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Address : Institute of Technology Management,
National Tsing Hua University,
NO.101, Sec. 2, Guangfu Road,
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Appointment : Associate Professor

Other affiliation/ appointment : Visiting Professor at SARChI in Industrial Development, University of Johannesburg, South Africa; Associate Editor for Technological Forecasting and Social Change

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Education

Ph.D. (Faculty of Economics and Administration)
University of Malaya, Malaysia
Thesis Title: Self-propagating Growth of Science and Technology: Papers and Patents of Selected Asian Economies

Areas of Interest

- Strategic Business Management Studies (Growth Strategies in SMEs, Business Model Innovation)
 - Regional Studies/ Development Studies (Entrepreneurship and Regional Development, Regional Innovation System, Middle-income Trap Economies, Economics of Catch-up)
 - Innovation and Development (Science and Technology Policy, Research Evaluation, Innovation Systems of Asian Economies)
 - Science and Technology Studies (Technology and Society, Scientometrics)
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Research and Publications

A. Publications (in Academic Journals)

2023

1. Wong, C-Y., Sheu, J. and Lee, K. (2023) Dynamics or Dilemma: Assessing the Innovation Systems of Three Satellite Platform Regions (Singapore, Dublin and Penang), *Eurasian Geography and Economics*, 64, 5, pp. 589-628 (SSCI Indexed Publication)
2. Wong, C-Y., Sheu, J. and Lee, K. (2023), Assessing the Quest of SMEs in Pivoting for New Technological Ventures: Comparing the Patenting Indexes of Seven Developed Cities, *Scientometrics*, 128, pp. 4029-4064 (SSCI Indexed Publication)
3. Wong, C-Y. and Wang, I-K. (2023) Resistant, Path Creation, or Resilient? An Empirical Study of 87 Innovation Cities Worldwide, *Seoul Journal of Economics*, 36, 2, pp. 165-191 (ESCI, Scopus Indexed Publication)

2022

4. Wong, C-Y., Wang, I-K., Sheu, J. and Hu, M-C. (2022), What network orientation supports the development of a Resilient City? Evidence from the innovation systems of eighty-seven cities, *Cities*, 131, 103923 (SSCI Indexed Publication)
5. Wong, C-Y. and Lee, K. (2022), Evolution of innovation systems of two industrial districts in East Asia: transformation and upgrade from a peripheral system and the role of the core firms, Samsung and TSMC, *Journal of Evolutionary Economics*, 32, pp. 955-990 (SSCI Indexed Publication)
6. Wong, C-Y. (2022), Dynamic Capabilities in a Learning Society—The Case of Taiwan in Controlling the Coronavirus Outbreak, *East Asian Science, Technology and Society*, 16, 2, pp. 230-236 (SSCI Indexed Publication)
7. Ng, B-K., Wong, C-Y. and Santos, M.G.P. (2022), Grassroots Innovation: Scenario, Policy and Governance, *Journal of Rural Studies*, 90, pp. 1-12 (SSCI Indexed Publication)

8. Wong, C-Y., Ni, F-C. and Sugano, T. (2022), Detouring route of SMEs in post catching-up conditions: context and dilemmas behind the quest for science-based business model innovation, *Asian Journal of Technology Innovation*, 30, 3, pp. 519-537 (SSCI Indexed Publication)

2021

9. Wong, C-Y. and Park S. (2021), Diverged Evolutionary Pathways of Two Public Research Institutes in Taiwan and Korea: Shared Missions and Varied Organizational Dynamics in ITRI and KIST *East Asian Science, Technology and Society*, 15, 4, pp. 417-438 (SSCI Indexed Publication)
10. Barr-Kumarakulasinge C., B-K., Ng and Wong, C-Y. (2021), Governing the progress of internet-of-things: Ambivalence in the quest of technology exploitation and user rights protection *Technology in Society*, 64, 101463 (SSCI Indexed Publication)
11. Gomez, E-T., Cheong, K-C. and Wong, C-Y. (2021), Regime Changes, State-Business Ties and Remaining In The Middle-Income Trap: The Case of Malaysia, *Journal of Contemporary Asia*, 51, 5, pp. 782-802 (SSCI Indexed Publication)
12. Lim, G., Gomez, E-T. and Wong, C-Y. (2021), Evolving State-Business Relations in an Age of Globalisation: An Introduction, *Journal of Contemporary Asia*, 51,5, pp. 697-712 (SSCI Indexed Publication)

