



8TH INTERNATIONAL CONFERENCE ON F-ELEMENTS

AUGUST 26-31, 2012
UDINE, ITALY



PROGRAM



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Welcome

On behalf of the Organizing committee we welcome you in Udine to the 8th International Conference on f-Elements (ICFE-8).

The International Conference on f-Elements is a major Conference held in Europe every three years, dealing with all aspects of the Chemistry, Physics and Materials Science of lanthanide and actinide elements and compounds. It is a meeting point for all scientists interested in both fundamental investigations and technological applications of these important and fascinating classes of elements. ICFE belongs to a series of international conferences held sequentially in Asia, America and Europe, and has been organized in several towns in major European countries. The organizing committee is honored and delighted to have been given the opportunity of organizing the current edition of ICFE in the university town of Udine, strategically located in the North East of Italy close to the borders with Austria and Slovenia. We have tried to keep up with the very high standard of the previous editions of ICFE, also introducing a new session dealing with “Resources, recovery and recycling”, which addresses the current critical issues related to the f-elements in the world market. This aims to provide a forum with stimulating discussion with major industrial players in the world market.

We thank all of you for sharing your work and ideas and we thank all industrial sponsors and organizing/supporting institutions for the generous support. Without this and without the help of many of you it would not have been possible to put together the program.

We hope that you will enjoy five days of interesting and stimulating presentations and discussions with us, that you will meet old friends and colleagues and that you might start new friendship and cooperation here in Udine.

Alessandro Trovarelli

Marco Bettinelli

ICFE-8

Udine, July 5, 2012

ERES Welcome

Dear Participants to the 8th International Conference on f-Elements, when this series of conferences was started in 1990 at the initiative of the newly-created Rare Earth and Actinide Society, the World was very different from the present one although one could already feel that changes were to come. Generous sponsoring from industry was easy to get and rare-earthers were still a bit considered by the international scientific community as dealing with a minor topic compared to d-transition metal science.

This feeling gradually changed as could be gathered from the atmosphere prevailing during the successive ICFE conferences. In the day-to-day life, more and more high-technology products have been incorporating rare-earth elements and China firmly emerged as a major actor in the field, leading to the present tense geopolitical situation. Chinese monopoly on rare-earth production with a >95% share is indeed stirring passionate debates and even triggering legal action with the WTO. This is the dark side of the story. The bright side is quite constructive in that politicians, scientists, engineers, and (hopefully) investors start to realize that World resources in rare earths and other key metals are limited. A continuous economical growth comparable to the one seen in the past decade is very problematic. If one adds the consequences of the Fukushima accident, this generates exciting challenges for the 4f- and 5f communities: more environmental friendly mining operations, recycling (a main theme of ICFE8), designing of smart devices containing a minimum amount of precious metals and easy to recycle, as well as clever ways of dealing with nuclear waste management are some of the themes which will be the motors of a new thrust in f-element basic and applied sciences. ICFE'8 comes at the right moment to witness these changes and to stimulate the emergence of new solutions through constructive cross-discipline discussions and collaborations between scientists, engineers, and industry policy makers.

The ERES executive committee thanks the organizers for the outstanding work they come up with for setting up an attractive program and wish you an excellent conference.

J.-C. Bünzli

ERES Secretary-treasurer

Lausanne, July 5, 2012

Organization

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- Silvio Aime (University of Torino)
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- Qiang Su (Sun Yat-sen University, China)
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- Chunhua Yan (Peking University, China)

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- Andrea Melchior (University of Udine)
- Marta Boaro (University of Udine)
- Eleonora Aneggi (University of Udine)
- Marzia Casanova (University of Udine)

Other Staff members from the University of Verona, Udine, Trieste and Padova are directly involved in the organization of the conference.

ORGANIZING INSTITUTIONS



**UNIVERSITÀ
DEGLI STUDI
DI UDINE**



Università degli Studi di Verona



UNIVERSITÀ
DEGLI STUDI DI TRIESTE



UNIVERSITÀ
DEGLI STUDI
DI PADOVA



SUPPORTING INSTITUTIONS



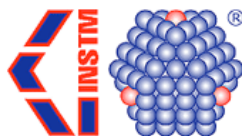
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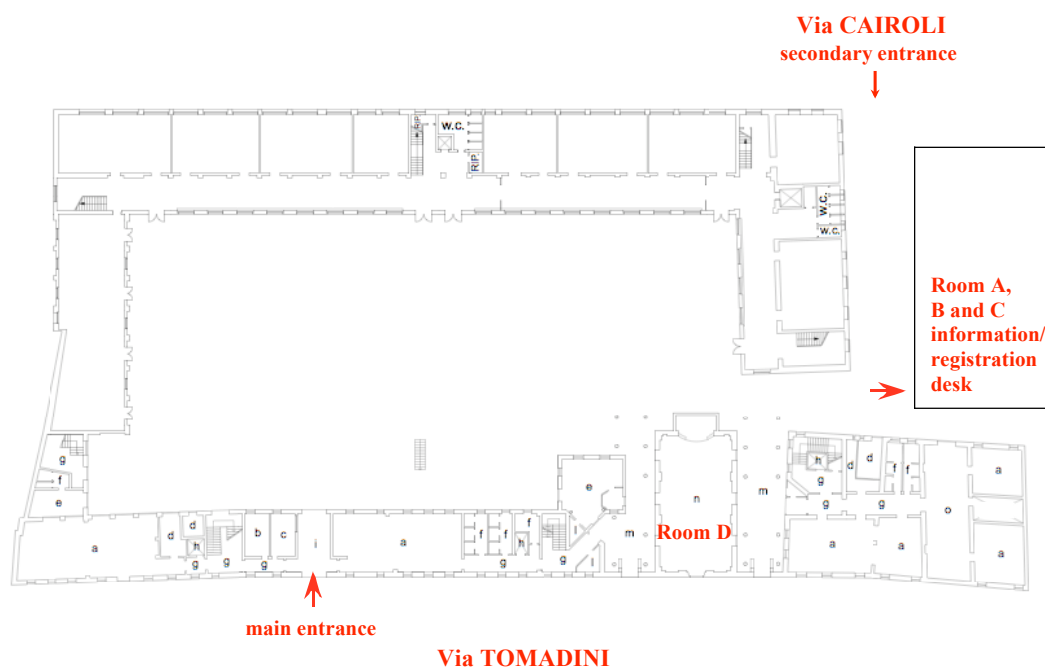
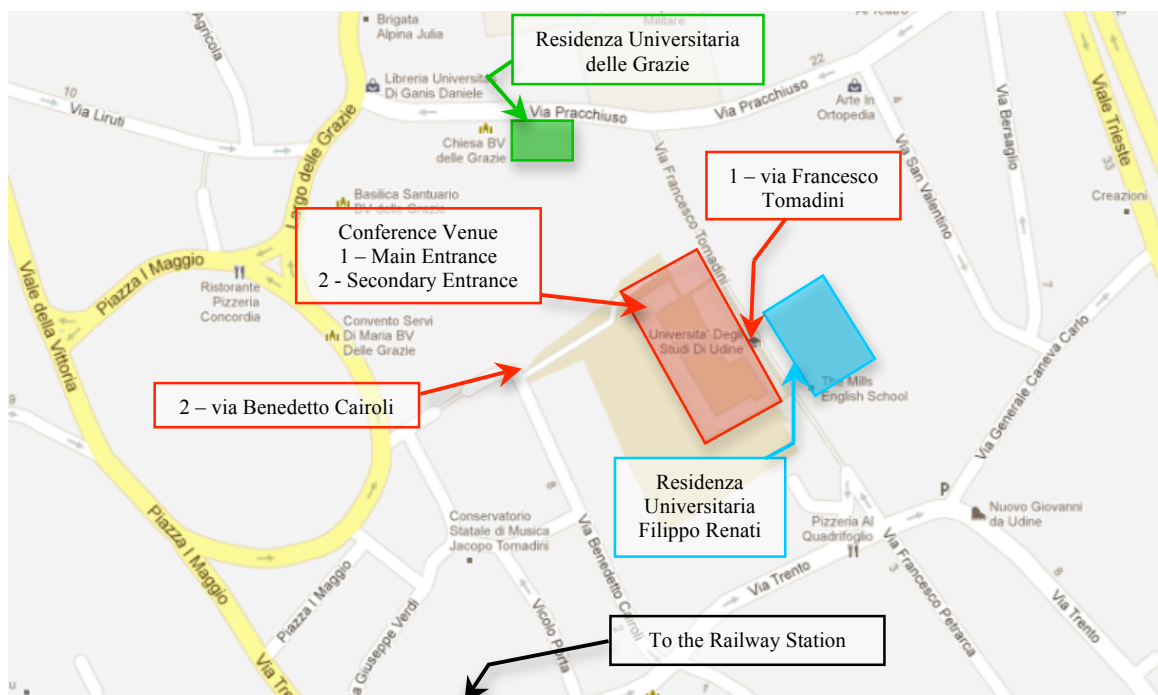
SPONSORS



