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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*

12-14 July 2009, Casa da Música (Porto)

Final Program

Sunday, 12 July

14:30 – Welcome and Registration (Casa da Música Level 1)

16:00 – Bus Transfer (from Casa da Música/Hotel Porto Palácio to Douro Docks)

16:30 – Five-bridges & World Heritage Tour (Douro Cruise/City Tour)

Monday, 13 July

8:00 – Welcome and Registration (Welcome desk | Level 1)

9:30 – OPENING & PLENARY SESSION: FOSTERING S&T AND KNOWLEDGE NETWORKS TO FACE THE FINANCIAL CRISIS | SALA 2 (ROOM 2)

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

“Innovation and the financial crisis. Consequences and opportunities.”

Heinrich Flegel, Vice-President for R&D, Daimler AG

“Sustainable Strategies for Manufacturing in Europe”

James Utterback, Sloan School of Management, MIT

“Design-Inspired Innovation”

José Mariano Gago, Portuguese Minister of Science, Technology and Higher Education

11:00 – Coffee-Break | Floor2, West Foyer

11:30 – Parallel Sessions

Sala 2 (Room 2) | Sala de Ensaio 1 (Rehearsal Room1) | Cybermúsica (Cybermusic Room) |
Sala de Ensaio 10 (Rehearsal Room10)

Session A1 – New Frontiers in Science and Technology

Chairs: **Lígia Amâncio**, Vice-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 U.S. Companies* - **Hidemichi Fujii**, IC² Institute, University of Texas at Austin; **Tatsuo Kimbara**, Hiroshima Shudo University; **Shinji Kaneko**, Hiroshima University; **David Gibson**, IC² 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; **Geoffrey Parks**, University of Cambridge; **Leonardo Gonçalves**, University of Cambridge
- *A Nanoscience Innovation Infrastructure for the Emerging “Molecular-Era” Economy* - **Donald Hicks**, University of Texas at Dallas; **Kathleen Noble**, Tarrant County College

Session A2 – Industrial Policy

Chairs: **Heinrich Flegel**, Vice-President for R&D, Daimler AG | **Ana Teresa Lehmann**, Vice-President of North Regional Coordination and Development Commission (CCDR-N)

- *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**, Faculdade de Economia, Universidade do Porto.
- *Information Technologies and Economic Development: Telecommunication Services and Poverty in Mexico* - **Cristina Casanueva-Reguart**, Universidad Iberoamericana; **Antonio Pita S.**, Instituto Tecnológico y de Estudios Superiores de Monterrey.
- *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
- *Networked Governance of Innovation Policies: the “Technological Plan” in Portugal* - **Manuel Laranja**, ISEG - Universidade Técnica de Lisboa, Portugal

Session A3 – Entrepreneurship, incubators, venture capital

Chairs: **Bob Hodgson**, Zernike (UK) Limited, Cambridge | **Clara Braga da Costa**, Member of the Board, Inovcapital

- *A Theory of Social Entrepreneurship* - **Filipe Santos**, INSEAD
- *Knowledge Networks, Venture Investment Flows and Localized New Firm Formation* – **Donald Hicks and Cathleen Xiao**, University of Texas at Dallas
- *Commercialization strategies of research-based spin-offs: the case of companies that operate in the market for technologies* - **Oscarina Conceição**, DINÂMIA; **Margarida Fontes**, INETI & DINÂMIA; **Teresa Calapez**, ISCTE & DINÂMIA, Portugal

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

Chairs: **Ana Amorim**, UTEN|Portugal | **Eli Mercer**, UTEN@Austin

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

Case Studies: Multiwave Networks (José António Salcedo, CEO) | Alert Software (Maria João Azeredo, Member of the Board) | Sysdvance (José Vale Machado, CEO) | MOG Solutions (Pedro Ferreira, Director of Product Marketing & Engineering and Member of BoD, MOG-Solutions) | CRITICAL SOFTWARE, Henrique Pereira (Vice-President, Critical Manufacturing, CRITICAL Group)

Objective: An in-depth conversation global tech-based businesses about some of the greatest challenges they are confronted with.

