Mei-Chih Hu

Institute of Technology Management, National Tsing-Hua University 101 Kuang-Fu Road, Section 2, Hsinchu 300, Taiwan <u>mchu@mx.nthu.edu.tw</u> +886 (0)3-5162162

Education

PhD in Management Macquarie University, Sydney, Australia	2002-2005
MBA in International Business Saint Louis University, Missouri, USA	1994-1996
BA in Economics National Tsing Hua University, Hsinchu, Taiwan	1988-1992

Experience

Professor Institute of Technology Management National Tsing Hua University, Taiwan	2013.8-present
Associate Professor Institute of Technology Management National Tsing Hua University, Taiwan	2009.2–2013.7
Associate Professor Graduate Institute of Technology & Innovation Management National Chung Hsing University, Taiwan	2008.2–2009.1
Associate Professor Graduate Institute of Management of Technology Feng Chia University, Taiwan	2005–2008.1
Project leader for the "Market and Patent Information" Marketing Department, Taiwan Bicycle R&D Center, Taiwan	1993-1994
Marketing Planning Specialist Yu-Tian Mechanical Corporation, Taiwan	1992.6-1992.12

Research Interests

- National Innovation System
- East Asian Latecomers Strategy
- Intellectual Property Rights Management
- Emerging Technologies and Markets

Teaching Interests

- Intellectual Property Rights
- Entrepreneurship and Startups
- New Energy Economics, Markets, and Policies
- Innovation and Transformation

Patents

- 2019 Taiwan Innovative Business Model Patent: Smart plant eco-system tank for oxygen generation and air purification (Patent Number: M579261)
- 2020 Taiwan Patent: Air Purifier (Patent Number: M592064)
- 2020 Taiwan Patent: Smart Aquaponics Environmental Management System (Application Number: 109201887)

Academic Affiliations

Chair for Management Discipline 1 Ministry of Science and Technology, Taiwan	2020.1-present
Research Fellow for Advanced Biohydrogen Technology Asia-Pacific Economic Cooperation (APEC)	2019.9-present
Director of Center of Technology Innovation & Entrepreneurship National Tsing Hua University, Taiwan	2017.8-present
Director of Institute of Technology Management National Tsing Hua University, Taiwan	2017.8-present

Academic Awards

- 2019 Dean's Award, Outstanding Research Award of Hou De Association, College of Technology Management, National Tsing Hua University, Taiwan
- 2017-2019 Marquis Who's Who The Albert Nelson Marquis Lifetime Achievement Award, USA
- 2015-2019 Marquis Who's Who in Science and Engineering, USA
- 2014 Best Paper Award, International Association of Management of Technology (IAMOT), Washington D.C., USA.
- 2013 Top 45 Authors (2008-2012), International Association of Management of Technology (IAMOT), Washington D.C., United States
- 2013 Young Scholar Excellence Award, National Science Council, Taiwan
- 2012 Visiting Fellow, Graduate School of Business, Stanford Program on Regions of Innovation and Entrepreneurship, Stanford University, USA.
- 2012 Saylin Wen International Collaboration Award, Taiwan
- 2012 Marquis Who's Who in the World (Management Area), USA
- 2011 Advisory Board Member, Technological Forecasting and Social Change
- 2010 Wu Da-You Young Scholar Award, National Science Council, Taiwan
- 2010 Visiting Fellow, Technology and Economics Department, Tsinghua University, Beijing, China
- 2009 Young Scholar Research Excellence Award, National Tsing Hua University, Taiwan
- 2008 The Best Young Scholar Research Award, National Chung Hsin University, Taiwan
- 2007 Academic Research & R&D Excellence, Feng Chia University, Taiwan
- 2006 The Best Academic Research, Feng Chia University, Taiwan
- 2004 Research Excellence Award, Macquarie University, Australia