Venue

Conference Venue: Faculty of Economics, Via Francesco Tomadini, 30A (at the center of the map) 33100 Udine.

The conference site is the “Nuovo Polo Didattico Facoltà di Economia” (Faculty of Economics) which include three main halls (two with 250 seats and one with 400 seats) plus smaller rooms, areas for posters and exhibitions and a coffee bar. This is located in downtown Udine within walking distance from several restaurants and bars in Udine.



Invited Speakers

Plenary Speakers

- Polly L. Arnold, University of Edinburgh, UK
- Alexander Bouvier, Treibacher Industrie AG, Austria
- Jose Juan Calvino Gamez, University of Cádiz, Spain
- Andries Meijerink, University of Utrecht, The Netherlands
- Vincent Pecoraro - University of Michigan, Ann Arbor, USA
- Roberta Sessoli, University of Florence, Italy
- Chun-Hua Yan, University of Peking, China

Award Lecturers

- David Parker, Durham University, UK - Le Coq de Boisbaudran Senior Award 2012
- Tiziano Montini, University of Trieste, Italy - ERES Junior Award 2012

Keynote Speakers

- Jean-Luc Adam - CNRS, France
- Nicolas Barthel - Rhodia, France
- Isabelle Billard - CNRS, France
- Svilen Bobev - University of Delaware, USA
- Julia Chan - Louisiana State University, USA
- Liviu Chibotaru - University of Leuven, Belgium
- Josef Hamacek - University of Geneva, Switzerland
- Jorma Hölsä - University of Turku, Finland
- Guenter Huber - Universität Hamburg, Germany
- Tatsumi Ishihara - Kyushu University, Japan
- Yasuhiro Kato - University of Tokyo, Japan
- Michel Kenzelmann - Paul Scherrer Institut, Switzerland
- Chun-Sheng Liao - Peking University, China
- Xiaogang Liu - University of Singapore, Singapore
- Ricardo Luiz Longo - Universidade Federal de Pernambuco, Brasil
- Frederic Meunier – CNRS, France
- François Nief - CNRS, France
- Claude Piguet, University of Geneva, Switzerland
- Kenneth N. Raymond - University of California, Berkeley, USA
- Lidia Smentek - Vanderbilt University, Nashville, USA

Invited Lecturers

- Lidia Armelao – University of Padova, Italy
- Toshio Irie - Santoku corporation, Kobe-shi Hyogo, Japan
- Masakuni Ozawa - Nagoya Institute of Technology, Japan
- Alistair Reid - Lynas Corporation Ltd, Sydney, Australia
- Renata Reisfeld – The Hebrew University of Jerusalem, Israel
- Mark Smith - Molycorp, Inc., USA
- Fulvio Uggeri - Bracco Imaging spa, Italy
- Bruno Viana - LCMCP, France
- Hidenori Yahiro - Ehime University, Japan

Topics Overview

Topics / Session organizers

Optical materials OPT	Daniel Jaque Setsuhisa Tanabe
Spectroscopy and theory SPC	Oscar Malta Lidia Smentek
Applications in biology and medicine MED	Silvio Aime John A. Capobianco
Solid state chemistry and physics SST	John Sarrao Thomas Schleid
Coordination, organic and organometallic COO	Jean-Claude Bünzli Peter W. Roesky
Catalysis, energy and fuel cells CAT	Serafin Bernal Nobuhito Imanaka
Magnetism MGN	Jean-Pierre Costes Song Gao
Solution chemistry, extraction, separations SOL	Isabelle Billard Claude Piguet
Resources, recovery and recycling RES	Gin-ya Adachi Koen Binnemans
Golden Anniversary of the Judd-Ofelt Theory JOF	Lidia Smentek

