**Manuel Heitor´s Brief Biographical Note** (full CV available at http://in3.dem.ist.utl.pt/ )

Manuel Heitor is Full Professor at *Instituto Superior Técnico*, IST, the engineering school of the Technical University of Lisbon, www.ist.utl.pt, and director of IN+, the *Center for Innovation, Technology and Policy Research* at IST, http://in3.dem.ist.utl.pt/. From March 2005 to June 2011 he served as Secretary of State for Science, Technology and Higher Education in the Government of Portugal. Most recently, in the 2011-12 academic year he was a Visiting Scholar at Harvard University's Graduate School of Design and in the Science, Technology and Public Policy Program at the Kennedy School.

After earning a (five-year) degree in Mechanical Engineering at IST in 1981, he obtained his Doctorate at the Imperial College London in 1985 in the area of fluid mechanics and combustion. In 1986 he conducted post-doctoral study at the University of California-San Diego in microgravity flame propagation. Manuel Heitor was appointed Assistant Professor in the Department of Mechanical Engineering at IST in 1986, Associate Professor in 1991 and Full Professor in 1995. He served as Deputy-President of *Instituto Superior Técnico* from 1993 to 1998.

In addition to his engineering research, Manuel Heitor has worked and published extensively in the interrelated fields of technology management, innovation, and science and higher education policy. His chief activities in these fields are summarized below.

*Internationally:* Since 1995 he has been a Research Fellow of the $IC^2$ Institute (for "Innovation, Creativity and Capital") at the University of Texas at Austin. From 1996 to 2005 he chaired the Organizing Committee of the series of International Conferences on Technology Policy and Innovation, http://in3.dem.ist.utl.pt/confpolicy/. In 2002 he was co-founder of Globelics: the Global Network for the Economics of Learning, Innovation, and Competence-building Systems; and served until 2005 as a member of its Scientific Board and co-Director of the Globelics Academy. Manuel Heitor has participated in several international *fora* on science, technology and innovation policy, and represented Portugal in the OECD's initiative on Steering and Funding of Public Research and in its Futures Programme. He is a founding member of the Science and Technology Council of the International Risk Governance Council, IRGC.

*In Portugal:* Manuel Heitor was the founding director of IN+, the Center for Innovation, Technology and Policy Research at IST, which in 2005 was named one of the top 50 global research centers in technology management by the International Association of Management of Technology. He also launched IST´s programmes in Engineering Policy and Management of Technology (1998) and in Engineering Design (2002), as well as the IST Design Studio (2002). In 1999 he was appointed National Coordinator of the Research Assessment Exercise by the Portuguese Ministry of Science and Technology. In 2003 he coordinated a national initiative and exhibition on the history of engineering in Portugal in the 20th century, which won the Dibner Award of the Society for the History of Technology.

*Books, Journals, Papers:* Manuel Heitor is co-author of *New Ideas for the University* (in Portuguese, IST Press, 1998) and *Innovation for All?* (Praeger, 2005). He is co-editor of the book series on Technology Policy and Innovation, launched by Greenwood Publishing Group and currently continued by Purdue University Press. He is on the Advisory Boards of the journals *Technological Forecasting and Social Change* and the *International Journal of Technology, Policy and Management*, where he has served as guest editor for several special Issues. He has written numerous papers on these topics.

*While in the Government of Portugal,* Manuel Heitor was successfully involved in attracting public and private investment in R&D, growing the research landscape of the country, and in the reform and modernization of higher education (including, but not limited to, reforms under the Bologna Process). He was instrumental in forming international consortia for research and advanced education with several U.S. universities. These consortia are of varying types and scale, and include industry relationships and technology commercialization activities.

**Name :** Manuel Frederico Tojal de Valsassina Heitor
**Birth**: September 21, 1958 - Lisbon, Portugal; **Nationality:** Portuguese
**Contact/ Email:** mheitor@ist.utl.pt;

**Area of Specialization:**
Science, Technology and Innovation Policy; Higher Education Policy, Engineering and Public Policy;
**Other research areas of interest:**
Management of Science and Technology; Risk Governance
Energy and Environmental Technologies; Experimental Fluid Mechanics and Combustion;

**Education :**
1981**:** Engineering Diplom (5 years) in Mechanical Engineering, IST, Technical University of Lisbon
1985: Ph.D. in Mechanical Engineering, Imperial College, University of London, UK
1992: "Agregação", D. Sc., in Mechanical Engineering, IST, Technical University of Lisbon

**Academic and Research Career:**
1980-1981: Research student, IST, Dept. Mechanical Engineering
1981-1985: Research student, Imperial College, University of London, UK
1985-…: Lecturer at IST, Technical University of Lisbon
1986- Post-doctoral researcher, University of California at San Diego, USA
1995-…: Full Professor, IST, Mechanical Engineering Department