2020

13. Wong, C-Y. and Elbegsaikhan, M. (2020), Geographical Indications in Development Contexts: Function, Supply Chain and Pursuit of Rural Industrial Development, *The Journal of World Intellectual Property*, 23, 5-6, pp. 712-735 (ESCI Indexed Publication)
14. Wong, C-Y. and Lim, G. (2020), A Typology of Agricultural Production Systems: Capability Building Trajectories of Three Asian Economies, *Asia Pacific Viewpoint*, 61,1, pp.37-53 (SSCI Indexed Publication)
15. Lee, K., Wong, C-Y., Intarakumnerd, P., and Limapornvanich, Is the Forth Industrial Revolution a Window of Opportunity for Upgrading or Reinforcing the Middle-Income Trap? Asian model of development that focuses on electronic and automobile clusters in Southeast Asia, *Journal of Economic Policy Reform*, 23:4, pp. 408-425 (SSCI Indexed Publication)

2019

16. Wong, C-Y. (2019), A Century of Scientific Publication: Towards a Theorization of Growth Behavior and Research-Oriented, *Scientometrics*, 119, Issue 1, pp 357–377 (SSCI Indexed Publication)
17. Wong, C-Y. and Fung, H-N. (2019), Caught-In or Breaking-Free from the Middle Income Trap: The Case of Malaysia, *Seoul Journal of Economics*, 31, 1, pp.1-22 (SCOPUS-Indexed)
18. Wong, C-Y., Hsieh, Y-C., Wu, C-Y. and Hu, M-C. (2019), Academic Entrepreneurship for Social Innovation: The Cases of the OurCityLove Platform and the Forest App, *Science, Technology and Society*, 24, 3, pp. 446-464 (SSCI Indexed Publication)
19. Ng, B-K., Chandran, VGR., Chen, S-H. and Wong, C-Y. (2019), University Incubation System for Research Commercialization: The Case of Taiwan and Malaysia, *Science, Technology and Society*, 24, 3, pp. 465-485 (SSCI Indexed Publication)

2018

20. Wong, C-Y. and Lee, K. (2018), Projecting the Arena of Inclusion: The Case of South Korea in Pursuing a Phased Inclusive Growth Process, *Review of Policy Research*, 35, 4, pp. 590-616 (SSCI Indexed Publication)
21. Wong, C-Y., Ng, B-K., Azizan S.A. and Hasbullah, M. (2018), Knowledge Structures of City Innovation Systems: Singapore and Hong Kong, *Journal of Urban Technology*, 25, 1, pp. 47-73 (SSCI Indexed Publication)

2017

22. Wong, C-Y. and Fung, H-N.(2017), Science-technology-industry correlative indicators for policy targeting on emerging technologies: exploring the core competencies and promising industries of aspirant economies, *Scientometrics*, 111, 2, pp. 841-867 (SSCI Indexed Publication)
23. Ng, B-K. Magli, A.S., Wong, C-Y. and Chandran, V.G.R. (2017), Localised learning in the Malaysian rice cluster: proximity, social capital and institutional dynamics, *International Development Planning Review*, 39, 2, pp. 163-185 (SSCI Indexed Publication)

24. Fung, H-N. and Wong, C-Y. (2017), Scientific collaboration in indigenous knowledge in context: Insights from publication and co-publication network analysis, *Technological Forecasting and Social Change*, 117, 57-69 (SSCI Indexed Publication)
25. Fung H-N. and Wong C-Y. (2017) Accelerating the technological life cycle through convergence: trends from herbal medicine patents and insights from case studies in Asia Pacific, *Int. J. Technological Learning, Innovation and Development*, 9, 4, 353-378 (SCOPUS-Indexed)