13:00 – Lunch | Kool Restaurant

14:30 - Parallel Sessions

**Sala 2 (Room 2) | Sala de Ensaio 1 (Rehearsal Room1) | Cybermúsica (Cybermusic Room) |
Sala de Ensaio 10 (Rehearsal Room10)**

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 Amico Roxas**, European Commission - DG JRC, ENEA (Italian National Agency for New Technologies, Environment and Energy); **Giuseppe Piroli**, European Commission - DG JRC; **Mario Sorrentino**, Second University of Naples
- *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
- *Technology Transfer Opportunities for Small Open Economies: Case of 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 | Filipe Santos, INSEAD

- *To innovate or not to innovate - the case of Uruguayan manufacturing firms* - **Adriana Cassoni**, GEOPS; **Magdalena Ramada**, Watson Wyatt
- *A Stress Test for Creative and Innovative Management: Entrepreneurship in a War Zone* - **Corey Carbonara and Michael Korpi**, Baylor University; **Marc LeGare**, Proactive Communications, Inc.
- *Best Practices in Entrepreneurship Centers* - **Rosangela Catunda**, PUC-Rio / IC² of UT at Austin
- *Innovation and Employment in Portuguese rural areas – An exploratory analyse* – **Carla Marques, Susete Costa, and Lúvia Madureira**, University of Trás-os-Montes e Alto Douro (UTAD)
- *The Role of Microfoundations in Explicating Dynamic Capabilities: A Case Study of Commercializing Discontinuous Innovation in the Norwegian Petroleum Sector* - **Lene Foss, Tatiana Iakovleva, Jill Kickul, Elin Oftedal and Anne Solheim**, University of Stavanger

Session B3 – Entrepreneurship, Science Parks and Technopoles

Chairs: David Gibson, University of Texas at Austin, USA | Alberto Castro, Portuguese Catholic University

- *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* - **Ronald Dauscha**, Federation of Industries of the State of Paraná, Brasil; **Ramiro Wahrhaftig**, State Secretary of State for Science, Technology and Higher Education, Paraná, Brasil
- *Collaboration in the Portuguese SMEs: What distinguishes traditional and modern industries?* - **Vitor Braga**, Escola Superior de Tecnologia e Gestão de Felgueiras, IPP, CIICESI, CETRAD
- *An economic logistics model for the multimodal inland distribution of maritime containers* – **Sten Thore**, IC2 Institute University of Texas at Austin; **Fedele Iannone**, Research Fellow at the Institute for Service Industry Research (IRAT), National Research Council (CNR).

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

Chairs: Marco Bravo, MCTES Portugal | Cliff Zintgraff, UTEN@Austin

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

Case Studies: Stematters (Rui Sousa) | We Adapt (Miguel Carvalho) | Ply (António Valente) | IonJelly (Pedro Vidinha) | Digital Otometer (Jorge Reis) | IdeiaM (Júlio Martins) | GenoMed (Amélia Pina) | Polight (José Carlos Ferreira)

Objective: A discussion with Portuguese early-stage teams/start-ups: challenges and opportunities presented by the financial crisis.

16:00 Coffee Break | Floor2, West Foyer

16:30 PLENARY SESSION: CRITICAL INFRASTRUCTURES AND THE NEED FOR S&T BASED INNOVATION | SALA 2 (ROOM 2)

Chairs: William Nuttall, Judge Business School, University of Cambridge | Belmiro de Azevedo, SONAE 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
"Smart Cyber-Physical Infrastructures: The Next Technology Revolution".

Alain Pompidou, President of French Academy of Technologies, France
"Technologies as a major driver to innovation".

Charles Wessner, Director, Technology, Innovation and Entrepreneurship, The National Academy of Sciences, USA
"President Obama's New Technology Initiatives and the Valley of Death".

20:00 – Conference Dinner | Palácio da Bolsa

Tuesday, 14 July

09:00 – Welcome | Floor2, West Foyer

09:30 – PLENARY SESSION: MODERNIZING UNIVERSITIES TO MEET GLOBAL CHALLENGES | SALA 2 (ROOM 2)

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
"University governance: which model to meet global challenges?"

Juan Sanchez, Vice President for Research, University of Texas at Austin, USA
"Interdisciplinary Research at the University of Texas at Austin".

Jean-Pierre Contzen, Chairman of the Von Karman Institute, Belgium; Special Advisor to the Portuguese Minister for Science, Technology and Higher Education
"Specialized Research Institutes and Universities: partners, competitors or just good friends?"

