

Education

University of Cambridge

PhD Student in Chemistry

Cambridge, UK
January 2020 - Present

- Project: Quantifying the role of sulfur emissions in Earth system models
- Supervisors: Dr Alexander T. Archibald, Dr Paul T. Griffiths

Chulalongkorn University

M.Sc. (Physics)

Bangkok, Thailand

2014 – 2018

- Thesis: Theoretical Studies of Methyl-ammonium Lead Iodide Perovskite under High Pressure
- Supervisor: Asst Prof Dr Thiti Bovornratanaraks

B.Sc. (Physics), Second-class honour

2010 – 2014

- Thesis: Comparing Absorption Spectra Observed from Icy Dwarf Planet and Modelled Water Ices from Density Functional Theory
- Supervisor: Asst Prof Dr Thiti Bovornratanaraks

Research experience

National Astronomical Research Institute of Thailand (NARIT)

July 2017 – December 2019

- *Research Assistant at the Atmospheric Research Unit under Dr Ronald Macatangay*

Awards

University of Cambridge, UK

- Joint scholarship from Cambridge Commonwealth, European & International Trust and Cambridge Thai Foundation

2020 – Present

Chulalongkorn University

- Development and Promotion of Science and Technology Talents Project Scholarship (DPST), Government of Thailand
- 90th Anniversary of Chulalongkorn University Research Grant

2013 – Present

2017 – 2019

Publications

- W. Sukmas, **V. Sakulsupich**, P. Tsuppayakorn-aek *et al.* “Preferred oriented cation configurations in high pressure phases IV and V of methylammonium lead iodide perovskite”. *Sci Rep* 10, 21138 (2020).
- R. Solanki, R. Macatangay, **V. Sakulsupich** *et al.* “Mixing Layer Height Retrievals from MiniMPL Measurements in the Chiang Mai Valley: Implications for Particulate Matter Pollution”. *Front. Earth Sci.* 7:308 (2019).
- R Klinkla, **V Sakulsupich**, T. Pakornchote, U. Pinsook, T. Bovornratanaraks. “The crucial role of density functional nonlocality and on-axis CH₃NH₃ rotation induced I₂ formation in hybrid organic-inorganic CH₃NH₃PbI₃ cubic perovskite”. *Scientific Reports* 8, 13161 (2018)

Contributed talks and posters

V. Sakulsupich, A. Schmidt. "Assessing the potential hazards of volcanic sulfur species to aviation"

- Summer school on volcanic effects on atmosphere and climate, University of Greifswald (Poster) September 2021
- Department of Chemistry Showcase Week (Poster) September 2021
- St Edmund's College Students' Conference (Talk) February 2021

V. Sakulsupich, D. Ruffolo, W. Mitthumsiri, R. Macatanga, F. Yu. "Pre-Cloud Condensation Nuclei Cluster Formation by Ion-Mediated Nucleation from Solar Energetic Particles: Example of the 2005 January 20 Ground Level Enhancement"

- Siam Physics Congress 2019, Hat Yai, Thailand (Awarded best poster) 2019
- EGU General Assembly, Vienna, Austria (Poster) April 2019

V. Sakulsupich, R. Macatangay, P. T. Griffiths, V. Surapipith. "Multi-year trend and temporal analysis of air quality from observation over the Greater Bangkok area, Thailand"

- iCACGP-IGAC 2018, Takamatsu, Japan (Poster) September 2018

V. Sakulsupich, R. Klinkla, T. Bovornratanaraks. "Effects of Van der Waals Interaction on Structural and Electronic Properties of Methylammonium Lead Iodide Perovskites"

- Siam Physics Congress 2016 (Talk) 2016

Collaboration, Communication and Public Outreach

University of Cambridge

Cambridge, UK

- *Student chair* for the departmental peer-to-peer presentation 2021
- *Executive secretary* for students at St Edmund's college 2020 – 2021
Responsible for representing the students at college level, publishing students newsletters, and facilitating academic and social events

National Astronomical Research Institute of Thailand (NARIT)

Chiang Mai, Thailand

- *Wrote press releases* for the Atmospheric Research Unit 2019
- *Teaching assistant* in Aerosol modelling workshop 2019
- *Staff* at NASA Land-Cover and Land-Use Change (LCLUC) conference 2018

Chiang Mai University

Chiang Mai, Thailand

- *Gave a graduate seminar talk* titled "Handling Missing Observation Data Using Principal Component Analysis" 2019

Mahidol University

Bangkok, Thailand

- *Gave a talk* titled "Possible cosmic rays effects on cloud nucleation" 2019

Chulalongkorn University

Bangkok, Thailand

- *Teaching Assistant (TA)* for undergraduate physics courses 2016 – 2017
- *Coordinator* for graduate seminars at the Department of Physics 2016
- *Graduate student staff* for Siam Physics Congress (SPC2015) 2015
- *Local coordinator* for the 7th Asian Conference on High Pressure Research (ACHPR7) 2014
- *President of physics students* for Chula Vichakarn (Biennial academic showcase week) 2013

Languages

- English - IELTS - Overall 8.0/9.0 November 2019
Listening 8.5/9.0, Reading 9.0/9.0, Writing 7.0/9.0, Speaking 7.0/9.0
- Fluent in Thai