centre Prouvé
Session Chair: Abdul Rahman Abdel Razek, FARO Technologies Europe GmbH, Germany

The Role of Data within The Service Prototyping Design Dimensions

Abdul Rahman Abdel Razek[3], Daniela Fehrenbach[1], Marc Pallot[2], Christian van Husen[1], Simon Richir[2]
[1]Furtwangen University, Germany; [2]Arts et Métiers ParisTech; [3]FARO Technologies

The Integration of Industry 4.0 in Healthcare Quality Improvement

Eveth Nkeiruka Nwobodo-Anyadiegwu, Deborah Baraka Tambwe, Alice Kabamba Lumbwe
University of Johannesburg, South Africa

Collaborative Filtering for Mobile Application Recommendation with Implicit Feedback

Beatriz Paula[1,6], João Coelho[1,6], Diogo Mano[1,7], Carlos Coutinho[1,2,3], João Oliveira[2,3,4], Ricardo Ribeiro[3,5], Fernando Batista[3,5]
[1]Caixa Mágica Software, S.A., Portugal; [2]Information Sciences, Technologies and Architecture Research Center (ISTAR-IUL); [3]Iscte - Instituto Universitário de Lisboa; [4]Instituto de Telecomunicações (IT); [5]INESC-ID; [6]Instituto Superior Técnico; [7]Faculdade de Ciências da Universidade de Lisboa

Digital platform user-centered impact: A Conceptual Evaluation Framework

fatima ezzahra hamdani, marie gribouval, barbara moissa, davy monticolo, vincent boly
erpi, France

ENG3-1: Service Design and Engineering

Time: Tuesday, 21/June/2022: 2:30pm - 4:00pm · *Location:* Room 203 - Centre Prouvé
Session Chair: hakim boudaoud, Université de Lorraine, France

Analysis of Impact of Maintenance Practices on Road Infrastructure

Khumbelo Bele, Megashnee Munsamy, Arnesh Telukdarie

University of Johannesburg, South Africa

Assessment of the Effectiveness of Speed Humps as Traffic Calming for Accident Reduction in Durban, South Africa

Lemo Andrew Monyatsi

Road Traffic Management Corporation, South Africa

Evaluating the understanding of Personal Data Privacy in Brazilian financial institutions from the perspective of consultants

Marcelo T Okano[1], Iamara Ferreira[2], Edson Luiz Ursini[3], Henry de Castro Lobo dos Santos[3]
[1]UNIP, CEETEPS and FT UNICAMP, Brazil; [2]CEETEPS; [3]FT UNICAMP

Improving maintenance management of reservoir structures using smart systems

Lebogang Makama, Arnesh Telukdarie

University of Johannesburg, South Africa

ENG8-1: Innovation on Education and Learning

Time: Tuesday, 21/June/2022: 2:30pm - 4:00pm · *Location:* Room 204 - Centre Prouvé
Session Chair: Alex Gabriel, Université de Lorraine, France

Contribute to Open Science with Research-based Learning: Explorative Research Action Study applied to Peer-to-Peer Energy Trading

Alex Gabriel, Laurent Dupont

Université de Lorraine, France

Gamification for Smart and Collaborative Last Mile Networks Knowledge Transfer

Anna-Maria Nitsche[1,2]**, Bogdan Franczyk**[1,3]**, Christian-Andreas Schumann**[2]

[1]University of Leipzig, Germany; [2]University of Applied Sciences Zwickau, Germany; [3]Wrocław University of Economics, Poland

Assisted Reality as an enabler for resilient remote learning during COVID-19

Thomas Kogias[1]**, Adrian Butnaru**[2]**, Frank Waszink**[3]**, Jan Smallegange**[2]**, Nikolaos Gavalakis**[1]**, Elias Xidias**[1]**, Dimitris Zissis**[1]

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Virtual laboratory, a learning resource for distance education

Daniel Galvez, Lorena Delgado, Christopher Caceres, Lucas Villarroel

University of Santiago, Chili, Chile

IE10: Responsible Research and Innovation

Time: Tuesday, 21/June/2022: 4:30pm - 6:00pm · *Location:* Room 103 - Centre Prouvé
Session Chair: Geerten van de Kaa, Delft University of Technology, Netherlands, The
Session Chair: Fedoua KASMI, Université de Lorraine, France
Session Chair: Vincent BOLY, Université de Lorraine / ERPI, France

Responsible Research and Responsible Innovation: Have new concepts emerged?

