

## SAVE THE DATE

### Web Conference on

## Sustainable Transport & Sustainable Cities

February 18<sup>th</sup> - 09:00 am - 12:30 am

February 19<sup>th</sup> - 09:00 am - 12:30 am

The Mobil\_City project team is pleased to invite you to participate in the upcoming Web Conference to be held virtually in Université de Technologie de Compiègne, FRANCE.

# WEB

INTERNATIONAL CONFERENCE  
COMPIÈGNE, FRANCE

18-19, FEBRUARY 2021



## Sustainable Transport & Sustainable Cities

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The purpose of the International Web Conference on sustainable transport and sustainable cities is to bring together researchers and practitioners from various fields interested in the technological advances and application challenges in all fields of transport and mobility. The speakers will analyze the various aspects of the sustainable transport for sustainable cities with a main focus on electro-mobility, detailing the technical, economic, and social aspects, with short and long term perspectives.

The Mobil\_City project team will present the main results regarding electro-mobility, i.e. an innovative energy system, a number of tools, methodologies, and algorithms to provide support in the decision-making process. They will take stock of their implementation (theory versus practice) and the stage of reproducibility in different urban spaces for the different solutions.

FOR FURTHER QUESTION PLEASE CONTACT [manuela.sechilariu@utc.fr](mailto:manuela.sechilariu@utc.fr)

# PROGRAM AND SPEAKERS

**INTRODUCTION: Manuela SECHILARIU (UTC, France)**

**Decision support to assess the capacity of an urban space for the IIREVs implantation**

Hipolito MARTELL-FLORES (UTC, France) and Nathalie MOLINES (UTC, France)

**Travel behaviour and future mobility systems**

Cristina PRONELLO (Politecnico Di Torino, Italy)

**Use of digitisation for “smart” travel data collection**

Pinky KUMAWAT (Politecnico Di Torino, Italy)

**Reefer trucks powered by solar PV. Sustainable transport of goods by road**

Eduardo ROMÁN (TECNALIA, Spain) and Adrian VALVERDE (PrimaFrio, Spain)

**Urban solar potential for PV-powered vehicles**

Miguel Centeno BRITO (University of Lisbon, Portugal)

**Campus of University with Mobility based on Innovation and carbon Neutrality (CUMIN): policy and social aspects**

Elodie CASTEX and Eugénie MASCLEF (Université de Lille, France)

**Campus of University with Mobility based on Innovation and carbon Neutrality (CUMIN): technical and economical aspects**

A. Bouscayrol, A. Desreveaux (Université de Lille, France)

**Societal impact and acceptability of PV-powered charging stations for electric vehicles**

Thibault JANIK (SYSTRA, France)

**Economic feasibility of PV-powered charging stations for electric vehicles**

Arthur COSSERAT (SYSTRA, France)

**Sizing tool for PV-powered intelligent infrastructures recharging electric vehicles**

Youssef KRAIEM (UTC, France)

**Cost optimization for PV-powered charging stations**

Saleh CHEIKH MOHAMAD (UTC, France)

**Human machine interface for PV-powered charging stations for electric vehicles**

Carlos Eduardo MONTANO SALCEDO (UTC, France)

**CONCLUSION: Manuela SECHILARIU (UTC, France)**

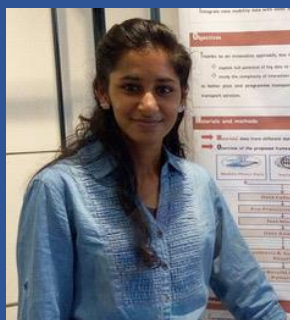
# SPEAKERS



**Cristina PRONELLO**, Full Professor specialized in Intelligent Transport Systems

Cristina Pronello is Full Professor at Politecnico di Torino, at Interuniversity Department of Regional and Urban Studies and Planning, where she coordinates the TRIS (Transport Research for Innovation and Sustainability) research group. Till to November 2019, she was Full Professor at Sorbonne Universités – UTC, where she was Chair holder of “Intelligent Transport Systems and Territorial Dynamics”. She is member of the Board of Ferrovie dello Stato Italiane SpA and she was President of the Regional Transport Authority of Piedmont Region in Italy (2016-2018). She is the winner (<https://www.travisions.eu/TRAVisions/>) of 2020 award from TRA VISIONS 2020 for the cross-modal section of the competition given to transport innovators, who have

