The Program's Footprint in Energy Transition

May 16, 2022
Auditorium 2 - Centro de Congressos de Lisboa

In the year the Program celebrates its 15th anniversary, the UT Austin Portugal's session at Ciência 2022 takes stock of some of its projects and assets helping pave the way to clean energy transition.

Although Energy does not constitute a scientific area of the Program, the International Partnership is well-positioned to help speed up the energy transformation that both Portugal and Texas are committed to realizing. After all, it gathers advanced energy expertise, top-notch research infrastructures, scientific leadership and people who interface exceptionally well with both academia and the industry. Additionally, energy transition tops political and business agendas on both sides of the Atlantic.

The Program's Areas of Nanotechnologies and Advanced Computing, in particular, may take a leading role in setting the stage for Energy to become a core area of this Partnership, whose impact has not been limited to the Austin-Portugal community. To a great extent, the breadth of this impact results from the Program's alignment with critical challenges also tackled by other regions of the world. Energy-related challenges are among those.

Therefore, the session should also shed light on the synergies Portugal and Texas share with Egypt - Ciência 2022's guest country - regarding their standing in the global energy landscape and potential to become global renewable energy hubs.

AGENDA

Lisbon Time 2:00 p.m.	**Opening Remarks from the Leadership** José Manuel Mendonça | National Director, UT Austin Portugal Program | Virtual Participation
Lisbon Time 2:10 p.m.	**From Path-Breaking Research to Deployment of Innovation Solutions for a Sustainable Energy Transition** Brian Korgel | Area Director for Nanotechnologies, UT Austin Portugal Program, and Director of the UT Austin's Energy Institute | Virtual Participation
Lisbon Time 2:35 p.m.	**SOS-WindEnergy** Sustainable Reuse of Decommissioned Offshore Jacket Platforms for Offshore Wind Energy Lance Manuel | SOS-WindEnergy's Principal Investigator, UT Austin | Virtual Participation
Lisbon Time 2:50 p.m.	**ML@GridEdge** Distributed Machine Learning Solutions for Coordinating Distributed Energy Resources at the Edge of the Power Grid Javad Mohammadi | ML@GridEdge's Principal Investigator, UT Austin | Virtual Participation
Lisbon Time 3:05 p.m.	**Coupling Digital Transition with Green Transition: The case of Deucalion** Carlos Silva | Researcher @ INESC TEC | Virtual Participation
Lisbon Time 3:20 p.m.	**Wrap-up & Closing Remarks**

BRIAN KORGEL

Brian A. Korgel is the Director of The University of Texas at Austin Energy Institute, Rashid Engineering Regents Chair Professor in the McKetta Department of Chemical Engineering. He also directs the Industry/University Cooperative Research Center (IUCRC) for a Solar Powered Future (SPF2050), the Nanotechnologies area of the UT Austin Portugal Program at UT, and serves as Associate Editor of the journal, Chemistry of Materials. He has been Visiting Professor at the University of Alicante in Spain, the Université Josef Fourier in France and the Chinese Academy of Sciences in Beijing. He has co-founded two companies, Innovalight and Piñon Technologies. He received his PhD in Chemical Engineering from UCLA in 1997 and was a post-doctoral fellow at University College Dublin, Ireland, in the Department of Chemistry.

LANCE MANUEL

Lance Manuel (PhD, Stanford) is the Texas Atomic Energy Research Foundation Professor of Engineering and Associate Chair of Civil Engineering at UT-Austin. His research deals with the modeling of uncertainties affecting the safe performance of civil infrastructure and energy-generation assets, with specific focus on improving the safety of wind turbines operating in complex inflow turbulence and in extreme climate events such as thunderstorm downbursts and hurricanes. Lance, an AAAS Fellow, serves as Editor-in-Chief of ASME's Journal of Offshore Mechanics and Arctic Engineering. He has been recognized with the ASCE Stephen D. Bechtel, Jr. Energy Award for outstanding achievements in the energy field by a civil engineer, an NSF CAREER award and the Lockheed Martin Award for Excellence in Engineering Teaching.

JAVAD MOHAMMADI

Javad Mohammadi is an Assistant Professor in the Department of Civil, Architectural, and Environmental Engineering at The University of Texas at Austin. Prior to joining UT, he was a faculty member in the Electrical and Computer Engineering department at Carnegie Mellon University (CMU). Mohammadi is an IEEE senior member and a recipient of the Innovation Fellowship from Swartz Center for Entrepreneurship at CMU. His research interests include multi-agent optimization and machine learning in networked cyber-physical systems, including smart grid-interactive buildings, power grid, and electrified transportation systems. Mohammadi received his Ph.D. in Electrical and Computer Engineering from CMU.

CARLOS SILVA

Carlos has a master's on Mechanical Engineering from the Faculty of Engineering of the University of Porto. In the last three years, he has been working in academia and industry mainly in research topics related to renewable energy. Currently, Carlos is a researcher in the Center for Power and Energy Systems at INESC TEC, where one of his main focus is to contribute to the Sustainable HPC project.

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