**Main awards:**
- IAMOT Award 2005 (institutional) – "Top 50 global centres of research on Management of Technology", Intl. Association for the Management of Technology
- IAMOT Award 2004 – *Excellence in Research Award on Technology Innovation Management*, Intl. Association for the Management of Technology
- "Solvay Innovation Trophy 2003" for "Management Improvement", through the project "Solvay Ideas Challenge", http://www.green-wheel.net/ (co-winner)
- Dibner Award 2003 – Society for the History of Technology, SHOT, Best Exhibition, through the project "Engineering in Portugal in the 20$^{th}$ century" (co-winner)
- Prémio TELEciência 2003 (4º lugar) - V Festival Internacional do Filme de Divulgação Científica, através do filme "*ENGENHO E OBRA*: Engineering in Portugal in the 20$^{th}$ century"

**Political and Government Appointments**
2005-2011: Secretary of State for Science, Technology and Higher Education, Government of Portugal

**Institutional Development and University Management Appointments:**
1993-1998: Deputy-President of the Instituto Superior Técnico, Technical University of Lisbon
1998-2005: Founder and Director of the "Center for Innovation, Technology and Policy Research", IN+, at the Instituto Superior Técnico, Technical University of Lisbon
2013-…: Director of the "Center for Innovation, Technology and Policy Research", IN+, at the Instituto Superior Técnico, Technical University of Lisbon

**Coordination of University Programs:**
1997-2005: Founder and Director of the M.Sc. Program at IST on "Engineering Policy and Management of Technology"
1997-2000: Director of the IMPACT Program at IST on science and technology commercialization

2001-2005: Director of the VECTOR$^{e}$ Program at IST on science and technology commercialization

2002-2005: Founder and Director of the M.Sc. Program at IST on "Engineering Design"

2004-2005: Director, Globelics Academy – PhD School on Systems of Innovation and Economic Development

2012-…: Director of the Ph.D. Program at IST on "Engineering and Public Policy"

2014-…: Director of the Ph.D. Program at IST on "Engineering Design and Advanced Manufacturing"

**Appointments in Academia, Research and Scientific Institutions**

1996- …: "Senior Research Fellow", IC2 Institute (Innovation, Creativity, Capital), The University of Texas at Austin, USA.

1996: Coordinator of the Research Assessment Exercise in the area of Mechanical Engineering, Foundation for Science and Technology (FCT), Portugal.

1999-2000: National Coordinator of the Research Assessment Exercise in Portugal, Foundation for Science and Technology (FCT), Portugal.

2002- ...: Co- founder and member of the "Scientific Board" of the international network "Globelics - the global network for the economics of learning, innovation, and competence building systems"

2004-…: Member of the Science and Technology Council, International Risk Governance Council.

2002-2004: Member of the Examiners Committee of the Technology Policy Program, Cambridge-MIT Institute (CIT), University of Cambridge, Judge Institute of Management.

2009-…: Member of Serbian Academy of Engineering Sciences (elected foreign member).

2010-…: Member of the International Advisory Committee of the President of Carnegie Mellon University for the area of "Engineering and Public Policy".

2011-…: Member of the International Advisory Board of the University of Macau, China.

2012-…: Member of the Academy of Engineering, Portugal

2013-…: Corresponding Member of the Royal Academy of Engineering, Spain

**Other Functions:**

1990-2005: Member and main promoter of the International Organizing Committee of the Conferences on "Applications of Laser Techniques to Fluid Mechanics", http://in3.dem.ist.utl.pt/lisboa-laser/;

1997- 2005: Co-founder and "Chairman" of the international Conferences on "Technology Policy and Innovation", http://in3.dem.ist.utl.pt/conf.policy/;

2000: Chairman Intl. Conference on "Towards a learning society: Innovation and competence building with social cohesion for Europe - a seminar on socio-economic research and European policy", Guincho, 28-30 Maio, 2000.

2000: Chairman Intl. Conference on "Collaborative Design: Competence Building for Innovation", Hannover, Portugal Pavilion, September 11, 2000.

2000-2001: Expert at OECD, Science, Technology and Industry Division, for "Steering and Funding of Public Research"

2000- 2004: Expert at OECD, for the Project "Futures"

2002/03: Director for the exhibition "Engineering in Portugal in the 20$^{th}$ century"

2002-2003: Director, "*Pensar e Fazer* – Engineering for youngsters"

2012-13: Chairman of ALTEC 2013, the Latino-Ibero-American Conference on Management of Technology, Porto, 28-30 October, 2013.

**Sample list of publications:**

Recent Books, in preparation:

- M. Heitor, P. Ferrão and D. Roos (2014), "Global Minds", Kluwer Publ., in preparation.
- M. Heitor, J. Barros and J.Moura (2014), "Networks of Opportunity", Springer Verlag, in preparation.
- M. Heitor (2014), "Democratizing Higher Education", MIT PRESS, in preparation.

Books (co-authorship):

- P. Conceição, M. V. Heitor, (2005), *Innovation for All? Learning from the Portuguese path to technical change and the dynamics of innovation*. Westport and London: Praeger.
- M. Heitor and J. Duarte (2001). GLASS CHAIR: Competence Building for Innovation. Lisbon: IST Press.
- Conceição, P., Heitor, M.V. e Santos, F. (1998), *New Ideas for the University* (in Portuguese), Lisbon: IST Press.