carried out highly impactful research funded by the EU. She is the coordinator of the EU project WE-TRANSFORM. She was before (2010-2012) full professor at Université Lumière Lyon2, LET (Laboratoire d’Economie des Transports). She has an extensive international experience in the transport research field. She has been national expert in the Transport Programme Committee at the European Commission; she was member of Scientific Advisory Board of JPI Urban Europe (2012-2018); Chair of the COST “Transport and Urban Development” Domain Committee (2006-2014); member of ECTRI (European Conference of Transport Research Institutes) since 2003 where she served in the board from 2005 to 2013. She was member (till to 2018) of the US TRB Committees on International Activities and she is member of Technology Transfer and Women's Issues in Transportation. She is member of the EU Evaluator/Review Expert database within the Horizon 2020, 7th FP, ERANET, ESF, Agence Nationale de la Recherche de France (ANR), MIUR (Ministry for University and Research), and of AERES now HCERES (Haut Conseil à l’évaluation de la recherche et de l’enseignement supérieur), and Fonds québécois de la recherche sur la société et la culture (FQRSC). Her main research fields are Intelligent Transport Systems, transport systems’ environmental impacts, travel behaviour and travel surveys. She is author of more than 100 international publications and she has taken part in numerous research activities, contracts and advices, and coordinated several research projects on transport planning and policy, public transport, travel behaviour, ITS, and environmental impacts from transport. She is a member of editorial boards of some international journals.



**Pinky KUMAWAT**, PhD Student working in Intelligent Transport Systems

Pinky Kumawat is currently a 3<sup>rd</sup> year PhD student in Transport Research for Innovation and Sustainability (TRIS) research group in the Interuniversity Department of Regional and Urban Studies and Planning (DIST) at Politecnico di Torino, Italy. Her doctoral research is about the use of data mining, machine learning, and statistical analytical techniques to understand the travel behaviour and mobility patterns of users by collecting and analysing travel data from various available data sources under the supervision of Prof. Cristina Pronello. She holds a master’s degree in Computer Science and Engineering (CSE) from Rajasthan Technical Kota, and bachelor’s degree in Computer Science and Engineering (CSE) from Govt. Women Engineering College Ajmer, Rajasthan, India.



Ciências  
ULisboa



**Miguel Centeno BRITO**, Professor specialized in photovoltaic energy

Miguel Centeno Brito Miguel graduated in Physics Engineering at the Technical University of Lisbon and, in 1999, got his PhD in Physics from the University of Oxford, in the UK. Since then he has been at the Faculty of Sciences of the University of Lisbon, researching and teaching photovoltaics and sustainable energy systems. His current research interests include solar irradiation measurement and mapping in complex urban environments, including onboard PV electric vehicles.

# SPEAKERS



**Eduardo ROMÁN**, PhD-Eng. specialized in photovoltaic energy systems

Eduardo Román was born in Barakaldo (Spain) in 1975. He received the B.Eng. degree in Telecommunications in the University of Basque Country (Spain), year 1999. In 2007, he received the PhD degree in the field of Photovoltaics. His experience is mainly focused on Renewable Energy Sources with emphasis in Photovoltaics, above all those aspects related to "Balance of System" components, PV modules (materials) and electronics, Building Integration PV and Concentration PV technologies, Electronic technologies (Hardware and firmware) development Communications (Telecom, wired, etc.). He also shows great experience in managing R&D projects on PV energy. At present, he is the head of the PV group within the Solar Area in TECNALIA, leading several EU funded RTD projects and projects with companies (e.g. PVSITES-H2020). From 2008-2010, he has been member of the Management Board (Direction Committee) of the Spanish Photovoltaic Industry Association (ASIF) and at present, member of the Direction Committee of UNEF (Spanish Union of Photovoltaics). He is also part of the Steering Committee of the European PV Technology and Innovation platform (ETIP PV), member of the Spanish certification Committee AEN/CTN 82, Spanish representative in the IEA PVPV Task 15 and Task 17, and TECNALIA's representative in SolarPower Europe, participating in Solar Mobility, O&M and digitalization task forces. Professor in "RES in the Maritime sector master", author of more than 50 papers and conference communications (h=9 in Scopus) in national and international forums and reviewer of multiple journals and congresses. Last but not least, he is holder of 4 patents, all of them in the PV field.



**Adrián VALVERDE**, Eng. specialized in logistics infrastructures, industrial automation

Adrián Valverde was born in Murcia (Spain) in 1992. He studied Industrial Technologies Engineering at the Polytechnic University of Cartagena, developing at the same time the renowned international competition project called "Formula Student" competing in the Silverstone international circuit (England) as result. He complemented his studies with a degree in civil engineering and the maximum certification of English from Cambridge. He is currently studying industrial organization engineering, telecommunications engineering, master's degree in SCR and an industrial PhD. With more than 4 years of experience in the business sector, he is director of the R&D&I area of the company GRUPO PRIMAFRIO (the leading European company for the transport of refrigerated goods). Among the fields of study, he works in the area of logistics infrastructures, industrial automation and advanced connectivity, developments of the truck of the future (capable of neutralizing the carbon footprint being its activity zero emissions), optimization developments and predictive modeling that will contribute adding value and promoting the sector transformation. In addition, he is project manager for the European Commission and develops collaborations with more than 100 European partners and more than 30 European universities in which the transfer and generation of knowledge is promoted. Last but not least, Adrián is also member of the steering committee and deputy to the Managing Director where he develops the strategy of the company as well as being board director of reputed international organizations and Secretary-General of the Hydrogen Association of his region.

