

## Curriculum Vitae

### *NICHOLAS S. VONORTAS*

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ResearcherID: <http://researcherid.com/rid/O-6321-2015>

### **APPOINTMENTS**

*Primary:*

Institute for International Science and Technology Policy The George Washington University 1957 E Street, N.W., Suite 403 Washington, D.C. 20052 U.S.A. Tel: (1-202) 378-6230 Fax: (1-202) 994-1639 E-mail: <a href="mailto:vonortas@gwu.edu">vonortas@gwu.edu</a>	&	Department of Economics The George Washington University 2215 G Street, N.W. Monroe Hall, Suite 340
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*Secondary:*

São Paulo Excellence Chair (SPEC)  
Innovation Systems, Strategy and Policy  
Departamento de Política Científica e Tecnológica  
Universidade Estadual de Campinas (UNICAMP)  
São Paulo, Brasil

*Editor:*

Science and Public Policy (Journal)

### **EDUCATION**

Ph.D., 1989, New York University, U.S.A. (Economics)  
M.Phil., 1987, New York University, U.S.A. (Economics)  
M.A., 1983, Leicester University, U.K. (Economic Development)  
B.A., 1981, National and Kapodistrian University of Athens, Greece (Economics)

**FIELDS OF SPECIALIZATION**

Applied Microeconomics / Economics of Technological Change and Innovation  
Strategic Business Partnerships / Innovation Networks  
Science, Technology, and Innovation Strategy and Policy / R&D Program Assessment

**PROFESSIONAL EXPERIENCE**

**i. Academic Appointments**

Professor of Economics and International Affairs, Department of Economics & Institute for International Science and Technology Policy (IISTP), George Washington University, 2004 - present; Associate Professor, 1996-2004; Assistant Professor 1990-1996.

São Paulo Excellence Chair (SPEC) “Innovation Systems, Strategy and Policy”, Department of Science and Technology Policy, University of Campinas (UNICAMP), State of São Paulo, Brazil, 2014-2024.

Leading Research Fellow, Institute for Statistical Studies and Economics of Knowledge (ISSEK), National Research University Higher School of Economics (HSE), Moscow, Russian Federation, 2015-present.

Visiting Professor, Schwarzman College, Tsinghua University, Beijing, China, 2019 - 2020.

Instructor of Economics, Department of Economics, New York University, 1986-1988.

**ii. Administrative Positions**

Director, Institute for International Science and Technology Policy (IISTP), George Washington University, 2019-2022; 2001 – 2012; Deputy Director, 1998-2001.

Director, Graduate Program on International Science and Technology Policy (ISTP), George Washington University, 2019-2022; 1998 – 2012; Spring 2018; 2019-2020.

Director, Ph.D. Candidacy, Department of Economics, George Washington University, 2014 – 2018; 2019-.

Dean’s Council, Elliott School of International Affairs (several terms).

GW Faculty Senate, Elliott School representative, 2019-2021; Executive Committee 2020-2021.

Chair and member of faculty hiring committees, Elliott School of International Affairs.

Appointments, Promotion and Tenure Committee, Elliott School of International Affairs.  
Advisory Council on Research, George Washington University.  
Academic Excellence Committee, George Washington University.  
Steering Committee for the doctoral Public Policy Program.

iii. Visiting Positions, Teaching, Research

Visiting Professor, Schwarzman College, Tsinghua University, Beijing, Republic of China, 2019-.

Leading Research Fellow, Institute for Statistical Studies and Economics of Knowledge, National Research University Higher School of Economics, Moscow, Russian Federation, 2015-.

Visiting Professor, Graduate School of Management of Technology (MOT), Korea University, Seoul, Republic of Korea, Spring 2016 – 2018.

Visiting Professor, Centre for Innovation, Research and Competence in the Learning Economy (CIRCLE), University of Lund, Sweden, Spring 2013.

Visiting Scholar, Joint Institute for Innovation Policy (JIIP), Brussels, Belgium, Spring 2013.

Visiting Professor, Fundacao Getulio Vargas (FGV), Rio de Janeiro, Brazil, Fall 2012.  
Visiting foreign lecturer summer 2014, 2015

Visiting Scholar, Centro Universitario de Brasilia (UniCEUB), Brasilia, Brazil, Sept. 2012.

Research Associate, CESPRI-KITeS, Luigi Bocconi University, Milano, Italy, 2001–2012.

Research Associate, Management Science Laboratory, Athens University of Economics and Business, Greece, 2001 – 2011.

Research Associate, Laboratory for Industry and Energy Economics, National Technical University of Athens, Greece, 1998 – present.

Visiting Scholar, Maastricht Economic Research Institute on Innovation and Technology (MERIT), University of Maastricht, Netherlands, Fall 1997.

Visiting Scholar, National Technical University of Athens, Greece, Spring 1998.

Research Associate, Center for Science and Technology Policy, New York University and Rensselaer Polytechnic Institute, 1985 – 1989.

Intern, United Nations Centre for Transnational Corporations, New York, 1984.

iii. Journal Editor / Editorial Board / Editorial Council

Editor, *Science and Public Policy*, 2010 – present

Editorial Board, *Asian Research Policy*, 2013 – present

Editorial Board, *Foresight and STI Governance*, 2015 – present

Editorial Board, *Annals of Science and Technology Policy*, 2017 - present

Advisory Board, *Research Evaluation*, 2010 – 2015

Advisory Board, *Innovations*, 2006 – 2010

iv. Book Series Editor

Editorial Board, *Science, Technology and Innovation Studies*, Springer Publishers, 2014-present

v. Research Funding - Consulting

U.S. National Science Foundation (NSF)

U.S. National Research Council, National Academies of Science (NRC/NAS)

U.S. Department of Commerce, Advanced Technology Program (ATP)

U.S. Department of Commerce, National Institute of Standards and Technology (NIST)

U.S. Small Business Administration (SBA)

U.S. Department of Energy, Office of Science (DOE/OS)

U.S. National Aeronautics and Space Administration (NASA)

European Commission, DG Research and Innovation

European Commission, DG Information Society and Media

European Commission, DG Enterprise

European Commission, Washington Delegation  
Organization for Economic Cooperation and Development (OECD)  
United Nations Conference on Trade and Development (UNCTAD)  
United Nations, Economic and Social Commission for Western Asia (UN/ESCWA)  
The World Bank, Private Sector Development, Middle East, Caucasus  
Ministry of Economy, Trade and Industry, Japan (METI)  
Science and Technology Policy Institute, Republic of Korea (STEPI)  
Korea Institute of S&T Evaluation and Planning, Republic of Korea (KISTEP)  
SRI International  
General Secretariat for Research and Technology, Greece  
National Statistical Agency, Greece

vi. Advisory Committees, Boards

Innovation Policy Forum, National Research Council, US National Academies of Science, 2015-2019.

Chair, International Advisory Board, Institute for Statistical Studies and Economics of Knowledge, National Research University Higher School of Economics, Moscow, Russian Federation, 2016-.

Academic Council, Master Program “Governance of Science, Technology and Innovation”, Institute for Statistical Studies and Economics of Knowledge, National Research University Higher School of Economics, Moscow, Russian Federation, 2014-.

Advisory Committee for International Science and Engineering, U.S. National Science Foundation, 2006-2011.

- Acting Chair, Strategic Planning Panel, 2011

- Chair, Committee of Visitors, International Science & Engineering Programs, 2011

Chair, Evaluation Panel, “Industrial Clusters” Competition, General Secretariat for Research and Technology (GSRT), Ministry of Education and Continuous Learning, Greece, 2011-2012.

Chair, George Washington University Faculty Taskforce on Science Policy Institute, 2010.

International Advisory Board on Evaluation and Impact Analysis, VINNOVA, Sweden, 2007-2009.

Board of Directors, Korea-U.S. Science Cooperation Center, Korea National Research Foundation (NRF), 2006-2012.

vii. Expert Committees – Testimony

Member, Merit Review Panel, Science of Science and Innovation Policy Program, US National Science Foundation, 2015-

Member of the Expert Panel advising on the Economic Development of Low Earth Orbit Activities and the International Space Station, US National Aeronautics and Space Administration (NASA), 2014-2015.

Member of the External Experts Committee evaluating the quality and progress of the Department of Economics of the National and Kapodistrian University of Athens, Greece (February-March 2014)

Chair of the High-Level Expert Panel developing a “Monitoring & Evaluation Roadmap” for the Directorate-Generale Information Society and Media (INFOS), European Commission (January-December 2006)

Member and Rapporteur of the High-level Expert Panel for the 5-Year Assessment of the EU Framework Programmes on Research and Technological Development, Directorate-Generale Research and Innovation, European Commission (May – December 2004)

Member of the Panel for the project “Innovation Models for Aerospace Technologies”, Board on Science, Technology and Economic Policy, US National Academies of Science (NAS), (Spring 2004 – Spring 2005)

Member of the Working Group on “Innovation Infrastructure and the Environment” for the “National Innovation Initiative”, organized by the US Council on Competitiveness (February – December 2004)

Member of the Subpanel of the Basic Energy Sciences Advisory Committee (BESAC) of the Department of Energy to examine DOE’s Office of Science approach to performance measurement in view of GPRA (Jan. 24-25, 2002)

Member of STRATA-ETAN Expert Group on Intellectual Property Rights in Publicly Funded Research & Development (European Commission – 2001-2003)

Member of STRATA-ETAN Expert Group on Intellectual Property Rights in International Collaboration (European Commission – 2000-2001)

Testified in joint hearings by the Federal Trade Commission and the Antitrust Division, US Department of Justice on the potential usefulness of guidelines on research joint ventures (May 1997)

**LEADERSHIP IN PROFESSIONAL ORGANIZATIONS / INT’L EVENTS**

Lead organizer, series of 5 high level expert panels (online) on “The Challenges of Technology and Economic Catch-up in Emerging Economies”, George Washington University, University College London, University of Campinas, National Seoul University, National Research University Higher School of Economics, Fall 2020 – Spring 2021.

Organizer, Conference “Transforming Research”, The George Washington University, Washington, DC, September 26-27, 2019.

Organizer International Symposium “Technology Upgrading and Economic Catching-Up”, University of Campinas and FAPESP, São Paulo, Brazil, July 3-5, 2019.

Organizer, International Workshop “Regional Innovation Ecosystems, Entrepreneurship, and Challenges for Small Business”, Research Foundation of the State of São Paulo (FAPESP), São Paulo, Brazil, June 8, 2018.

Organizer International Symposium “Innovation Ecosystems, Technology Upgrading, and Regional Development”, University of Campinas and FAPESP, São Paulo, Brazil June 6-7, 2018.

Organizer International Workshop “Evaluation and Big Data for Science, Technology and Innovation”, co-sponsored by the Institute for International Science and Technology Policy (GW), Clarivate, and the Technology Interest Group of the American Evaluation Association, George Washington University, Washington, D.C., November 8, 2017.