Plenary Lectures

Monday, August 27, 2012	
9.00-9.50	Plenary lecture 1 <i>A. Bouvier</i>
	Rare Earths – Critical Raw Materials for High Tech Applications
14.00-14.50	Plenary lecture 2 <i>A. Meijerink</i>
	Spectral Conversion for Solar Cells with Lanthanides
Tuesday, August 28, 2012	
9.00-9.50	Plenary lecture 3 <i>P. L. Arnold</i>
	Small Molecule Activation with Uranium and Uranyl Complexes
14.00-14.50	Plenary lecture 4 <i>R. Sessoli</i>
	Lanthanides in Molecular Magnetism: a Fascinating Challenge
Wednesday, August 29, 2012	
9.00-10.00	Plenary lecture 5 SENIOR AWARD <i>D. Parker</i>
	Emissive Chiral Lanthanide Probes for Proteins
Thursday, August 30, 2012	
9.00-9.50	Plenary lecture 6 <i>V. Pecoraro</i>
	Preparation of Metallocrown Based Supramolecular Complexes and Their Applications in Molecular Magnetism and NIR luminescence
14.00-14.50	Plenary lecture 7 <i>J. J. Calvino</i>
	Contributions of Electron Microscopy to Understanding the Chemistry of Ceria-based Catalytic materials
Friday, August 31, 2012	
9.00-9.50	Plenary lecture 8 <i>C.-H. Yan</i>
	Controllable Synthesis and Catalytic Property of Ceria-based Nano- and Meso-Materials

Program Overview

Sunday, August 26, 2012	
14.00-18.30	Registration
19.00-21.00	Welcome reception

Monday, August 27, 2012				
8.30-9.00	Room A	Opening ceremony		
9.00-9.50		Plenary lecture 1 A. Bouvier		
9.50-10.20	Coffee break			
	Room A	Room B	Room C	Room D
10.20-11.00	KN G. Huber		KN F. Nief	KN Y. Kato
11.00-11.20	A. Watras		P. W. Roesky	K. Binnemans
11.20-11.40	G. Ledoux		P. Junk	K. Grabas
11.40-12.00	M. L. Saladino		M. Seitz	T. Irie
12.00-12.20	J. Ueda		V. Utochnikova	W. Liao
12.20-14.00	Lunch			
14.00-14.50	Room A	Plenary lecture 2 A. Meijerink		
	Room A	Room B	Room C	Room D
15.00-15.20	V. Lavín	P. Dorenbos	M. D. Ward	KN C-S. Liao
15.20-15.40	P. Lindqvist-Reis	M. Grinberg	K. Nakamura	
15.40-16.10	Coffee break			
	Room A	Room B	Room C	Room D
16.10-16.30	R. Reisfeld	S. F. León-Luis	KN C. Piguet	KN N. Barthel
16.30-16.50	B. Julian-Lopez	G. A. Costa		
16.50-17.10	Y. Guyot	H. Brito	M. Pietraszkiewicz	M. Ozawa
17.10-17.30	S. Akerboom	R. Pazik	K. Nchimi Nono	A. Reid
17.30-17.50	F. Artizzu	V. Monteseguro	S. V. Eliseeva	
17.50-18.10	I. N. Ogorodnikov	S. Nedilko	T. N. Parac-Vogt	

Tuesday, August 28, 2012				
9.00-9.50	Room A	Plenary lecture 3 P. L. Arnold		
9.50-10.20	Coffee break			
	Room A	Room B	Room C	Room D
10.20-10.40	KN J-L. Adam	KN I. Billard	G. Liu	KN
10.40-11.00			P. Gawryszewska	M. Kenzelmann
11.00-11.20	I. R. Martín	J. J. Curry	O. A. Blackburn	S. Maskova
11.20-11.40	C. K. Jayasankar	M. Nakase	A. Kaminska	L. Rigamonti
11.40-12.00	D. Manzani	M. Watanabe	M. G. Brik	K. S. Pedersen
12.00-12.20	G. Malashkevich	E. J. Schelter	M. A. Couto dos Santos	D. Aguilà
12.20-14.00	Lunch			
14.00-14.50	Room A	Plenary lecture 4 R. Sessoli		
	Room A	Room B	Room C	Room D
15.00-15.20	W. Strek	KN J. Hamacek	A. Kerridge	KN
15.20-15.40	L. Marciniak		P. Novak	L. F. Chibotaru
15.40-16.10	Coffee break			
	Room A	Room B	Room C	Room D
16.10-16.30	E. W. Barrera	M. Tropiano	L. D. Carlos	J.-P. Costes
16.30-16.50	E. M. Chan	F. Piccinelli	J. Legendziewicz	S. Gao
16.50-17.10	A. Speghini	M. Smith	L. Puntus	R. A. Layfield
17-10-18.30	Poster session A			

Wednesday, August 29, 2012				
9.00-10.00	Room A	Plenary lecture 5 SENIOR AWARD D. Parker		
10.00-10.20	Coffee break			
	Room A	Room B	Room C	Room D
10.20-10.40	H. Liang	U. H. Kynast	KN	KN
10.40-11.00	J. Wang	M. Massi		X. Liu
11.00-11.20	P. J. Dereñ	J. Kai	S. Carron	E. Aneggi
11.20-11.40	F. Angiuli	J. Andres	A. Casoni	F. Castaldo
11.40-12.00	A. Katelnikovas	P. G. Marques	F. Lux	L. Katta
12.00-12.20	A. Guille	V. Jubera	D. Jaque	K. Schermanz
12.20-12.40	M. Miritello	G. Bellocchi	Z. Pikramenou	J. J. Delgado
12.40-14.00	Lunch			
14.30-22.00	Excursion with dinner			

Thursday, August 30, 2012				
9.00-9.50	Room A	Plenary lecture 6 V. L. Pecoraro		
9.50-10.20	Coffee break			
	Room A	Room B	Room C	Room D
10.20-10.40	KN L. Smentek	N.P. Burkovskaya	KN Jr award	
10.40-11.00		K. Zeckert	T. Montini	
11.00-11.20	M. F. Reid	N. Kuzmina	R. Gumeniuk	J.-C. G. Bünzli
11.20-11.40	G. W. Burdick	L. Armelao	A.-V. Mudring	M. Ozawa
11.40-12.00	L. Ungur	D. J. H. Emslie	T. Irie	H. Yahiro
12.00-12.20	A. N. C. Neto	V. Mougel	S. Lis	P. Fornasiero
12.20-14.00	Lunch			
14.00-14.50	Room A	Plenary lecture 7 J. Calvino		
	Room A	Room B	Room C	Room D
15.00-15.40	Golden anniversary J-O Theory	KN K. Raymond	KN J. Chan	KN T. Ishihara
15.40-16.10	Coffee break			
	Room A	Room B	Room C	Room D
16.10-16.30	Golden anniversary J-O Theory	M. J. Allen	L.-D. Sun	J. Luzon
16.30-16.50		H. Furuno	M. Banski	V. K. Pecharsky
16.50-17.10				M. Yamashita
17.10-18.00	Poster session B			ERES general meeting
18.00-18.30				
20.00	Social dinner			