2016

26. Wong, C-Y.(2016), Evolutionary Targeting for Inclusive Development, *Journal of Evolutionary Economics*, 26,2, pp.291-316 (SSCI Indexed Publication)
27. Ng, B-K., Thiruchelvam, K., Wong C-Y., Chandran, VGR (2016), Innovation for inclusive development in Southeast Asia: the roles of regional coordination mechanisms, *The Pacific Review*, 29,4, pp. 573-602 (SSCI Indexed Publication)
28. Wong, C-Y. and Salmin, M.M. (2016), Attaining a Productive Structure for Technology: The Bayh–Dole Effect on University–Industry–Government Relations in Developing Economy, *Science and Public Policy*, 43, 1, PP. 29-45 (SSCI Indexed Publication)
29. Wong, C.-Y., Keng, Z-K., Mohamad, Z. F., and Azizan S.A. (2016), Patterns of Technological Accumulation: The Comparative Advantage and Relative Impact of Asian Emerging Economies in Low Carbon Energy Technological Systems, *Renewable and Sustainable Energy Reviews*, 57, 977-987 (SCI Indexed Publication)
30. Wong,C-Y., Chandran, V.G.R. and Ng, B-K. (2016), Technology Diffusion in the Telecommunications Services Industry of Malaysia, *Information Technology for Development*, 22, 4, pp. 562-583. (SSCI Indexed Publication)
31. Lewison, G., Kumar, S., Wong, C-Y., Roe, P. and Webber, R. (2016), The Contribution of Ethnic Groups to Malaysian Scientific Output, 1982-2014, and the Effects of the New Economic Policy, *Scientometrics*, 109, 3, pp. 1877-1893 (SSCI Indexed Publication)
32. Wong, C-Y. (2016), Book Review- Learning to Industrialize: From Given Growth to Policy-aided Value Creation by Kenichi Ohno, *Institutions and Economies*, 8, 4, pp. 94-99. (SCOPUS-Indexed)
33. Cheong, K-C., Wong, C-Y. and Goh, K-L. (2016), Technology Catch-up with Chinese Characteristics: What Can Southeast Asia Learn from China?, *The RoundTable*, 105, 6, 667-681 (SCOPUS-Indexed)

2015

34. Wong, C-Y. and Goh, K.L. (2015) Catch-up models of science and technology: A theorization of the Asian experience from bi-logistic growth trajectories, *Technological Forecasting and Social Change*, 95, pp. 312- 327 (SSCI Indexed Publication)
35. Wong, C-Y. and Wang, L. (2015) Trajectories of science and technology and their co-evolution in BRICS: Insights from publication and patent analysis, *Journal of Informetrics*, 9, 1, pp. 90-101 (SSCI Indexed Publication)
36. Wong C-Y, Hu M-C, Shiu J-W (2015) Governing the economic transition: How Taiwan strategically transformed its industrial system to attain virtuous cycle development. *Review of Policy Research*, 32, 3, pp. 365-387 (SSCI Indexed Publication)
37. Wong, C-Y., Hu, M-C. and Shiu J-W. (2015), Collaboration between Public Research Institutes and Universities: A Study of Industrial Technology Research Institute, Taiwan, *Science, Technology & Society* 20,2, pp. 161-181 (SSCI Indexed Publication)
38. Fung, H-N and Wong, C-Y. (2015), Exploring the modernization process of traditional medicine: a Triple Helix perspective with insights from publication and trademark statistics, *Social Science Information*, 54, 3, pp.327-353. (SSCI Indexed Publication)
39. Mohamed, M. Fung, H-N and Wong, C-Y. (2015), Convergence innovation in railway technology: how ERL of Malaysia attained its co-evolution structure for systemic development, *Asian Journal of Technology Innovation*, 23, 1, 93-108. (SSCI Indexed Publication)

2014

40. Wong, C.-Y., Mohamad, Z. F., Keng, Z-K. and Azizan S.A. (2014), Examining the patterns of innovation in low carbon energy science and technology: Publications and patents of Asian emerging economies. *Energy Policy*, 73, pp. 789-802 (SSCI Indexed Publication)
41. Shiu, J-W. Wong, C-Y. and Hu, M-C. (2014), The dynamic effect of knowledge capitals in the public research institute: insights from patenting analysis of ITRI (Taiwan) and ETRI (Korea), *Scientometrics*, 98, 3, pp. 2051-2068 (SSCI Indexed Publication)
42. Wong, C-Y. and Cheong, K-C. (2014), Diffusion of Catching-up Industrialization Strategies: The Dynamics of East Asia's Policy Learning Process, *Journal of Comparative Asian Development*, 13,3, pp. 369-404 (Scopus Cited)

2013

43. Wong, C-Y. (2013) On a Path to Creative Destruction: Science, Technology and Science-based technological Trajectories of Japan and South Korea, *Scientometrics*, 96, 1, pp. 323–336 (*SSCI Indexed Publication*).
44. Wong, C-Y, Siow, G. Li, R. and Kwek, K.T. (2013), The Impact of China on the Emerging World: New Growth Patterns in Chinese Import-Export Activities, *Engineering Economics*, 2013, 24, 4, 309-319 (*SSCI Indexed Publication*)

