

SCIENTIFIC PROGRAMME

ORAL PRESENTATIONS

Sunday, 08/23			
14:00			Begin Registration
16:00			Opening Ceremony Kurt Alder-Hörsaal
Plenary Session 1			Kurt Alder-Hörsaal
Chair: Gerd Meyer			
16:30 – 17:15	William J. Evans	PS01	The Utility of the f Elements in Isolating New Types of Radicals and Metalated Cyclopentadienyl Ligands
17:15 – 18:00	Hans U. Güdel	PS02	Chemistry and physics of new lanthanide upconversion materials and processes
18:00 – 20:30			Opening Reception

Monday, 08/24			
Plenary Session 2			Kurt Alder-Hörsaal
Chair: Anja-Verena Mudring			
9:00 – 9:40	Michael F. Reid	PS03	Spectroscopy of High-Energy States – Where to From Here?
9:40 – 10:20	Rhett Kempe	PS04	Rare Earth Transition Metal Bonding
Plenary Session 3			Kurt Alder-Hörsaal
Chair: Peter W. Roesky			
14:00 – 14:40	Peter C. Junk	PS05	Metal-Organic Rare Earth Chemistry Continues to Excite
14:40 – 15:20	Reiner Anwander	PS06	Synthesis and reactivity of homoleptic rare-earth metal methyl complexes

Monday, 08/24

Parallel Session O1	Organometallics		Hörsaal II
Chair: Rhett Kempe			
10:30 – 11:00	Peter W. Roesky	O01-1	Low Valent Main Group Compounds as Ligands in Lanthanide Chemistry
11:00 – 11:20	Kuburat O. Saliu	O01-2	Synthesis, Characterization and Structural Variation of Scorpionate Supported Lanthanide bis-Alkynide Complexes, “(Tp ^{R,R'})Ln(C≡CR'') ₂ ”
11:20 – 11:40	Jun Okuda	O01-3	Molecular Alkyl and Hydride Complexes of the Lanthanides
11:40 – 12:00	Norbert W. Mitzel	O01-4	Cyclic (poly)aminals as neutral or ionic ligands in rare-earth metal chemistry
12:00 – 12:20	H. Martin Dietrich	O01-5	Controlling alkyl/halo and amido/halo ligand combinations in organolanthanide complexes
Lunch Break			
Parallel Session O2	Organometallics		Hörsaal II
Chair: Peter W. Roesky			
15:30 – 16:00	Glen B. Deacon	O02-1	Lanthanoid Containing Bimetallics Prepared from the Elements
16:00 – 16:20	Kornelia Zeckert	O02-2	Lanthanide chemistry with dual functional ligand systems containing low valent Group 14 elements
16:20 – 16:40	Elise Abinet	O02-3	Highly Active Hydrosilylation Catalysts Based on Early Rare-Earth Metals Complexes
16:40 – 17:00	Christian Döring	O02-4	Aminopyridinato Ligand Stabilized Lanthanide Alkyl Complexes and Their Use in Polymerization of Ethylene and Isoprene
17:00 – 17:20	Matthias Tamm	O02-5	Imidazolin-2-iminato Complexes of Rare Earth Metals with Very Short Metal-Nitrogen Bonds – Experimental and Theoretical Studies
17:20 – 17:50	Sjoerd Harder	O02-6	Lanthanide Chemistry with Unusual Ligands
19:00 – 21:00	Poster Session		