Organizer International Symposium “Entrepreneurship and the Geography of Innovation”, and International Roundtable “System Innovation Axes: Universities & Entrepreneurship”, University of Campinas and FAPESP, São Paulo, Brazil July 5-7,

2017.

Organizer, International Workshop “Governance of System Innovation”, Research Foundation of the State of São Paulo (FAPESP), São Paulo, Brazil, July 7, 2017.

Organizer, International Symposium “Ex Ante Evaluation, Prioritization and STI Planning”, University of Campinas, Brazil, July 4-5, 2017.

Co-organizer (with University of Ottawa), D. Allan Bromley Memorial Lecture, annual, April, 2005-

Organizer, Workshop “The Geography of Innovation and Entrepreneurship”, The World Bank Group, Washington DC, April 26, 2016.

Co-organizer, special Globelics session “Lessons for priority setting and indicators relevant to the impact of research programmes in Europe and Emerging Economies: An evidence-based debate between the research and the policy-shaping community”, STI Conference 2016 “Peripheries, Frontiers and Beyond”, Valencia, Spain, September 2016.

Co-Organizer, Workshop “Can Network Measures Serve as Indicators of Knowledge Creation and Flow?”, National Science Foundation NCSES, George Washington University, December 14, 2016.

Co-organizer, GW Workshop on Context-Driven Technology Choice for Development (2015)

Organizer, International Workshop “Demand-Side Policies for Innovation / Public Procurement for Innovation”, University of Campinas, Brazil, May 28-29, 2015.

Co-organizer, GW Conference on Developing Country Adaptation to Climate Change (2011)

Co-organizer, Annual Conference, Technology Transfer Society (2010)

Co-organizer, GW Conference on Science and Technology Policy (2010)

Co-organizer, Science of Science Policy (SoSP) Conference on Best Practices in R&D Appraisal and Prioritization (2009)



Co-organizer, first Science of Science Policy (SoSP) Conference on S&T Evaluation Roadmap (2008)

Organizing Committee, 5<sup>th</sup> International Industrial Organization Conference (2007)

Co-founder of the Washington Research Evaluation Network (WREN), a forum for informed discussion, research, and decision-making on R&D program evaluation. Co-Principal organizer of the first major international conference of WREN at the George Washington University, December 4-5, 2003. Co-organizer of the second international conference of WREN in collaboration with the European Commission, Brussels, June 17-18, 2004, and of the third international conference of WREN in Seoul, Republic of Korea, May 31 – June 1, 2005. Co-Principal organizer of the fifth year anniversary international conference of WREN at the George Washington University, December 3-4, 2008. Co-organizer of smaller workshops, especially as they relate to ex ante program evaluation (investment strategy).

**PUBLICATIONS**

*Scopus author ID: 6602487131*  
*ORCID ID: 0000-0002-6745-4926*  
*Researcher-ID: O-6321-201*

i. Books

*Technology Upgrading and Economic Catch-Up: Challenges for Emerging Economies*, editor, Oxford University Press, forthcoming June 2021 (Co-editors, Jeong-Dong Lee, Keun Lee, Dirk Meissner, Slavo Radosevic)

*Public Procurement for Innovation*, editor, Edward Elgar, 2015 (Co-editors, Jakob Edler, Charles Edquist, Jon Mikel Zabala-Iturriagoitia)

*Innovation Policy: A Practical Introduction*, editor, Springer, 2014 (Chinese version 2019) (Co-editors, Phoebe C. Rouge, Anwar Aridi)

*Handbook on the Theory and Practice of R&D Program Evaluation*, editor, Edward Elgar, 2013 (Co-editor, Al Link)

*Innovation Networks in Industries*, editor, Edward Elgar, 2009 (Co-editor, Franco Malerba)

*The Innovation Imperative: National Innovation Strategies in the Global Economy*, editor, Edward Elgar, 2009 (Co-editors, Goran Marklund, Charles Wessner)

*Knowledge Flows in European Industry: Mechanisms and Policy Implications*, editor, Routledge, 2006 (Co-editors, Yannis Caloghirou, Natasha Constantellou)

*European Collaboration in Research and Development: Business Strategies and Public Policies*, editor, Edward Elgar, 2004 (Co-editors, Yannis Caloghirou and Stavros Ioannides)

*Cooperation in Research and Development*, Kluwer Academic Publishers, 1997

*Cooperative Research in R&D-Intensive Industries*, Avebury Academic Publishers, 1991

*Strategic Research Partnerships*, editor, National Science Foundation, 2001 (Co-editors John E. Jankowski and Albert N. Link)

ii. Refereed Articles

- “Ecosystems of Entrepreneurship: Configurations and Critical Dimensions”, *The Annals of Regional Science*, forthcoming. (With André Alves Cherubini and Bruno Brandão Fischer)
- “Innovation Barriers, Indicators and Policies: Coevolving Concepts in Innovation Studies”, *Annals of Science and Technology Policy*, forthcoming. (With Diego R. de Moraes Silva and André T. Furtado)
- “Mission-Oriented Policy and the Fuzzy Boundaries of Market Creation: The Brazilian Shipbuilding Case”, *Science and Public Policy*, December 2020. (With André Alves Cherubini and Paulo Antônio Zawislak) (<https://doi.org/10.1093/scipol/scaa059>)
- “Do-It-Yourself Laboratories and Attitude Towards Risk: The Effects of Self-efficacy and the Perception of Security and Privacy”, *Technological Forecasting and Social Change*, 159, October 2020. (With Jeewhan Yoon and SungWon Han)
- “Local Capacity, Innovative Entrepreneurial Places and Global Connections: An Overview”, *Journal of Technology Transfer*, July 2020. (With Jeong-Dong Lee, Keun Lee, Dirk Meissner, and Slavo Radosevic) (<https://doi.org/10.1007/s10961-020-09812-7>)
- “Returnee Academic Entrepreneurship in China”, *Journal of Intellectual Capital*, 22(1), April 2020. (With Yanzhao Lai) (<https://doi.org/10.1108/JIC-12-2019-0281>)
- “Public Technology Transfer, Commercialization and Business Growth”, *European Economic Review*, published online March 2020. (With Jae-Woong Min and YoungJun Kim) (<https://doi.org/10.1016/j.euroecorev.2020.103407>)
- “Microgravity Protein Crystallization for Drug Development: A Bold Example of Public Sector Entrepreneurship”, *Journal of Technology Transfer*, published online 2019. (With Troy Scott) (<https://doi.org/10.1007/s10961-019-09743-y>)
- “Internal Barriers to Innovation and University-Industry Cooperation among Technology-based SMEs in Brazil”, *Industry and Innovation*, 2020, 27(3): 235-263. (With Diego R. de Moraes Silva and Luis Otávio Lucas)
- “Configurations of Knowledge-Intensive Entrepreneurial Ecosystems: An Assessment of the State of São Paulo, Brazil”, *Revista de Administração de Empresas*, 2019,

59(4): 242-257. (With André Alves Cherubini, Bruno Brandão Fischer and Sérgio Queiroz).

- “Regional Entrepreneurial Ecosystems in China”, *Industrial and Corporate Change*, 2019, 28(4): 875-897. (With Yanzhao Lai)
- “Evolution of University-Industry Collaboration in Brazil from a Technology Upgrading Perspective”, *Technological Forecasting and Social Change*, 2019, 145: 330-340. (With Bruno Brandão Fischer and Paola Rucker Schaeffer)
- “A Moderated Mediation Model of Technology Roadmapping and Innovation: Roles of Corporate Foresight and Organizational Support”, *Journal of Engineering and Technology Management*, 2019, 52: 61-73. (With Jeewhan Yoon, SungWon Han, and YoungJun Kim)
- “Smart Specialization as a Tool to Foster Innovation in Emerging Economies: Lessons from Brazil”, *Foresight and STI Governance*, 2019, 13(1): 35-47. (With Anna Bosch)
- “Commercialization of Transferred Public Technologies”, *Technological Forecasting and Social Change*, 2019, 138: 10-20. (With Jae-Woong Min and YoungJun Kim)
- “The Singular Economy: End of the Digital/Physical Divide”, *STI Policy Review*, 2019, 9(1): 1-25. (With Ann Meceda)
- “Technology Transfer and Commercialization by Universities and PRIs: Benchmarking OECD Country Policy Approaches”, *Economics of Innovation and New Technology*, 2018, 27(5-6): 510-530. (With Sandrine Kergroach and Dirk Meissner)
- “Corporate Foresight and Innovation: The Effects of Integrative Capabilities and Organizational Learning”, *Technology Analysis and Strategic Management*, 2018, 30(6): 633-645. (With Jeewhan Yoon, YoungJun Kim and SungWon Han)
- “On the Location of Knowledge-Intensive Entrepreneurship in Developing Countries: Lessons from São Paulo, Brazil”, *Entrepreneurship & Regional Development*, 2018, 30(5-6): 612-638. (With Bruno Brandão Fischer and Sérgio Queiroz)
- “Quality Comes First: University-Industry Collaboration as a Source of Academic Entrepreneurship in a Developing Country”, *Journal of Technology Transfer*, 2018,

43(2): 263-284. (With Bruno Brandão Fischer, Paola Rücker Schaeffer, and Sérgio Queiroz)

“University-Industry R&D Cooperation in Brazil: A Sectoral Approach”, *Journal of Technology Transfer*, 2018, 43(2): 285-315. (With Diego R. de Moraes Silva and André T. Furtado)

“Determinants of Young Firms’ Innovative Performance: Empirical Evidence from Europe”, *Research Policy*, 2017, 46: 1312-1326. (With Aimilia Protogerou and Yannis Caloghirou)

“Towards A Broad Understanding of Innovation - Implications for Innovation Policy”, *Journal of Technology Transfer*, 2017, 42(5): 1184-1211. (With Dirk Meissner and Wolfgang Polt)

“Technology Foresight in Transition”, *Technological Forecasting and Social Change*, 2017, 119: 211-218. (With Ian Miles, Dirk Meissner, and Elias Carayannis)

“Context Appropriate Technologies for Development: Choosing for the Future”, *Technological Forecasting and Social Change*, 2017, 119: 219-226. (With David Feige)

“The Impact of Government R&D Subsidy on Firm Performance: Evidence from Korean SMEs”, *Small Business Economics*, 2017, 48(2): 345-360. (With Beom Cheol Cin and YoungJun Kim)

“Does Exposure to University Research Matter? Evidence from Europe”, *Asian Research Policy*, 2016, 7(1). (With Yannis Caloghirou and Aimilia Protogerou)

“Market, Firm and Project-Level Effects on the Innovation Impact of Collaborative R&D Projects”, *Journal of the Knowledge Economy*, 2015: 1-20. (With Konstantinos C. Kostopoulos, Yiannis Spanos, Klas Eric Soderquist, and Gregory Prastacos)

“From Research Project to Research Portfolio: Meeting Scale and Complexity”, *Foresight and STI Governance*, 2015, 9(2): 38-43. (With Jonathan Linton)