Books (edition):

- M. van Geenhuizen, D. Gibson and M. V. Heitor (eds.), (2005), *Regional Development and Conditions for Innovation in the Network Society*. New York: Purdue University Press.
- Heitor, M. (ed.), (2004), "Ciências Experimentais", (in portuguese), Nova Activa Multimédia – Enciclopédia de Consulta, Lexicultural Editores
- Heitor, M. (ed.), (2004), "Tecnologias", (in portuguese), Nova Activa Multimédia – Enciclopédia de Consulta, Lexicultural Editores
- M. Heitor (ed.), (2004), "Pensar e fazer engenharia com os mais novos*: um ensaio sobre cultura tecnológica para pais e educadores*" (in Portuguese), Lisboa: Dom Quixote
- D. Gibson, M. V. Heitor and A. Ibarra (eds.), (2004), *Knowledge and learning for the Network Society*. New York: Purdue University Press.
- J.M.B. Brito, M. Heitor, M.F. Rollo (eds.), (2004), "Engineering in Portugal in the 20$^{th}$ century" (in Portuguese), Lisboa: Dom Quixote
- J. Bento, J. Duarte, M. Heitor and W. Mitchell, (eds.), (2004), *Collaborative Design and learning: competence building for innovation*. Westport and London: Praeger.
- D. Gibson, C. Stolp. P. Conceição, and M. V. Heitor (eds.), (2003), *Systems and Policies for the Global Learning Economy*. Westport and London: Praeger.
- M. Heitor, J.M.B. Brito, M.F. Rollo, H. Cayatte, J. Pessoa, R. Trindade (eds), (2003), "*Engenho e obra: memory of an exhibition*" (in Portuguese), Lisboa: Dom Quixote
- P. Conceição, M. V. Heitor, B.-A. Lundvall (eds.), (2003), *Innovation, Competence Building, and Social Cohesion in Europe- Towards a Learning Society*, London: Edward Elgar.
- P. Conceição, D. Gibson, M. V. Heitor, G. Sirilli, F. Veloso (eds.), (2002), *Knowledge for Inclusive Development*. Westport and London: Quorum Books.
- J.M.B. Brito, M. Heitor, M.F. Rollo (eds), (2002), "*Engenho e obra:* an approach to the history of engineering in Portugal in the 20$^{th}$ century" (in Portuguese), Lisboa: Dom Quixote
- M. Heitor (2001), "National evaluation of R&D Units in Portugal" (in Portuguese), Portuguese Ministry of Science and Technology.
- P. Conceição, D. Gibson, M. Heitor and S. Shariq (2000). Science, Technology and Innovation Policy: Opportunities and Challenges for the Knowledge Economy. QUORUM Publ., New York.
- R. Adrian, D. Durão, F. Durst, M. Heitor, M. Maeda and J. Whitelaw (2000). Laser Techniques Applied to Fluid Mechanics, Springer Verlag.
- M. Heitor (1999) "National evaluation of R&D Units in Mechanical Engineering in Portugal" (in Portuguese), Portuguese Ministry of Science and Technology.
- R. Adrian, D. Durão, F. Durst, M. Heitor, M. Maeda and J. Whitelaw (1997). Developments in Laser Techniques and Fluid Mechanics, Springer Verlag.
- R. Adrian, D. Durão, F. Durst, M. Heitor, M. Maeda and J. Whitelaw (1996). Developments in Laser Techniques and Applications to Fluid Mechanics, Springer Verlag.
- F. Culick, M. Heitor and J. Whitelaw (1996). Unsteady Combustion, Kluwer Academic Publishers, NATO/ASI Series.

*Technical Journals Edited:*

- *Technological Forecasting and Social Change, Elsevier Science Inc.*
- *Intl. Journal of technology, Policy and Management, Inderscience Publishers*

*Main Papers in Technical Journals and Books:*

Recent Papers submitted for publication in international journals:

- Daniela S. Couto, Luis Perez-Breva, and Manuel Heitor (2014), "Are Cell Therapies Disrupting Traditional Clinical Assessment Practices?", Nature Drug Reviews Discovery, submitted for publication.
- Daniela S. Couto, Luis Perez-Breva, and Manuel Heitor (2014), "Technological Adjacency for Emergent Therapies: A Knowledge Creating Market Strategy", Industrial and Corporate Change, submitted for publication.

Sample published papers:

- M. Heitor (2014), "How far university global partnerships may facilitate a new era of international affairs and foster political and economic relations?", Technological Forecasting and Social Change, accepted for publication.
- M. Heitor and H. Horta (2014), "Reforming higher education in times of uncertainty: are illities important?", Studies in Higher Education, accepted for publication.
- M. Heitor, H. Horta, R. Castañón, R. Sbragia and A. Jiménez (2014), "Can Latin America move forward after a lost decade in technical change?…looking at opportunities for knowledge-based change in times of increasing uncertainty", Journal of Technology Management and Innovation, Vol 9 (4a).
- M. Heitor and H. Horta (2014), Further democratizing Latin America: Broadening access to higher education and promoting science policies focused on the advanced training of human resources, Journal of Technology Management and Innovation, Vol 9 (4a).
- M Heitor, H. Horta and J. Mendonça (2014), "Developing human capital and research capacity: science policies promoting brain gain", Technological Forecasting and Social Change, 82, pp. 6-22.
- M. Heitor and H. Horta (2014), "Democratizing higher education and the access to science: the Portuguese reform 2006-2010", Higher Education Policy, 27, pp. 239-257.
- M. Heitor and H. Horta (2012), "Opening-up higher education in emerging economies: Autonomy and integrity on the rise of globalization", Intl. Journal of Chinese Education, 1, pp. 196-234.
- Heitor, M., and Horta, H., (2011), "Science and Technology in Portugal: From Late Awakening to the Challenge of Knowledge Integrated Communities" in Neave, G., and Amaral, A., (Eds) Higher Education in Portugal 1974-2009: A Nation, A Generation, Dordrecht: Springer, 179-226.
- M. Heitor and M. Bravo (2010), "Portugal on the crosstalk of change, facing the shock of the new: People, knowledge and ideas fostering the social fabric to facilitate the concentration of knowledge integrated communities", Technological Forecasting and Social Change, 77, pp. 218-247.
- M. Heitor (2009), "The European Research Universities and the Challenge for Science and Technology in Europe", in: Charles F. Bonser (ed.), Adapting Universities to the Global Society - A Transatlantic Perspective, Münster: LIT-Verlag, February 2009.
- M. Heitor (2009), "Tertiary Education Institutions in Times of Change: A Systems Approach to Institutional Transformation", in ""The Future of the Research University: Meeting the Global Challenges of the 21st Century", Kauffman Foundation, pp. 55-67. Also presented at The 2008 Kauffman-Max Planck Annual Summit on "Rethinking the Role of the University and Public Research for the Entrepreneurial Age", Munich, June 8-11, 2008.
- M. Heitor (2008). "A system approach to tertiary education institutions: towards knowledge networks and enhanced societal trust". Science and Public Policy, 35 (8), pp. 607-617.
- H. Horta, J. Huisman and M. Heitor (2008). Does a competitive research funding encourage diversity in higher education? Science and Public Policy, 35(3), pp. 146-158.

- P. Conceição, M. V. Heitor and H. Horta (2008), "R &D funding in US universities: from public to private support or public policies strengthening diversification?", in J. Enders, B. Jongbloed (eds.), "Public-Private Dynamics in Higher Education: Expectations, Developments and Outcomes", pp. 301-328., Bielefeld, Transcript Verlag.
- J.M. Gago and M. Heitor (2007), "A commitment to science for the future of Portugal", in J.M.Gago, ed., "The Future of Science and Technology in Europe", Portuguese Ministry of Science, Technology and Higher Education, pp. 403-416.
- P. Conceição and M.V. Heitor (2007), "Diversity and integration of science and technology policies", Technological Forecasting and Social Change, 74, pp. 1-17.
- P. Conceição and M.V. Heitor (2007), "Do we need a revisited policy agenda for research integrity? …an institutional perspective", "World Conference on Research Integrity", Calouste Gulbenkian Foundation, Lisbon, Portugal, 16-18 September 2007.
- G.P.J. Dijkema, P. Ferrão, P.M. Herder and M. Heitor (2006), "Trends and Opportunities framing Innovation for Sustainability in the Learning Society", Technological Forecasting and Social Change, 73(3), pp. 215-227.
- P. Conceição, J. Ehrenfeld, M. Heitor and P.S. Vieira (2006) 'Sustainable universities: fostering learning beyond environmental management systems', Int. J. Technology, Policy and Management, Vol. 6, No. 4, pp.413–440.
- P. Conceição, M. V. Heitor, P. Vieira (2006), "Are Environmental Concerns Drivers of Innovation? Interpreting Portuguese innovation data to foster environmental foresight", Technological Forecasting and Social Change, 73(3), pp. 266-276.
- M. van Geenhuizen, D. Gibson and M. V. Heitor (2005) "Fostering Innovation and Regional Develpoment in the Global Learning Economy", in M. van Geenhuizen, D. Gibson and M. V. Heitor (eds.), *Regional Development and Conditions for Innovation in the Network Society,* pp.1-13. New York: Purdue University Press.
- P. Conceição and M. Heitor (2005) "Mapping Networks of Excellence and S&T Competencies for Europe: Building on the Portuguese Experience in evaluating research excellence", in M. van Geenhuizen, D. Gibson and M. V. Heitor (eds.), *Regional Development and Conditions for Innovation in the Network Society,* pp.241-271. New York: Purdue University Press.
- J. Moutinho and M. Heitor (2005), "Building Human Centered Systems Based on Communication Infrastructures: Evidence from Portugal", in Marshall, S., Taylor, W. and Yu, X., (eds.), "The Encyclopedia of Developing Regional Communities with ICT", Hershey, Idea Group.
- S. I. Shtork, C.E. Cala, E.C. Fernandes, and M.V. Heitor (2005) "Coherent Helical Structures in Swirl Flows. Technical Physics Letters", Vol. 31, Issue 8, pp. 660-662.
- S.I. Shtork, O. Comas, E.C. Fernandes, and M.V. Heitor (2005) "Aerodynamic structure of unsteady swirling flow downstream of a sudden expansion". Thermophysics and Aeromechanics, Vol. 12, No. 2, pp. 217-228.
- C.E. Cala, E.C. Fernandes, M.V. Heitor and S.I. Shtork (2005), "Coherent structures in unsteady swirling jet flow". Experiments in Fluids; available online at http://dx.doi.org/10.1007/s00348-005-0066-9.
- E.C. Fernandes, M.V. Heitor M.V. and S.I. Shtork (2005), "An analysis of unsteady highly turbulent swirling flow in a model vortex combustor". Experiments in Fluids; available online at http://dx.doi.org/10.1007/s00348-005-0034-4.
- P. Conceição, M.V. Heitor, and H. Horta (2005), " R&D funding in US universities: from public to private support or public policies strengthening diversification?" em Enders, J., and Jongbloed, B., (Eds) Public-Private Dynamics in Higher Education: Expectations, Developments and Outcomes, (CHEPS, University of Twente).
- M. Heitor, R. Nunes and P. Conceição (2004). "Technological Change and the challenges for Regional Development: Building 'social capital' in Less Favored Regions", in A. Romano M. Landabaso (eds.), "Social capital, innovation and regional development", European Commission.
- M. V. Heitor (2004), "…in the way of a Manifesto: Competence Building for Innovation", in J. Bento, J. Duarte, M. Heitor and W. Mitchell (eds.), *Collaborative Design and learning: competence building for innovation*. Westport and London: Praeger; pp. ix-xxiii.
- P. Conceição and M. V. Heitor (2004), "Learning through interaction: perspectives for the University", in J. Bento, J. Duarte, M. Heitor and W. Mitchell (eds.), *Collaborative Design and learning: competence building for innovation*. Westport and London: Praeger; pp. 13-46.

