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Investigations of Selected Properties of Material Properties under Dynamical High Pressure and Temperature

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The mechanical properties of materials change when subjected to dynamically conditions of high pressure and temperature. Such materials are those applied in cutting and shaping resulting in twisting and tensile forces. Results of selected MAX phases are presented to show variations in elastic constants as a function of dynamically pressure and temperature. Another situation where materials are subjected to such conditions is in the core of the earth. Stishovite, CaCl_2 and Seifertite phases of silica, occurring in the core of the earth, are investigated with outcomes of phases transitions and related changes in seismic velocities that are compared with experimentally determined values.

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No. Not a student nor Postdoc.

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Registered for the conference?

Yes

CHPC User

Yes

CHPC Research Programme

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