

MIT Portugal

2018

Annual Conference

*An international partnership towards
the challenges of complex systems*

October 1, 2018
Culturgest, Lisboa

 **MIT** Massachusetts
Institute of
Technology

FCT Fundação
para a Ciência
e a Tecnologia

AGENDA

8:30 Registration

9:00 Opening Session

Manuel Heitor, *Minister of Science, Technology and Higher Education*
Paulo Ferrão, *President of FCT*
Dava Newman, *MIT Portugal Partnership 2030 Director at MIT*
Pedro Arezes, *MIT Portugal Partnership 2030 Director in Portugal*

9:30 Session #1 - MIT Portugal Partnership 2030: Research Focus Areas

Earth Systems: Oceans to Near Space

Dava Newman, *MIT Portugal Partnership 2030 Director at MIT*

Climate Science & Climate Change

José Moutinho, *AIR Centre*

Digital Transformation in Manufacturing

John Hart, *MIT*

Sustainable Cities

Jessika Trancik, *MIT*

Presentation of upcoming call for flagship project proposals

Dava Newman, *MIT Portugal Partnership 2030 Director at MIT*
Pedro Arezes, *MIT Portugal Partnership 2030 Director in Portugal*

11:00 Coffee-break

11:30 Session #2 - MIT Portugal Program, Phase 2: Exploratory Projects

BIOMedical DEVICE development based on pre-miRNA G-quadruplex

Carla Madeira da Cruz, *UBI*

Multifunctional marine-inspired bioadhesives as medical devices for gastrointestinal anastomosis repair

Ana Catarina Vale, *UMinho/13Bs*

New low-cost approach for solar-cells based on magnetoplasmonic nanostructures

David Navas Otero, *FCUP, UPorto*

Innovative High Altitude Balloon for Atlantic Observation: Fostering the Development of a Collaborative Platform for Integrated Aerial and Oceanic Research

Dário Silva, *IST, ULisbon*

Towards deep sea soundscaping

Marcos Silva, *UMinho*

ISY-AIR: An integrated system for urban scale air quality assessment and forecast

Daniela Dias, *UCoimbra*

Rational design of a thermostable esterase for the production of high-value bioplastics for biomedical applications

Alexandra Carvalho, *UCoimbra*

Marine oil spills: Green biological Emulsifiers agents production and autonomous Robotic tools for response optimization

Frederico Ferreira, *IST, ULisbon*

Development of new numerical tools and constitutive models to simulate the fused filament fabrication – a low-cost additive manufacturing process

Jorge Belinha, *FEUP, UPorto*

Additive Manufacturing of Innovative and Multifunctional Ceramic Products for Architectural Systems

Paulo Cruz, *UMinho*

FIRST: Mapping flexibility of urban energy systems

Daniel Aelenei, *FCT-UNL, Lisbon*

Streamlined environmental and cost life-cycle assessment of building retrofits: a decision-supporting tool

Vanessa Tavares, *UCoimbra*

UMove - Understanding User's Needs, Preferences and Social Interactions for the Design of Future Mobility Services

Carlos Bento, *UCoimbra*

Aware - a data driven towards to drivers attention

António Couto, *FEUP, UPorto*
António Lobo, *FEUP, UPorto*

13:00 Lunch

Workshop with Industrial Affiliates (by invitation only)

14:30 Session #3—MIT Portugal: Innovation, Entrepreneurship & Industry

Why I&E is important, and how we are teaching and promoting it at MPP

Nuno Arantes, *MIT Portugal, IST, ULisbon*

Results of what has been done at MPP: Outcome of the student community survey

João Bigotte, *MIT Portugal, UCoimbra*

MPP entrepreneurs testimonials and debate

15:45 Coffee-break

16:00 Session #4 - MIT Portugal Program, Phase 2: Test-bed Presentations

SusCity – Urban data driven models for creative and resourceful urban transitions

Carlos Silva, *IST, ULisbon*
João Serra, *FCUL, ULisbon*

IAMAT- Introduction of advanced materials technologies into new product development for the mobility industries

Pedro Camanho, *FEUP, UPorto*
Carolina Furtado, *FEUP, UPorto*

CardioStem: Engineered cardiac tissues and stem cell-based therapies for cardiovascular applications

Hugo Fernandes, *UCoimbra*
Maria Margarida Serra, *iBET*
Mariana Branco, *IST, ULisbon*

17:30 Closing Session & Poster Awards

Bruce Tidor, *MIT Office of the Associate Provost for International Activities*
António Cunha, *MIT Portugal Partnership 2030, Governing Committee*
Pedro Arezes, *MIT Portugal Partnership 2030 Director in Portugal*