The Large Volume Press beamline workshop

1-2 October 2018
Deutsches Elektronen-Synchtron (DESY)
Bldg 48e, Seminar room

Contact:
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Monday October 1st		
12:45	Registration	
13:00 – 13:15	Welcome and Status of PETRA III Extension Project (FS-PEX, incl. P61)	Dr. Wolfgang Drube
Session 1: *Chair: Robert Farla*		
13:15 – 13:40	Determination of phase relations under deep-mantle conditions using multi-anvil presses in combination with in situ X-ray diffraction: current capability and future development	~~Prof. Tomoo Katsura~~ Dr. Takayuki Ishii
13:40 – 14:05	The science case for in situ angle dispersive diffraction studies	Prof. Björn Winkler
14:05 – 14:30	Monitoring chemical reactions and transitions at high pressures and temperatures by in-situ synchrotron diffraction	Prof. Ulrich Haussermann
14:30 – 14:55	High-pressure synthesis of new binary superconductors	Dr. Ulrich Schwarz
14:55 – 15:30	Coffee Break	
Session 2: *Chair: Shrikant Bhat*		
15:30 – 15:55	Multifunctional Inorganic Nitrides: High Pressure Synthesis, Structure and Properties	Prof. Ralf Riedel
15:55 – 16:20	Exploring new High-Pressure Nitrides – Crystal Structure Analysis	Dr. Leonore Wiehl
16:20 – 16:45	The LVP press and its abilities	Dr. Hans Joachim Mueller
16:45 – 17:10	Kinetic control in the synthesis of metastable In2O3 polymorphs: in situ high-pressure high-temperature synchrotron studies in multi-anvil assemblies	Dr. Maged Bekheet
17:10 – 18:10	Beamline tour/sightseeing at P61B	
18:30 – open	Dinner	

Tuesday October 2nd		
8:45 – 9:00	Coffee, Announcements	
Session 3: *Chair: Robert Farla*		
9:00 – 9:25	Advanced ceramics for advanced high pressure cells in large-volume synchrotron experiments	Dr. Marcus Schwarz
9:25 – 9:50	Melt relations in the system CaCO3-MgCO3 under anhydrous and hydrous conditions and high pressure	Prof. Monika Koch-Müller
9:50 – 10:15	Structural changes in supercritical fluids at high pressure	Dr. Clemens Prescher
10:15 – 10:40	On phase transformations of austenitic stainless steels at high pressures up to 20 GPa	Dr. Anja Weidner
10:40 – 11:00	Coffee Break	
Session 4: *Shrikant Bhat*		
11:00 – 11:25	Understanding grain-scale deformation in granular materials: Time-lapse XCT imaging of a deforming reservoir sandstone	Dr. Suzanne Hangx
11:25 – 11:40	HP/HT study of phase equilibria in the Fe-N system - Results of ex situ analysis and perspectives for in situ experiments at P61B	Mr. Marius Wetzel
11:40 – 12:05	Current status and future development of P61B	Dr. Robert Farla
12:05 – 12:30	Discussion and Closing	