Friday, August 31, 2012				
9.00-9-50	Room A	Plenary lecture 8 C.-H. Yan		
9.50-10.20	Coffee break			
	Room A	Room B	Room C	Room D
10.20-10.40	KN	KN	F.Uggeri	KN
10.40-11.00	J. Hölsa	R.L. Longo	A. Maiocchi	S. Bobev
11.00-11.20	L. C. V. Rodrigues	A. Bednarkiewicz	J.-C. Zhou	T. Laamanen
11.20-11.40	J. J. Velázquez	N. A. Kulagin	J.-L. Zhang	G. Meyer
11.40-12.00	B. Viana	Y. V. Orlovskii	M. Botta	Y.-W. Zhang
12.00-12.20	D. Hreniak	H. Zheng	S. Petoud	M. S. Wickleder
12.20-12.35	Closing ceremony			
12.45-14.00	Lunch			

Lecture Program

Monday, August 27, 2012

Room A

8:30-9:00

Opening ceremony

9:00-9:50

PL 1

Plenary lecture – chair: G. Adachi

Rare Earths - Critical Raw Materials for High Tech Applications
A. Bouvier

9:50-10:20

Coffee break

Optical materials (lasers, telecommunication, lighting, sensors, photovoltaics.....)

Session chair: D. Jaque

10:20-11:00

KN 1

Diode pumped solid-state lasers in the near infrared and visible spectral region
G. Huber

11:00-11:20

OPT 01O

Luminescence properties of $\text{Ca}_9\text{Al}(\text{PO}_4)_7$ doped with Eu^{2+} and Eu^{3+} ions
A. Watras, R. Pazik, K. Maleszka-Baginska, K. Zawisza, P. J. Dereń

11:20-11:40

OPT 02O

Lanthanide doped nanoparticles as temperature nano-sensors
D. Amans, C. Dujardin, F. Lux, M. Martini, O. Tillement, C. Truillet, G. Ledoux

11:40-12:00

OPT 03O

Ce:YAG-PMMA nanocomposite for white LED
M. L. Saladino, D. Hreniak, L. Marciniak, W. Stręk, E. Caponetti

12:00-12:20

OPT 04O

Electronic and Optical Properties in Ce^{3+} -Doped Garnet Ceramics
J. Ueda, K. Aishima, S. Tanabe

12:20-14:00

Lunch

14:00-14:50

PL 2

Plenary lecture – chair: M. Bettinelli

Spectral conversion for solar cells with lanthanides
A. Meijerink, R. Martin-Rodriguez

Session chair: J. Holsa

15:00-15:20

OPT 05O

Luminescence of f-elements in solids under pressure
V. Lavín, C. K. Jayasankar, F. Rivera-López, V. Venkatramu, I. R. Martín, U. R. Rodríguez-Mendoza, P. Babu

15:20-15:40

OPT 06O

Time-Resolved Laser Fluorescence Spectroscopy (TRLFS) Studies of Eu^{3+} and Cm^{3+} in Rare-Earth Hydroxides
P. Lindqvist-Reis, R. Klenze, N. Finck, H. Geckeis

15:40-16:10

Coffee break

Session chair: W. Stręk

16:10-16:30

OPT 07O
invited

How the luminescence of Lanthanides can be increased by their interaction with surface plasmons
R. Reisfeld, V. Levchenko, T. Saraidarov

16:30-16:50

OPT 08O

Tailoring up-conversion properties in lanthanide-doped ZrO_2 :di-ureasil organic-inorganic hybrid nanocomposites
F. Gonell, B. Julian-Lopez, V. T. Freitas, L. D. Carlos, R. A. S. Ferreira

16:50-17:10

OPT 09O

SiO_2 dependence on optical properties of $\text{Eu}^{2,3+}$ -doped Calcium Alumino-Silicate glass

		phosphors <i>Y. Guyot, A. Milan Farias, G. Boulon, M. L. Baesso, L. H. C. Andrade, S. M. Lima</i>
17:10-17:30	OPT 100	Substituted phenanthrolines as antennae for luminescent Eu(III) complexes <i>S. Akerboom, J. van den Elshout, W.-T. Fu, E. Bouwman</i>
17:30-17:50	OPT 110	Dual Emitting (Vis and NIR) Properties of Lanthanide (Er, Yb) 8-Quinolinolato(Q) Complexes as Dopants of Sol-gel Glasses <i>F. Artizzu, F. Quochi, M. L. Mercuri, A. Serpe, A. Mura, G. Bongiovanni, P. Deplano</i>
17:50-18:10	OPT 120	UV Luminescence of $\text{Li}_6\text{GdB}_3\text{O}_9\text{:Ce}^{3+}$ Optical Crystals under photoexcitation in the 3-650 eV Energy Range <i>I. N. Ogorodnikov, V. A. Pustovarov</i>

Room B

14:00-14:50

Plenary lecture (Room A)

Spectroscopy and theory

Session chair: L. Smentek

15:00-15:20	SPC 010	Vacuum referred binding energies of the lanthanides in rare earth phosphates, borates, and aluminates <i>P. Dorenbos</i>
15:20-15:40	SPC 020	Binding energies of Eu^{2+} and Eu^{3+} ions in $\beta\text{-Ca}_2\text{SiO}_4$ doped with europium <i>A. Baran, J. Barzowska, K. Szczodrowski, M. Grinberg</i>
15:40-16:10		Coffee break

Optical materials (lasers, telecommunication, lighting, sensors, photovoltaics.....)

Session chair: M. Grinberg

16:10-16:30	OPT 130	Optical temperature sensors based on f-elements <i>S. F. León-Luis, U. R. Rodríguez-Mendoza, V. Monteseguro, C. Perez-Rodriguez, I. R. Martín, V. Lavín</i>
16:30-16:50	OPT 140	Synthesis and characterization of mixed rare earth oxycarbonates and oxides for optical application. <i>G. A. Costa, L. Panzeri, M. Fasoli, M. Martini, F. Locardi, C. Artini, R. Masini, E. Franceschi, I. Miletto, G. Berlier, E. Gianotti</i>
16:50-17:10	OPT 150	Valence Control of Pr in ZrO_2 by Gd^{3+} Co-Doping <i>J. M. Carvalho, M. Lastusaari, T. Laamanen, L. C. V. Rodrigues, J. Hölsä, M. C. F. C. Felinto, L. A. O. Nunes, H. Brito</i>
17:10-17:30	OPT 160	Luminescence properties and emission quenching processes in Eu^{3+} -doped $\text{La}_2\text{CaB}_{10}\text{O}_{19}$ <i>R. Pazik, K. Zawisza, A. Watras, K. Maleszka-Bagińska, P. Boutinaud, R. Mahiou, P. J. Dereń</i>
17:30-17:50	OPT 170	Synthesis, structure and optical properties of Er^{3+} -doped $\text{Y}_3\text{Ga}_5\text{O}_{12}$ nano-garnet <i>V. Monteseguro, V. Venkatramu, U. R. Rodríguez-Mendoza, F. J. Manjón, P. Rodríguez-Hernández, C. K. Jayasankar, A. Muñoz, V. Lavín</i>
17:50-18:10	OPT 180	VUV excited luminescence of RE-doped $\text{K}_2\text{Bi}(\text{PO}_4)(\text{MoO}_4)$ (RE = Eu, Ce, Tb) powdered crystals <i>V. Chornii, Y. Hizhnyi, M. Slobodyanik, K. Terebilenko, I. Zatovsky, V. Boyko, V. Sheludko, S. Nedilko</i>

