

# Exploring the Earth's Interior from Geophysical, Geochemical and Geodynamical Perspectives

October 22, 2024, Taipei

Venue:  
Lecture Hall, 2<sup>nd</sup> Floor,  
Institute of Earth Sciences  
Academia Sinica

## Agenda

09:30-09:40 **Opening /Group photo**

09:40-10:15 **William McDonough** - Earth Sci. & RCNS, Tohoku Univ.; Geology, Univ. of Maryland  
--What is powering the Earth's engine?

10:15-10:35 **Eh Tan** - IES, Academia Sinica  
--Serpentinite dehydration within the tectonic melange in Taiwan and its links to seismic tremors

10:35-10:50 **Break**

10:50-11:10 **Ban-Yuan Kuo** - IES, Academia Sinica  
--Continental shear zone architecture and lithosphere-asthenosphere coupling from shear-wave splitting analysis

11:10-11:30 **Jeremy TJ Wu** - Geosciences, NTU  
--Reconstructed upper-mantle heterogeneity domains in Southeast Pacific since the Cenozoic

11:30-11:50 **Kai-Xun Chen** - Geosciences, NTU  
--On the origin of the Hawaiian swell: constraints from lithosphere and asthenosphere seismic structure

11:50-13:25 **Lunch**

13:25-14:00 **Eiji Ohtani** - Earth Sci., Tohoku Univ.  
--Hydration and dehydration of the slabs and their roles in mantle dynamics

14:00-14:20 **Wen-Che Yu** - IES, Academia Sinica  
--Thermo-chemical structures of the lowermost mantle

14:20-14:40 **Wen-Pin Hsieh** - IES, Academia Sinica  
--Deep water cycle impacts the seismic structure and thermochemical evolution in deep mantle

14:40-15:00 **Frédéric Deschamps** - IES, Academia Sinica  
--Mapping CMB heat flux from numerical models of convection and seismic tomography

15:00-15:10 **Discussion & Closing**

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