



GESELLSCHAFT DEUTSCHER CHEMIKER

Ortsverband Frankfurt

The Alchemy of Pressure and Heat: Crystallography's Uncharted Territory

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This presentation delves into the realm of high-pressure and high-temperature crystallography, where the familiar chemical rules governing compounds at atmospheric pressure are challenged. We explore various compound classes, including oxides, borides, carbides, nitrides, halides, and hydrides, noting the emergence of compounds with homoatomic polyanions as a significant discovery.

The implications of high-pressure crystallography extend beyond chemistry, impacting disciplines such as physics, materials science, earth sciences, and planetary sciences. We examine how extreme conditions reshape our understanding of matter. This talk offers a sober examination of the deviation from conventional chemical norms under extreme pressure and temperature, shedding light on the broader implications for scientific research.

The presentation will take place on Tuesday,
14.05.2024, 17:15 in room H1 (Chem. Institute),
Goethe University Frankfurt,
Max-von-Laue-str. 9, 60438 Frankfurt am Main



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