Room C

9:00-9:50

Plenary lecture (Room A)

9:50-10:20

Coffee break

Coordination, organic and organometallic chemistry

Session chair: J.-C. Bünzli

10:20-11:00	KN 2	Divalent Lanthanide Complexes: Experience and Theory <i>F. Nief</i>
11:00-11:20	COO 010	Main Group Molecules in 4f Metal Chemistry <i>P. W. Roesky</i>
11:20-11:40	COO 020	Syntheses of lanthanoid metal-organic compounds at elevated temperatures – a bridge towards solid state chemistry <i>P. Junk</i>
11:40-12:00	COO 030	The Impact of the Vibrational Overtone Structure of Aromatic C-H/C-D-Oscillators on the Near-IR Luminescence in Rigid Lanthanoid Cryptates <i>C. Doffek, N. Alzakhem, C. Bischof, J. Wahsner, M. Seitz</i>
12:00-12:20	COO 040	Mixed-ligand compounds of lanthanide luminescent aromatic carboxylates and their role in thin film deposition of homo-ligand aromatic carboxylates <i>V. Utochnikova, A. Kalyakina, A. Vaschenko, O. Pietraszkiewicz, M. Koźbial, P. Gierycz, M. Pietraszkiewicz, N. Kuzmina</i>

12:20-14:00 *Lunch*

14:00-14:50 **Plenary lecture (Room A)**

Session chair: P. Roesky

15:00-15:20	COO 050	Dual luminescence in lanthanide complexes: white light emission and two-photon imaging <i>D. Sykes, A. H. Shelton, M. D. Ward</i>
15:20-15:40	COO 060	Enhanced red-emission from Eu(III) complex in DNA-surfactant film <i>K. Nakamura, A. Sagara, N. Kobayashi</i>

15:40-16:10 *Coffee break*

Session chair: P. Roesky

16:10-16:50	KN 3	Implementing near-infrared to visible light upconversion in coordination complexes <i>C. Piguet, H. Nozary</i>
16:50-17:10	COO 070	Highly Photoluminescent 1,3-Diketone Eu(III) Complexes With Spiro-Fluorene-Xanthphos Dioxide Ligand. Synthesis and Properties <i>M. Pietraszkiewicz, M. Maciejczyk</i>
17:10-17:30	COO 080	Multifunctional phosphonated ligands for lanthanides complexation and biolabeling <i>K. Nchimi Nono, A. Lecointre, S. Shakir, L. Sabatier, P. Cywinski, L. Charbonnière</i>
17:30-17:50	COO 090	Polymetallic Luminescent Lanthanide Dendrimers Emitting in the Visible and in the Near-infrared <i>S. V. Eliseeva, C. M. Shade, S. Petoud</i>
17:50-18:10	COO 100	Self-assembled heterometallic f-d complexes as potential agents for bimodal MRI/optical imaging <i>G. Dehaen, E. Debroye, P. Verwilt, S. V. Eliseeva, S. Laurent, L. Vander Elst, R. N. Muller, K. Binnemans, W. De Borggraeve, T. N. Parac-Vogt</i>

Room D

9:00-9:50 **Plenary lecture (Room A)**

9:50-10:20 *Coffee break*

Resources, recovery and recycling

Session chair: G. Adachi

10:20-11:00	KN 4	Deep-sea mud in the Pacific Ocean as a new mineral resource for rare-earth elements <i>Y. Kato</i>
11:00-11:20	RES 01O	Economics of Rare Earths: the Balance Problem <i>K. Binnemans, P. T. Jones, K. Van Acker, J. Eyckmans</i>
11:20-11:40	RES 02O	Recovery of lanthanides from electric waste recycling <i>K. Grabas, D. Hreniak, M. Miller, A. Ostrowski, A. Pawełczyk, W. Strek, E. Zych</i>
11:40-12:00	RES 03O <i>invited</i>	Recycling process of Rare earth from RE-Fe-B sintered magnets at SANTOKU Corporation <i>M. Kamiyoshi, H. Miyamoto, N. Nishigaki, Y. Taira, T. Irie</i>
12:00-12:20	RES 05O	Recovery of thorium from rare earth ores in Baotou and Sichuan of China <i>W. Liao, D. Li</i>

12:20-14:00 *Lunch*

14:00-14:50 **Plenary lecture (Room A)**

Session chair: K. Binnemans

15:00-15:40	KN 5	Green Separation of Rare Earth Resources in China <i>C.-S. Liao, S. Wu, F.-X. Cheng, C.-H. Yan</i>
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15:40-16:10 *Coffee break*

Session chair: K. Binnemans

16:10-16:50	KN 6	The new Rare Earths urban mine: Rhodia launches an industrial unit for RE recycling from used low consumption lamps <i>N. Barthel</i>
16:50-17:10	RES 06O	New Element Strategy in Nuclear Fuel Cycle –Creation of Rare Earth Elements by Transmutation- <i>M. Ozawa</i>
17:10-17:30	RES 07O <i>invited</i>	Lynas: Bringing Rare Earths resources to market <i>A. Reid</i>

Tuesday, August 28, 2012

Room A

9:00-9:50

PL 3

Plenary lecture – chair: G. Meyer

Small molecule activation with uranium and uranyl complexes

S. M. Mansell, R. C. White, A. I. Germeroth, A.-F. Pecharman, E. Hollis, J. B. Love, N. Kaltsoyannis, R. Caciuffo, L. Maron, P. L. Arnold

9:50-10:20

Coffee break

Optical materials (lasers, telecommunication, lighting, sensors, photovoltaics.....)

