STEPHEN TAY (Dr)

PhD (Materials) Imperial College London, B.Eng. (Materials Engineering, First Class Honours) Nanyang Technological University

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CURRICULUM VITAE

ACADEMIC QUALIFICATIONS:

- PhD in Materials, Imperial College London (2015)
    - National Research Foundation (Clean Energy) Overseas Scholarship
- B.Eng. in Materials Engineering (First Class Honours), Nanyang Technological University (2011)
    - Dean's List for 2009/2010 and 2010/2011
    - A*STAR Pre-Graduate Scholarship for 2010/2011
- Workforce Skills Qualifications Advanced Certificate in Training and Assessment (2017)

EMPLOYMENT RECORDS:

- Senior Lecturer, Department of Building, NUS (2019 – Present)
- Adjunct Researcher, Solar Energy Research Institute of Singapore, NUS (2019 – Present)
- Head of Urban Solar Group and National Solarisation Centre, Solar Energy Research Institute of Singapore, NUS (2017 – 2018)
- Head of National Solarisation Centre, Solar Energy Research Institute of Singapore, NUS (2016 – 2017)
- Deputy Head of National Solarisation Centre, Solar Energy Research Institute of Singapore, NUS (2015 – 2016)

PROFESSIONAL/CONSULTING ACTIVITIES:

- Working Group Member on Renewable Energy Certificates, Singapore Standards Council (Present)
- Taskforce member of Green Built-Environment Advisory Committee for the Singapore Green Building Masterplan (2020)
- Invited speaker and panelist for Sustainable Energy Technology Asia 2018 (2018)
- Lead Trainer for ASEAN Training of Trainers on Solar Technology for Renewable Energy Training Institutions (2018)
- Country representative for ACE-USAID Workshop on Renewable Energy Incentive (2017)
- Consultant for Imperial Consultants advising a Fortune Global 500 company (2013-2014)

(Updated June 2021)

TEACHING:

- PF3105 Research Methods
- PF3504 Energy Management
- PF4305 Green Development

RESEARCH INTERESTS:

- Solar photovoltaic performance in the urban environment
- Co-location of solar photovoltaic systems and greenery
- Willingness-to-pay and social perceptions on renewable energy

SELECTED PUBLICATIONS:

- Chapter contribution to *Update of the Solar Photovoltaic (PV) Roadmap for Singapore*, commissioned by the National Climate Change Secretariat (2020)
- Chapter contribution to *Where Sun Meets Water : Floating Solar Market Report - Executive Summary (English)*, commissioned by World Bank Group (2018)
- Chapter contribution to *Super Low Energy Building Technology Roadmap*, commissioned by Building Construction and Authority (2018)
- **Stephen E. R. TAY**, Angela E. GOODE, Johanna NELSON WEKER, Amy C. CRUICKSHANK, Sandrine HEUTZ, Alexandra E. PORTER, Mary P. RYAN, and Michael. F. TONEY, *Direct In situ Observation of ZnO Nucleation and Growth via Transmission X-ray Microscopy*, Nanoscale, 8, 1849 (2016)
- **Stephen E. R. TAY**, *The development of non-toxic and earth-abundant solar cells to reduce fossil fuel dependence*, Imperial Engineer, 18th issue (2013)
- Rachel LAWLER, Stuart IRVINE, **Stephen TAY**, and Henry SNAITH, *The rise of solar power*, Materials World, 21, 9, 28-29 (2013)

AWARDS:

- University Annual Teaching Excellence Award (ATEA) and School's Teaching Excellence Award (STEA) for AY19/20 (2021)
- Young Green Building Advocate Award Category under the SGBC-BCA Sustainability Leadership Awards (2019)
- Nanoscale article selected for the "2016 Nanoscale HOT Article Collection" and featured in the Stanford Synchrotron Radiation Lightsource Science Highlights (2016)
- 1st prize for presentation and poster competition, Electrophoretic Deposition V: Fundamentals and Applications (2014)
- 1st prize for technical presentations, IET Present Around the World Competition (UK South East Region) (2013)
- 1st prize, Royal School of Mines Association Essay Competition (2012)
- 1st prize for poster competition, Discover URECA@NTU (2010)
- NTU President Research Scholar (2009/2010)
- DSO-URECA Research Scholar (2008/2009)

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