“Strategic Technology Alliances and Networks”, *Economics of Innovation and New Technology*, 2015, 24(5): 490-509. (With Lorenzo Zirulia)

- “Antecedents of Innovation Impacts in Publicly Funded Collaborative R&D Projects”, *Technovation*, 2015, 36-37: 53-64. (With Yiannis Spanos and Irimi Voudouris)
- “Managing Risk in the Formative Years: Evidence from Young Enterprises in Europe”, *Technovation*, 2014, 34(8): 454-465. (With YoungJun Kim)
- “Cooperation in the Formative Years: Evidence from Young Enterprises in Europe”, *European Management Journal*, 2014, 32(5): 795-805. (With YoungJun Kim)
- “Academic Entrepreneurship: An American (Individualistic) Perspective”, *Asian Research Policy*, 2013, 4(2). (With James D. Kettenhofen)
- “Network Structure and Robustness: Lessons for Research Programme Design,” *Economics of Innovation and New Technology*, 2013, 22(4): 392-411. (With Koichiro Okamura)
- “Social Networks in R&D Program Evaluation”, *Journal of Technology Transfer*, 2013, 38(5): 577-606.
- “Scale and Performance in Publicly Funded Collaborative Research and Development”, *R&D Management*, 2012, 42(5): 494-513. (With Yiannis E. Spanos)
- “The Value of Flexibility in Adapting to Climate Change: A Real Options Analysis of Investments in Coastal Defense”, *Climate Change Economics*, 2012, 3(2): 1-33. (With Peter Linquiti)
- “Uncertainty, Networks and Real Options”, *Journal of Economic Behavior and Organization*, 2010, 75(3): 523-541. (With Isabelle Bajeux-Besnainou and Sumit Joshi)
- “Exclusivity in Licensing Alliances”, *Strategic Management Journal*, 2010, 32(2): 159-186. (With Deepak Somaya and Young-Jun Kim)
- “Networked Research: European Policy Intervention for Information & Communication Technologies”, *Technology Analysis and Strategic Management*, 2009, 21(7): 833-857. (With Stefano Breschi, Franco Malerba, Lorenzo Cassi)
- “Research Partners”, *International Journal of Technology Management*, 2009, 46(3/4): 280-306. (With Koichiro Okamura)

- “Research Networks as Infrastructure for Knowledge Diffusion in European Regions”, *Economics of Innovation and New Technology*, 2008, 17(7/8): 663-676. (With Nicolletta Corrocher, Franco Malerba, Lorenzo Cassi)
- “The Impact of EU-funded Research Networks on Knowledge Diffusion at the Regional Level”, *Research Evaluation*, 2008, 17(4): 283-293. (With Nicolletta Corrocher, Franco Malerba, Lorenzo Cassi)
- “Risk Financing for Knowledge-Based Enterprises: Mechanisms and Policy Options”, *Science and Public Policy*, 2007, 34(7): 475-488. (With Guy Ben-Ari)
- “Real options framework to assess public research investments”, *Science and Public Policy*, 2007, 34(10): 699-708. (With Chintal Desai)
- “S&T parks and business incubators in middle-sized countries: The case of Greece”, *Journal of Technology Transfer*, 2007, 32(5): 525-544. (With Evangelia Sofouli)
- “Intellectual property protection mechanisms in research partnerships”, *Research Policy*, 2006, 35(6): 825-38. (With Henry Hertzfeld and Al Link)
- “Determinants of technology licensing”, *Managerial and Decision Economics*, 2006, 27(4): 235-49. (With YoungJun Kim)
- “Technology licensing partners”, *Journal of Economics and Business*, 2006, 58(4): 273-89. (With YoungJun Kim)
- “European alliance and knowledge networks”, *Technology Analysis and Strategic Management*, 2006, 18(5): 535-60. (With Koichiro Okamura)
- “Managing large research partnerships”, *Technovation*, 2006, 26(10): 1101-10h. (With Richard N. Spivack)
- “Multiproject contact in research joint ventures: Evidence and theory”, *Journal of Economic Behavior and Organization*, 2005, 58(4): 459-86. (With Christopher Snyder)
- “Evaluating the European Union’s Research Framework Programmes: 1999-2003”, *Science and Public Policy*, 2005, 32(5): 399-406. (With Erkki Ormala)
- “Antitrust policy, interface compatibility standards, and information technology”, *Knowledge, Technology & Policy*, 2005, 18(2): 126-47. (With Thomas Hemphill)

- “Research joint ventures: A critical survey of theoretical and empirical literature”, *Journal of Economic Surveys*, 2003, 17(4): 541-70. (With Yannis Caloghirou and Stavros Ioannides.)
- “Strategic Research Partnerships: A Managerial Perspective”, *Technology Analysis and Strategic Management*, 2003, 15(2): 255-71. (With Thomas Hemphill.)
- “The performance of research partnerships”, *Managerial and Decision Economics*, 2003, 24(2-3): 85-99. (With Yannis Caloghirou and George Hondroyannis.)
- “Building competitive firms: Technology policy initiatives in Latin America”, *Technology in Society*, 24, 2002.
- “Science and technology policies towards research joint ventures”, *Science and Public Policy*, 2002, 29(2): 82-94. (With Yannis Caloghirou and Stavros Ioannides.)
- “Toward an integrated model of strategy formulation for strategic technical alliances”, *International Journal of Technology Transfer and Communications*, 1(3), 2002. (With Chung-Shing Lee.)
- "Convergence to symmetry in dynamic strategic models of R&D: The undiscounted case," *Journal of Economic Dynamics and Control*, 2001, 25(12): 1881-97. (With Sumit Joshi.)
- “University-industry cooperation in the context of the European Framework Programmes”, *Journal of Technology Transfer*, 2001, 26(1-2): 153-61. (With Yannis Caloghirou and Aggelos Tsakanikas.)
- “Apprentissage et cooperation a travers la recherche-developpement”, *Technologies, Ideologies, Pratiques*, XIV(1), 2000. (With Rigas Arvanitis.)
- “Technology Policy in the United States and the European Union: Shifting Orientation Towards Technology Users,” *Science and Public Policy*, 2000, 27(2): 97-108.
- “Research Partnerships,” *Research Policy*, 2000, 29(4-5): 567-86. (With John Hagedoorn and Albert Link.)
- “Multimarket contact and inter-firm cooperation in R&D,” *Journal of Evolutionary Economics*, 2000, 10(1-2): 243-71.



- “Participation of European Union Companies in US Research Joint Ventures”, *The IPTS Report*, 2000. (With Albert Link.)
- “Towards the knowledge-based economy: United States and its APEC partners”, *Journal of APEC Studies*, 1(2), 2000. (With Adam Tolnay)
- “How do participants in research joint ventures diversify?”, *The Review of Industrial Organization*, 1999, 15(3): 263-81.
- "R&D project selection in the public sector," *Journal of Policy Analysis & Management*, 1998, 17(4): 621-38. (With Henry R. Hertzfeld.)
- “Strategic alliances in information technology and developing country firms: Policy perspectives,” *Science, Technology and Society*, 3(1), 1998.
- “Research joint ventures: The use of databases”, *The IPTS Report*, May 1998.
- "Research joint ventures in the United States", *Research Policy*, 1997, 26(4-5): 577-95.
- "Process innovation in small firms: Case studies on CNC machine tools," *Technovation*, 1997, 17(8): 427-38. (With Lan Xue.)
- "Strategic alliances in information technology and developing country firms I: Recent evidence," *World Development*, 1997, 25(5): 657-80. (With Stratos P. Safioleas.)
- "Two-stage R&D competition: An elasticity characterization," *Southern Economic Journal*, 1996, 62(4): 930-37. (With Sumit Joshi.)
- "New directions for U.S. science and technology policy: The view from the R&D assessment front," *Science and Public Policy*, 22(1), 1995.
- "Inter-firm cooperation with imperfectly appropriable research," *International Journal of Industrial Organization*, 1994, 12(3): 413-35.
- "Cournot equilibrium with imperfectly appropriable R&D," *Journal of Industrial Economics*, 1994, 42(1): 79-92. (With R. David Simpson.)
- "Emerging patterns of multinational enterprise operations in developed market economies: Evidence and policy," *Review of Political Economy*, 1990, 2(2): 188-220.

iii. Refereed Paper Series

“Partnerships and Networking in Science and Technology for Development”, Technology for Development Paper Series, United Nations Conference on Trade and Development, Geneva: UNCTAD, 2002 (UNCTAD/ITE/TEB/11).

iv. Book Chapters

“United States of America” (With Brennan Hoban and Connor Rabb)  
In UNESCO Science Report 2021, Geneva: UNESCO, forthcoming April 2021.

“An Institutional Perspective on the Development of the Venture Capital Market in Brazil”  
(With Irineu de Souza Lima Júnior and Sérgio Robles Reis de Queiroz)  
In Duc Khuong Nguyen, Vi Dzung Ngo, and Ngoc Thang Nguyen (eds) Entrepreneurial Finance, Innovation and Development: A Research Companion, Routledge/Taylor & Francis Group, forthcoming.

“Technology Upgrading and Economic Catch-Up: A Context, Overview and Conclusions”  
(With Jeong-Dong Lee, Keun Lee, Dirk Meissner, and Slavo Radosevic)  
“Macro and Micro Foundations for Technology Upgrading and Innovation: The Case of Shipbuilding and Offshore Industry in Brazil” (With André Cherubini Alves and Paulo Antônio Zawislak)  
In Jeong-Dong Lee, Keun Lee, Dirk Meissner, Slavo Radosevic and Nicholas S. Vonortas (eds) Technology Upgrading and Economic Catch-Up: Challenges for Emerging Economies, Oxford University Press, forthcoming June 2021.

“Technology Upgrading and Knowledge Triangle in Brazil” (With Bruno Brandão Fischer and Paola Rücker Schaeffer)  
in Jaroslav Kutsminov, Leonid Gokhberg, Mario Cervantes, Silvia Schwar-Steger, and Dirk Meissner (eds) Knowledge Triangle, Springer, forthcoming 2021.

“Internal Barriers to Innovation and University-Industry Cooperation among Technology-based SMEs in Brazil” (With Diego R. de Moraes Silva and André T. Furtado)  
In Pedro de Faria, Florian Noseleit, and Bart Los (eds) The Influence of Internal Barriers on Open Innovation, Routledge, forthcoming March 2021.

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“Corporate Foresight and Innovation: The Effects of Integrative Capabilities and Organizational Learning” (With Jeewhan Yoon, YoungJun Kim, and SungWon Han)  
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“Effects of University Research Exposure on Young Company Behavior and Performance” (With Yannis Caloghirou and Aimilia Prorogerou)  
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“Protein Crystallization for Drug Development: A Prospective Empirical Appraisal of Economic Effects of ISS Microgravity”  
in Patrick Beshia and Alexander MacDonald (eds) Economic Development of Low Earth Orbit, NASA, 2016.