Publications

Refereed Journal Papers

- Chou, J.C.P., Hu, M.C. and Shih, T.T.Y., 2019. Green transformation: Lessons from the fuel cell innovation system in Taiwan. *Journal of Cleaner Production*, 240, p.118-182. (SCI)
- 2. Wong, C.Y., Hsieh, Y.C., Wu, C.Y. and Hu, M.C., 2019. Academic Entrepreneurship for Social Innovation in Taiwan: The Cases of the OurCityLove Platform and the Forest App. **Science**, *Technology and Society*, 24(3), pp.446-464. (SSCI)
- 3. Lo, H.C., Hsu, W.C., Wu, C.Y. and Hu, M.C., 2018. Explore the Business Models for Taiwan's SMEs in Entering an Emerging Market: The Case of Indonesia, *Industry and Management Forum*, 20(3), pp.56-77. (TSSCI, in Chinese)
- 4. Mathews, J. A., Hao, T., and Hu, M.C. 2018. Moving to a Circular Economy in China: Transforming industrial parks to eco-industrial parks. *California Management Review* 60, 157-181. (SSCI, Hass-Berkeley)
- Zheng, C. and Hu, M.C. 2018. An Exploration of the Application of Universities as Artificial Institutional Entrepreneurs: The Case of China. *Journal of Public Affairs* 18(1), 1-10. Available at: <u>https://onlinelibrary.wiley.com/doi/full/10.1002/pa.1697</u>
- 6. Hsu, W.C., Wu, C. H., Hu, M.C., Shih, C.T. 2017. Growth Drivers of Taiwan's

Biopharmaceutical Firms: Perspective from the Technological Latecomers, *Industry and Management Forum*, 19(2), pp.56-83. (TSSCI, in Chinese)

- Hu, M.C., Hsu, W.C. and Wu, C. Y. 2017. Why is growth more difficult to achieve for biopharmaceutical latecomer firms? Evidence from Taiwan. *Science, Technology & Society* 23(3), 388-417. (SSCI)
- Hu, M.C., Kang, J.S. and Wu, C.Y. 2017. Determinants of profiting from innovation activities: comparison between technological leaders and latecomers. *Technological Forecasting and Social Change* 116, 223-236. (SSCI) (IF: 2.678, 4/55 Planning Development (2015))
- 9. Hu, M.C., Wadin, J., Lo, H.C., and Huang, C. Y. 2016. Transformation into an eco-city: lessons from the three Asian cities. *Journal of Cleaner Production* 123, 77-87. (IF: 3.844, Environmental Science, 24/223=10.7% (2014)) (SCI)
- Hu, M.C. and Mathews, J.A. 2016. Taiwan's green shift prospects and challenges. *The Asia-Pacific Journal: Japan Focus* 14 (19/2), available on-line on October 1, 2016 at: <u>http://apjjf.org/2016/19/Hu.html</u>
- Hu, M.C.*, Hung, S. H., Lo, H. C., Tseng, Y. C. 2016 Determinants of university-industry research collaborations in Taiwan: The case of National Tsing Hua University. *Research Evaluation*, 25, 121-135. (leading article) (SSCI)
- Mathews, J.A., Hu, M.C., and Wu, C.Y. 2015. Are the land and other resources required for total substitution of fossil fuel power systems impossibly large? *Renewable & Sustainable Energy Reviews* 46, 257-281. (IF: 5.510, Multidisciplinary Science, 6/83=7.2% (2013)) (SCI)
- 13. Wong, C. Y., Hu, M.C., and Shiu, J.W. 2015. Governing the Economic Transition: How Taiwan Transformed its Industrial System to Attain Virtuous Cycle Development. *Review of Policy Research* 32(3), 365-387. (SSCI)
- 14. Hu, M.C., Wu, C.Y.*, and Shi h, T. 2015. Creating a New Socio-Technical Regime in China: Evidence from the Sino-Singapore Tianjin Eco-City. *Futures* 70, 1-12. (leading article) (SCI)
- Hu, M.C., Phillips, Y. F., Wu, C.Y.*, and Wang, S. H. 2015. The influence of the technological regime on the global light-emitting diode industry: lessons from innovative leaders and latecomers. *Innovation, Management, Policy and Practice* 17(1), 91-114. (SSCI)
- Wong, C. Y., Hu, M.C., and Shiu, J.W. 2015. Collaboration between Public Research Institutes and Universities: the Case of the Industry Technology Research Institute, Taiwan. *Science, Technology & Society* 20(2), 161-181.(SSCI)
- 17. Mathews, J.A.*, Hu, M.C., Wu, C.Y. 2014. Concentrating Solar Power: A Renewable Energy Frontier. *Carbon Management* 5(3), 293-308.(SSCI/SCI)
- Lee, J. H., Hancock, M.G. and M.C. Hu. 2013. Toward an effective framework for building smart cities: lessons from Seoul and San Francisco. *Technological Forecasting and Social Change* 89, 80-99. (SSCI, Planning & Development, 7/55=7%)
- Wu, C.Y., Hu, M.C*., and Mathews, J.A. 2014. Chinese patent surge is driven by policy. Correspondence, *Nature* 509, 427. (SCI ' IF: 42.351, Multidisciplinary Science: 1/55= 1.8% (2013))
- Hu, M.C.* 2014. Antecedents for the Adoption of New Technology in Emerging Wireless Cities: Comparisons between Singapore and Taipei. *Regional Studies* 48(4), 665-679. (SSCI)
- 21. Hu, M.C.*, Wu, C.Y., Lee, J. H., and Lu, Y.C. 2014. The Influence of Knowledge Source