2012

45. Wong, C-Y. and V.G.R. Chandran (2012), Technology Stocks and Economic Performance of Government-Linked Companies: The Case of Malaysia, *Technological and Economic Development of Economy*, 18, 2, pp. 248-261 (*SSCI Indexed Publication*)
46. Wong C-Y and Goh K-L (2012), The Sustainability of Functionality Development of Science and Technology: Papers and Patents of Emerging Economies, *Journal of Informetrics*, 6, 1, pp. 55-65. (*SSCI Indexed Publication*).
47. Wong C-Y And Yap X-S. (2012), Mapping Technological Innovations Through Patent Analysis: A Case Study Of Foreign Multinationals And Indigenous Firms In China, *Scientometrics* 91, 3, 773-787 (*SSCI Indexed Publication*).
48. Wong C-Y and Goh K-L (2012), The Evolution and Pathways for Development: Science and Technology of NIEs and Selected Emerging Countries, *Scientometrics*, 92, 3, 523-548 (*SSCI Indexed Publication*).

2011

49. Wong, C-Y. (2011), Rent-seeking, Industrial Policies and National Innovation Systems in Southeast Asian Economies, *Technology in Society*, 33, ¾, pp. 231-243, (*SCOPUS-Cited Publication*)
50. V.G.R. Chandran and Wong, C-Y. (2011), Patenting activities by developing countries: The case of Malaysia, *World Patent Information*, 33, 1, pp. 51-57. (*SCOPUS-Cited Publication*)
51. Wong, C-Y. and Enoch C. (2011), An Evolutionary Perspective on Development of Venture Capital Industries in Malaysia, *Malaysian Journal of Science and Technology Studies*, 9, 1, pp. 22-40.

2010

52. Wong C. Y., Thirucelvam K., and Kurunathan R. (2010), Diffusion Trajectories of Emerging Sciences in Malaysian R&D System, *Technological Forecasting and Social Change*, 77, 7, 1109-1125. (*SSCI Indexed Publication*)
53. Wong C-Y. and Goh K. L. (2010), Growth Behavior of Publications and Patents: A Comparative Study on Selected Asian Economies, *Journal of Informetrics*, 4, 4, pp. 460-474 (*SSCI Indexed Publication*)
54. Wong C-Y and Goh K-L (2010), Modeling the behaviour of science and technology: Self-propagating growth in the diffusion process, *Scientometrics*, 84, 3, 669-686. (*SSCI Indexed Publication*)

2009

55. Wong, C-Y. and Goh K. L. (2009), Modeling the Dynamics of Science and Technology Diffusion of Selected Asian Countries using a Logistic Growth Function, *ASIAN Journal of Technology Innovation*, 17,1, pp. 75-100 (*SSCI Indexed Publication*)

2008

56. Wong, C-Y. and Asgari, B. (2008), Malaysian System of Innovation: The Case of Automation and Robotics Technology, *Malaysian Journal of Science and Technology Studies*, 6, 1, pp. 67-88.

2007

57. Asgari, B., and Wong, C-Y. (2007), Depicting the Technology and Economic Development of Modern Malaysia, *ASIAN Journal of Technology Innovation*, 15, 1, pp. 167-193.

B. Book and Book Chapters

2022

1. Wong, C-Y. (2022), *Experimental Learning, Inclusive Growth and Industrialised Economies in Asia: Lessons from South Korea and Taiwan*, Palgrave Macmillan: Singapore.

2019

2. Wong, C-Y., Ng, B-K., Shazana, A. and Cheong, K-C. (2019), Talent and Technological Innovation in Malaysia, with Lessons from China, In Tyson, A. (Ed.), *The Political Economy of Brain Drain and Talent Capture: Evidence from Malaysia and Singapore*, Routledge, Oxon, pp. 106-121.
3. Wong, C.-Y., & Fung, H.-N. (2019). Post catch-up science and technology trajectories: Publishing and patenting activities of China and Korea. In W. Glanzel, H. F. Moed, U. Schmoch, & M. Thelwall (Eds.), *Springer handbook of science and technology indicators* (pp. 1043–1061). Heidelberg: Springer.

2018

4. Ng, B-K., Wong, C-Y. and Magli, A. S. (2018), *Cluster Innovation and Development in Malaysia*, UMPress, Kuala Lumpur

2017

5. Wong, C-Y. (2017), *Convergence Innovation in City Innovation System*, In Lee, K-R. (Ed.), *Managing Convergence in Innovation, The New Paradigm of Technological Innovation*, Routledge: Oxon, pp. 117-137.