- J. Bento, J. Duarte, T. Heitor and M. V. Heitor (2004), "Remote Collaborative Design: Case studies of transatlantic cooperation in engineering and architecture", in J. Bento, J. Duarte, M. Heitor and W. Mitchell (eds.), *Collaborative Design and learning: competence building for innovation*. Westport and London: Praeger; pp. 247-263.
- M. V. Heitor (2004), "Rethinking Technology Policy and Innovation", Technological Forecasting and Social Change, 71(5), pp. 549-551.
- P. Conceição, M. V. Heitor, G. Sirilli and R. Wilson (2004), "The Swing of the Pendulum from Public to Market Support for Science and Technology: Is the US Leading the Way?", Technological Forecasting and Social Change, 71(5), pp. 553-578.
- C. Costa, M. Fontes and M. Heitor (2004), "A Methodological Approach to the Marketing Process in the Biotechnology-based Companies". Industrial Marketing Management Journal, 33, pp. 403-418.
- E. Fernandes, M. Heitor and S. Shtork (2004) On the dynamics of swirling recirculating flow with precessing vortex core. Experiments in Fluids
- M. Heitor and J. Moutinho (2004) "Digital Cities and the network society: Towards a Knowledge-Based View of the Territory?", in D. Gibson, M. Heitor and A. Ibarra, Eds., *Knowledge and learning in the Network Society*. New York: Purdue University Press.
- M. Heitor and J. Moutinho (2004) "Digital Cities and the opportunities for mobilizing the information society: case studies from Portugal", in M. Tanabe, P. van den Besselaar and T. Ishida, Eds., Digital Cities III – Computational and sociological approaches. Springer Verlag.
- P. Anacleto, E. Fernandes, M. Heitor and S. Shtork (2003). "Swirl flow structure and flame characteristics in a model lean premixed combustor", Combustion Science and Technology.
- P. Conceição, M. V. Heitor, F. Veloso (2003), "Infrastructures, Incentives and Institutions: fostering distributed knowledge bases for the Learning Society", Technological Forecasting and Social Change, 70, pp.583-617.
- P. Conceição, and M. V. Heitor (2003), "Technological Innovation and Productivity Growth: A Perspective after the IT Bubble's burst", International Journal of Technology, Policy and Management, 3(2), pp. 113-126.
- Conceição, P. and Heitor, M. (2003). "Systems of innovation and competence building across diversity: Learning from the Portuguese path in the European context" in Larisa V. Shavinina (Ed.). In "International Handbook on Innovation", Elsevier, pp.945-975.
- Conceição, P. and Heitor, M. (2003). "Techno-economic Paradigms and Latecomer Industrialization" in UNESCO Encyclopedia of Life Support Systems (EOLSS), Eolss Publishers, Oxford, UK
- F. Santos and M. Heitor (2003)."The cognocratic organization: toward a knowledge theory of the firm", in D. Gibson, C. Stolp. P. Conceição, and M. V. Heitor (eds.), *Systems and Policies for the Global Learning Economy*. Westport and London: Praeger, pp. 465-481.
- P. Conceição, D Gibson, M Heitor and C. Stolp (2003)."Knowledge and Innovation for the Global learning Economy: building capacity for development", in D. Gibson, C. Stolp. P. Conceição, and M. V. Heitor (eds.), *Systems and Policies for the Global Learning Economy*. Westport and London: Praeger, pp. 11-43.
- P. Conceição, M. V. Heitor (2002), "Knowledge Interaction Towards Inclusive Learning - Promoting Systems of Innovation and Competence Building", Technological Forecasting and Social Change, 69(7), pp.641-651.
- P. Conceição, and M. V. Heitor (2002), "University-based entrepreneurship and economic development: A learning-centered model", International Journal of Technology, Policy and Management, 2(3), pp. 220-239.
- P. Conceição and M. Heitor (2002)."Sustainable Societal Learning: A Discussion of the Role of the University", in P. Conceição, D. Gibson, M. V. Heitor, G. Sirilli, F. Veloso (eds.), (2002), *Knowledge for Inclusive Development*. Westport and London: Quorum Books.
- P. Conceição, M. Heitor and F. Veloso (2002)." Knowledge, Technology and Innovation Systems for Inclusive Development", in P. Conceição, D. Gibson, M. V. Heitor, G. Sirilli, F. Veloso (eds.), (2002), *Knowledge for Inclusive Development*. Westport and London: Quorum Books, pp. 1- 16.
- J.M.B. Brito, M. Heitor, M.F. Rollo (2002). "Engenho e Obra: uma abordagem à História da Engenharia em Portugal no séc. XX", em J.M.B. Brito, M. Heitor, M.F. Rollo (eds), (2002),