Akbar Mohammadi[1], Sahar Babaei[2]

[1]Tehran University; [2]Allameh Tabatabaei University

Analysis of innovation phases in the different AM future scenarios

Marianne Hörlesberger[1], Brigitte Kriszt[2], Andrea Kasztler[1]

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RRI and Digital Transformation in Grand Est Region

Marianne Hörlesberger[1], Vincent Boly[2], Jean-Jacques Bernardini[3], Lucia Gonzalez[4]

[1]AIT Austrian Institute of Technology, Austria; [2]Université de Lorraine; [3]Grand E-nov+; [4]MATERALIA

AI governance and ethics in public procurement: Bridging the gap between theory and practice

Timo Tapani von Behr, Mikko Siponen, Pekka Abrahamsson

University of Jyväskylä, Finland

Exploring extended outcomes of co-creation applied for Responsible Research and Innovation

Felicitas Schmittinger, Francesca Rizzo, Alessandro Deserti

Politecnico di Milano, Italy

IE9: Research and Innovation in Creative Industries

Time: Tuesday, 21/June/2022: 4:30pm - 6:00pm · *Location:* Room 104 - Centre Prouvé
Session Chair: BHUKYA KOTESWARARAO NAIK, NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING, India

Towards an analytical framework to analyze the evolution of manufacturing innovation systems

Michelle McClelland[1], Sara S Grobbelaar[2], Natasha Sacks[1]

[1]Department of Industrial Engineering University of Stellenbosch AND DSI-NRF Centre of Excellence in Strong Materials (CoE-SM); [2]Department of Industrial Engineering Stellenbosch University AND DSI-NRF Centre of Excellence in Scientometrics and Science, Technology, and Innovation Policy (SciSTIP)

An empirical study on the effects of leader behaviour and resilience on innovative work behaviour

Kimaya Reddy, Kai-Ying Chan

University of Pretoria, South Africa

A Teams Approach to Idea Generation: An Analysis of Personality and Team Learning on Creativity

Kai-Ying Chan, Precious Mokgala

University of Pretoria, South Africa

Research and scientific production in COVID - 19 in Argentina: analysis of bibliometric data

Miguel Guagliano, Adriana Sanchez Rico

Ministry of Science, Technology and Innovation - Argentina, Argentine Republic

Grass-root Innovation Ecosystem - an Indian case

Bhukya Koteswararao Naik[1], Ajit Kumar[1,2], Karuna Jain[3], Anil Kumar[4], Gautam Prakash[5]

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TEC5: Artificial Intelligence & Big Data

Time: Tuesday, 21/June/2022: 4:30pm - 6:00pm · *Location:* Room 105 - Centre Prouvé
Session Chair: Monticolo Davy, Université de Lorraine, Réunion (France)

Telecommunications Customer Service Improvement Through Big Data Analytics

Thabile Shongwe[1], Masike Malatji[2], Jan-Harm Christiaan Pretorius[1]

[1]Postgraduate School of Engineering Management, University of Johannesburg, South Africa; [2]Graduate School of Business Leadership, University of South Africa, South Africa

The Impact of Interactive technology by using Artificial Intelligence on the Formation of Social Interactions: A Study in Tourism Industry 4.0

Seyede Rojin Sobhani[1], Negar Armaghan[2], Saeed Haghir[1], Ali Andaji Garmaroodi[1]

[1]School of Architecture, College of Fine Arts, University of Tehran, Iran; [2]Department of Technology Development Studies, Iranian Research Organization for Science and Technology (IROST), Tehran, Iran

Supporting circular economy in healthcare through digital reverse logistics

Getnet Bogale Fanta, Leon Pretorius

Department of Engineering and Technology Management, University of Pretoria, South Africa

Big data Citizen-centred smart city governance. Evidence from Wuhan and the Coronavirus battle

DIDIER GRIMALDI

Ramon LLull University, Spain

The Role of Management of Technology (MOT) in Unlocking Nations' Competitiveness in Post Pandemic and Global Crises

Mohamed Azzam, Tarek Khalil

Nile University, Egypt

IE7-3: R&D, Innovation and Entrepreneurship

Time: Tuesday, 21/June/2022: 4:30pm - 6:00pm · *Location:* Room 106 - Centre Prouvé
Session Chair: Matjaz Vidmar, The University of Edinburgh, United Kingdom

Systematic Literature Review on Corporate Accelerator: Benefits, Challenges and Critical Success Factors

Caroline Rodrigues da Silva, Thaynara Beatriz Vilela, Rodrigo Rodrigues Borges de Faria, Leonardo Breno Pessoa da Silva, Joseane Pontes, Luis Mauricio Martins de Resende, Rui Tadashi Yoshino, Fernanda Tavares Treinta
Federal University of Technology (UTFPR) - Paraná, Brazil

Enabling Entrepreneurs to build on their means: The Effectual Decision-Making Canvas

Marcos Antonio González[1,2], Orestis Terzidis[1], Benedict Heblich[1]
[1]Karlsruhe Institute of Technology, Germany; [2]Universidad Austral de Chile

Migrant Work Inclusion: Designing Research on Entrepreneurship Support

Yngve Dahle[1], Kevin Reuther[2], Dimitris Polychronopoulos[1], Anh Nguyen Duc[1], Lars Ueland Kobro[1]
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Self-Assessment Model based on the ISO 56002:2019 Standard for Evaluating Iinnovation Management Systems of Science and Technology Institutions

MICHELLE SANTOS, MARIA F ALMEIDA
Pontifical Catholic University of Rio de Janeiro, Brazil