Session chair: S. Tanabe

10:20-11:00

KN 7

Rare-Earth Ions in Non-Oxide Glasses

J.-L. Adam, X.-H. Zhang, V. Nazabal

11:00-11:20

OPT 190

Upconversion emission obtained in Yb³⁺-Er³⁺ doped fluorindate glasses using silica microspheres as focusing lens

C. Pérez Rodríguez, S. Ríos, I. R. Martín, L. L. Martín, P. Haro-González, D. Jaque

11:20-11:40

OPT 200

Dy³⁺-doped zinc fluorophosphate glasses for white luminescence applications

N. Vijaya, C. K. Jayasankar

11:40-12:00

OPT 210

Pr³⁺, Pr³⁺-Yb³⁺ and Tb³⁺-Yb³⁺ in fluorindate glasses

D. Manzani, E. Pecoraro, G. Galliani, Y. Messaddeq, P. Goldner, D. Pabœuf, F. Bretenaker, S. J. L. Ribeiro

12:00-12:20

OPT 220

Spectral-luminescent properties of Y₂O₃-B₂O₃-Al₂O₃-Sb₂O₃ glasses doped with Ce and Tb

G. Malashkevich, V. Sigaev, N. Golubev, E. Mamadzhanova, T. Khottchenkova, A. Stupak, A. Sukhodola

12:20-14:00

Lunch

14:00-14:50

PL 4

Plenary lecture – chair: S. Gao

Lanthanides in molecular magnetism: a fascinating challenge

R. Sessoli

Session chair: P. Dorenbos

15:00-15:20

OPT 230

Anti-Stokes white emission of LiNdP₄O₁₂ nanocrystals

W. Strek, L. Marciniak, D. Hreniak

15:20-15:40

OPT 240

Synthesis and luminescence properties of LiLa_{1-x}Dy_xP₄O₁₂ nanocrystals

L. Marciniak, W. Strek, D. Hreniak

15:40-16:10

Coffee break

Session chair: R. Reisfeld

16:10-16:30

OPT 250

Effect of Eu³⁺ doping in the luminescence of (Tm,Ho,Yb):KLuW nanocrystals

E. W. Barrera, M. C. Pujol, C. Cascales, J. J. Carvajal, X. Mateos, A. Speghini, M. Bettinelli, M. Aguiló, F. Díaz

16:30-16:50

OPT 260

Combinatorial discovery of lanthanide-doped nanocrystals with spectrally pure upconverted luminescence

D. J. Milliron, G. Han, J. D. Goldberg, B. E. Cohen, E. M. Chan

16:50-17:10

OPT 270

Lanthanide doped alkaline earth fluorides: a joint optical spectroscopy and EXAFS investigation

S. Pin, P. Ghigna, M. Pedroni, F. Piccinelli, M. Bettinelli, A. Speghini

		Poster session A
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Room B		
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9:00-9:50		Plenary lecture (Room A)
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9:50-10:20		<i>Coffee break</i>
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Solution chemistry, extraction, separations		
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Session chair: C. Piguet

	10:20-11:00	KN 8	Actinides and lanthanides liquid-liquid extraction. Molecules, mechanisms, processes, future ideas: a nuclear perspective <i>I. Billard</i>
	11:00-11:20	SOL 01O	Evaporation Characteristics of Pure and Mixed Lanthanide-Halides <i>J. J. Curry, E. G. Estupiñan, W. P. Lapatovich</i>
	11:20-11:40	SOL 02O	Continuous Separation of Eu/Sm by Oil-water countercurrent centrifuge extractor with Taylor vortexes <i>M. Nakase, K. Takeshita</i>
	11:40-12:00	SOL 03O	Adsorption of Actinides on Carbon Nano-materials <i>M. Watanabe, M. Arisaka, T. Kimura</i>
	12:00-12:20	SOL 04O	New Strategies for Managing the Oxidation of Cerium(III) Coordination Complexes <i>J. R. Robinson, J. R. Levin, J. A. Bogart, P. J. Carroll, P. J. Walsh, E. J. Schelter</i>

12:20-14:00		<i>Lunch</i>
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14:00-14:50		Plenary lecture (Room A)
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Session chair: I. Billard

	15:00-15:40	KN 9	Controlling the Self-Assembly of Polynuclear Ln(III) Complexes: Structural and Thermodynamic Aspects <i>J. Hamacek</i>
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15:40-16:10		<i>Coffee break</i>
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Coordination, organic and organometallic chemistry		
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Session chair: T. Parac-Vogt

	16:10-16:30	COO 11O	Lanthanide architectures and d-f assemblies <i>S. Faulkner, T. J. Sørensen, M. Tropicano</i>
	16:30-16:50	COO 12O	New NO ₃ ⁻ sensor based on chiral Eu(III) complex: comparative study of the species in the solid state and in solution <i>A. Melchior, A. Speghini, M. Monari, M. Tolazzi, M. Bettinelli, F. Piccinelli</i>

Resources, recovery and recycling		
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Session chair: S. Pirker

	16:50-17:10	RES 08O	Rare Earth Resurgence: Diversifying Global Supply Chains <i>M. Smith</i>
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		Poster session A
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Room C

9:00-9:50 **Plenary lecture (Room A)**

9:50-10:20 *Coffee break*

Spectroscopy and theory

Session chair: G. W. Burdick

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|-------------|---------|---|
| 10:20-10:40 | SPC 03O | Electronic and Vibronic Transitions in Actinyl Compounds
<i>G. Liu, T. Albrecht-Schmitt, M. Wilkerson, C. Cahill</i> |
| 10:40-11:00 | SPC 04O | Spectroscopy and Structure of Ln ^{III} Complexes with Sulfonylamidophosphate-Type Ligands as New Sensitizers of Visible and Near-Infrared Luminescence
<i>V. M. Amirkhanov, V. A. Trush, T. Krachko, E. Kasprzycka, L. B. Jerzykiewicz, P. Gawryszewska</i> |
| 11:00-11:20 | SPC 05O | Single and Multi-photon Processes of Lanthanide Ions and Complexes in Solution
<i>S. Faulkner, T. J. Sørensen, M. Tropiano, O. A. Blackburn</i> |
| 11:20-11:40 | SPC 06O | Peculiarities of spectroscopic properties of Ce ³⁺ ions in gadolinium gallium garnet crystal
<i>A. Kaminska, M. Berkowski, P. Sybilski, C.-G. Ma, M. G. Brik, A. Suchocki</i> |
| 11:40-12:00 | SPC 07O | First principles calculations of the electronic and optical properties of trivalent lanthanides in YAlO ₃
<i>M. G. Brik, C.-G. Ma, I. Sildos</i> |
| 12:00-12:20 | SPC 08O | A method of equivalent nearest neighbors applied to europium compounds
<i>H. L. L. Matos, Y. A. R. Oliveira, A. S. Souza, M. A. Couto dos Santos</i> |

