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## **12th International Conference on Technology Policy and Innovation (ICTPI)**

*Science, Technology and Knowledge Networks – long term growth strategies to face the financial crisis*

13-14 July 2009, Casa da Música (Porto)

### **Preliminary Program**

#### **Sunday, 12 July**

- 14:30 – Welcome and Registration (Casa da Música Level 1)
- 16:00 – Bus Transfer (from Casa da Música to Douro Docks)
- 16:30 – Five-bridges & World Heritage Tour (Douro Cruise/City Tour)

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#### **Monday, 13 July**

8:00 – Welcome and Registration

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#### **9:30 – OPENING & PLENARY SESSION: FOSTERING S&T AND KNOWLEDGE NETWORKS TO FACE THE FINANCIAL CRISIS**

**Chairs:** **José Manuel Mendonça**, President of INESC Porto, Director of UTEN|Portugal | **David Gibson**, Chair and Associate Director IC2 Institute, University of Texas at Austin

#### **Speakers:**

- Pier Carlo Padoan**, Deputy Secretary General, OECD
- Heinrich Flegel**, Vice-President for R&D, Daimler AG
- James Utterback**, Sloan School of Management, MIT
- José Mariano Gago**, Portuguese Minister of Science, Technology and Higher Education
- Fernando Teixeira dos Santos**, Portuguese Minister of Finance

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11:00 – Coffee-Break

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## 11:30 – Parallel Sessions

### Session A1 – New Frontiers in Science and Technology

**Chairs:** João Sentieiro, President of the Foundation for Science and Technology | José Carlos Príncipe, BellSouth Professor, University of Florida

- *Identifying how energy systems are affected by legislation, and how the limitations of a carbon market can create opportunities for other energy suppliers in the European Union* - **Raphael Heffron**, University of Cambridge
- *Mechanism of Corporate Environmental Management: Empirical Study for Japanese and US Companies* - **Hidemichi Fujii, David Eaton**, IC<sup>2</sup> Institute, University of Texas at Austin; **Shinji Kaneko, Tatsuo Kimbara**, Hiroshima Shudo University, Japan; **David Gibson**, IC<sup>2</sup> Institute, University of Texas at Austin
- *The Cost of Poor Reliability for Future Particle Accelerator Driven Systems in the UK Energy Market* - **Steven Steer**, University of Cambridge; **William Nuttall**, University of Cambridge; **Geoffery Parks**, University of Cambridge; **Leonardo Gonçalves**, University of Cambridge
- *A Nanoscience Innovation Infrastructure for the Emerging “Molecular-Era” Economy* - **Kathleen Noble**, Tarrant County College, **Donald Hicks**, University of Texas at Dallas

### Session A2 – Industrial Policy

**Chairs:** Carlos Costa, Vice-President of the European Investment Bank | José António Barros, President of the Portuguese Entrepreneurial Association

- *Too Big To Fail - lessons from UK industrial policy* - **William Nuttall**, Judge Business School, Cambridge; **M Holweg**, Judge Business School, Cambridge; **ME Leybovich**, MIT
- *“Catching up” in a crisis scenario: The role of Science, Technology and Innovation Policies in a follower country* - **Argentino Pessoa**, School of Economics, University of Porto
- *Information Technologies and Economic Development: Telecommunication Services and Poverty in Mexico* - **Cristina Casanueva-Reguart**, Universidad Iberoamericana; **Antonio Pita**, Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico
- *Networked Governance of Innovation Policies: the Technological Plan in Portugal* - **Manuel Laranja**, ISEG, Portugal

### Session A3 – Entrepreneurship, incubators, venture capital

**Chairs:** Bob Hodgson, Zernike (UK) Limited, Cambridge | Alberto Castro, Portuguese Catholic University

- *A Theory of Social Entrepreneurship* - **Filipe Santos**, INSEAD
- *Knowledge Networks, Venture Investment Flows and Localized New Firm Formation* – **Donald Hicks**, University of Texas at Dallas
- *Organizational Agility and its effect on Technological Opportunism to Entrepreneurial Activities in the Economic Crisis* – **Jeffrey Amos**, Clear Oak Partners, LP, USA
- *Commercialization strategies of research-based spin-offs: the case of companies that operate in the market for technologies* - **Oscarina Conceição**, DINAMIA; **Margarida Fontes**, INETI & DINAMIA; **Teresa Calapez**, ISCTE & DINAMIA, Portugal

