

Dear Asteroid-Meteorite Clay Scientists,

We are excited to share news of a session covering many aspects of phyllosilicate investigations in asteroids and meteorites at the International Clay Conference (ICC) in Dublin, Ireland July 13-18, 2025.

<https://icc.aipea.org/>

Abstracts are due April 11th.

We look forward to meeting you there!

Session Organizers:

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Session 2: Phyllosilicates in Asteroids and Meteorites: Identification and Characterization of Phyllosilicate Assemblages

Phyllosilicates have been identified and characterized on the asteroids Ryugu, Benu, and the dwarf planet Ceres through spectroscopic remote sensing and further investigated in the lab for Ryugu and Benu. Characterization of phyllosilicates in meteorites also provides key constraints on understanding the phyllosilicates in asteroids. NH_4 -phyllosilicates have been identified across much of the surface of Ceres, and lab studies of potential forms of these clays are enabling a more accurate understanding of the types and chemistries of these intriguing materials. Lab measurements performed on Ryugu and Benu returned samples demonstrate the presence of Mg-rich phyllosilicates, often associated with carbonates and organic components. Remote sensing at Ceres has revealed the presence of NH_4 -related spectral signatures, carbonates, and organics, often associated with phyllosilicates, highlighting an intriguing formation pathway. Abstracts are requested characterizing phyllosilicates in asteroids and meteorites, as well as lab studies supporting our understanding of these data.