“Innovation Systems of Ethanol in Brazil and the United States: Making a New Fuel Competitive” (With Luciano Cunha de Sousa, Inaiê Takaes Santos, and Demétrio Florentino de Toledo Filho)  
in Sergio L. M. Salles-Filho, J. M. J. Silveira, S. Trindade, and M. G. D. Fonseca (eds) Futures of Bioethanol: A Global Perspective, Elsevier, 2016.

“Managing Risk in New Entrepreneurial Ventures” (With YoungJun Kim)  
in Yannis Caloghirou, Franco Malerba, Maureen McKelvey, and Slavo Radosevic (eds), Dynamics of Knowledge-Intensive Entrepreneurship: Business Strategy and Public Policy, Routledge, 2016.

“Research and Technology Alliances”  
in David Audretsch, Christopher Hayter, and Albert N. Link (eds.) Concise Guide to Entrepreneurship, Technology and Innovation, Edward Elgar, 2015.

(a) “Introduction” (with Charles Edquist and Jon Mikel Zabala)  
(b) “Conclusions” (with Jacob Edler, Charles Edquist and Jon Mikel Zabala)  
(c) “Innovative Public Procurement in the United States”  
in Jacob Edler, Charles Edquist, Nicholas S. Vonortas and Jon Mikel Zabala (eds), Public Procurement for Innovation, Edward Elgar, 2015.

- (a) “Introduction”
- (b) “University Entrepreneurship” (with Cherilyn E. Pascoe)
- (c) “Strategic Alliances / Knowledge-Intensive Partnerships” (with Timothy Williams)  
in Nicholas S. Vonortas, Phoebe C. Rouge and Anwar Aridi (eds), Innovation Policy: A Practical Introduction, Springer, 2014.

“The Value of Flexibility in Adapting to Climate Change: A Real Options Analysis of Investments in Coastal Defense” (With Peter Linquiti)  
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- (a) “Introduction” (with Albert N. Link)
- (b) “Network Analysis”  
in Albert N. Link and Nicholas S. Vonortas (eds), The Theory and Practice of R&D Program Evaluation, Edward Elgar, February 2013.

“Knowledge-Intensive Entrepreneurship in Europe: Some Policy Implications”, in Franco Malerba (ed), Knowledge-Intensive Entrepreneurship and Innovation Systems, Routledge, 2010.

“Scale and Scope in Research”, in Henri Delanghe, Ugur Muldur, and Luc Soete (eds), European Science and Technology Policy: Towards Integration or Fragmentation?, Edward Elgar, 2009.

- (a) “Innovation Networks in Industries and Sectoral Systems: An Introduction” (with Franco Malerba);
  - (b) “Partnership Networks and Knowledge Networks in Five Sectors” (with Koichiro Okamura);
  - (c) “Innovation Networks in Industries”; “European Policy Favoring Networks in ICT” (with Stefano Breschi, Lorenzo Cassi, and Franco Malerba);
  - (d) “Evaluating the Links Between Research and Deployment Networks of Innovation in Information Society in Europe” (with Lorenzo Cassi, Nicoletta Corrocher, and Franco Malerba);
- in Franco Malerba and Nicholas S. Vonortas (eds), Innovation Networks in Industries, Edward Elgar, 2009.

- (a) “Introduction” (with Goran Marklund and Charles Wessner);
- (b) “Conclusion” (with Goran Marklund and Charles Wessner);

(c) “European Research Framework Programmes in a Global Context: Targets, Impacts, Lessons for the Future”;  
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- (a) “Introduction” (with Yannis Caloghirou and Anastasia Constantellou);
  - (b) “Theoretical Foundations and Key Concepts” (with Yannis Caloghirou and Anastasia Constantellou);
  - (c) “An Operational Framework for the Study of Knowledge Flows” (with Yannis Caloghirou and Anastasia Constantellou);
  - (d) “Knowledge Flows in European Industry: An Overview of Evidence from Surveys and Case Studies” (with Yannis Caloghirou and Anastasia Constantellou);
  - (e) “Overview of Innovation Policy Affecting Knowledge Flows in EU Member States” (with Yannis Caloghirou and Anastasia Constantellou);
  - (f) “Towards a New Agenda for Enhancing Knowledge Flows in Europe” (with Yannis Caloghirou and Anastasia Constantellou);
- in Yannis Caloghirou, Anastasia Constantellou, and Nicholas S. Vonortas (eds.) Knowledge Flows in European Industry: Mechanisms and Policy Implications, Routledge, 2006. (With Yannis Caloghirou and Anastasia Constantellou.)

“Collaborate to collude? Multimarket and multiproject contact in R&D”, chapter in Peter Grossman (ed.) How Cartels Endure and How They Fail: Studies of Industrial Collusion, Edward Elgar, 2004. (With Yongsuk Jang.)

“Business model innovation in the digital economy”, in Georgios I. Doukidis, Nikolaos Mylonopoulos and Nancy Pouloudi (eds.), Social and Economic Transformation in the Digital Era, IDEA Group Publishing, 2004. (With Chung-Shing Lee.)

“Real options for public sector R&D investments”, in Stephan Kuhlmann and Philip Shapira (eds.), Learning from Science and Technology Policy Evaluation: Experiences from the United States and Europe, Edward Elgar, 2004. (With Matthew Lackey.)

“US policy towards research joint ventures”, in Yannis Caloghirou, Stavros Ioannides and Nicholas S. Vonortas (eds.), Industrial Collaboration in Research and Development, Northampton, MA: Edward Elgar, 2004.

“Towards the knowledge-based economy: United States and its APEC partners”, in Albert N. Link and Maryann Feldman (eds.) *Technology Policy for the Knowledge-Based Economy*, Kluwer Academic Publishers, 2001. (With Adam Tolnay.)

“Multimarket contact and inter-firm cooperation in R&D”, in D. C. Mueller and U. Cantner (eds.) *Capitalism and Democracy in the 21<sup>st</sup> Century*, Heidelberg: Physica-Verlag, 2001.

"Dynamic cooperation in R&D with research externalities," in J. Poyago-Theotoky (ed.) *R&D Cooperation: Theory and Policy*, Macmillan, 1997. (With Sumit Joshi.)

v. Edited Paper Collections in Journals

“Local Capacity, Innovative Entrepreneurial Places and Global Connections”, editor, *Journal of Technology Transfer*, forthcoming. (Co-editors Keun Lee, Jeong-Dong Lee, Dirk Meissner, Slavo Radosevic)

“Innovation in State-Owned Enterprises: Implications for Technology Management and Industrial Development”, editor, *Industry and Innovation*, 2019, 26(2). (Co-editors Dirk Meissner and David Sarpong)

“International Perspectives on Innovation”, editor, *Journal of Technology Transfer*, 2018, 43(2).

“Technology Foresight in Developing and Transition Countries”, editor, *Technological Forecasting and Social Change*, 2017, 119. (Co-editors Ian Miles, Dirk Meissner, and Elias Carayannis)

“Evidence Never Lies: New Frontiers in Evaluation”, editor, *Science and Public Policy*, 34(10), 2007. (Co-editors, Klaus Zinoecker and Michael Stampfer)

“Evaluation of European Union Framework Programmes: The 2004 Five-Year Assessment”, editor, *Science and Public Policy*, 32(5), 2005. (Co-editor S. Hinze).

“Technology Alliances: Strategy, Evolution, Knowledge Management”, editor, *International Journal of Technology Management*, 2004, 27(8): 689-93. (Co-editor B. Bowonder)

“Strategic Research Partnerships: Economic, Managerial, and Policy Implications”, editor, *Technology Analysis and Strategic Management*, 2003, 15(2): 155-57. (Co-editors John Hagedoorn and Albert N. Link.)

“Technology Transfer and Learning Through Strategic Technical Alliances: International Experiences”, editor, *Journal of Technology Transfer*, 2000, 25(1): 9-12. (Co-editor Rigas Arvanitis.)

vi. Invited Articles

“Introduction”, Special Issue “Innovation in State-Owned Enterprises: Implications for Technology Management and Industrial Development”, *Industry and Innovation*, 2019, 26(2). (With Dirk Meissner and David Sarpong)

“The Role of Universities in the Knowledge Triangle”, *Foresight and STI Governance*, 2017, 11(2): 6-9.

“Innovation als Resultat der EU-Rahmenprograme fr Forschung und Technologische Entwicklung? Eine Untersuchung der Effekte auf die Forschungs und Innovationsaktivitaten der Teilnehmer” *Forschung: Politik-Strategie-Management*, 2009: 2: 31-34. (With Wolfgang Polt and Robbert Fisher.)

"Risk Financing for Knowledge-Based Enterprises", Featured Story, Management Science Laboratory, Athens University of Economics and Business, July-August 2007. (<http://www.msl.aueb.gr>)

“Strategic innovation alliances and science and technology policy”, *Encyclopedia of Life Support Systems* (UNESCO), 2003. (With Patrick Murphy)

“Information technology: Developing country firms enter the global network”, *iMP*, March, 2000. (<http://www.cisp.org>) (With Rebecca Dodder)

“Intellectual property rights and knowledge dissemination in research joint ventures,” Commentary, *Science Communication*, 19(1), 1997.

vii. Conference Proceedings

- “The Use of Research Portfolios in Science Policy”, Conference Proceedings Austrian EU Council Presidency Conference “Impact of R&D Policy at the Crossroads: Policy Design, Implementation, Evaluation”, Vienna, Austria, 2019. (With Ismael Ràfols)
- “International Research-based University Collaboration”, Conference Proceedings XVI April International Academic Conference on Economic and Social Development, Section Science and Innovation, National Research University Higher School of Economics, Moscow, Russian Federation, 2015. (With Antonina Gromyko)
- “Technology Foresight in Developing Countries”, Conference Proceedings Science, Technology and Innovation Policy: Foresight, Growth, Roadmaps, Sectoral Impact Assessment and Alliances, Indian National Science Academy, New Delhi, 2015. (With David Feige)
- “A Text Mining Model for Strategic Alliance Discovery”, 45<sup>th</sup> Hawaii International Conference on System Sciences (HICSS), Hawaii, USA, 2011.
- “Trends and Perspectives in the Era of Globalization”, Conference Proceedings “Greek Manufacturing: Towards the Knowledge Society”, Technical Chamber of Greece, Athens, Greece, 2006.
- “Determinants of technology licensing”, in D. H. Nagao (ed.) Academy of Management Best Paper Proceedings of the Sixty-fourth Annual Meeting, 2004, A1-A6. (With Young Jun Kim)
- “Technology Licensing”, in Patents, Innovation and Economic Performance: OECD Conference Proceedings, Directorate for Science, Technology and Industry, Organization for Economic Cooperation and Development, Paris: OECD, 2004.
- “Technology Policy in the United States and the European Union”, in Science and Technology Policies for the 21<sup>st</sup> Century, Conference Proceedings, Economic and Social Commission for Western Asia (ESCWA), United Nations, 1999.
- "Effective use of technical resources: Electromechanical engineering," in Herbert I. Fusfeld (ed.) Effective Use of Global Technical Resources, Center for Science and Technology Policy, Rensselaer Polytechnic Institute, 1993.
- "Inter-firm cooperation in imperfectly appropriable research," in S. Okamura, K. Murakami and I. Nonaka (eds.) Science and Technology Policy Research: What Should Be Done?