# SPEAKERS



**Elodie CASTEX**, Associate Professor specialized in transportation planning and mobility analysis  
Elodie Castex is currently an Associate Professor with the Geography and Urban Planning Department, University of Lille, Lille, France. She conducts research on transportation planning and mobility analysis at the laboratory TVES (Territoires, Villes, Environnement & Société, EA 4477) especially on the subject of news services in mobility and electromobility systems (electrics vehicles, car sharing, carpooling, demand responsive transportation, etc.).



**Alain BOUSCAYROL**, Full Professor specialized in electrical engineering  
Alain BOUSCAYROL received Ph.D. degree in Electrical Engineering from Institut National Polytechnique de Toulouse, France, in 1995. From 1996 to 2005, he was Associate Professor at University of Lille, France, where he has been a Professor since 2005. He is currently coordinator of the CUMIN (Campus of University with Mobility based on Innovation and carbon Neutrality) programme, coordinator the H2020 PANDA European project on simulation of electrified vehicle and director of the eCAMPUS international associated lab with Canada, on electro-mobility. He is also chair of the steering committee of IEEE Vehicle

Power Propulsion Conference. His main research activities deals with graphical formalism for modeling and control of energy conversion systems, with application to renewable energy conversion systems, electrified vehicles, etc.



**Eugénie MASCLEF**, PhD student working in electro-mobility  
Eugénie Masclef received the MS degree in Urbanism from the University of Lille, France, in 2019. She is preparing a PhD degree on the potential usage of electro-mobility on university campuses, under the co-supervision of University of Lille (France) and University of Trois-Rivières Canada, within the international associated lab eCAMPUS and with the CUMIN (Campus of University with Mobility based on Innovation and carbon Neutrality) programme.



**Anatole DESREVEAUX**, PhD specialized in electrical engineering  
Anatole Desrevaux received the MS degree and the PhD degree in electrical engineering from the University of Lille, France, respectively in 2016 and 2020. He holds a postdoctoral position within the Panda H2020 project on the simulation of electrified vehicles. His research interests include the simulation of electrified vehicles, energy consumption and cost of different kind of vehicle, and development of sustainable campuses based on electro-mobility.



# SPEAKERS



**Thibault JANIK**, Engineer specialized in transport planning and logistics

He leads projects covering macroscopic traffic modelling, traffic engineering, economic analysis, and strategic transport planning in SYSTRA. Graduated with an Engineering Diploma from the Institut Supérieur d'Etudes Logistiques (ISEL – University of Le Havre) and a Master's Degree in Transportation and Mobility from the Ecole Nationale des Ponts et Chaussées (ENPC) and the Ecole d'Urbanisme de Paris (EUP), he acquired solid knowledge in traffic modelling and transport economics. He joined the Consulting Services at SYSTRA in 2017. He peculiarly worked on demand forecasts and planning especially by taking part of the improvement of ARES model (forecasting

traffic model of Paris region), as a consultant. He also carried out the feasibility study of Cali (Colombia) in which he has dealt with transport modelling. Ultimately, he worked on different traffic forecast models in Paris, Bordeaux and Lyon at different scales (macroscopic and mesoscopic). His study fields are gathered around the understanding and modelling of travel behavior and their interface with socio-economic mechanisms that affect mobility.



**Arthur COSSERAT**, Engineer specialized in power supply

He is working in the Electrification Energy and Catenary (EEC) department at SYSTRA France. Currently, he contributes to power supply sizing for Santiago-Melipilla railway project in Chile, Panama Metro Line 2 Extension project and Bologna tram project in Italy. Lately, he concluded a study for harmonic pollution caused by DC traction power system to Alternating Current Medium Voltage power supply for the LRT1 extension project in Manila, Philippines. Graduated from Arts et Métiers ParisTech engineering school in 2017, he joined SYSTRA bid team in London for 2 years, working on proposals for major infrastructural calls for tender (HS2).