and Ambidexterity in the Thin Film Transistor and Liquid Crystal Display Industry: Evidence from Japan, Korea, and Taiwan. *Scientometrics* 99(2), 233-260. (SSCI & SCI, Information Science & Library Science, 7/85=8.2%)

- 22. Hu, M.C., Sharif, N., and Barrk, E. 2014. Information Technology Services: A Key Knowledge-Intensive Business Service Industry in Hong Kong SAR, China. Journal of *Science, Technology & Society* 19(1), pp.27-55. (SSCI)
- 23. Kastelle, T., Hu, M.C.*, Dodgson, M. 2013. Innovation in Taiwan: What is Next? *Innovation, Management, Policy and Practice* 15(4), pp.396-404. (SSCI)
- Shiu, J.W., Wong, C. Y. and Hu, M.C. 2013. The dynamic effect of knowledge capitals in the public research institute: insights from patenting analysis of ITRI (Taiwan) and ETRI (Korea). *Scientometrics* 98, 2051-2068. (SSCI & SCI, Information Science & Library Science, 7/85=8.2%)
- 25. Mathews, J.A. and Hu, M.C.* 2013. Renewable Energy vs. Nuclear Power: Taiwan's energy future in light of Chinese, German and Japanese experience since 3.11. *The Asia-Pacific Journal: Japan Focus* 11(23/4), available on-line on June 10, 2013 at: http://japanfocus.org/-Mei_Chih-Hu/3954 (Listed as the top 10 downloaded paper in 2013).
- 26. Chen, T.M., Lu, T. L., and Hu, M.C. 2013. The trajectory of biofuel technological development in Taiwan. *Modern Applied Science* 7(9), pp.25-31. (SCI)
- Mathews, A., Hu, M.C., and Wu, C.Y. 2013. Concentrating Solar Power China's New Solar Frontier. *The Asia-Pacific Journal: Japan Focus* 11(21/2), available on-line on May 27, 2013 at: <u>http://japanfocus.org/-Ching_Yan-Wu/3946</u>
- 28. Hu, M. C.* 2012. Technological innovation capabilities in the thin film transistor-liquid crystal display industries of Japan, Korea, and Taiwan. *Research Policy* 41(3), 541-555 (SSCI)
- 29. Hu, M.C.* 2011. Evolution of Knowledge Creation and Diffusion: the Revisit of Taiwan's Hsinchu Science Park. *Scientometrics* 88(3), 949-977 (SSCI & SCI, Information Science & Library Science, 7/85=8.2%)
- Mathews, J.A., Hu, M.C., and Wu, C.Y. 2011. Fast-follower Industrial Dynamics: The Case of Taiwan's Emergent Solar Photovoltaic Industry. *Industry and Innovation* 18(2), pp. 177-202. (SSCI)
- 31. Hu, M.C.*, Hung, S.C., and Gao, J. 2011. Emerging technologies in emerging markets: introduction to the special section. *Technological Forecasting and Social Change* 78(7), 1101-1103.(SSCI, Planning & Development, 7/55=12.7%)
- 32. Hu, M.C.* and Wu, C.Y. 2011. Exploring Technological Innovation Trajectories through Latecomers: Evidence from Taiwan's Bicycle Industry. *Technology Analysis & Strategic Management* 23(4), pp. 433-452. (SSCI)
- 33. Hu, M.C.* and Phillips, F. 2011. Technological evolution and interdependence in China's emerging biofuel industry. *Technological Forecasting and Social Change* 78, 1130-1146 (SSCI)
- Hu, M.C.* and Mathews, J.A. 2009. Estimating the Innovation Effects of University-Industry-Government Linkages: the Case of Taiwan. *Journal of Management & Organization* 15(2), pp. 138-154. (SSCI)
- Hu, M.C.* 2009. Developing Entrepreneurial Universities in Taiwan: the Effect of Research Funding Sources. *Science, Technology & Society* 14(1), 56-68. (IF: 0.194, Management: 167/172 (2013)) (SSCI)
- 36. Hu, M.C.* and Mathews, J.A. 2008. China's National Innovative Capacity. *Research Policy* 37(9), pp. 1465-1479. (SSCI)

