

# Tzu-Hao Huang

PhD Student

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🐦 @THHuang0627

🌐 Tzu-Hao Huang



A PhD student whose project is dedicated to unravelling the mystery of Marine Silicate Weathering (MSiW), which was ignored in the past but contributes significantly to Earth's carbon dioxide fixation. Multiple disciplines (elemental abundance, stable isotope, mineral composition and numerical modelling) are applied to the various continental margin sites to study MSiW.

## 🎓 Education

### PhD in Geochemistry (2021-Present)

Stockholm University, Department of Geological Science

Project: Decoding Marine Silicate Weathering

Advisors: Dr. Wei-Li Hong and Dr. Xiaole Sun

### MS in Marine Geology (2015-2017)

National Taiwan University, Institute of Oceanography

Project: Fluid temperature and composition associated with displacement of the Chelungpu fault in Taiwan

Advisors: Dr. Pei-Ling Wang and Dr. Li-Hung Lin

### BS in Oceanography (2011-2015)

National Sun Yat-sen University, Department of Oceanography

Project: Isotopic compositions of the planktonic foraminifera collected by plankton tow from the South China Sea.

Advisor: Dr. Hui-Ling Lin

## 👜 Employment

Doctrate at Stockholm University, Department of Geological Science  
(2021-Present)

Laboratory Analytical Specialist and Quality Control at I-MEI Foods Co., Ltd.  
(2018-2020)

## 🔍 Research Interest

Isotopic Geochemistry

Si, K and Clumped isotope

Subsurface Silicon cycle

Solid (biogenic and lithogenic) and liquid (porewater) Si interaction in marine sediment

Early Diagenesis

Silicate alteration and opal transformation in marine sediment



## Invited Talks and Presentations

Poster presentation in Geochemistry of the Earth's Surface 12 (GES12), Zürich, Switzerland (Title:Isolating Si diagenetic signals from deep subsurface sediments through a sequential leaching method, 2022/07 )

Oral presentation in 10th Isotopes in Biogenic Silica (IBiS), Lund, Sweden (Title:Isolating Si diagenetic signals from deep subsurface sediments through a sequential leaching method, 2022/06)

Invited Talk to the SiCON working group from the Department of Geology at Lund University (Title:Decoding Marine Silicate Weathering, 2022/05)

Poster presentation in Goldschmidt 2021,Virtual. (Title:Sequential extraction of biogenic, authigenic and lithogenic silicas and silicates from marine sediments , 2021/07)



## Publication

Isolating Si diagenetic signals from deep subsurface sediments through a sequential leaching method. (in prep.)

Fluid temperature and composition associated with displacement of the Chelungpu fault in Taiwan, Master Thesis. National Taiwan University, Taipei, Taiwan (2017/08).



## Grants and Awards

International Association of Geochemistry Student Research Grants (\$2300 USD, 2022/05)

Climate Research School (Bolin Center) Financial Supports to PhD student (5000 SEK, 2022/03)

European Consortium for Ocean Research Drilling Research Grants for Outstanding Early Career Researchers (3000 €, 2021/11)

Stockholm University Donation Scholarship (13000 SEK, 2021/06)

Dean's Award of College of Science, National Taiwan University (2017/06)