ENG10-2: Industrial Internet & Industry 4.0

Time: Tuesday, 21/June/2022: 4:30pm - 6:00pm · *Location:* Room 202 - Centre Prouvé
Session Chair: Regina Negri Pagani, Federal University of Technology, Paraná (UTFPR), Brazil

Support from Governance, Leadership and Smart People in the context of Smart Cities Development

Marcia Sierdovski, Luiz Alberto Pilatti, Priscila Rubbo, Rosmeiri Aprª Ribeiro Ferras, Juliana Vitória M. Bittencourt, <u>Regina N. Pagani</u>

Federal Technological University of Paraná, Brazil

Contribution of an IoT based cloud platform in the realization of data-driven in-house logistics

<u>Masoud Zafarzadeh</u>[1], Wajid Ali Khilji[1], Jannicke Baalsrud Hauge[1,2]

[1]KTH Royal Institute of Technology, Sweden; [2]BIBA, Germany

Forward kinematic based approach using sensor fusion for tracking the human limb

Arthur Johnson[1], Aswin K Ramasubramanian[2], <u>Robins Mathew</u>[2], Brian Mulkeen[1], Nikolaos Papakostas[2]

[1]School of Electrical and Electronic Engineering, University College Dublin, Ireland; [2]School of Mechanical and Materials Engineering, University College Dublin, Ireland

Preliminary approach to the functionality of a technical remote sensing platform applied to agriculture in the Colombian case

<u>Sandra Cecilia Bautista-Rodríguez</u>, Francy Pascagaza, Freddy Díaz, Victoria Vallejo

Universidad Central, Colombia

ENG8-2: Innovation on Education and Learning

Time: Tuesday, 21/June/2022: 4:30pm - 6:00pm · *Location:* Room 204 - Centre Prouvé
Session Chair: Alex Gabriel, Université de Lorraine, France

Designing the curriculum of the packaging design course based on the active learning

Narucha Tanaiutchawoot

Suranaree University, Thailand

Determinants of e-Learning user satisfaction at a South African University of Technology

Nhlanhla W. B. Mlitwa, Oluwamayowa O. Ogundaini

University of South Africa Gradaute School of Business Leadership, South Africa

Components of digital assistants in higher education environments

Sophie Henne, Vanessa Mehlin, Elena Schmid, Sigurd Schacht

University of Applied Science Ansbach, Germany

Digital Learning Readiness of higher education institutions in the 4th industrial revolution era during the COVID-19 pandemic, Case of a University in South Africa

Eric Mikobi Bakama, Charles Mukwakungu Sambil, Nita Sukdeo

University of Johannesburg, South Africa

IE12: Tech- & Digital Entrepreneurship

Time: Wednesday, 22/June/2022: 11:00am - 12:30pm · *Location:* Room 105 - Centre Prouvé
Session Chair: Clarice Bertin, ICN Business School & BETA Research Center, France

Digital Fit(ness) – is 'being in a fit with' enough?

Erich Heumüller, <u>Julia Kossowski</u>, Sebastian Richter
Baden-Wuerttemberg Cooperative State University Stuttgart, Germany

Local Ecosystem Open Innovation Intermediaries as Key Enablers for the Development of Incumbents' Digital Technology Partnerships

<u>Clarice Bertin</u>[1,3], Véronique Schaeffer[2,3]
[1]ICN Business School; [2]University of Strasbourg; [3]BETA Research Center

The e.DO Cube Hackathon – Transitioning to Graduate School

<u>Brendan Sullivan</u>[1], Monica Rossi[1], Lucia Ramundo[2], Paolo Rosa[1], Sergio Terzi[1]
[1]Politecnico di Milano, Italy; [2]EIT Manufacturing

WS02: HyValue Workshop

Time: Wednesday, 22/June/2022: 1:30pm - 4:15pm · *Location:* Auditorium 300 - Centre Prouvé
Session Chair: Robert Bierwolf, IEEE TEMS, Netherlands, The
Session Chair: Monticolo Davy, Université de Lorraine, Réunion (France)

Agilization of technical development processes for medical devices

Anna Schidek, Holger Timinger

University of Applied Sciences Landshut (Institute for Data and Process Science), Germany

Concept of a Fuzzy Expert System for Story Point Estimations in Agile Projects

Philipp Hansen[1,2], Holger Timinger[1,2]

[1]Landshut University of Applied Sciences, Germany; [2]Institute for Data and Process Science

Supporting the Development of a Mobile Context-Aware Application by an MDA-based Approach

Julian Dörndorfer, Markus Schmidtner

University of Applied Sciences, Germany

Influence of Project Parameters on the Decision of an Agile or Plan-based Approach

Markus Schmidtner, Holger Timinger, Claudia Doering, Finn Reiche

HAW Landshut, Germany

From Cooperation to Collaboration: Sociological Insights into Digital Collaboration Platforms in the Automotive Value Chain

Alexander Ziegler, Eckhard Heidling

Institute for Social Science Research Munich, Germany