- Hu, M.C.* 2008. Knowledge Flows and Innovation Capability: Patenting Trajectory of Taiwan's Thin Film Transistor-Liquid Crystal Display Industry. *Technological Forecasting and Social Change* 75(9), pp. 1423-1438. (SSCI)
- Dodgson, M., Mathews, J., Kastelle, T. and Hu, M.C. 2008. The Evolving Nature of Taiwan's National Innovation System: The Case of Biotechnology Innovation Networks. *Research Policy* 37(3), pp. 430-445. (SSCI)
- 39. Yan, H.D. and Hu, M.C. 2008. Strategic Entrepreneurship and the Growth of the Firm: the Case of Taiwan's Bicycle Industry. *Global Business and Economics Review* 10(1), pp. 11-34.
- 40. Mathews, J.A. and Hu, M.C. 2007. Enhancing the Role of Universities in Building National Innovative Capacity in Asia: The Case of Taiwan. *World Development* 25, pp. 245-264. (SSCI)
- 41. Hu, M.C.*, Zheng. C. and Lamond, D. 2007. Recruitment and Retention of ICT Skills Among MNCs in Taiwan. *Chinese Management Studies* 1(2), pp. 78-92.
- Zheng, C. and Hu, M.C., 2007. Challenge to ICT manpower Planning Under the Economic Restructured: Empirical Evidence From the MNCs in Singapore and Taiwan. *Technological Forecasting and Social Change* 74(7), pp. 834-853. (SSCI)
- 43. Hu, M.C.* and Tseng, C.Y. 2007. Technological Interdependence and Knowledge Diffusion in the Building of National Innovative Capacity: the Role of Taiwan's Chemical Industry. *Technological Forecasting & Social Change* 74(3), pp. 298-312. (SSCI)
- 44. Hu, M.C.* and Tsai, C.T., 2006. Building external network on intellectual property through joint R&D service outsourcing: the case of Taiwan's SMEs. *IEEE, Technology Management for the Global Future*, Volume 2, Issue 8-13, pp. 732 739. (EI)
- 45. Hu, M.C. and Mathews, J.A. 2005. National Innovative Capacity in East Asia. *Research Policy* 34(9): 1322-1349. (SSCI)

Book Chapters

- 1. Wu, C.Y. and Hu, M.C.* 2018. University- Industry- Government Linkages: The Case of Taiwan. Chapter 8, *Universities in the National Innovation Systems: Experiences from Asia-Pacific*, In Edited: V.V. Krishna. Sage Publications, London, U.K.
- 2. Mathews, J. A., Hu, M. C., and Tan, H. 2016. Toward Low Carbon Cities: The Chinese Experience. Creating Low Carbon Cities. In edited: Shobhakar Dhakal and Matthias Ruth, Springer International Publishing, London, United Kingdom.
- 3. Shiu, C.W., Zheng, C. and Hu, M.C. 2016. International knowledge transfer from Kodak to ITRI: a strategic alliance learning perspective. Chapter 11, *Knowledge Spillover-based Strategic Entrepreneurship*, In Edited: Ratten, V., Dana, L. P. and Ferreira, J. J. Routledge Publisher, London.
- Hu, M.C.*, Wong, C.Y. and Lo, H. C. 2015. The Trajectory of Taiwan's Industrial Development: Innovation Policy, Performance, and Future Challenges for a Latecomer. *World Scientific Reference on Globalisation in Eurasia and the Pacific Rim*: Vol. 2: Innovation. In Dai, X. D (Series Ed.), Imperial College Press, London, United Kingdom.
- 5. Zheng, C., Wang, B. X., and Hu, M.C. 2015. New Chinese Entrepreneurs: Perspectives of Confucian Attributes and Social Settings. Chapter 2, *Technological Solutions for Sustainable Business Practice in Asia.* IGI Publisher, Pennsylvania, U.S.A. (forthcoming)
- 6. Hu, M.C.* 2014. Technological Catching-up in East Asia. International Economic Development: Leading Issues and Challenges. In edited: Fu-Lai Tony Yu, Wai-Kee Yuen and Diana S. Kwan. Chapter 5, Routledge Publisher, Taylor & Francis Group, United