12:20-14:00 *Lunch*

14:00-14:50 **Plenary lecture (Room A)**

Session chair: J. Legendziewicz

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|-------------|---------|---|
| 15:00-15:20 | SPC 09O | Multiconfigurational studies of actinyl coordination by macrocyclic ligands
<i>A. Kerridge</i> |
| 15:20-15:40 | SPC 10O | Crystal field in rare earth aluminates
<i>P. Novak, K. Knizek</i> |

15:40-16:10 *Coffee break*

Session chair: R. Longo

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|-------------|---------|--|
| 16:10-16:30 | SPC 11O | The influence of the excitation energy and intramolecular energy transfer rates on the ⁵ D ₀ Eu ³⁺ lifetime
<i>R. A. S. Ferreira, M. Nolasco, A. C. Roma, R. L. Longo, O. L. Malta, L. D. Carlos</i> |
| 16:30-16:50 | SPC 12O | The comparison of efficiency of ligand-to-metal energy transfer in new type of lanthanide luminophores
<i>V. M. Amirkhanov, P. Dereń, P. Gawryszewska, J. Legendziewicz, O. V. Moroz</i> |
| 16:50-17:10 | SPC 13O | Influence of the charge transfer states on the energy transfer process
<i>L. Puntus, K. Lyssenko, E. Sergeeva, I. Pekareva, F. Kajzar</i> |

17:10-18:30 **Poster session A**

Room D

9:00-9:50 **Plenary lecture (Room A)**

9:50-10:20

Coffee break

Magnetism

Session chair: J.-P. Costes

10:20-11:00	KN 10	Magnetic order in f-electron superconductors <i>M. Kenzelmann</i>
11:00-11:20	MGN 01O	Tuning of physical properties of 221 compounds by hydrogen absorption <i>S. Maskova, L. Havela, A. Kolomiets, K. Miliyanchuk, H. Nakotte</i>
11:20-11:40	MGN 02O	A Systematic Approach Towards New Single Molecule Magnets (SMMs) with a Lanthanide-Containing Core <i>L. Rigamonti, R. Sessoli, A. Cornia</i>
11:40-12:00	MGN 03O	Employing Fluoride as Structure-Directing Motifs in 3d-4f Cluster Chemistry <i>K. S. Pedersen, J. Bendix, M. Schau-Magnussen, J. Dreiser, S. Singh, C. Thuesen, T. Birk, M. Evangelisti, G. Rajaraman</i>
12:00-12:20	MGN 04O	Lanthanide Complexes as Molecular Prototypes for Spin-Based Quantum Gates <i>G. Aromí, L. A. Barrios, V. Velasco, O. Roubeau, F. Luis, S. J. Teat, D. Aguilà</i>

12:20-14:00

Lunch

14:00-14:50

Plenary lecture (Room A)

Session chair: M. Kenzelmann

15:00-15:40	KN 11	Role of magnetic axiality of Ln ions in the blocking of magnetization of lanthanide-containing complexes <i>L. Ungur, L. F. Chibotaru</i>
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15:40-16:10

Coffee break

Session chair: M. Kenzelmann

16:10-16:30	MGN 05O	Role of the $3d_{x^2-y^2}$ orbitals in the 3d-4f magnetic interaction <i>V. Gomez, L. Vendier, M. Corbella, J.-P. Costes</i>
16:30-16:50	MGN 06O	Lanthanide Single-Ion Magnets <i>S. Gao</i>
16:50-17:10	MGN 07O	Lanthanide organometallics as single-molecule magnets <i>S. A. Sulway, C. A. Smith, D. Woodruff, L. F. Chibotaru, L. Ungur, A. Venugopal, J. Okuda, F. Tuna, D. Collison, R. E. P. Winpenny, R. A. Layfield</i>

17:10-18:30

Poster session A

Wednesday, August 29, 2012

Room A

9:00-10:00

PL 5

Plenary lecture Senior Award – chair: J.-C. Bünzli

Emissive chiral lanthanide probes for proteins
R. Carr, N. Evans, D. Parker

10:00-10:20

Coffee break

Optical materials (lasers, telecommunication, lighting, sensors, photovoltaics.....)

Session chair: B. Viana

10:20-10:40

OPT 280

Luminescence of $\text{Li}_2\text{MSiO}_4:\text{Eu}^{2+}$ (M = Ca, Sr, Ba) under low-voltage cathode ray excitation
M. Xie, H. Liang

10:40-11:00

OPT 290

Broadband sensitized rare earth near-infrared emitting phosphor suitable for solar spectral convertor
Q. Zhang, G. Zhang, C. Yan, J. Wang, Q. Su

11:00-11:20

OPT 300

Tuning the quantum efficiency of the rare earth emission in MgAl_2O_4 spinel by cation exchange
P. J. Dereń, K. Maleszka-Baginska, R. Pazik, A. Gągor

11:20-11:40

OPT 310

Luminescence of YPO_4 activated with Tb^{3+} , Sm^{3+} or Nd^{3+} and effect of the Bi^{3+} co-doping on the emission properties
F. Angiuli, E. Cavalli

11:40-12:00

OPT 320

On the Efficient Luminescence of Rare Earth Doped Molybdates
A. Katelnikovas, H. Winkler, A. Kareiva, T. Jüstel

12:00-12:20

OPT 330

Quantum-cutting in $\text{CaYAlO}_4: \text{Pr}^{3+}, \text{Yb}^{3+}$
A. Guille, A. Pereira, A. Bensalah-Ledoux, C. Martinet, B. Moine

12:20-12:40

OPT 340

Er in disilicate thin films for photonic and photovoltaic applications
M. Miritello, P. Cardile, R. Lo Savio, F. Priolo

12:40-14:00

Lunch

14:30-22:00

Excursion with dinner

Room B

9:00-10:00

Plenary lecture Senior Award (Room A)

10:00-10:20

Coffee break

Optical materials (lasers, telecommunication, lighting, sensors, photovoltaics.....)