## **Session A4 – UTEN Round-Table on Mature Technology-based Start-ups**

**Chairs:** Ana Amorim, UTEN | Portuga | Cliff Zintgraff, UTEN@Austin

**Brief introduction:** Pedro Faria, Miguel Preto, Instituto Superior Técnico

**Case Studies:** Alfama | Biotecnol | Crioestaminal | Critical Software | MOG Solutions | WIT Software | Fibersensing

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13:00 – Lunch

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## **14:30 - Parallel Sessions**

### **Session B1 - Technology Transfer: metrics and indicators**

**Chairs:** Steve Nichols, University of Texas at Austin | Daniel Bessa, CEO COTEC

- *Efficiency and evaluation analysis of a network of Technology Transfer brokers* - **Salvatore Roxas**, European Commission - DG JRC; **Giuseppe Piroli**, European Commission - DG JRC
- *Assessment of companies practices concerning the evaluation of R&D investments projects* - **Alexandre Pintos**, University of Minho and University of Vigo; **Jorge Cunha**, University of Minho; **Enrique Gómez**, University of Vigo; **Madalena Araújo**, University of Minho
- *Assessment of technology transfer and diffusion models in Latvia* - **Natalja Jarohnovich**, Technology Transfer Centre of Kurzeme; **Valdis Avotins**, Engineering Research Centre of Ventspils University College
- *How knowledge flows in the Mediterranean area: a patent citation analysis* - **Massimiliano FERRARA**, Mediterranean University of Reggio Calabria; **Roberto MAVILIA**, Universidad Complutense de Madrid and KITEs - Bocconi University

### **Session B2 - Innovation strategies**

**Chairs:** José Carlos Caldeira, Director of INESC Porto

- *To innovate or not to innovate - the case of Uruguayan manufacturing firms* - **Adriana Cassoni**, GEOPS; **Magdalena Ramada**, Watson Wyatt
- *The dynamics of innovation networks and the role of supporting organisations: the case of the Portuguese automotive industry* - **Joana Almodovar**, MioIR - Manchester Business School; **Aurora Teixeira**, CEF.UP, Faculdade Economia, Universidade do Porto; INESC Porto
- *Lessons from Iraq: A Creative and Innovative Management Perspective* - **Corey Carbonara**, Baylor University; **Michael Korpi**, Baylor University; **Marc LeGare**, Proactive Communications, Inc.
- *Best Practices in Entrepreneurship Centers* - **Rosangela Catunda**, PUC-Rio
- *Innovation and Employment in Portuguese rural areas – An exploratory analysis* – **Carla Marques**, UTAD; **Susete Costa**, UTAD; **Lívia Madureira**, UTAD

## Session B3 – Entrepreneurship, Science Parks and Technopoles

**Chairs:** David Gibson, University of Texas at Austin, USA | Carlos Zorrinho, Head of the Portuguese Technology Plan

- *UPTEC: a successful experience* - José Novais Barbosa, UPTEC; Jorge Gonçalves, University of Porto, Patrícia Teixeira Lopes, University of Porto, Clara Gonçalves, Isabel Barbosa, Fátima Ramalho, Mário Leitão, Fátima São Simão, UPTEC
- *Analysis of Emerging US and Global Convergence Technopoles: The role of transdisciplinarity in STEM, IT and Arts integration for wealth creation, sustainability and economic recovery* - Jim Brazell, Venture Ramp, San Antonio, Texas
- *Paraná's Center of Innovation, Education, Technology and Entrepreneurship (CIETEP): Development and Implementation* - Ramiro Wahrhaftig, State Secretary of State for Science, Technology and Higher Education, Paraná, Brasil; Ronald Dauscha, Federation of Industries of the State of Paraná, Brasil
- *Collaboration in the Portuguese SMEs: What distinguishes traditional and modern industries?* - Vitor Braga, ESTGF, CIICESI, CETRAD
- *An economic logistic model for the multimodal inland distribution of maritime containers* – Fedele Ianone, IRAT-CNR, Sten Thore, University of Texas at Austin

## Session B4 – UTEN Round-Table on Early-stage Technology-based Start-ups

**Chairs:** Marco Bravo, MCTES Portugal | Eli Mercer, UTEN@Austin

**Brief introduction:** Joana Mendonça, Miguel Amaral, Instituto Superior Técnico

**Case Studies:** Biodevices | ActiveSpace Technologies | Take the Wind | Critical Health | Stematters | PETsys | UAVision | Tomorrow Options | We Adapt | Ply Engenharia

