



*8<sup>th</sup> International Workshop on Spinel Nitrides and  
Related Materials, Rüdesheim/Rhein, Deutschland*

**Preliminary Program Plan**

	Sunday 04.09	Monday 05.09 <hr/> 8:45-9:00 Opening	Tuesday 06.09	Wednesday 07.09	Thursday 08.09	Friday 09.09	
9:00- 10:30 Morning Session 1	<b>ARRIVAL</b>	<b>Structural Characterization &amp; Properties I</b>	<b>Theoretical Predictions and Modeling I</b>	<b>Excursion Cologne</b>	<b>Materials Synthesis: <i>HP/HT Methods III</i></b>	<b>DEPARTURE</b>	
11:00- 12:00 Morning Session 2		<b>Materials Synthesis: <i>Precursor-based Methods I</i></b>	<b>Theoretical Predictions and Modeling II</b>		<b>Materials Synthesis: <i>HP/HT Methods IV</i></b>		
		<b>LUNCH</b>					
14:00- 15:30 Afternoon Session 1		<b>Materials Synthesis: <i>Precursor-based Methods II</i></b>	<b>Materials Synthesis: <i>HP/HT Methods I</i></b>		<b>Structural Characterization &amp; Properties II</b>		
16:00- 17:30 Afternoon Session 2		<b>Materials Synthesis: <i>Precursor-based Methods III</i></b>	<b>Materials Synthesis: <i>HP/HT Methods II</i></b>		<b>Structural Characterization &amp; Properties III</b>		
Evening		<b>18:30 Dinner</b>	<b>18:30 Dinner</b>		<b>18:30 Dinner</b>		<b>18:00 Conference Dinner</b>

<b>Monday 05.09. Morning Session I - Structural Characterization &amp; Properties I</b>				
Time	Name		Country	Title of the talk
09:00 - 09:30	Amparo	Fuertes	Spain	Tuning properties in metal oxynitrides
09:30 - 10:00	Yuichi	Ikuhara	Japan	Grain Boundary and Interface Atomic Structures in Covalent-bonded Ceramics
10:00 - 10:30	Alexander	Moewes	Canada	Exploring the role of oxygen vacancies in In <sub>2</sub> O <sub>3</sub> :Fe with synchrotronbased spectroscopy
10:30 - 11:00				<b>Coffee</b>
<b>Monday 05.09. Morning Session II - Materials Synthesis: Precursor-based Methods I</b>				
11:00 - 11:30	Richard	Laine	USA	Chemical transformations within and at nanoparticle surfaces. Selective phase separation producing nanocomposite nanopowders
11:30 - 12:00	Gian Domenico	Soraru	Italy	Polymer-derived ceramic aerogels for energy application
12:00 - 14:00				<b>Lunch</b>
<b>Monday 05.09. Afternoon Session I - Materials Synthesis: Precursor-based Methods II</b>				
14:00 - 14:30	Samuel	Bernard	France	Nitrides as Single-phase and Nanocomposite Structures through Molecular Engineering
14:30 - 15:00	Gabriela	Mera	Germany	Multifunctional Materials Based on Nanocarbon-Containing Polymer-Derived SiCN Ceramics
15:00 - 15:30	Alexander	Horcher	Germany	Microporous Al <sub>2</sub> O <sub>3</sub> /SiCN composite membranes for Hydrogen separation
15:30 - 16:00				<b>Coffee</b>
<b>Monday 05.09. Afternoon Session II - Materials Synthesis: Precursor-based Methods III</b>				
16:00 - 16:30	Zhaoju	Yu	China	Single-source-precursor route towards carbon nanofiller modified SiCN nanocomposites with versatile and tunable electromagnetic properties
16:30 - 17:00	Emanuel	Ionescu	Germany	Single-source-precursor synthesis of novel SiMX-based ceramic nanocomposites (M = metal; X = N or C)
17:00 - 17:30	Abhijeet	Lale	France	Polymer-derived silicon nitride-based nanocomposites as co-catalyst for hydrogen generation from chemical hydrides
<b>Tuesday 06.09. Morning Session I - Theoretical Predictions and Modeling I</b>				
09:00 - 09:30	Isao	Tanaka	Japan	Thermal conductivity of spinel nitrides and related materials by first principles calculations
09:30 - 10:00	Peter	Kroll	USA	From Soft to Hard: Conversion of Amorphous Boron Nitride to Cubic Boron Nitride studied by Density-Functional-Theory Calculations and Ab-Initio Molecular Dynamic Simulations at High Pressure
10:00 - 10:30	Hongbin	Zhang	Germany	First principles study of Mn <sub>3</sub> GaN
10:30 - 11:00				<b>Coffee</b>
<b>Tuesday 06.09. Morning Session II - Theoretical Predictions and Modeling II</b>				
11:00 - 11:30	Jean-Francois	Halet	France	Chemical Bonding and Physical Properties of Some Solid-State Nitrides Compounds
11:30 - 12:00	Wai-Yim	Ching	USA	Ab initio modeling of glassy metal-organic framework
12:00 - 14:00				<b>Lunch</b>
<b>Tuesday 06.09. Afternoon Session I - Materials Synthesis: HP/HT Methods I</b>				
14:00 - 14:30	Wolfgang	Schnick	Germany	Novel Nitridophosphates by Multianvil HP-HT Synthesis
14:30 - 15:00	Ken	Niwa	Japan	High pressure synthesis of 3d transition metal nitrides in a laser heated diamond anvil cell
15:00 - 15:30	Masashi	Hasegawa	Japan	Bonding and Electronic Structure of Pt-group Transition Metal Nitrides synthesized in High Pressures
15:30 - 16:00				<b>Coffee</b>
<b>Tuesday 06.09. Afternoon Session II - Materials Synthesis: HP/HT Methods II</b>				
16:00 - 16:30	Teak	Boyko	Canada	Bandgap Engineering of Oxygen Bearing High-pressure Zirconium Nitride
16:30 - 17:00	Marcus	Schwarz	Germany	Rocksalt-type AlN: High pressure synthesis with shock waves and large- volume presses – from precursors, nano-, poly- and single-crystal
17:00 - 17:30	Mathis	Antlauf	Germany	High Pressure Synthesis of Geometric Frustrated Rare Earth Pyrochlores RE <sub>2-x</sub> Si <sub>x</sub> O <sub>7</sub> with Multianvil Technique