Monday, 08/24

Parallel Session O3		Spectroscopy		Hörsaal III
Chair: Hans-U. Güdel				
10:30 – 11:00	Anne-Sophie Chauvin	O03-1	Efficiency of ligands fitted with phosphoester or phosphonate vs carboxylate groups in the sensitization of lanthanide-centred luminescence	
11:00 – 11:20	Nail M. Shavaleev	O03-2	Highly Luminescent Europium Complexes	
11:20 – 11:40	Lada Puntus	O03-3	Can weak noncovalent interactions affect the energy transfer processes in lanthanide compounds with heterocyclic diimines?	
11:40 – 12:00	Stefan Lis	O03-4	Chemiluminescence and Electrochemiluminescence of fluoroquinolone systems containing Tb(III) ions	
12:00 – 12:20	Markus Albrecht	O03-5	Approaches towards f-d and f-p heterodinuclear helicates	
Lunch Break				
Parallel Session O4		Spectroscopy		Hörsaal III
Chair: Michael F. Reid				
15:30 – 16:00	Kohei Soga	O04-1	Application of f-Element Photonic Materials for NIR Biophotonics	
16:00 – 16:20	Philippe Goldner	O04-2	A Highly Spin Concentrated Solid for Quantum Memories	
16:20 – 16:40	Claudia Wickleder	O04-3	Luminescence of Dy ²⁺ and Nd ²⁺ Ions	
16:40 – 17:00	Yehoshua Kalisky	O04-4	The Role of Spectroscopic Properties and Physical Processes in Solid State Lasers Based on f-Element ions	
17:00 – 17:20	A. G. Macedo	O04-5	Luminescence and magnetic features from nanosized europium doped gadolinium oxide	
17:20 – 17:50	Henning A. Höpfe	O04-6	Surprising Luminescent Properties of the Polyphosphates Ln(PO ₃) ₃ :Eu (Ln = Y, Gd, Lu)	
19:00 – 21:00	Poster Session			

Tuesday, 08/25

Plenary Session 4**Kurt Alder-Hörsaal**

Chair: Lester R. Morss

14:00 – 14:40	Sergey V. Krivovichev	PS07	Actinyl compounds with VIth-group elements: the world of amazing structural diversity and complexity
14:40 – 15:20	Thomas Schleid	PS08	Geo-Inspired Phosphors Based on Rare-Earth Metal(III) Fluorides with Complex Oxoanions

Tuesday, 08/25

Parallel Session O5 Lanthanide Biological Chemistry**Hörsaal II**

Chair: Jean-Claude G. Bünzli

9:00 – 9:30	Harri Härmä	O05-1	Solid-phase nonspecific binding sensors
9:30 – 9:50	Clémence Allain	O05-2	Changing the local coordination environment in mono- and bi-metallic lanthanide complexes through “click” chemistry
9:50 – 10:10	Stéphane Petoud	O05-3	Luminescent Lanthanide Dendrimer Complexes for Biologic Imaging in vivo
10:10 – 10:30	Vanesa Fernández-Moreira	O05-4	Bioconjugation of Luminescent Lanthanide Helicates and its Applications.
10:30 – 10:50	Loic Charbonnière	O05-5	A polyvalent approach to luminescent lanthanide biomarkers

Coffee Break

11:20 – 11:40	David Parker	O05-6	Emissive Lanthanide Complexes: In Vitro and In Cellulo Applications
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Flash presentation of selected posters

11:40 – 11:45	Ilkka Hemmilä	P08-01-193	Europium-based assays to monitor GPCR activation
11:45 – 11:50	Geert Dehaen	P08-03-177	Self-assembled heteropolymetallic complexes as MRI contrast agents

