

SEES-FORCE Joint Meeting - Poster Session

#	Presenter	Title
1	Katherine Armstrong	Furthering the User-Friendly Resistive Heating Capabilities for Diamond Anvil Cell Experiments at ALS 12.2.2
2	Augustin Braun	Mechanistic Insight into the High Pressure Synthesis of Nanodiamonds and Silicon Carbide from In Situ X-ray Diffraction
3	Israel Carrillo	Shock Compression of Hydrated Silicate Glasses to Deep Mantle Pressures
4	Stella Chariton	Advancing Earth Science at High Pressure: The 13-ID-D Beamline Upgrade
5	Luisa Chavarria	Effect of Sodium Incorporation on Structure of Magnesio-wüstite (Mg, Fe)O
6	Qi Chen	Pressure and Water Effects on the Viscosity of Intermediate-SiO ₂ Aluminosilicate Melts up to 7.5 GPa
7	Irina Chuvashova	Novel Lanthanum Hydroxyl Borate Structure with Potentially Deep-Ultraviolet Birefringent Properties at Extreme Conditions
8	Roberto Colina Ruiz	Chromium and Vanadium Redox States Recorded in Apollo 17 Dunite Reveal Origin in Highly Reduced Lunar Mantle
9	Sabine Dietrich	Microbial Interactions, Biomineralization, Ore Deposit Enrichment, and Complexity in Geosystems and Geomaterials
10	Vasilije Dobrosavljevic	Thermal Conductivity of FeO: Effect of the Insulator-Metal Transition and Implications for Mantle Plume Generation
11	Victoria Gonzalez	SiO ₂ Melt Viscosity from One-Atmosphere to 2.5 GPa
12	Lindsay Harrison	Elastic and Volumetric Properties of Vitreous SiO ₂ under Shockless Dynamic Compression
13	Jiasen Hu	Isothermal Compression X-Ray Diffraction Study of Fe-, Al-, Mg-, and Ti-Bearing Davemaoite
14	Qinxin Hu	Thermal and Mechanical Controls on Fracture Stiffness and Hydraulic Characteristics in Unmated Rock Fractures
15	Rong Huang	Resolving Site-Specific Spin Transitions of Iron in Bridgmanite Using Single Crystal X-ray Diffraction
16	Laura Jimenez Arcia	Synchrotron-Based Micro-CT Observations of Mixing-Controlled Hotspots in Porous Media
17	Bora Kalkan	Structural Behavior of Eitelite, Na ₂ Mg(CO ₃) ₂ -Double Carbonate under High Pressure: Unrevealing of Trigonal to Triclinic Phase Transition
18	Kyounglim Kang	Iron–Organic Carbon Interactions and Carbon Transformation in Ombrotrophic Peatlands
19	Martin Kunz	High-Temperature Diffraction Experiments on Talc: A Cautionary Tale on Low Symmetry Rietveld Studies
20	Zhenxian Liu	Frontier Synchrotron Infrared Spectroscopy Extreme Conditions Beamline at NSLS-II
21	Ekanshu Mallick	Sulfur-Driven Phase Equilibria and Melting Relations in Mercury's Reduced, FeO-Poor Mantle
22	Abdul Haseeb Manayil Marathamkottil	X-ray Diffraction and Electrical Transport Imaging of Superconducting Superhydride (La,Y)H ₁₀
23	Tracey Nelson	Exploring the High Pressure Phase Space of the Titanium Carbide System Using a Novel Synthetic Method for Diamond Anvil Cells

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24	Timothy Officer	Scaling Relations between High Pressure, High Temperature Transformational Faulting Experiments and Natural Seismicity
25	Devika Padmakumar	Thermal Conductivity and Acoustic Velocity of Mg_2SiO_4 and $(\text{MgO})_{1.5}\text{SiO}_2$ Glasses at High Pressures
26	Allison Pease	EoSAlign: An Open-Source Software for Calculating, Comparing, and Aligning Pressure under Extreme Conditions
27	Juliana Peckenpaugh	Experimental Investigation of High-Pressure Phase Stability and Thermoelastic Properties of Brucite $\text{Mg}(\text{OH})_2$
28	Vitali Prakapenka	Advanced Synthesis and Characterization of Minerals at Extreme Conditions
29	Maxwell Queener	Characterizing the Thermal Gradients of Multi-Anvil Press Cell Assembly Types
30	Mithil Rajput	Experimental Constraints on Core Formation via Melt Percolation in Icy Moons
31	Shradha Ravikumar	A Novel Cooling System for D-DIA Experiments at Cryogenic Conditions
32	Edwin Rivas Meraz	In-Situ Oxidation of Iron Sulfide and Humic Acid with Fe L-edge and C K-edge STXM
33	Mark Rivers	In-Situ Capabilities for Computed Microtomography at SEES Facilities at the APS
34	Claire Romine	High-Resolution Synchrotron-Based X-Ray Fluorescence Spectroscopy Characterization of Beryl to Determine Chemistry-Color Relations
35	Young Jay Ryu	Pressure-Induced Structural and Elastic Evolution of CaSiO_3 Glass to 65 GPa
36	Young Jay Ryu	Advancing Extreme Conditions Research at GSECARS 13-BM-D
37	Christofanis Skordas	Optimizing X-ray Diffraction Workflows for Measurements at Extreme Conditions
38	Wenhao Su	Ultra-Dense CaSiO_3 Melt Revealed by Sound Velocity Measurements of CaSiO_3 Glass up to 100 GPa
39	Daybis Tencio	High Pressure Synthesis of Ultrasmall Nanodiamonds with Nitrogen Vacancy Centers
40	Alem Tukic	Hydrogen-Silicate Reactions at Low H_2 Availability: Implications for Water Production in Atmosphere-Depleted Sub-Neptunes
41	Lily Velez Lewis	Effects of Composition and Electronic Spin on Raman Spectroscopy of Bridgmanite
42	Yanbin Wang	PIPS-2025: An Updated Practical Pressure Scale for the Large-Volume Presses
43	Maksim Yakovlev	Micro- and Nano-Tomography Reconstruction Correction for Motion Prone Datasets in Earth Science
44	Tony Yu	Synchrotron X-Ray Studies of High-Pressure Melts in a Large-Volume Press at GSECARS, Advanced Photon Source
45	Dongzhou Zhang	X-ray Photon Correlation Spectroscopy Combined with Falling Sphere in a Diamond Anvil Cell
46	Bin Zhao	Phase Diagram of Fe-C-S Ternary System under Planetary Core Conditions
47	Jiyong Zhao	Update of the Nuclear Resonant Scattering Beamlines at APS