2015

6. Hu M-C., Wong, C-Y. and Lo, H-C., *The Trajectory of Taiwan's Industrial Development: Innovation Policy, Performance and Future Challenges for A Latecomer*, In *World Scientific Reference on Globalization in Eurasia and The Pacific Rim: Vol 2- Innovation*, pp. 43-56

2014

7. K.Thiruchelvam. Hassan, N., Daud M., Mohd, I., Inangda, N., Yusoff, S., Aziz, A., Ahmad, F., Hanif, N. and Wong, C-Y., *City Innovation Systems: Case Studies on Urban Innovations in Kuala Lumpur, Petaling Jaya: Gerakbudaya*

2013

8. K.Thiruchelvam, VGR Chandran, Boon-Kwee Ng, Chan-Yuan Wong, *Malaysia's Quest for Innovation, Progress and Lessons Learned*, Petaling Jaya: Strategic Information and Research Development Centre.
9. Chairatana, P. and Wong C-Y., *The Awakening Dragon: Vietnam Innovation System in the Making*, In Ratanawaraha, A., Chairatana, P. and Ellis W.W. (Ed.), *Innovation Systems In Southeast Asia*, Bangkok: Chulalongkorn University Press, pp.199-222
10. Thiruchelvam, K., B.K. Ng and C.Y. Wong. 2013. An Overview of Malaysia's National Innovation System: Policies, Institutions and Performance. In A. Ratanawaraha, P.A. Chairatana & W.W. Ellis (Eds). *Innovation Systems in Southeast Asia*, pp.53-88. Bangkok: Chulalongkorn University Press.

2012

11. K.Thiruchelvam, VGR Chandran, Boon-Kwee Ng, Chan-Yuan Wong, Kim-San, Chee (2012), *Financing Innovation: The Experience of Malaysia*, In Intarakumnerd, P and Wonglimpiyarat, J.(Ed.), *Towards Effective Policies for Innovation Financing in Asia*, Bangkok: Thammasat University Press, pp. 161-250.

2009

12. Rasiah, R. and Wong, C-Y. (2009), *The Global Financial Crisis and Malaysia's ICT Sector*, In Ramasamy, R. (Ed.), *ICT Strategic Review 2009/10: Innovation the Way Forward*, PIKOM: Petaling Jaya. pp. 51-66.

C. Other types of Publications: Consultancy Reports/Assignments

1. Review of Asian City Entrepreneurship (ASER), A Joint Project with Prof. Hu Mei-Chih. This Project is joint-commissioned from Industrial Technology Research Institute (ITRI) Taiwan.
2. STI Report- report prepared for Ministry of Science, Technology and Innovation, Malaysia
3. Metric Study for Malaysian Research Universities, 2015, report prepared for Univ. Malaya Commercialization and Innovation Center
4. Bibliometric Study- Science and Technology Knowledge Productivity in Malaysia, 2015
5. Study of Research Performance and Impact of R,D&C Program of 9th Malaysia Plan. The Report is used to assess the R&D Program of Ministry of Science, Technology and Innovation, 2013.

6. Consultancy report for Multimedia Development Corporation (MDEC), entitled National Broadband Survey and Strategic Plan, 2011. The report will be used to implement National Broadband Initiative (NBI) 2012.
7. Consultancy report for Ministry of Science, Technology and Innovation, 2011. The report is used to prepare Science, Technology Policy 3 of Malaysia.
8. Consultancy report for Ministry of Science, Technology and Innovation, entitled Study on Development of National Innovation Policy, 2010. The report is used to prepare Science, Technology Policy 3 of Malaysia.
9. Consultancy report for Ministry of Science, Technology and Innovation, entitled Malaysia's Science, Technology and Innovation Strategic and Action Plan, 2010. The report is used to prepare Science, Technology Policy 3 of Malaysia.
10. Consultancy report for OECD entitled Malaysia's National Innovation System, 2010.

Academic Experience

A. Visiting Position

Visiting Researcher

Institute of Economic Research, Seoul National University, South Korea

Mar 2017- Aug 2017

Visiting Scholar

UNU-MERIT, United Nation University, Netherlands

June 2014- Aug 2014

Visiting Scholar

Institute of Technology Management, National Tsing Hua University, Taiwan

Sept 2012- Dec 2012

Visiting Scholar

Department of Urban and Regional Planning, Chulalongkorn University, Thailand

June 2010- Sept 2010

B. Faculty/Teaching Position

Lecturer/Senior Lecturer

Department of Science and Technology Studies, University of Malaya, Malaysia

Dec 2010- Aug 2018

Lecturer

Faculty of Information and Communication Technology, of University of Tunku Abdul Rahman, Malaysia

Mar 2007- Dec 2008