**Nathalie MOLINES**, Associate Professor specialized in geography and multi-criteria modelling within decision support aspects

Nathalie Molines is a lecturer in geography in the urban engineering department of UTC. She has been member of Avenues research team since 2006. She is interested in questions of decision support in territorial management. After a thesis on the environmental assessment of linear infrastructure and two postdoctoral contracts, his field of study refocused on the issues of sustainable cities and cities in transition. By bringing together more than 55% of the world population (and more than 80% of the inhabitants of the member countries of the OECD) and nearly 70% of the EGES, the urban territories also bring together the elements on which to focus our efforts to limit emissions than human issues that need to be adapted and protected. Thus, the various projects in which it is involved allow it to

address the issue of climate change from all three dimensions: limitation, anticipation, and management of the impact and effects. She then more particularly takes charge of spatial analysis, multi-criteria modelling and decision support aspects.

# SPEAKERS



**Hipolito MARTELL-FLORES**, Associate Professor specialized in transport planning and development. Hipolito MARTELL-FLORES received the degree in civil engineer from UNAM in Mexico and the Ph.D. degree in Land Use Planning from the Université Le Havre Normandie in France. He is currently Associate Professor at the Université de Technologie de Compiègne and member of AVENUES research unit at UTC since 2011. His research focuses on subjects related to the transport of goods and passengers, urban planning, development of coastal towns, planning and design of transport infrastructure, environmental and flood risk assessment, and multi-critical analysis and decision support.



**Youssef KRAIEM**, Postdoctoral engineer specialized in electrical engineering and working in electro-mobility.

Youssef KRAIEM was born in Kairouan (Tunisia) in 1991. He received the degree in electrical engineering from the National Engineering School of Monastir, Monastir, Tunisia, in November 2015; and the Ph.D. degree in electrical engineering from the National Engineering School of Monastir, Tunisia, and in cooperation with the School of Advanced Engineering Studies of Lille, France, in February 2019. From October 2019 to June 2020, he was with the laboratory of electrical engineering and power electronics of Lille as a study and research engineer. He is currently a researcher postdoctoral position at Université de Technologie de Compiègne within the PV2E\_Mobility project on PV energy and power, stationary and on-board, for and in transport. His specific research interests are in the area of modelling and control of energy conversion systems, multi-source systems management, electrified vehicles, storage systems, and connection to the power grid. He is the author or co-author of 23 papers in the fields of digital control of electrical machines, renewable energies, distributed generation, and railway systems.



**Carlos Eduardo MONTANO SALCEDO**, Postdoctoral engineer specialized in Electronic Engineering. Carlos Eduardo Montano-Salcedo, was born in Cúcuta, Colombia in 1979. He received the M.Sc. and Ph.D. degrees in Electronic Engineering from the University of Zaragoza, Zaragoza, Spain, in 2010 and 2013, respectively. From 2014 to 2017, he was an Assistant Professor with the Antonio Nariño University and Manuela Beltran University, Bogota Colombia. During this time, he was teaching courses on sensors, electrical instrumentation and digital circuits and working on research projects. Between 2018 and 2019, he was with Lear Corporation Valls, Spain, developing and executing tests to characterize two different On-Board Chargers (OBC) for an electric vehicle charging system and its communication with Electric Vehicle Supply Equipment (EVSE). Since 2020, he has been a member of the AVENUES (EA 7284) research team at UTC as a postdoctoral researcher within the Mobil\_City

project on PV-powered intelligent infrastructures recharging electric vehicles. His research interests are smart charging algorithms and Energy management strategies.



**Saleh CHEIKH-MOHAMAD**, PhD Student specialized in electrical engineering and working in electro-mobility.

Saleh CHEIKH MOHAMAD received the MS degree in Smart Grids and Buildings from Grenoble Institut National Politechnique, ENSE3 in 2019. He is preparing a PhD degree, with the University of Technologie of Compiègne, on the modeling and design of an urban energy microsystem based on renewable energies and dedicated to electro-mobility, under the Mobil\_City project.

# SPEAKERS



**Manuela SECHILARIU**, Full Professor specialized in microgrids

Manuela Sechilariu research interests focus on the power and energy systems, smart grid, microgrids, electro-mobility, distributed generation, photovoltaic-powered systems, energy management, optimization, intelligent control, and Petri Nets modeling. She has delivered several invited lectures and has published more than 100 refereed scientific and technical papers in international journals and conferences, with over 2000 citations. Her research has been funded by agencies and sponsors including the CNRS (National Center for Scientific Research), ADEME (The French Agency for ecological transition), and FEDER (European Fund for Regional Economic Development). She has managed several international and national research projects and industrial research contracts, including IEA PVPS Task17. Since 2016

she is Director of the interdisciplinary research unit AVENUES (EA 7284) and since 2018 Deputy Director of French research CNRS group GDR SEEDS (Electric Power Systems in their Social Dimension). She has founded the French Working Group Microgrids (included into GDR SEEDS supported by CNRS France) and coordinated activities and several research teams working on microgrids.