"*Engenho e obra: uma abordagem á história da engenharia em Portugal no seculo XX*", Lisboa: Dom Quixote, pp. 19-21.

- M. Heitor, H. Horta e P. Conceição (2002). "Engenharia e conhecimento: ensino técnico e investigação", em J.M.B. Brito, M. Heitor, M.F. Rollo (eds), (2002), "*Engenho e obra: uma abordagem á história da engenharia em Portugal no seculo XX*", Lisboa: Dom Quixote, pp.57-79.
- P. Conceição e M. Heitor (2002). "Engenharia e mudança tecnológica: as dinâmicas do conhecimento e o desafio da inovação", em J.M.B. Brito, M. Heitor, M.F. Rollo (eds), (2002), "*Engenho e obra: uma abordagem á história da engenharia em Portugal no seculo XX*", Lisboa: Dom Quixote, pp.107-121.
- P. Conceição, D. Gibson, M. V. Heitor, and G. Sirilli (2001), "Beyond the Digital Economy: A Perspective on Innovation for the Learning Society", Technological Forecasting and Social Change, 67(2-3):115-142.
- Conceição, P., Gibson, D. V., Heitor, M.V. and Sirilli, G. (2001). "Knowledge for Inclusive Development: The Challange of Globally Integrated and Learning Implications for Science and Technology Policy", Technological Forecasting and Social Change, 66, pp. 1-29.
- P. Conceição, M. V. Heitor (2001), "Towards a University Agenda on Engineering Policy and the Management of Technology," International Journal of Technology, Policy and Management, 1(2): 195-227.
- Conceição, P., and Heitor, M.V. (2001)."Universities In The Learning Economy: Balancing Institutional Integrity with Organizational Diversity", in :"The Globalising Learning Economy:Major Socio-Economic trends and European innovation Policy", Eds. Bengt-Aake Lundvall and Daniele Archibugi, Oxford University Press, pp. 83-96.
- P. Conceição, M. V. Heitor (2001). "Building a Manifesto for Engineering Education Renewal," in M. V. Heitor, J. Duarte(eds.), The Glass Chair. Lisbon: IST Press.
- Bommer, M., Heitor, M.V., Vedovelho, C., and Pissarra, P. (2001), "Biotecnol Phamaceutica", Business Case Journal, 9(1), pp. 107-119. Reprinted in Digman, Les, (2002) Strategic Management: Cases for the Global Information Age, Dame/Thomson Learning, Cinc. pp. 30.1 – 30.11.
- Caraça, J., Conceição, P., and Heitor, M.V. (2000). "Suggesting a Public Policy towards the Research University in Portugal", Higher Education Policy, June 2000, 13, pp.181-201.
- Caldeira-Pires, A., Carvalho, J. A. and Heitor, M.V. (2000)."Characteristics of Nitric Oxide formation rates in turbulent non-premixed jet flames", Combustion and Flame, 120, pp. 383-391
- P. Conceição, M. Heitor, P Oliveira and F. Santos (2000)."On the socioeconomic context and organizational development of the research university", in P. Conceição, D. Gibson, M. V. Heitor and s Shariq (eds.), *Science, technology and Innovation Policy – Opportunities and challenges for he knowledge economy*. Westport and London: Quorum Books, pp. 99-118.
- P. Conceição, D. Gibson and M. Heitor (2000)."Knowledge, Technology and Innovation for Development", in P. Conceição, D. Gibson, M. V. Heitor and s Shariq (eds.), *Science, technology and Innovation Policy – Opportunities and challenges for he knowledge economy*. Westport and London: Quorum Books, pp. 1-18.
- Conceição, P. and Heitor, M.V. (1999). "On the role of the university in the knowledge-based economy. Science and Public Policy, 26 (1), pp. 37-51.
- Duarte, D., Ferrão, P. and Heitor, M.V. (1999). "Turbulence Statistics and Scalar Transport in Higlhy-Sheared Premixed Flames", Flow, Turbulence and Combustion, 60, pp. 361-376
- Caldeira-Pires, A. and Heitor, M.V. (1999)."On the analysis of Propane jet Flames in Mutual Interaction", Combust. Sci. and Technology, 141, pp.37-57.
- P. Ferrão, M. V. Heitor (1998)."Simultaneous velocity and scalar measurements in premixed recirculating flames", Experiments in Fluids, 24, pp. 399-407
- Ferrão, P., and Heitor, M.V., (1998). "Probe and Optical Diagnostics in Premixed Flames". Experiments in Fluids, 24, (5/6), pp. 389-398.
- Carvalho, I.S. and Heitor, M.V. (1998). "Liquid Film Break-up in a Model of a Prefilming Airblast Nozzle". Experiments in Fluids 24, (5/6), pp. 408-415.
- Caldeira-Pires, A., Heitor, M.V. and Moreira, A.L.N. (1998). "Analysis of temperature Dissipation in a Turbulent Jet Propane Flame". Experimental Thermal and Fluid Science, 18, pp. 116-121.