11:00 – Coffee Break | Floor2, West Foyer

11:30 – Parallel Sessions

Sala Suggia (Room Suggia) | Sala de Ensaio 1 (Rehearsal Room1) |
Sala de Ensaio 2 (Rehearsal Room2) | Sala de Ensaio 10 (Rehearsal Room10)

Session C1 – Human Factors and Knowledge Networks

Chairs: **Pedro Guedes de Oliveira**, INESC Porto, Director FCCN | **Luís Magalhães**, President of Knowledge Society Agency (UMIC)

- *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
- *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**, **Domenico Napolitano**, **Bruno Garavelli** and **Adriano La Vopa**, Techitra Srl; **Fabrizio D'Ambrosio** and **Luigi Iavarone**, Consorzio Technapoli; **Massimo Iacobelli**, Gentium SpA.
- *Assessing Scientific Mobility Dynamics and Impact on Knowledge Networks: drawing on the potential of electronic CV databases* - **André Pirralha**, DINÂMIA; **Margarida Fontes**, Dinâmia / INETI; **José Assis**, Dinâmia/INETI
- *Network Relations and Innovative Performance* – **Filipa Vieira** and **Fernando Romero**, University of Minho;

Session C2 – The role of Universities

Chairs: **Carlos Costa**, Dean of FEUP | **Dirk Elias**, Director of Fraunhofer Portugal

- *Human Resource Information System (HRIS) Strengthening Universities - Holistic Approach* - **M.S. Rawat** DCAC, University of Delhi
- *Knowledge Network in Action - new paradigms from India* - **Deepak Bhatnagar**, TIFAC, Department of Science & Technology, New Delhi
- *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 Arce**, North Carolina State University; **Federico Sequeda** and **Irina L. Gribchenko**, Universidad del Valle
- *Critical Diversity in Boosting the Role of Universities in the Regional Economy* - **Marina van Geenhuizen**, Delft University of Technology, Faculty of Technology, Policy and Management, OTB Research Institute; **Danny Soetanto**, Delft University of Technology, Faculty of Technology, Policy and Management.

Session C3 - UTEN Round-Table on International Patenting from Portuguese Universities and Research Centers

Chairs: **David Gibson**, UTEN@Austin | **Marco Sousa**, TecMinho

Case Studies: NanoXIM (Fluidinova) | Paper-e (FCT-UNL) | PETsys (IST) | Piezo (Somática)

Round Table discussion: INPI, Telmo Vilela (Board Advisor) | WIPO, Anil Sihna (Cooperation for Development Sector SMEs Division) | William N Hulsey III, Principal; HULSEY IP Lawyers, P.C.; Austin, TX, USA

13:00 – Lunch | Kool Restaurant

14:30 – Parallel Sessions

Sala Suggia (Room Suggia) | Sala de Ensaio 1 (Rehearsal Room1) |
Sala de Ensaio 2 (Rehearsal Room2) | Sala de Ensaio 10 (Rehearsal Room10)

Session D1 – User-driven innovation

Chairs: **James Utterback**, Sloan School of Management, MIT | **Carlos Aguiar**, FEUP Design Studio, MIT Portugal Program

- *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 and Dirceu Yoshikazu Teruya**, National Institute of Industrial Property.
- *Platform Leadership in Software as a Service: How Platforms Facilitate Innovation* - **Bartłomiej Kotakowski**, Judge Business School, University of Cambridge
- *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

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: **José Ricardo Aguiar**, IPN | **Steven Nichols**, University of Texas at Austin

Case Studies: Hovione (Peter Villax) | Bial (Isabel Morgado, Member of the Board) | IBMC (Antonio Parada, TTO) | Biotecnol (Pedro de Noronha Pissarra, CEO) | IGC (Instituto Gulbenkian de Ciência) | Tecminho (Marta Catarino, TTO)

16:00 – Coffee Break | Floor2, West Foyer

16:30 – PLENARY SESSION: LOOKING AT URBAN ENVIRONMENTS: GREENING THE CITY WITH KNOWLEDGE | SALA SUGGIA (ROOM SUGGIA)

Chairs: **Marina van Geenhuizen**, Faculty of Technology, Policy and Management, Delft University of Technology | **Eduardo de Oliveira Fernandes**, Coordinator of the Sustainable Energy Systems Area at Faculty of Engineering of University of Porto, MIT Portugal Program

Speakers:

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

"Tapping Creativity and Entrepreneurship in Austin, Texas"

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

"The Role of Dynamic Monitoring and Decision Systems for Enabling Adaptive Urban Consumption".

Paulo Ferrão, Instituto Superior Técnico

"The urban metabolism: flows of materials and information"

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

"Smart Grids and Mobility"

18:00 – Closing Remarks | Sala 2 (Room 2)

- **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

19:00 – ICTPI09 Porto Event | Casa da Música | Sala 2 (Room 2)

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