

Koh Tieh Yong

Brief history of employment

No.	Organisation	Period of employment	Designation
1	National University of Singapore	2025 - present	Adjunct Associate Professor
2	Singapore University of Social Sciences	2024 - 2026	Associate Professor (part-time)
3	Singapore University of Social Sciences	2016 – 2023	Associate Professor
4	Nanyang Technological University	2004 – 2016	Associate Professor (before 2013: Assistant Professor)
5	National University of Singapore	2001 – 2004	Research Scientist (A)
6	Ecole Polytechnique	2001	Visiting Scientist

Full title of selected research papers/ patents published

No.	Title
1	Incorrect computation of Madden-Julian oscillation prediction skill
2	Multi-scale interactions in a high-resolution tropical-belt experiment and observations
3	Statistical evidence for asymmetry in ENSO-IOD interaction
4	Improved simulation of precipitation in the tropics using a modified BMJ scheme in the WRF model
5	Borneo vortex and mesoscale convective rainfall
6	A multi-resolution ensemble study of a tropical urban environment and its interactions with the background regional atmosphere
7	Effects of the Cold Tongue in the South China Sea on the Monsoon, Diurnal Cycle and Rainfall in the Maritime Continent
8	A diagnostic suite to assess NWP performance
9	Principal component analysis of observed and modeled diurnal rainfall in the Maritime Continent
10	Large-eddy simulation of flow and pollutant transport in urban street canyons with ground heating
11	Sea breeze simulation over the Malay Peninsula in an intermonsoon period

No.	Title
12	Hyperbolic lines and the stratospheric polar vortex

For full publication list, see <https://alum.mit.edu/www/tiehyong/>.

Other relevant information

Professional Membership

2022 - present: Provisional Member, Asia Pacific Institute of Experts (APIEx)

2016 - present: Member (2022 - 2025: Co-chair), Asia-Australia Monsoon Working Group (AAMWG), CLIVAR/GEWEX Monsoons Panel, World Climate Research Programme, World Meteorological Organization (WMO)

2016 - 2023: Editor, Scientific Online Letters on the Atmosphere (SOLA), Meteorological Society of Japan

2014 – 2023: Member, Madden-Julian Oscillation Task Force, Working Group on Numerical Experimentation, World Meteorological Organisation

2010 - 2023: Secretary, Atmospheric Science Section, Asia Oceania Geosciences Society

2008 - 2023: Member, Selection Panel, WSPC-ICAAS Most Outstanding Junior College Science Student Award, jointly awarded by Imperial College Alumni Association of Singapore (ICAAS) and World Scientific Publishing Company (WSPC) and facilitated by the Ministry of Education

2007 - 2008 & 2013 - 2014: Member, Advisory Committee, Climate Change Exhibition I & II, Singapore Science Centre

Selected Authorship

2021: Contributor, ASEAN State of Climate Change Report, commissioned by ASEAN Working Group on Climate Change (AWGCC) through Institute of Global Environmental Strategies (Bangkok, Thailand) and Centre for International Law, National University of Singapore (Singapore). (Accessible at <https://asean.org/book/asean-state-of-climate-change-report/>)

2021: Co-author, Book Chapter on "Grand Challenges in Asian Summer Monsoon Modeling — Representation of Processes and Sources of Model Error" in The Multiscale Global Monsoon System, C.-P. Chang, K.-J. Ha, R. H. Johnson, D. Kim, G. N. C. Lau and B. Wang, Eds., Vol. 11, World Scientific Series on Asia-Pacific Weather and Climate, World Scientific Publishing Co, pp. 420. ISBN: 978-981-121-659-6 (hardcover), 978-981-121-661-9(e-book).

2011: Co-author, Book Chapter on "The Maritime Continent Monsoon" in The Global Monsoon System - Research and Forecast, C.-P. Chang, Y. Ding, N.-C. Lau, R. H.

Johnson, B. Wang and T. Yasunari, Eds., Vol. 5, World Scientific Series on Asia-Pacific Weather and Climate, World Scientific Publishing Co, pp. 594. ISBN: 978-981-4343-40-4.

Curriculum Work (Syllabus, Assessment, Pedagogy)

2020: Member, Syllabus Development Committee for Pre-University H1 and H2 Geography, Ministry of Education

2019: Member, Curriculum Review Committee for Pre-University H1 and H2 Geography, Ministry of Education

2014 - 2016: Member, NTU Teaching Council

2014: Examiner, Asian Physics Olympiad 2014

2009: Member, 'A'-level Mathematics Syllabuses Consultative Committee, Ministry of Education

2006: Examiner, International Physics Olympiad 2006

Selected Course Development

2022: Developer and Lecturer, Workshop Session 10 - Sustainable Energy and Carbon Mitigation Policies in Enterprise Leadership for Transformation 03, at Centre for Continuing and Professional Education, Singapore University of Social Sciences (SUSS)

2019 - 2021: Developer and Lecturer, Course Code SCO211 Science for Sustainability, at Centre for University Core, Singapore University of Social Sciences (SUSS)

2012 - 2016: Developer and Lecturer, Course Code ES007 Climate and Climate Change, at Asian School of the Environment, Nanyang Technological University (NTU)

2005 - 2012: Developer and Lecturer, Course Codes PH4502 Atmospheric Physics, PH2201 Classical Mechanics, MH1800 Calculus for the Sciences I, at School of Physical and Mathematical Sciences, Nanyang Technological University (NTU)

Funded Research

Total funding over 15 years is \$7,734,400. For complete listing, see <http://alum.mit.edu/www/tiehyong/>.