What Can Be Done?, National Institute of Science and Technology Policy (STA - Japan), 1992.

"Economic interdependence among developed market economies and multinational enterprises," in Herbert I. Fushfeld, ed., Changing Global Patterns of Industrial Research and Development, Center for Science and Technology Policy, Rensselaer Polytechnic Institute, 1989.

"The role of small and medium size enterprises in collective activities," in Herbert I. Fushfeld and Richard R. Nelson, eds., Cooperation and International Competitiveness, Center for Science and Technology Policy, Rensselaer Polytechnic Institute, 1988. (With Sigvard Tomner).

viii. Reports

Analyzing the Deployment of Blockchain and Distributed Ledger Technologies in the Financial Sector, prepared as background document for the World Bank flagship report "Europe 4.0: Addressing the Digital Dilemma", September 2019. (With Pierre Padilla, Veronica Belousova, Yury Dranev, and Emmanuel Boudard)

Transformação Digital de Campinas, Projeto BR-T1374, Interamerican Development Bank, November 2018. (With Giancarlo Nuti Stefanuto and Camila Zeitoum)

The Use of Research Portfolios in Science Policy, Science Policy Research Report, US National Science Foundation, January 2018. (With Ismael Ràfols)

An Economic Appraisal of Microgravity Protein Crystallization for Drug Development, US National Aeronautics and Space Administration (NASA), June 2017. (With Troy J. Scott)

Protein Crystallization for Drug Development: A Prospective Empirical Appraisal of Economic Effects of ISS Microgravity, US National Aeronautics and Space Administration (NASA), 2015.

Fostering Entrepreneurship in Armenia, Directions in Development, core contributor, Smita Kuriakose (ed.), Washington, DC: The World Bank, 2013.

Fostering Entrepreneurship in Azerbaijan, Directions in Development, core contributor, Smita Kuriakose (ed.), Washington, DC: The World Bank, 2013.

Fostering Entrepreneurship in Georgia, Directions in Development, core contributor, Smita Kuriakose (ed.), Washington, DC: The World Bank, 2013.

“Promoting Strategic Alliances for Innovation Capacity”, chapter contribution to the Technology and Innovation Report 2012 Exploring the South for Technology and Innovation Capacity, United Nations Conference on Trade and Development (UNCTAD).

Innovation Policy Handbook, Washington DC: The World Bank, 2012. (With Anwar Aridi et al.)

ICT Network Impact on Structuring a Competitive European Research Area, European Commission, DG Information Society and Media, 2011. (With Stefano Breschi, Robbert Fisher, Franco Malerba, Koichiro Okamura, Siemon Smid)

Public Procurement and Innovation in the United States, Embassy of Finland, 2011.

Strategic Plan to Establish the George Washington University Science Policy Institute, Report to the Vice President for Research, The George Washington University, 2010. (Panel Chair)

Scale and Scope as Drivers of the European Research Area, European Commission, DG Research, 2010. (With Wolfgang Polt, Robbert Fisher, Yiannis Spanos, Michael Dinges, Babis Ipektsides, Maria Pateraki)

Trends and Evolution of the EU ICT Research and Deployment Landscape, European Commission, DG Information Society and Media, 2010. (With Franco Malerba, Nicoletta Corrocher, Lucia Cusmano)

The Contribution of the Athens International Airport to the Greek Economy, Athens University of Economics and Business, Athens, Greece, 2009. (In Greek) (With Gregory Prastacos, Costas Costopoulos, and Nicholas Stroblos)

Evaluation Manual for ICT Research in FP7: Joint Technology Initiatives, European Commission, DG Information Society and Media, 2009. (With Michael Dinges and Wolfgang Polt)

Participation in the Sixth Framework Programme for Research, European Commission, DG Research, 2008. (FP6 Evaluation Panel)

Analysing and Evaluating the Impact on Innovation of Publicly Funded Research Programmes: Lot 1 – Evaluation of the Impact on Innovation of Projects of Community 5<sup>th</sup> and 6<sup>th</sup> Framework Programmes”, European Commission, DG Enterprise, 2008. (With Robbert Fisher and Wolfgang Polt.)

Real Options for Research Investment Portfolio Analysis at the U.S. Department of Energy, Office of Science, US Department of Energy, 2008.

Research on the Factors of Success of Public Policies Regarding Science, Technology and Innovation, Special Secretariat for Competitiveness, Greek Ministry of Development, May 2007.

Biodefense and Homeland Security Technology Development: Analysis of U.S. Policies and Process of Selection, International Access Corporation for the Ministry of Economics, Trade and Industry, Japan, March 2007.

Networks of Innovation in Information Society: Development and Deployment in Europe, Final Report, European Commission, DG Information Society and Media, 2007. (With Franco Malerba, Nicoletta Corrocher, Lorenzo Cassi, and Caroline Wagner.)

IST Evaluation and Monitoring, Final Report, European Commission, DG Information Society and Media, forthcoming 2007. (With Wolfgang Polt)

Innovation Models for Aeronautics Technologies, National Research Council of the National Academies, Washington, DC:National Academies Press, 2006 (Panel Report)

Evaluation of Progress Towards a European Research Area for Information Society Technologies, Final Report, European Commission, DG Information Society and Media, January 2006. (With Franco Malerba, Stefano Breschi, and Lorenzo Cassi)

Developing a Methodological Framework for High Quality Assessment of the IST-RTD Effects (Results and Impacts) at the “Strategic Objective” Level, Final Report, European Commission, DG Information Society and Media, Contract 29000, November 2005. (Group report led by Technopolis)

Five-Year Assessment of the Community Research Framework Programme 1999-2003, Final Report of the High-Level Panel to Evaluate the European Union’s Framework Programme for RTD, European Commission, DG Research, February 2005. (Panel member and Rapporteur)

“Assessment of the Impact of Actions Completed under the 5<sup>th</sup> Community Research Framework Programme: Survey for the Five-Year Assessment of Community Research Activities 1999-2003”, European Commission, DG Research, 2004. (With Atlantis Research, Joanneum Research, Ken Guy, and Wolfgang Polt)

*The Emergence of New Industrial Activities: Fusing Services and Manufacture*, Final Report of the TENIA Project, European Commission, DG Research, July 2004. (With Yannis Caloghirou and Stavros Ioannides)

*Management of Intellectual Property in Publicly-Funded Research Organizations: Towards European Guidelines*, co-author, Expert Group (ETAN) Report, European Commission, DG Research, 2004 (EUR 20915 EN).

*Technology Licensing*, Organization for Economic Cooperation and Development, Paris: OECD, October 2003.

*Information Infrastructure for Healthcare: Case Studies from a Focused Program*, Advanced Technology Program, National Institute for Standards and Technology, Gaithersburg: NIST, June 2003. (With Richard Spivack.)

*Paradigm Shifts in Science, Technology and Innovation Policy of Leading and Catching-up Countries: The case of the United States and Korea*, Science and Technology Policy Institute (STEPI), Seoul, Korea, 2003. (With Yongsuk Jang)

*Performance Measurement for Government R&D Programs: In Search of Best Practices*, Korea Institute for Science and Technology Evaluation and Planning (KISTEP), Seoul, Korea, December 2002. (With Yongsuk Jang)

*Trends in Life Sciences – U.S. Market*, Report to the Japan External Trade Organization (JETRO), International Access Corporation, with the collaboration of the Center for International Science and Technology Policy, Washington, D.C. October 2002.

*The U.S. Biotechnology Industry*, Report to Japan Industrial Policy Research Institute (JIPRI), International Access Corporation, with the collaboration of the Center for International Science and Technology Policy, Washington D.C., May 2002.

*Role and Strategic Use of Intellectual Property Rights in International Research Collaborations*, co-author, Expert Group (ETAN) Report, European Commission, DG Research, EUR 20230, April 2002.

Assessing the Socio-economic Impacts of the Framework Programme, chapter author, Report coordinated by the Policy Research in Engineering, Science and Technology (PREST) Unit, the University of Manchester, for the European Commission, DG Research, March 2002.

Methodology for the Assessment of Performance of Selected Existing Industries, Sectoral Issues and Policy Division, United Nations Economic and Social Commission for Western Asia, United Nations, June 2001.

Innovation-Related Knowledge Flows in European Industry: Extent, Mechanisms, Implications, Final Report of the KNOW Project, Targeted Socio-Economic Research Programme (TSER), European Commission, DG Research, August 2001. (With Yannis Caloghirou and Natasha Constantelou.)

European Presence in US-Based Research Joint Ventures, European Commission, DG Research, Improving Human Research Potential and the Socio-Economic Research Base, July 2001.

Priority Research Areas and Operational Systems of Major Public Research Institutes in the United States, Science and Technology Policy Institute (STEPI), Seoul, Republic of Korea, July 2001. (With Yongsuk Jang.)

Strategic Research Partnerships: Results of a Workshop, Science Resource Studies Division, US National Science Foundation, October 2000. (With John Hagedoorn and Albert Link.)

Technology and Innovation Policy Initiatives in the Americas, Sectoral Issues Policy Division (SIPD), Economic and Social Commission for Western Asia (ESCWA), United Nations, Beirut, August 2000.

Science and Technology Policy Towards Research Joint Ventures, Final Report of the STEP-TO-RJVs Project SOE1-CT97-1075, Targeted Socio-Economic Research Programme (TSER), European Commission, DG Research, March 2000. (With Yannis Caloghirou.)

Participation of European Corporations in US-Based Research Joint Ventures, European Commission, June 1999. (With Albert Link.)

*Business Diversification Through Research Joint Ventures: Advanced Technology Program*, National Institute of Standards and Technology, March 1999.

*A Survey of High-Technology Small Firms*, U.S. Small Business Administration, Fall 1999.  
(With Joseph Cordes and Henry Hertzfeld.)

*Indicators for Science, Technology and Innovation in Europe and in Greece: Organization of Statistical Information*, National Statistical Agency of Greece, Fall 1998. (In Greek.)

*Inter-Firm Strategic Alliances in Information Technology: The Case of Developing Countries*, Private Sector Development Department, The World Bank, September 1995.  
(With Stratos P. Safioleas.)

*The Implementation of Process Innovation in Small Firms: Case Studies on CNC Machine Tools*, Dilthey Fellowship Committee, The George Washington University, November 1994. (With Sotiris Papantonopoulos and Lan Xue.)

*Factors Affecting Demand for NIST Calibration Services*, National Institute of Standards and Technology, September 1994. (With Joseph J. Cordes.)