- P. Conceição, D. V. Gibson, M. V. Heitor, S. S. Shariq (1998), "The Emerging Importance of Knowledge for Development: Implications for Technology Policy and Innovation", Technological Forecasting and Social Change, 58(3), pp. 181-202.
- P. Conceição, M. V. Heitor, P. Oliveira (1998), "Expectations for the University in the Knowledge Based Economy", Technological Forecasting and Social Change, 58(3), pp. 203-214.
- P. Conceição, M. V. Heitor, P. Oliveira, (1998)"University-based Technology Licensing in the Knowledge Based Economy", Technovation, 18 (10), pp. 615-625.
- Santos, F., Heitor, M. V., and Caraça , J.(1998). "Organizational challenges for the university". Higher Education Management, 10 (3), pp. 87-107.
- Caraça, J., Conceição, P., Heitor, M. V. (1998), "A Contribution Towards a Methodology for University Public Funding", Higher Education Policy, 11(1) pp. 37-58.
- Caldeira-Pires, A. and Heitor, M.V. (1998). "Temperature and Related Statistics Measurements in Turbulent Jet Flames". Experiments in Fluids, 24, pp. 118-129.
- Conceição, P. and Heitor, M. V. (1998). "Perspectivas sobre o papel da universidade na economia do conhecimento". Colóquio/Educação e Sociedade, nº 2, pp. 71-98.
- Caldeira-Pires, A., Heitor, M.V. and Moreira, A.L.N. (1998). "On the transport characteristics of non-premixed diffusion flames in mitral interaction. J. Braz. Soc. Mech. Sciences, XX (2), pp. 164-178.
- Ferrão, P., Heitor, M.V., Moreira, A.L. and Silva, T. (1997). "Experiments in turbulent flames: from industrial to laboratory scale. Thermal Science, 1 (2), pp. 3-26.
- Conceição, P., Gibson D., Heitor, M.V. and Shariq, S. (1997). "Towards a research Agenda for Knowledge Policies and Management, Journal of Knowledge Management, 1(2), pp. 129-141.
- Anacleto, P., Heitor M. V., and Moreira A. L. N. (1996). "The Mean and Turbulent Flowfields in a Model RQL Gas-turbine Combustor". "Experiments in Fluids", 22, pp. 153-164.
- E.C. Fernandes and M.V. Heitor (1996). "On the Analysis of Oscillating Flames". In: "Unsteady Combustion", ed. F. Culick, M.V. Heitor and J.H. Whitelaw, Kluwer Academic Publ., NATO ASI Series, pp. 1-17
- D. Correia, P. Ferrão, M.V. Heitor and T.F. Silva (1996). "Low-emissions Glass Furnace Technology based on Advanced Control and Monitoring". Glass Sci. and Tech., 69 (10), pp. 305-310.
- Carvalho, I.S. and Heitor, M.V. (1996). "Visualization of Vortex Breakdown in Turbulent Unconfined Jet Flames". Optical Diagnostics in Engineering, 1, (2), pp. 22-30.
- Caseiro, T., Conceição, P., Durão, D.F.G. and Heitor, M.V., (1996). "On the Development of High Engineering Education in Portugal and the Monitoring of Admissions: a Case Study". Presented at the 7th Intl Conf. Assessing Quality in Higher Education, Tampere, Finland, July 21-23, 1995. European Journal of Engng. Education, 21 (4), pp. 435-445.
- E.A. Spencer, M.V. Heitor and I.P. Castro (1995). "Intercomparison of Flow Measurements and Computations Through a Contraction and a Diffuser". Flow Meas. and Instrumentation., 6, (1), pp. 13-14.