Lunch Break

Parallel Session O6		Lanthanide Biological Chemistry		Hörsaal II
Chair: David Parker				
15:30 – 15:50	Peter Caravan	O06-1	Design and in vivo application of multimodal imaging probes	
15:50 – 16:10	Steve Comby	O06-2	Sensing of Biologically Important Molecules using Functional Lanthanide Luminescent Gold Nanoparticles	
16:10 – 16:30	Goran Angelovski	O06-3	Unusual Calcium Sensitivity of Aminobis(methylenephosphonate)-Containing MRI Contrast Agents	
16:30 – 16:50	Graeme Stasiuk	O06-4	Incorporation of ‘Click’ Chemistry into Lanthanide Chelates	
Coffee Break				
17:10 – 17:30	Josef Hamacek	O06-5	Self-Assembly of Polynuclear Arrays for Sensing Purposes	
17:30 – 17:50	Sara Figueiredo	O06-6	Paramagnetic liposomes as Enzyme-responsive Relaxometric agents	
Flash presentation of selected posters				
17:50 – 17:55	Badr El Aroussi	P08-04-093	Insights into The Self-Assembly of a New Family of Dissymmetric Tripodal Ligands with Lanthanides	
17:55 – 18:00	Elena De Luca	P08-05-047	Fluorinated Responsive Lanthanide Complexes for 19-F MRS/MRI	
19:00 – 21:00	Poster Session			

Tuesday, 08/25

Parallel Session O7	Solid State Chemistry and Theory		Hörsaal III
Chair: Sanjay Mathur			
10:30 – 11:00	Frank R. Wagner	O07-1	Position-Space Analysis of <i>TM-RE</i> Bonding Situations in Simple Molecules and Complex Solids
11:00 – 11:20	Nicolay A. Kulagin	O07-2	Electronic Structure of Clusters with RE or AC-Ions and Collaps of <i>nf</i> – Shell
11:20 – 11:40	Konstantin A. Lyssenko	O07-3	Chemical bonding pattern in lanthanide-containing systems via topological analysis of experimental charge density function
11:40 – 12:00	Ingo Hartenbach	O07-4	Rare-Earth Metal(III) Chloride <i>Ortho</i> -Oxomolybdates(VI): One Formula <i>RECl[MoO₄]</i> (<i>RE</i> = Y, La – Nd, Sm – Lu), but Four Structure Types
12:00 – 12:20	Holger Kohlmann	O07-5	Crystal structures and properties of europium and samarium hydrides
Lunch Break			
Parallel Session O8	Actinides		Hörsaal III
Chair: Peter C. Junk			
15:30 – 16:00	Daniel B. Rego	O08-1	New Routes to Actinide Nitrides <i>via</i> Low Temperature Syntheses
16:00 – 16:20	Gregory Nocton	O08-2	Coordination Chemistry of Pentavalent Uranyl: Structure and Magnetism
16:20 – 16:40	Pascale Delangle	O08-3	Impact of the softness of the heterocyclic N-donors Pyridine and Pyrazine on the selectivity for Am(III) over Eu(III)
16:40 – 17:00	G. Meinrath	O08-4	Direct Speciation of Uranyl(VI) Interaction with Carboxylic Acid N-oxides in Solution and Solid State
17:00 – 17:30	Michael Dolg	O08-5	Efficient quantum chemical valence-only treatments of actinide systems
19:00 – 21:00			Poster Session

Wednesday, 08/26

Plenary Session 5

Kurt Alder-Hörsaal

Chair: Karl A. Gschneidner, Jr.

9:00 – 9:40	Walter Temmermann	PS09	Electronic and Magnetic Phase Diagrams of the Rare Earths
9:40 – 10:20	John D. Corbett	PS10	Condensed Polymetal Salts That are Unique to the Rare-Earth Elements

Wednesday, 08/26

Parallel Session O9 Solid State Physics

Hörsaal II

Chair: Walter Temmermann

10:30 – 11:00	V. K. Pecharsky	O09-1	Controlling physics using precise chemical and microstructural tools
11:00 – 11:20	Karl A. Gschneidner, Jr.	O09-2	The Unprecedented Magnetic Behavior of GdNi
11:20 – 11:40	Hellmut Eckert	O09-3	High-resolution ⁴⁵ Sc NMR Spectroscopy: A New Technique for the Structural Characterization of Intermetallic Compounds
11:40 – 12:00	Regino Sáez- Puche	O09-4	Pressure effects on the structural and magnetic properties of the RCrO ₄ oxides (R= rare earths)
13:00	Departure to Boat Ride		