*The Changing Economic Context: Strategic Alliances Among Multinationals*, Center for Science and Technology Policy, Rensselaer Polytechnic Institute, 1989.

*Export Controls and the International Technical System: The U.S. Semiconductor Industry*, Center for Science and Technology Policy, Rensselaer Polytechnic Institute, 1988.  
(With Carmela S. Haklisch.)

*Export Controls and the International Technical System: The U.S. Machine Tool Industry*, Center for Science and Technology Policy, Rensselaer Polytechnic Institute, 1987.  
(With Carmela S. Haklisch.)

ix. Book Reviews

“Public Accountability: Evaluating Technology-Based Institutions” by Albert N. Link and John Scott (Kluwer Academic Publishers), *The Journal of Technology Transfer*, 2000.

**UNPUBLISHED PAPERS**

- “Personal and Social Proximity: Shaping Leadership in a Free Software Project”, Basic Research Program working paper, WP BRP84/STI/2018, Institute for Statistical Studies and Economics of Knowledge, National Research University Higher School of Economics, Moscow, Russian Federation, September 2018. (With Clement Bert-Erboul)
- “Networks and Strategic Options for Innovative performance in Knowledge-Intensive Enterprises”, George Washington University, April 2012. (With Molly K. McPherson)
- “Networks and Knowledge-Intensive Entrepreneurship in Practice II: Technology-based Strategic Alliances in Industry”, George Washington University, April 2012.
- “Partnerships for Growth”, Center for International Science and Technology Policy, George Washington University, December 2005.
- “Strategic alliance formation in the business cycle”, Center for International Science and Technology Policy, George Washington University, 2004. (With John Hagedoorn)
- “Assessing industrial performance”, Center for International Science and Technology Policy, George Washington University, May 2002. (With Robin Auger)
- "Asymptotic behavior of dynamic strategic models of R&D: The discounted case," Department of Economics, The George Washington University, February 2000. (With Sumit Joshi.)
- "Characterization of Markov perfect equilibria in a dynamic model of R&D," Department of Economics, The George Washington University, January 1997. (With Sumit Joshi).
- "Strategic alliances in information technology and developing country firms," Occasional Paper #29, Private Sector Development Department, *The World Bank*, February 1997. (With Stratos P. Safioleas.)
- "Structural change and competitiveness: Manufacturing in Spain, Portugal and Greece," Center for International Science and Technology Policy, The George Washington University, March 1996. (With Yannis Caloghirou, Angeliki Mourtzikou and Lefteris Papayannakis.)
- "Disconnected: Economics and the process of technological advance," Center for International Science and Technology Policy, The George Washington University, October

1996.

"Dynamic competition and cooperation with research externalities," Department of Economics, The George Washington University, 1993. (With Sumit Joshi.)

"Small and medium size enterprises in the context of cooperative industrial research and international competitiveness," GEA working paper #87-02, Department of Economics, New York University, 1987.

"Jumping over national borders: a partial equilibrium model of the multinational corporations decision to invest," mimeo, Department of Economics, New York University, 1986.

"Technological aspects of transnational corporations' involvement in South-South trade," paper prepared for the South-South Trade Project, United Nations, 1984.

### **IN PROGRESS**

#### i. Papers / Reports / Manuscripts

"Determinants of Manufacturing Exports Sophistication: Do Intangible Inputs and Global Value Chain Participation Matter?" (With Aggelos Tsakanikas, Yannis Caloghirou, and Petros Dimas)

"Mapping the Evolution of Global Value Chains and Innovation Systems". (With Carlo Pietrobelli and Antonio Vezzani)

"Deployment of Blockchain and Distributed Ledger Technologies in the Financial Sector". (With Pierre Padilla, Veronica Belousova, Yury Dranev, and Emmanuel Boudard)

"Dynamics of Network Communities in the Evolution of Innovation Ecosystems", research paper. (With Yuan Zhou)

Chapter for "Encyclopedia on the Economics of Knowledge and Innovation", Cristiano Antonelli (ed.), Edward Elgar publishers.

"Mission-Oriented STI Policies", research paper. (With Wolfgang Polt and Hanna Kuittinen)



- “The Process of Innovation Capabilities Building”, research paper. (With Nathalia Pufal and Paulo Antônio Zawislak)
- “Do Peer Schools Affect Patenting and Licensing? Evidence from Chinese Research Universities”, research paper. (With Yanzhao Lai)
- “Barriers as Intermediaries in the Innovation Process”, research paper. (With Diego R. de Moraes Silva and André T. Furtado)
- “Measurement of and Important Policies to Innovation Barriers”, research paper. (With Diego R. de Moraes Silva and André T. Furtado)

**(Selected) RESEARCH GRANTS, CONTRACTS (1998-2020)**

- “Strategic Assistance for Designing Innovation Policies, Innovation Surveys, and Global Innovation Index (GII) Roadmap”, N-Able, project “European Union for Private Sector in Libya (EU-PSL)”, Expertise France 2020-2021. [Sub-contractor]
- “Framework Agreement to Support the Advisory Activities of the European Investment Bank”, N-Able, Roland Berger lead contractor EIB, 2020-2022. [Sub-contractor]
- “São Paulo Excellence Chair” (SPEC) System Innovation: Organizational Strategy, Research and Innovation Policy Governance, University of Campinas (UNICAMP), Science Foundation of the State of São Paulo (FAPESP), Brazil, 2020-2024. [Holder of Chair and Principal Investigator]
- “Returnee Academic Entrepreneurship in China”, Confucius Institute, The George Washington University, 2019-2020. [Principal Investigator]
- “UNESCO Science Report 2020: United States of America”, UNESCO, Geneva, 2019-2020. [Principal Investigator]
- “Artificial Intelligence: Critical Industrial Applications”, Executive Agency for Small and Medium-Sized Enterprises (EASME/COSME/2018/12), European Commission, McKinsey&Co and N-Able, Jan-Dec. 2019. [Investigator]

- “Opportunities and Risks of Blockchain Applications in the Financial Sector”, Background report for Europe Industry 4.0 Flagship Report, The World Bank, Jan-June 2019. [Principal Investigator]
- “Capturing the Value of Intangible Assets in Micro Data to Promote the EU's Growth and Competitiveness” (GLOBALINTO), SC6 Transformations, European Commission, DG Research and Innovation, 2019-2021. [Co-Principal Investigator]
- “Catching-up Along the Global Value Chain” (CATCHAIN), European Commission, Marie Kłosowska-Curie Programme, 2018-2022. [Co-Principal Investigator]
- “Strategy for the Digital Transformation of (the City of) Campinas (Brazil)”, Inter-American Development Bank (IDB), BR-T1374, 2018. [Co-Principal Investigator]
- “Science Policy Research Report: The Use of Research Portfolios in Science Policy”, Science for Science and Innovation Policy (SciSIP), National Science Foundation (NSF), 2017. [Principal Investigator]
- “Obstacles to Innovation and Firm Innovativeness in Brazil”, Brazil Initiative, Elliott School of International Affairs, George Washington University, 2017.
- “Centre for Europe-Brazil Business and Innovation Cooperation” (CEBRABIC), European Commission, DG Research and Innovation, 2017-2021. [Co-Principal Investigator]
- “Protein Crystallization for Drug Development: An Empirical Appraisal of Economic Effects of Microgravity”, National Aeronautics and Space Administration (NASA), AMES Research Center (ARC), Emerging Space Office (ESO), 2016-2017. [Co-Principal Investigator]
- “Increasing International Science, Technology and Innovation Cooperation between Brazil and the European Union” (INCOBRA), European Commission, DG Research and Innovation, 2016-2018. [Co-Principal Investigator]
- “Economic Development of Low Earth Orbit Activities”, US National Aeronautics and Space Administration (NASA), 2014-2015. [Co-Principal Investigator]
- “Country Case Chile: Public Research Centres”, Organization for Economic Cooperation and Development (OECD), 2015. [External Advisor.]

- “São Paulo Excellence Chair” (SPEC) Innovation Systems, Strategy and Policy, University of Campinas (UNICAMP), Science Foundation of the State of São Paulo (FAPESP), Brazil, 2014-2019. [Holder of Chair and Principal Investigator]
- “Impact Assessment of Greek Research, Development and Innovation Programs 2000-2009”, General Secretariat of Research and Technology, Ministry of Education, Greece, 2014-2016. [Co-Principal Investigator and Scientific Director]
- “Choosing Emerging Technologies for Development”, Elliott School of International Affairs, The George Washington University, 2014. [Co-Principal Investigator]
- “Review of Korea’s Industrial Policy and Innovation Policies”, Organization for Economic Cooperation and Development (OECD), 2013. [Expert Support]
- “Fostering Entrepreneurship in the Southern Caucasus”, The World Bank, 2012-2013. [Co-Principal Investigator]
- “R&D Investment and Structural Change in Sectors” (RTDS), European Commission, DG Research and Innovation, 2010-2013. [Co-Principal Investigator]
- “Advancing Knowledge-Intensive Entrepreneurship and Innovation for Economic Growth and Social Well-Being in Europe” (AEGIS), European Commission, DG Research, 2009-2012. [Co-Principal Investigator]
- “Innovation Policy Handbook”, The World Bank, 2011-2012. [Principal Investigator]
- “Innovative Procurement in the United States”, TEKES and Washington Embassy, Finland, 2010-2011. [Principal Investigator]
- CIP ICT-PSP Final (Second Interim) Evaluation Support Study, European Commission, DG Information Society and Media, 2010-2011. [Co-Principal Investigator]
- “ICT Network Impact in Structuring a Competitive ERA”, European Commission, DG Information Society and Media, 2009-2011. [Co-Principal Investigator]
- “Using Performance Indicators in Monitoring the Implementation of ICT Research in FP6 and FP7”, European Commission, DG Information Society and Media, 2009-2010. [Co-Principal Investigator]

- “Trends in the Evolution of the EU ICT Research and Deployment Landscape”, European Commission, DG Information Society and Media, 2009-2010. [Co-Principal Investigator]
- “Economies of Scale at the Research Project Level”, European Commission, DG Research, 2008-2010. [Co-Principal Investigator]
- “Evaluation Manual for ICT Research in FP7: Joint Technology Initiatives”, European Commission, DG Information Society and Media, 2009. [Co-Principal Investigator]
- “Manual for Monitoring and Evaluating ICT Research in FP7”, European Commission, DG Information Society and Media, 2008-2009. [Co-Principal Investigator]
- “Research and Technology Partnerships: Quantifying Strategic Relationships”, Science of Science and Innovation Policy Program, U.S. National Science Foundation, 2007-2010. [Principal Investigator]
- “Analysing and Evaluating the Impact on Innovation of Publicly Funded Research Programmes: Lot 1 – Evaluation of the Impact on Innovation of Projects of Community 5<sup>th</sup> and 6<sup>th</sup> Framework Programmes” (INNO-IMPACT), European Commission, DG Enterprise, 2006-2007. [Co-Principal Investigator]
- “Analysing and Evaluating the Impact on Innovation of Publicly Funded Research Programmes: Lot 2 – Benchmarking Strategies and Methodologies of National, European and International R&D Programmes to Assess and Increase their Impact on Innovation”, European Commission, DG Enterprise, 2006-2007. [Co-Principal Investigator]
- “Research on the Factors of Success of Public policies Regarding Science, Technology and Innovation”, Greek Ministry of Development, 2006. [Principal Investigator]
- “IST Evaluation and Monitoring”, European Commission, DG Information Society, 2006. [Co-Principal Investigator]
- “Networks of Innovation in Information Society: Development and Deployment in Europe”, European Commission, DG Information Society, 2006. [Co-Principal Investigator]
- “Real Options for Research Investment Portfolio Analysis at the U.S. Department of Energy”, DOE Office of Science, 2004-2006. [Principal Investigator]