*Sample of Main Papers in **Portuguese** Technical Journals and Books:*

- M. V. Heitor (2005). "Prioridade à Inovação". Cadernos de Economia, 72, (Jul./Set. 2005), pp. 9-16.
- M. Heitor (2004). "Será que a inovação pode ser questionada ", em M.M. Borges, (Org.), "Cibercidadania", Coimbra: Ariadne Editora, pp.68-73.
- M. Heitor, J.M.B. Brito, M.F. Rollo (2004). "Introdução - Uma perspectiva sobre a evolução da engenharia em Portugal: os momentos de inovação tecnológica", em M. Heitor, J.M.B. Brito, M.F. Rollo (eds.), , "Momentos de Inovação e Engenharia em Portugal no século XX", Lisboa: Dom Quixote.
- M. Heitor, H. Horta e P. Conceição (2004). "Do Ensino Técnico ao ensino da engenharia em Portugal", em M. Heitor, J.M.B. Brito, M.F. Rollo (eds.), , "Momentos de Inovação e Engenharia em Portugal no século XX", Lisboa: Dom Quixote.
- M. Heitor, H. Horta (2004). "Engenharia e desenvolvimento científico", em M. Heitor, J.M.B. Brito, M.F. Rollo (eds.), , "Momentos de Inovação e Engenharia em Portugal no século XX", Lisboa: Dom Quixote.
- P. Conceição e M. Heitor (2004). "Inovar em Portugal", em M. Heitor, J.M.B. Brito, M.F. Rollo (eds.), , "Momentos de Inovação e Engenharia em Portugal no século XX", Lisboa: Dom Quixote.

- P. Conceição, M. Heitor e H. Horta (2003). “Reflexões sobre o ensino superior em Portugal: perspectivas para o desenvolvimento institucional ”, em A. Amaral (ed.), “Avaliação, revisão e consolidação da legislação do ensino superior”, CIPES, Fundação da Universidades Portuguesas, pp. 175-195.
- M. Heitor (2003). “Bases de conhecimento e parcerias para a inovação ”, em M.J. Rodrigues, A. Neves e M.M. Godinho (eds), “Para uma Política de Inovação em Portugal”, Lisboa: Dom Quixote, pp.183-210.
- P. Conceição e M. Heitor (2002). “Engenharia e mudança tecnológica: as dinâmicas do conhecimento e o desafio da inovação”, em J.M.B. Brito, M. Heitor, M.F. Rollo (eds), “Engenho e obra: *uma abordagem á história da engenharia em Portugal no século XX*”, Lisboa: Dom Quixote, pp. 107-122.
- M. Heitor, H. Horta e P. Conceição (2002). “Engenharia e conhecimento: ensino técnico e investigação ”, em J.M.B. Brito, M. Heitor, M.F. Rollo (eds), “Engenho e obra: uma abordagem à história da engenharia em Portugal no século XX”, Lisboa: Dom Quixote, pp. 57-79.
- Conceição, P., Heitor, M.V. e Santos, F. (2000). “A Universidade na Sociedade do Conhecimentos em Portugal”, Revista Portuguesa de Gestão, Série III, Ano 15 (4), pp. 46-54.
- Conceição, P. e Heitor, M. V. (1998). “Perspectivas sobre o papel da universidade na economia do conhecimento”. Colóquio/Educação e Sociedade, nº 2, pp. 71-98.
- P.M. Anacleto e M.V. Heitor (1997). “Câmaras de Combustão com Baixa Produção de Poluentes para Turbinas a Gás. Parte 2 - Simulação em Modelos Laboratoriais”. “Ingenium - A Revista da Ordem dos Engenheiros”, 15, (Jan. 97), pp. 66-70.
- M.V. Heitor, A.L.N. Moreira, A.M.C: Silva e T.F. Silva (1997). “Implicações da Queima Industrial de Emulsões em Água em Sistemas de Produção de Energia”. “Ingenium - A Revista da Ordem dos Engenheiros”, 16, Fevereiro 1997, pp. 74-79.
- I.S. Carvalho e M.V. Heitor (1997). “Caracterização de Jactos Coaxiais Turbulentos com e sem Pré-recirculação”. Técnica, (1), pp.35-47.
- P. Conceição, M.V. Heitor, P. Oliveira e F. Santos (1997). “Valorização de Actividades de I&D no Processo de Inovação Industrial”. Documenta, 2, (Feb. 97), pp. 68-79.
- J. Caraça, P. Conceição e Heitor, M.V. (1997). “Perspectivas sobre o Financiamento das Universidades: Portugal no Contexto Internacional”. Estudos de Economia, Vol. XVI-XVII (4), pp. 447-492.
- P.M. Anacleto e M.V. Heitor (1996). “Câmaras de Combustão com Baixa Produção de Poluentes para Turbinas a Gás. Parte 1 - Novos Conceitos e Perspectivas de Evolução”. “Ingenium - A Revista da Ordem dos Engenheiros”, 13, (Nov. 96), pp. 66-71.
- I.S. Carvalho e M.V. Heitor (1996). “Atomização de Líquidos em Injectores para Baixa Produção de Poluentes”. Técnica, 3 (Set. 96), pp. 47-60.
- J. Caraça, P. Conceição e M.V. Heitor (1996). “Uma Perspectiva sobre a Missão das Universidades”: Análise Social, Vol XXXI (139), pp. 1201-1233.