Wednesday, 08/26

Parallel Session O10	Materials I		Hörsaal III
Chair: Jorma Hölsä			
10:30 – 11:00	Luis Humberto da Cunha Andrade	O10-1	Combination of Ce ³⁺ -doped glass phosphor and blue/UV LED for color balance to generate smart white light
11:00 – 11:20	Melissa A. Harrison	O10-2	Synthesis and Room Temperature Ultraviolet Luminescence in EuS Nanotubes
11:20 – 11:40	N. Kuzmina	O10-3	Lanthanide carboxylates as precursors of oxide thin film materials
11:40 – 12:00	A. Braud	O10-4	Down-conversion in rare-earth nano-clusters for silicon solar cell efficiency enhancement
12:00 – 12:20	Clemens K. Weiss	O10-5	Lanthanide-polymer hybrid nanoparticles prepared in miniemulsion – from nanoions to luminescing films
13:00	Departure to Boat Ride		

Thursday, 08/27

Plenary Session 6			Kurt Alder-Hörsaal
Chair: Frank T. Edelmann			
9:00 – 9:40	Sanjay Mathur	PS11	Chemical Approaches to Functional Nanostructures: Growth, Applications and Devices
9:40 – 10:20	Robin D. Rogers	PS12	Aspects of the Application of Ionic Liquids in the Separations of f-Elements: Coordination and Solvation
Plenary Session 7			Kurt Alder-Hörsaal
Chair: Thomas Schleid			
14:00 – 14:40	Claude Piguet	PS13	A Short Trip Trough Lanthanide Self-Assemblies
14:40 – 15:20	Frank T. Edelmann	PS14	Organolanthanide Chemistry in Three Oxidation States: 20 Years of Fascination
15:20	Closing Ceremony		

Thursday, 08/27

Parallel Session O11	Materials and Spectroscopy	Hörsaal II	
Chair: Nicolay A. Kulagin			
10:30 – 11:00	Jorma Hölsä	O11-1	Synchrotron Radiation Studies of Rare Earth Persistent Luminescence Materials
11:00 – 11:20	Petra Becker	O11-2	Non-centrosymmetric ammonium rare-earth nitrates $(\text{NH}_4)_2\text{RE}(\text{NO}_3)_5 \cdot 4 \text{H}_2\text{O}$: Crystal growth and optical properties
11:20 – 11:40	M. Chavoutier	O11-3	Yb-LGOb single crystal, a new promising laser material
11:40 – 12:00	Andrea Simone Stucchi de Camargo	O11-4	Structural and Optical Characterization of Rare-Earth Doped Yttrium Aluminoborate Laser Glasses and Glass Ceramics
12:00 – 12:20	N. Rajmuhon Singh	O11-5	Synthesis and optical characterization of re-dispersible Tb^{3+} -doped GdPO_4 crystalline nanoparticles
Lunch Break			

Thursday, 08/27

Parallel Session O12	Materials II	Hörsaal III	
Chair: Glen B. Deacon			
10:30 – 11:00	Peter Nockemann	O12-1	Lanthanide and Actinide Chemistry in Ionic Liquids
11:00 – 11:20	Anna Mondry	O12-2	Crystal Structures and Photophysical Properties of Ln(III) Complexes with Ethylenediaminetetrakis(methylenephosphonic acid) H8EDTMP
11:20 – 11:40	Ulrich Kynast	O12-3	Rare Earth Activated Nano Clays: Particles With Multifunctional Properties
11:40 – 12:00	Eva Hemmer	O12-4	Cytotoxicity of $\text{Gd}_2\text{O}_3:\text{Ln}^{3+}$ Nanostructures and their Potential as Biomarkers
12:00 – 12:20	Anja-Verena Mudring	O12-5	Luminescent lanthanide nanoparticles via metal vapour synthesis in ionic liquids
Lunch Break			