- “Knowledge-Based Entrepreneurship: Innovation, Networks, and Systems” (KEINS), European Commission, DG Research, 2004-2006. [Co-Principal Investigator]
- “Assessment of the Small Business Innovation Research (SBIR) Program”, National Research Council, National Academies of Science, 2002-2005. Study mandated by US Congress, HR 5667 Section 108. [Investigator]
- “Evaluation of Progress towards a European Research Area in Information Society Technologies”, European Commission, DG Information Society, 2005. [Co-Principal Investigator]
- “IST-RTD Monitoring and Evaluation: Results and Impact Indicators”, European Commission, DG Information Society, 2004-2005. [Co-Principal Investigator]
- “Five-Year Assessment of the Community Research Framework Programme 1999-2003”, member of and rapporteur for the High-Level Panel to Evaluate the European Union’s Framework Programme for RTD, European Commission, DG Research, 2005. [Panel Member and Rapporteur]
- “Innovation Networks”, GW Research Enhancement Fund Award, 2002-2005. [Co-Principal Investigator]
- “Assessment of the Impact of Actions Completed under the 5<sup>th</sup> Community Research Framework Programme: Survey for the Five-Year Assessment of Community Research Activities 1999-2003”, European Commission, DG Research, 2004. [Co-Principal Investigator]
- “Patent Licensing Contracts in the OECD”, Organization for Economic Cooperation and Development (OECD), 2002-2003. [Principal Investigator]
- “Network Indicators and Globalization: Public Policy Implications”, GW Center for the Study of Globalization, 2002-2003. [Co-Principal Investigator]
- “Networks and Globalization”, GW Center for the Study of Globalization, 2001-2002. [Co-Principal Investigator]
- “Network Indicators”, Science Resources Studies, U.S. National Science Foundation, 2001-2003. [Co-Principal Investigator.]

- “Network Indicators: Science, Technology and Innovation”, European Commission, DG Research, Improving the Human Research Potential and the Socio-Economic Research Base, Common Basis of Science, Technology and Innovation Indicators Programme, 2001-2004. [Co-Principal Investigator.]
- “Performance Measurement for Government R&D Programs: in Search of Best Practice”, Korea Institute for Science and Technology Policy (KISTEP), Republic of Korea, 2002. [Principal Investigator].
- “Paradigm Shifts in Science, Technology and Innovation Policy of Leading and Catching-up Countries: The case of the United States and Korea”, Science and Technology Policy Institute (STEPI), Republic of Korea, 2001-2002. [Principal Investigator]
- “The Emergence of New Industrial Activities: Fusing Services and Manufacture (TENIA)”, Commission of the European Union, DG Research, 2001-2003. [Co-Principal Investigator]
- “The Assessment of the Socio-economic Impact of the Framework Program (ASIF)”, Commission of the European Union, DG Research, 2001-2002. [Co-Principal Investigator]
- “European Presence in US-Based Research Joint Ventures”, European Commission, DG Research, Improving Human Research Potential and the Socio-Economic Research Base, 2001.
- “Evaluation of United States government programs under GPRA”, Korea Institute for Science and Technology Policy (KISTEP), Republic of Korea, 2001. [Co-Principal Investigator]
- “Strategic Partnerships for Developing Countries”, Division on Investment, Technology and Enterprise Development (DITE), United Nations Conference on Trade and Development, 2001. [Principal Investigator]
- “Methodology for the Assessment of Performance of Selected Existing Industries”, Sectoral Issues and Policy Division, Economic and Social Commission for Western Asia (ESCWA), United Nations, 2001. [Principal Investigator]
- “Priority Research Areas and Operational Systems of Major Public Research Institutes in the United States”, Science and Technology Policy Institute (STEPI), Seoul, Republic of Korea, 2001. [Principal Investigator]

“Succeeding in Collaborative R&D: Three Case Studies of ATP-sponsored Research Joint Ventures”, Advanced Technology Program, National Institute of Standards and Technology, 2000-2001. [Co-Principal Investigator]

“Economic Analysis of Intellectual Property Protection Mechanisms for Research Partnerships,” Directorate for Social, Behavioral and Economic Sciences, U.S. National Science Foundation, 1999-2001. [Co-Principal Investigator.]

“Innovation-Related Knowledge Flows in European Industry: Mechanisms and Policy (KNOW)”, Targeted Socio-Economic Research Programme (TSER), Commission of the European Union, DG Research, 1999-2001. [Co-Principal Investigator]

"Science and Technology Policies Towards Research Joint Ventures (STEP-TO-RJVs)", Targeted Socio-Economic Research Programme (TSER), Commission of the European Union, DG Research, 1998-2000. [Co-Principal Investigator]

### **TEACHING**

i. Full-Term Courses, GW (2019-2020)

A. *Department of Economics*

Econ 6255.10 “Economics of Technological Change”, graduate course

B. *Science, Technology and Public Policy Program*

IAFF 6141.10 “International Science and Technology Policy”, graduate course

ii. Full-Term Courses Offered Regularly in Previous Years, GW

A. *Department of Economics*

“Managerial Economics”, MBA course

“Intermediate Microeconomics”, undergraduate course

Econ 4198 “Proseminar in Economics”, undergraduate course

*B. Science, Technology and Public Policy Program*

IAFF 6142 “Technology Creation and Diffusion”, graduate course

“Multidisciplinary Seminar in Science, Technology and Global Affairs”, graduate course

“Technology Collaboration: Incentives and Policy for Strategic Alliances”, graduate course

“Technology and International Economic Competitiveness”, graduate course

“Science, Technology, and International Affairs”, graduate course, team-taught with Professor Robert Rycroft

“Technology and Globalization”, graduate seminar (capstone), team-taught with Professor Robert Rycroft.

ii. Short Courses, GW

“Microeconomics”, 8-lecture series, Minerva Program, Center for Latin American Issues, School of Business, The George Washington University, Washington, D.C. (Delivered semi-annually 2003 – 2013).

“Strategic Business Partnerships”, 2-lecture series, Certificate Program for the University of Chile (EMBA), The George Washington University, Washington, D.C. (Delivered 2014).

iii. Full-Term Courses, non-GW

“Introduction to International Science and Technology Policy”, Schwarzman College, Tsinghua University, Beijing, Republic of China, April-June 2019, May 2020.

“R&D Program Evaluation”, Fundacao Getulio Vargas (FGV), Rio de Janeiro, Brazil, Fall 2012.

iv. Short Courses, non-GW

“Strategic Business Partnerships”, 8-meeting course delivered for the graduate program in Science and Technology Policy and Governance, Institute for Statistical Studies and Economics of Knowledge (ISSEK), National Research University Higher School of Economics (HSE), Moscow, Russian Federation, (Annually since Fall 2019).



“Strategic Management of Technology and Innovation”, “Technology Management Economics”, and “Doctoral Seminar”, three 4-meeting course series delivered for the graduate program in Management of Technology (MOT), Korea University, Seoul, Republic of Korea, (Annually 2016 – 2018).

“Strategies in STI Management” and “Economics of Innovation”, two 4-meeting course series delivered for the graduate program in Science and Technology Policy and Governance, Institute for Statistical Studies and Economics of Knowledge (ISSEK), National Research University Higher School of Economics (HSE), Moscow, Russian Federation, Fall 2018.

“R&D Program Evaluation”, 10-lecture series, Fundacao Getulio Vargas (FGV), Rio de Janeiro, Brazil, Summer 2014.

“Strategic Business Partnerships”, 5-lecture series, Centro Universitario de Brasilia (UniCEUB), Brasilia, Brazil, Fall 2012.

“R&D Program Evaluation”, 5-lecture series, Centro Universitario de Brasilia (UniCEUB), Brasilia, Brazil, Fall 2012.

“Incentives and Policy for Strategic Technical Partnerships”, 6-lecture series, MIEM Program, SDA, Luigi Bocconi University, Milan, Italy. (Annually 1999 – 2004).

“Strategic Business Partnerships”, 5-lecture series, International MBA Program, Athens University of Economics and Business, Athens, Greece. (Annually 2001 – 2012).

v. Executive Training Seminars

Developed a professional training course on the **R&D program evaluation**. The course (8 days long) has been delivered to foreign groups at the George Washington University and at other locations (including abroad).

Co-developed with Prof Sergio Salles-Filho two professional training courses on **R&D program evaluation** (ex ante and ex post) at the University of Campinas. These courses are being offered at UNICAMP through the institute GEOPI to mixed audiences of industry and government representatives at regular time intervals.

Developed an executive training seminar on **crafting strategic partnerships**. Versions of the seminar (1-3 days long) have been delivered during the past few years to both

industry and government audiences in the US and abroad. Longer, more traditional educational versions are being delivered to business schools such as Luigi Bocconi University and the Athens University of Economics and Business (see above).

Developed a professional training seminar on the **knowledge-based economy**. The seminar (1 day long) has been delivered repeatedly to US government audiences.

### **OTHER PROFESSIONAL ACTIVITIES**

#### vi. Seminar Series

Organizer of the **Technology and Innovation** Seminar Series at GW. Seminars held once a month at the Center for International Science and Technology Policy. Average attendance: 30 strategy and policy scholars, advisers, and professionals from the greater Washington metropolitan area. (2001 – 2011)

Co-organizer of the joint **S&T Research** Seminar Series. Seminars organized collaboratively by GW's Center for International Science and Technology Policy and GMU's School of Public Policy. Seminars held once a month at the George Washington University and at George Mason University. Average attendance: 15 strategy and policy scholars and graduate students. (2006 – 2011)

#### vii. R&D Program Evaluation

Co-organizer of the Washington Research Evaluation Network (2000-2009)

Engaging in various initiatives relating to R&D program evaluation in the United States, Europe, Japan, South Korea, Mexico and Brazil for several years. Such initiatives include evaluation studies, relevant conference presentations, and advisory work. Examples of collaborating organizations over the years have included:

United States: National Institute of Standards and Technology, Advanced Technology Program, Department of Energy (Office of Science), NASA, National Research Council.