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16:00 Coffee Break

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## 16:30 PLENARY SESSION: CRITICAL INFRASTRUCTURES AND THE NEED FOR S&T BASED INNOVATION

**Chairs:** William Nuttall, Judge Business School, University of Cambridge | Belmiro de Azevedo, SONEAE SGPS, Portugal

**Speakers:**

**Raj Rajkumar**, Professor of Electrical and Computer Engineering, Carnegie Mellon University, USA; Co-Director General Motors-CMU Information Technology and Autonomous Driving Collaborative Research Labs, USA

**Alain Pompidou**, President of French Academy of Technologies, France

**Charles W. Wessner**, Director, Technology, Innovation and Entrepreneurship, The National Academy of Sciences, USA

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**20:00 – Conference Dinner** | Palácio da Bolsa

**Dinner Speaker:** Ruth Ladenheim, Secretary of State of Science, Technology and Higher Education, Argentina

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**Tuesday, 14 July**

09:00 – Welcome and Registration

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## **09:30 – PLENARY SESSION: MODERNIZING UNIVERSITIES TO MEET GLOBAL CHALLENGES**

**Chairs:** **Maria Helena Nazaré**, Rector, University of Aveiro | **Giorgio Sirilli**, Institute of Studies on Scientific Research (ISRDS), NRC, Rome, Italy

### **Speakers:**

**José Marques Santos**, Rector, University of Porto

**Juan Sanchez**, Vice President for Research, University of Texas at Austin, USA

**Franz Zwarts**, Rector, University of Groningen, Netherlands

**Jean-Pierre Contzen**, Chairman of the Von Karman Institute, Belgium; Special Advisor to the Portuguese Minister for Science, Technology and Higher Education

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11:00 – Coffee Break

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## **11:30 – Parallel Sessions**

### **Session C1 – IPR policies**

**Chair:** **Maria Oliveira**, UPIN Director

- *Using Knowledge Stocks and Licensed Technologies to Increase Productivity in the Pharmaceutical Industry* - **Alexandra Stone**, University of Texas, Austin
- *Knowledge Protection Capabilities and their Effects on Knowledge Creation and Exploitation in High- and Low-tech Environments* - **Wolfgang Sofka**, ZEW; **Pedro Faria**, IST - IN+
- *Easy to use methods for Valuation of Intellectual Property should facilitate open innovation, knowledge diffusion and have implications for private and public sectors* - **Angelo Ranaulo**, Techitra Srl; **Domenico Napolitano**, Techitra Srl; **Fabrizio D'Ambrosio**, Technapoli; **Luigi Iavarone**, Technapoli; **Massimo Iacobelli**, Gentium SpA
- *Technical Progress, Technical Efficiency Change and Total Factor Productivity Growth in the Indian Manufacturing Industry – Implications for Sustainable Future Growth* - **Palaniswamy Sivakumar**, EMPI New Delhi

## Session C2 – Human Factors and Knowledge Networks

Chair: **Pedro Guedes de Oliveira**, INESC Porto, Director FCCN

- *Broadening social context for innovation: role of human capital* - **M L Pandit**, Birla Institute of Management Technology
- *Does authentic leadership promote employees' enthusiasm and creativity* - **Filipa Sousa**, Instituto Politécnico de Leiria; **Arménio Rego**, Universidade de Aveiro; **Carla Marques**, Universidade de Trás-os-Montes e Alto Douro
- *Human Resource Information System (HRIS) Strengthening Universities - Holistic Approach* - **Rawat DCAC**, University of Delhi
- *Assessing Scientific Mobility Dynamics and Impact on Knowledge Networks: drawing on the potential of electronic CV databases* - **André Pirralha**, Dinâmica; **Margarida Fontes**, Dinâmica / INETI; **José Assis**, Dinâmica/INETI
- *Network Relations and Innovative Performance* – **Filipa Vieira**, University of Minho

## Session C3 – The role of Universities

Chairs: **Ruth Ladenheim**, Secretary of State of Science, Technology and Higher Education, Argentina | **Luís**