Kingdom.

- 7. Hu, M.C.* and Wu, C. Y. 2014. Giant Bicycle and King Liu. *The Handbook of East Asian Entrepreneurship*. Routledge Publisher, Taylor & Francis Group, United Kingdom.
- 8. Hu, M.C.* 2013. Technology transfer in developing economies: China and East Asia. *Leading Issues in International Economic Development*. In edited: Yu, F.L. Nova Science Publishers, New York, USA (accepted, forthcoming).
- 9. Hu, M.C. and Yan, H.D. 2013. Strategic entrepreneurship and the growth of the firm: the case of Taiwan's bicycle industry. Chapter 9, *The Making of Taiwan's Economic Miracles: Successful Entrepreneurship in Theories and Practices*, In Edited: Yu, F. Y., Yan, H.D., and Chen, C.Y. Global Research Publications, New Delhi, India.
- 10. Yu, F. L. and Hu, M.C. 2012. Giants: Taiwan's World Brand bicycle. Chapter 6, *Entrepreneurship and Economic Development of Taiwan*. In Edited: F. L., Yu., Springer Publisher, New York, USA.
- 11. Hu, M.C.* 2011. University- Industry- Government Linkages: The Case of Taiwan. Entrepreneurial University in Asia, In Edited: V.V. Krishna. National Singapore University Press, Singapore.
- 12. Hu, M.C.* and Mathews, J.A., 2010. Evolution of China's National Innovation System and Its Challenges in Technological Development, Part Six: *National Innovation System*, *Encyclopedia of Technology and Innovation Management*, In Edited: Narayanan, VK and O'Connor, C.G., John Wiley & Sons Publisher, United Kingdom.
- 13. Hu, M.C.*, Liu, C. H., and Wu, C.Y. 2010. The Causes of Developing a Wireless City: Singapore versus Taipei (Taiwan). Chapter 9, *Strategic Pervasive Computing for Business: Trends and Applications*, In Ed. By Godara, V. IGI Global Publisher, USA.
- 14. Hu, M.C.*, 2007. Industry and Knowledge Evolution: the Case of Taiwan's Flat Panel Display Industry, Chapter 8, *Taiwan's Economic Transformation in Evolutionary Perspective: Entrepreneurship, Innovation Systems and Government*. In Ed. By Yu, F.L. Nova Science Publishers, New York, USA.
- 15. Mathews, J.A., and Hu, M.C., 2007. Universities and Public Research Institutions as Drivers of Economic Development in Asia, Chapter 5, *How Universities Promote Economic Growth*. In Ed. By Yusuf, S. and Nabeshima, K. World Bank, Washington DC. USA.

Opinions on media

- 1. Lee, C. K. and Hu, M.C. (2020). The return of technocrats in the US-China divide and coronavirus pandemic. *Taiwan Insights*, May 22 2020, University of Nottingham, Nottingham, United Kingdom (forthcoming).
- Hu, M.C. and Lo, H.C. (2018). Heading South: Co-sharing as Taiwan's niche strategy. *Taiwan Insights*, November 2, 2018, University of Nottingham, United Kingdom. <u>https://taiwaninsight.org/2018/11/02/heading-south-co-sharing-as-taiwans-niche-strategy/</u>
- 3. Hu, M.C. and Mathews, J.A. (2016). Taiwan's green shift. *Taipei Times*, October 24, 2016, Taiwan. <u>http://www.taipeitimes.com/News/feat/archives/2016/10/24/2003657797/3</u>
- 4. Hu, M.C. and Mathews, J.A. (2016). Taiwan's green shift. *Taipei Times*, October 24, 2016, Taiwan. <u>http://www.taipeitimes.com/News/feat/archives/2016/10/24/2003657797/3</u>.
- Mathews, J.A. and Hu, M.C. (2013). Taiwan's opportunity to supply green technologies to China. *Financial Times*. Letters, April 11, 2013, the United States. <u>http://www.ft.com/cms/s/0/d59e4466-9e18-11e2-bea1-0144feabdc0.html#axzz3ABsjan13</u>.
- 6. Mathews, J.A. and Hu, M.C. (2013). China key to Taiwan energy crisis. *Taipei Times*,