Europe: European Commission (DG Research and Innovation, DG Information Society and Media), Vinnova (Sweden), National Statistical Agency of Greece.

Japan: METI, Mitsubishi Research Institute.

South Korea: Korea Institute of S&T Evaluation and Planning (KISTEP), Science and Technology Policy Institute (STEPI).

Mexico: Centro de Investigacion y Asistencia en Tecnologia y Diseno del Estado de Jalisco (CIATEJ).

Brazil: Universidade Estadual de Campinas (UNICAMP), Fundacao Getulio Vargas (FGV), Centro Universitario de Brasilia (UniCEUB).

viii. Referee for:

*Strategic Management Journal*  
*International Journal of Industrial Organization*  
*Journal of Industrial Economics*  
*Journal of Economic Behavior and Organization*  
*Review of Industrial Organization*  
*R&D Management*  
*Zeitschrift Fur Nationaloekonomie*  
*Economica*  
*World Development*  
*Journal of Policy Analysis and Management*  
*Journal of Policy Reform*  
*Journal of Small Business Economics*  
*Science and Public Policy*

ix. Reviewer and Referee for:

*National Science Foundation.*  
*Oxford University Press.*  
*Cambridge University Press.*  
*Springer.*  
*McGraw-Hill, Inc.*  
*Scott, Foresman & Co.*  
*South-Western College Publishing*  
*General Administration of Research and Development (GGET, Greece).*

**STUDY AWARDS/DISTINCTIONS**

Fellowship, New York University, 1986-1988

Scholarship, New York University, 1984-1986

Developmental Fellowship, New York University, 1983-1984

M.A. degree awarded with *distinction*, Leicester University (U.K.), 1983

**OTHER ACTIVITIES**

Media communications (Wall Street Journal, U.S. News, Sky, Korean Herald, Greek Voice of America, ERT 1 (Greek public radio), Kerdos (Gain, a Greek financial weekly), etc  
Faculty mentor for the Hellenic Club KOSMOS at the George Washington University, 1993 – 2010.

Member of the Board, Hellenic Society PROMETHEAS, Washington, D.C., 1992 – 1996, 2011 – 2012.

President, Graduate Economics Student Association, New York University, 1984 - 1986

### **LANGUAGES**

Fluent in Greek and English. Limited knowledge of French and Spanish

### **PERSONAL**

Born May 6, 1958 in Athens Greece

### **MILITARY SERVICE**

Greek Navy, 1989 – 1990

### **NATIONALITY**

United States of America & Greece

**(Select) PRESENTATIONS January 2019 – February 2021**

- Moderator, “Emerging Paradigm on Technology Capability Upgrading: Embracing Green, Inclusive and Social Sustainability Concerns”, 3<sup>rd</sup> International Workshop (online) co-organized by the George Washington University (US), University of Campinas (Brazil), Seoul National University (Korea), University College London (UK), and National Research University Higher School of Economics (Russia) (online), February 25, 2021.
- “Benefit-Cost Analysis”, Executive Training Course “Impact Evaluation of R&D & Innovation”, University of Campinas (UNICAMP), Brazil, February 25, 2021.
- Moderator, “Technology Capabilities and Sectoral Catch-up: What Explains Successes, Failures, Challenges?”, 2<sup>nd</sup> International Workshop (online) co-organized by the George Washington University (US), University of Campinas (Brazil), Seoul National University (Korea), University College London (UK), and National Research University Higher School of Economics (Russia) (online), December 3, 2020.
- “Strategic Business Partnerships”, 4-lecture series, National Research University Higher School of Economics, Moscow, Russian Federation (online), November 23-27, 2020.
- “Corporate Foresight”, multiple sessions, Executive Education Programme “Foresight Management”, ENRICH-BR in collaboration with the University of Campinas and the University of Bremen (online), November 23-27, 2020.
- Discussant, Session “Policies to Promote Industry & Entrepreneurial Emergence”, Annual Conference of the Association for Public Policy Analysis and Management (APPAM) (online), November 13, 2020.
- “Macro and Micro Foundations for Technology Upgrading and Innovation: The Case of Shipbuilding and Offshore Industry Missed Window of Opportunity in Brazil”, paper presentation, 10<sup>th</sup> International Academic Conference “Foresight and STI Policy”, National Research University Higher School of Economics, Moscow, Russia (online), November 13, 2020.
- Speaker, Workshop with the Permanent Technical Committee for Measuring Innovation, Government of Libya, organized by EU-PSL (online), November 12, 2020.
- Moderator, “Technology Capability and Growth Performance at the Country Level”, 1<sup>st</sup> International Workshop (online) co-organized by the George Washington University

(US), University of Campinas (Brazil), Seoul National University (Korea), University College London (UK), and National Research University Higher School of Economics (Russia) (online), November 4, 2020.

“Positioning Translational Research in the Biotech Ecosystem: from Basic Research to Biotech Entrepreneurship”, Annual Conference American Evaluation Association (online), October 30, 2020.

“The Notion and Importance of Innovation”, BlueLab Workshop. Piraeus, Greece (online), October 26, 2020.

“Strategic Business Partnerships and SMEs”, panel presentation, OEVD-Korea Workshop on Promoting International Technology Collaboration in the Digital Age and in the Light of COVID-19, Seoul, Korea (online), September 21-22, 2020.

“What Has Happened to Globalization? Structural Reshaping, GVC Resilience, Future Prospects”, Keynote Speech, Workshop of Ermoupolis on the “Information Society and the Knowledge Economy 2020”, Syros, Greece (online), July 18, 2020.

“Socio-economic Impact: New Approaches from Policy Analysis – Research Portfolios: In Need of Evaluation for Evidence-Based Policy”, UK-FAPESP Workshop “Science and Innovation Impact Evaluation”, Research Foundation of the State of São Paulo (FAPESP), São Paulo, Brazil, February 13, 2020.

“Evaluation of Economic Impact”, Executive Training Course “Impact Evaluation of R&D & Innovation”, University of Campinas (UNICAMP), Brazil, February 12, 2020.

“Policy Challenges and Workforce Dilemmas in the Knowledge Economy”, keynote presentation, workshop “Emerging Scientific and Technological Areas: Relationship with the Labor Market”, National Fellowships Foundation, Athens, Greece, January 22, 2020.

“Scaling Innovation: How the European Innovation Council Bolsters Europe’s Competitiveness”, Panel member, Information Technology & Innovation Foundation (ITIF), Washington, D.C., January 14, 2020.

“Ecosystems of Entrepreneurship: Configurations and Critical Dimensions”, First Conference on “Micro-dynamics, Catching-Up and Global Value Chains”, EU CatChain Program, Luigi Bocconi University, Milano, Italy, November 21, 2019.

- “Innovation Clusters; Where We Have Been, Where We Are Going, Organizational Implications”, 2019 Seoul S&T Forum, Seoul, Republic of Korea, November 6, 2019.
- “The Use of Research Portfolios in Science Policy”, research paper presentation, SciSIP Grantee Workshop, ATLC2019, Atlanta, October 16, 2019.
- “Returnee Academic Entrepreneurship in China”, research paper presentation, ATLC2019: Atlanta Conference on Science and Innovation Policy, Atlanta, October 15, 2019.
- “Ecosystems of Entrepreneurship: Configurations and Critical Dimensions”, research paper presentation, ATLC2019: Atlanta Conference on Science and Innovation Policy, October 15, 2019.
- “Strategic Business Partnerships”, 4-lecture series, National Research University Higher School of Economics, Moscow, Russian Federation, October 7-12, 2019.
- “R&D Portfolios”, lecture in the course “Strategies in STI Management”, National Research University Higher School of Economics, Moscow, Russian Federation, October 3, 2019.
- “Mapping Networks in Artificial Networks Research”, Conference “Transforming Research”, George Washington University, Washington, DC, September 26-27, 2019.
- “Strategic Partnerships and Innovation”, Journalism Academy Workshop, Korea Broadcasting Journalist Association, SRI, Arlington, VA, September 23, 2019.
- “Workshop Introduction” and closing panel “Challenges for STI Policy Evaluation: how to measure technology upgrading and catching-up and how to effectively use evaluation results”, International Workshop “Technology Upgrading and Catching up in Latin America: Reflections from Policy Evaluations”, Research Foundation of the State of São Paulo (FAPESP), São Paulo, Brazil, July 5, 2019.
- “Technological Upgrading of Sectors through the Prism of Shifting Firm-Level Innovation Strategies”, paper presentation, International Conference “The Challenges of Technology and Economic Catching-Up in Emerging Economies”, University of Campinas (UNICAMP), Brazil, July 3-4, 2019.
- “Meso-Micro Perspectives”, closing panel, International Conference “The Challenges of Technology and Economic Catching-Up in Emerging Economies”, University of

Campinas (UNICAMP), Brazil, July 3-4, 2019.

“Regional Entrepreneurial Ecosystems in China”, seminar, NITEC, Federal University Rio Grande do Sul, Porto Alegre, Brazil, June 28, 2019.

“Ecosystems of Entrepreneurship: Configurations and Critical Dimensions”, research paper presentation, ICC-Tsinghua University Conference “Innovation, Macroeconomic Dynamics, Economic Development and Catch-Up”, Tsinghua University, Beijing, People’s Republic of China, May 24, 2019.

“Ecosystems of Entrepreneurship: Configurations and Critical Dimensions”, research seminar, School of Management and Economics, Chinese University of Hong Kong, Shenzhen, People’s Republic of China, May 6, 2019.

“Ecosystems of Entrepreneurship: Configurations and Critical Dimensions”, research seminar, School of Management, Zhejiang University, Hangzhou, People’s Republic of China, April 26, 2019.

“Losing Appetite for Mission: R&I Policy Initiatives Beyond Health and National Defence”, Science Forum “Mission Orientation in Innovation Policy: A Critical Comparison Between China, USA, and Europe/Germany”, Embassy of the Federal Republic of Germany, Beijing, People’s Republic of China, April 24, 2019.

“Technology and Entrepreneurship in China: Evidence from High-Tech Sectors and Regions”, Workshop, Schwarzman College, Tsinghua University, Beijing, People’s Republic of China, April 18, 2019.

“Technology Upgrading and Economic Catch-Up: Challenges for Emerging Economies”, Roundtable, School of Public Policy and Management, Tsinghua University, Beijing, People’s Republic of China, April 16, 2019.

“Conceptual and Analytical Issues”, Workshop on the South African STI System’s Monitoring and Evaluation Framework, CREST, Stellenbosch University, Cape Town, South Africa, March 19, 2019.

“Social Network Analysis”, “Economic Analysis”, Executive Training Course “Impact Evaluation of R&D & Innovation”, University of Campinas (UNICAMP), Brazil, February 18-22, 2019.

“An Economic Appraisal of Microgravity Protein Crystallization for Drug Development”,



TECHNIS web-seminar, January 15, 2019.