**Magalhães**, President Mission Unit for The Information Society

- *Establishing partner-driven Institutions for a new era: an Australian case study* - **Anthony Francis**, Flinders Partners - **Carolin Plewa**, University of Adelaide
- *Knowledge Network in Action? - new paradigms from India* - **Deepak Bhatnagar**, TIFAC, Department of Science and Technology, New Dehli
- *Management of Innovation and Technology Transfer process between University & Industry: the Material Research Center case in Universidad del Valle, Colombia* - **Juan Ortega**, Universidad del Valle; **Alderson Neira**, North Carolina State University; **Federico Sequeda**, Universidad del Valle; **Irina L. Gribenchenko**, Universidad del Valle
- *Critical Diversity in Boosting the Role of Universities in the Regional Economy* - **Marina van Geenhuizen**, TU Delft; **Danny Soetanto**, TU Delft
- *Austin and creative industries: Infrastructure, NGOs, and culture*, **Sharon Strover**, Chair, RTF Department and Philip G. Warner Regents Professor of Communication, University of Texas at Austin

## Session C4 - UTEN Round-Table on International Patenting from Portuguese Universities and Research Centers

Chairs: **António Campinos**, INPI | **Bill Hulseley**, Huxley and Associates, USA

Initial Interventions: European Patent Office | United States Patent Office | World Intellectual Property Organization

Case Studies: NanoXIM | Fluidinova | Paper Transistor | PETsys | LIP | INETI | LNEC

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13:00 – Lunch

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## 14:30 – Parallel Sessions

### Session D1 – User-driven innovation

Chair: **Meg Wilson**, University of Texas at Austin

- *User-Driven Innovation in the Mobile 2.0 Domain* - **Corina Pascu**, European Commission JRC IPTS; **Claudio Feijoo**, European Commission JRC IPTS
- *What factors affect the Portuguese Firms Decision Making on Innovation?* - **Alexandra Maria Braga**, ESTGF-IPP; **Carla Susana Marques**, UTAD; **Vitor L. Braga**, ESTGF – IPP
- *The profile of use of industrial property by small and medium enterprises in Brazil in 1998-2005* - **Elizabeth Ferreira da Silva**, National Institute of Industrial Property; **Dirceu Yoshikazu Teruya**, National institute of Industrial Property
- *Platform Leadership in Software as a Service* - **Bartomiej Kotakowski**, Judge Business School, University of Cambridge
- *The role of formal collaborations in the Portuguese software for telecommunications industry: a preliminary study using Social Network Analysis* - **Isabel Salavisa**, DINÂMIA; **Pedro Videira**, DINÂMIA; **Filipa Santos**, DINÂMIA

### Session D2 – Round Table on Scholarly Publishing in Technology Policy & Innovation: Editors' Perspectives

Chair: **David Gibson**, Chair and Associate Director IC2 Institute, University of Texas at Austin

#### Speakers:

**Fred Phillips**, Senior Editor, Technological Forecasting & Social Change

**Steven Walsh**, Area Editor in Technology, Entrepreneurship, Technovation

**Srinivas Talluri**, Department Editor for Models and Methodologies, IEEE Transactions on Engineering Management, and Associate Editor, Decision Sciences Journal

**Meg Wilson**, Journal of Technology Transfer

### Session D3 – UTEN Round-Table on Licensing Technologies from and to University Research Centers in Portugal

Chairs: **Teresa Mendes**, IPN | **Steve Nichols**, University of Texas at Austin

Brief introduction: **Meg Wilson**, University of Texas at Austin

Case Studies: Biotechnol|Hovione|Bial|TecMinho|IPN|UPIN

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16:00 – Coffee Break

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## 16:30 – PLENARY SESSION: LOOKING AT URBAN ENVIRONMENTS: GREENING THE CITY WITH KNOWLEDGE

**Chairs:** **Marina van Geenhuizen**, Faculty of Technology, Policy and Management, Delft University of Technology, |  
**Nuno Portas**, Faculty of Architecture, University of Porto

### Speakers:

**Will Wynn**, Former Mayor, City of Austin, Texas, USA

**Marija Ilic**, Professor of Electrical and Computing Engineering, and Engineering and Public Policy, Carnegie Mellon University, USA

**Paulo Ferrão**, Instituto Superior Técnico

**João Peças Lopes**, Faculty of Engineering of the University of Porto, Director of INESC Porto

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### 18:00 – Closing Remarks

- **José Manuel Mendonça**, President of INESC Porto, Director of UTEN | Portugal, and **David Gibson**, Chair and Associate Director IC2 Institute, University of Texas at Austin
- **Manuel Heitor**, Secretary of State for Science, Technology and Higher Education, Portugal

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### 19:00 – ICTPI09 Porto Event | Casa da Música

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