April 15, 2013, Taiwan.

http://www.taipeitimes.com/News/editorials/archives/2013/04/15/2003559647.

 Mathews, J.A. and Hu, M.C. (2013). Taiwan ignoring renewable lessons from mainland China. China Dialogue, April 24, 2013, China. <u>http://www.chinadialogue.net/article/show/single/en/5932-Taiwan-ignoring-renewablelessons-from-mainland-China</u>.

Editorial Board

•	Advisory Editor, Research Policy (SSCI)	2014-present
٠	Associate Editor, Technological Forecasting and Social Change (SSCI)	2015-present
•	Editorial Advisory Board, Science, Technology & Society (SSCI)	2017-present
•	Senior Editor, Industrial and Management Forum (TSSCI)	2017-present
•	Guest Editor of special issue, Journal of Management and Business	2020
	Research	
•	Associate Editor, Innovation, Management, Policy and Practice (SSCI)	2013-2017
•	Guest Editor of special issue: University-Industry R&D Connections:	2016
	Boundary-spanning Bridges or Boulevards of Broken Dreams?, Innovation,	
	Management, Policy and Practice (SSCI)	
٠	Editorial Advisory Board, Technological Forecasting and Social Change	2011-2014
	(SSCI)	
•	Guest Editor of special issue: Innovation in Taiwan, Innovation,	2013
	Management, Policy and Practice (SSCI)	
•	Guest Editor of special issue: Emerging Market Uncertainty, Technological	2011
	Forecasting and Social Change (SSCI)	

Consulting Services

•	Committee Member/Research Fellow, APEC Research Center for	2017-present
	Advanced Biohydrogen Technology, ACABT	
•	Consultant, Digisine Eenergytech Company	2018-present
•	Appraisal Committee, Technology Management Category, Directorate-	2016-present
	General of Personnel Administration	
•	Committee Member, R&D Achievements Management, Council of	2015-2017
	Agriculture, Executive Yuan	
•	Intellectual Property Adviser, Ship and Ocean Industries R&D Center	2014-present
•	Consultant, Yaching Design Company	2012-present
•	Consulting Member, Chih-Fa Science Company	2012-present
•	Exam Committee, Technology Development Programs, Ministry of	2008-present

Economic Affairs

• Committee Member, Service Industry Innovation Research, Department of 2008-present Commerce, Ministry of Economic Affairs

International Invited Talks

•	Entrepreneurial university: mechanisms and courses, University of Malaya,	2019/09/24
•	Malaysia. How universities exert social influence, Asia Academy of Management, Bali, Indonesia.	2019/06/19
•	Taiwan and Southeast Asia Regional Economic Sharing Strategy, International Schumpeter Society Conference, Seoul National University, South Korea.	2018/07/04
•	Strategy of Intellectual Property Rights, Wuhan University, China. Eco-city in China: Sino-Singapore Tianjin Eco-city, SSTEC, Nanjing University of Science and Technology, China.	2015/11/21 2015/04/05
•	Globalization management strategy, KAIST (Korea Advance Institute of Science and Technology), South Korea.	2014/12/12
•	Industry-Academia Cooperation Alliance, University of Malaya, Malaysia. Technology Policy, National Council of Science and Technology Policy, Vietnam.	2014/12/04 2014/07/18
•	Innovation, Nanjing Science and Technology University, China. Technology Development and Policy Course Evaluation in Business School, University of Malaya, Malaysia.	2013 2013
•	Stony Brook's Center of Excellence in Wireless & Information Technology, CEWIT2013 Conference, Incheon, South Korea.	2012
•	East and South Asia Research Center 'Focus Asia', Lund University, Sweden.	2011
•	International Innovation and Economic Management, Seoul National University, South Korea.	2011