Wednesday 07.09 Excursion Köln				
<b>Thursday 08.09. Morning Session I - Materials Synthesis: HP/HT Methods III</b>				
09:00 - 09:30	Markus	Roth	Germany	Dynamic compression of low-Z materials, from lasers to FAIR
09:30 - 10:00	Takashi	Taniguchi	Japan	Synthesis of boron nitride polymorphic phases under high pressure and their applications
10:00 - 10:30	Norimasa	Nishiyama	Germany	Synthesis of transparent bulk nanocrystalline form of cubic silicon nitride
10:30 - 11:00				<b>Coffee</b>
<b>Thursday 08.09. Morning Session II - Materials Synthesis: HP/HT Methods IV</b>				
11:00 - 11:30	Hiroaki	Ohfuji	Japan	Successful synthesis of pure, super-hard carbon nitride at high pressure and high temperature
11:30 - 12:00	Pavel	Zinin	USA / Russia	Anomalous optical and elastic properties of graphitic C <sub>3</sub> N <sub>4</sub> materials
12:00 - 14:00				<b>Lunch</b>
<b>Thursday 08.09. Afternoon Session I - Structural Characterization &amp; Properties II</b>				
14:00 - 14:30	Koshi	Takenaka	Japan	Magnetovolume and magnetocaloric effects of frustrated antiperovskite manganese nitrides.
14:30 - 15:00	Ryo	Ishikawa	Japan	Direct observation of functional point defect structures in nitrides
15:00 - 15:30	Leonore	Wiehl	Germany	Crystal structure of a novel boron oxynitride (BON) from electron diffraction and modelling
15:30 - 16:00				<b>Coffee</b>
<b>Thursday 08.09. Afternoon Session II - Structural Characterization &amp; Properties III</b>				
16:00 - 16:30	Zoltán	Lencéš	Slovakia	Lanthanide-doped LaSi <sub>3</sub> N <sub>5</sub> phosphors
16:30 - 17:00	Rong-Jun	Xie	Japan	Luminescence nitride ceramics for solid state laser lighting
17:00 - 17:30	Thomas	Tolhurst	Canada	Studying next-generation phosphors using soft x-ray spectroscopy