



**PROF. DR. TERRY PLANK** is the Arthur D. Storke Professor of Earth Sciences at Columbia University in New York, USA. She began her professional career at the University of Kansas and Boston University before becoming the first female professor in her field at Columbia University in 2008. She is one of the world's leading scientists in volcano research. Her research focuses on subduction zones and related explosive volcanic eruptions.

Awarding of the 30. Excellence Professorship from the Prof. Dr. Werner Petersen Foundation to Prof. Dr. Terry Plank

Now at GEOMAR Extension Building

# Wednesday, 27<sup>th</sup> March 2024, 18:30 CET

ENB, Foyer and Conference Room (Geb. 5) | Wischhofstr. 1-3 | D-24148 Kiel

## AT THE SPEED OF VOLCANIC ERUPTIONS

What happens under volcanoes in the months, days and minutes leading up to eruption? Why are some eruptions more explosive than others? Volcanic crystal are providing answers to these questions.



It may come as a surprise that dozens of volcanoes are currently in a state of heightened activity. The vast majority of these volcanoes are located in subduction zones and have the potential for explosive eruptions. Magmas beneath these volcanoes contain comparatively large amounts of water in

dissolved form. This water escapes as gas during explosive volcanic eruptions and hurls the molten rock apart. Deep below the volcanoes, growing crystals from the hydrous magmas preserve the water content in their crystal structure. Using infrared spectroscopy, Terry Plank's team measured the zonation of the water in the mineral olivine in order to determine the rate of ascent of the magma for the first time.

### PROGRAMM

Welcome: Prof. Dr. Katja Matthes, Director of GEOMAR

Laudatio: Prof. Dr. Kaj Hoernle, Leader of Working Group Petrology and Geochemistry (MuHS-P), GEOMAR

Awarding the 30. Excellence Professorship to Prof. Dr. Terry Plank

Lecture of Prof. Dr. Terry Plank: "At the Speed of Volcanic Eruptions"

#### **Closing words:**

Prof. Dr. Katja Matthes, Director of GEOMAR

Reception in the conference area



#### **Registration:**

Please apply online by **20 March 2024** at the latest via this link: https://events.geomar.de/event/381/registrations/83/

Werner Petersen Stiftung

This award ceremony is sponsored by the Prof. Dr Werner Petersen Foundation. More Info: www.petersen-stiftung.de