Session chair: J. L. Adam

10:20-10:40

OPT 350

Rare Earth Salicylates as Luminescent Probes for Spatial Constraints
M. M. Lezhnina, T. H. Tran, D. Pleshkov, A. Bosak, U. H. Kynast

10:40-11:00

OPT 360

The "Plug-and-Play" Approach to Luminescent Lanthanoid-based Hybrid Materials
B. Ennis, D. Brown, M. Ogden, S. Muzzioli, S. Stagni, M. Massi

11:00-11:20

OPT 370

Synthesis, Characterization and Photoluminescence Study of aquatri(2-phenylbutyrate)Lanthanate(III) Complexes
I. G. N. Silva, L. C. V. Rodrigues, P. R. P. Cech, M. C. F. C. Felinto, H. F. Brito, J. Kai

11:20-11:40

OPT 380

Printing luminescent lanthanide complexes for color reproduction with invisible inks
J. Andres, A.-S. Chauvin

11:40-12:00	OPT 39O	Luminescent solar concentrators based on Eu^{3+} -based tripodal organic-inorganic hybrids <i>P. G. Marques, P. S. Pereira, P. P. Lima, E. Pecoraro, P. S. André, R. A. S. Ferreira, L. D. Carlos</i>
12:00-12:20	OPT 40O	Probing surface redox reactions of semiconductors <i>V. Jubera, C. Langford, M. Treguer-Delapierre, Y. Petit, T. Cardinal, C. Leroy, C. Boissière, D. Grosso, R. Brown, S. Lacombe</i>
12:20-12:40	OPT 41O	Eu^{3+} reduction and efficient light emission in Eu_2O_3 films deposited on Si substrates <i>G. Bellocchi, G. Franzò, F. Iacona, S. Boninelli, M. Miritello, T. Cesca, F. Priolo</i>
12:40-14:00		<i>Lunch</i>
14:30-22:00		<i>Excursion with dinner</i>

Room C

9:00-10:00	<i>Plenary lecture Senior Award (Room A)</i>
10:00-10:20	<i>Coffee break</i>

Applications in biology and medicine

Session chair: F. Uggeri

10:20-11:00	KN 12	Upconversion Nanocrystals: A New Class of Luminescent Bioprobes <i>X. Liu</i>
11:00-11:20	MED 01O	Development of Novel Bimodal Contrast Agents for Cancer Diagnostics <i>S. Carron, T. N. Parac-Vogt, J. A. Capobianco</i>
11:20-11:40	MED 02O	Development of new folate-based bioconjugates: <i>fiat lux</i> on tumor cells <i>S. Quici, S. Orlandi, P. Kotrusz, G. Bottaro, A. Casoni</i>
11:40-12:00	MED 03O	Theranostic gadolinium nanoprobes for X-radiosensitization guided by imaging <i>A. Mignot, C. Truillet, J. Morlieras, G. Le Duc, L. Sancey, P. Mowat, S. Dufort, J.-L. Coll, S. Roux, P. Perriat, O. Tillement, F. Lux</i>
12:00-12:20	MED 04O	Core ($\text{LaF}_3\text{:Nd}^{3+}$)-shell (LaF_3) nanoparticles for deep tissue fluorescence bioimaging <i>U. Rocha, W. F. Silva, E. Bovero, C. C. Santos, I. Guedes, F. C. J. M. van Veggel, A. Benayas, L. Martinez Maestro, P. Rodriguez, J. Garcia-Solé, D. Jaque, C. Jacinto</i>
12:20-12:40	MED 05O	Imaging of Water Soluble, Lanthanide-Coated Nanoparticles in Cells and Flows <i>D. Lewis, A. Davies, A. Savage, S. Thomas, S. Watson, Z. Pikramenou</i>
12:40-14:00		<i>Lunch</i>
14:30-22:00		<i>Excursion with dinner</i>

Room D

9:00-10:00	<i>Plenary lecture Senior Award (Room A)</i>
10:00-10:20	<i>Coffee break</i>

Catalysis, energy and fuel cells

Session chair: C.-H. Yan

10:20-11:00	KN 13	Relevance of formates observable by FT-IR on ceria-based water-gas shift catalysts. <i>F. C. Meunier, A. Goguet, R. Burch</i>
11:00-11:20	CAT 01O	Higher activity of soot oxidation over CeO_2 and $\text{CeO}_2\text{-ZrO}_2$ solid solutions from more reactive surface planes <i>E. Aneggi, C. de Leitenburg, J. Llorca, A. Trovarelli</i>

11:20-11:40	CAT 02O	Cerium oxide-supported catalysts for ethanol steam reforming reaction <i>V. Palma, F. Castaldo, P. Ciambelli, G. Iaquaniello</i>
11:40-12:00	CAT 03O	Iso- and alio-valent cations doped nanosized ceria solid solutions for low temperature soot oxidation <i>P. Sudarsanam, L. Katta, B. M. Reddy</i>
12:00-12:20	CAT 04O	Rare Earths as Key Components in Innovative Vanadia based SCR Materials for NO _x Removal in Exhausts of Diesel Engines <i>A. Sagar, M. Casanova, A. Trovarelli, K. Schermanz</i>
12:20-12:40	CAT 05O	The effect of reaction conditions on the apparent deactivation of Ce-Zr mixed oxides for the catalytic wet oxidation of phenol <i>J. J. Delgado, X. Chen, W. Ouahbi, R. Kouraichi, J. M. Rodríguez-Izquierdo, M. A. Cauqui</i>
12:40-14:00		<i>Lunch</i>
14:30-22:00		<i>Excursion with dinner</i>

Thursday, August 30, 2012

Room A

9:00-9:50

PL 6

Plenary lecture – chair: M. Tolazzi

Preparation of Metallacrown Based Supramolecular Complexes and Their Applications in Molecular Magnetism and NIR luminescence
V. L. Pecoraro, T. Boron, J. Jankolovits, T. Mallah

9:50-10:20

Coffee break

Spectroscopy and theory

Session chair: O. L. Malta

10:20-11:00

KN 14

Various faces (and phases) of the Judd-Ofelt theory during its half-a-century travel
L. Smentek

11:00-11:20

SPC 140

Ab-initio calculations of Judd-Ofelt intensity parameters for transitions between crystal-field levels
J. Wen, C.-K. Duan, M. F. Reid

11:40-12:00

SPC 150

Beyond the Judd-Ofelt approximation: Direct calculation of the two-photon absorption spectrum of $Gd^{3+}:LaF_3$
G. W. Burdick, C.-K. Duan, M. F. Reid

12:00-12:20

SPC 160

Ab Initio Methodology for First Principles Calculation of Crystal-Field Parameters in Lanthanide Complexes
L. Ungur, L. F. Chibotaru,

11:20-11:40

SPC 170

The Dynamic Coupling Mechanisms of f-f Intensities Based on the Chemical Bond Overlap Polarizability
A. N. C. Neto, R. T. Moura JR, R. L. Longo, O. L. Malta

12:20-14:00

Lunch

14:00-14:50

PL 7

Plenary lecture – chair: M. Ozawa

Contributions of Electron Microscopy to Understanding the Chemistry of Ceria-based Catalytic materials
M. López-Haro, J. M. Cies, E. del Río, J. C. Hernández, M. P. Yeste, A. B. Hungria, S. Trasobares, G. Blanco, J. M. Pintado, J. M. Rodríguez-Izquierdo, M. A. Cauqui, X. Chen, J. J. Delgado, S. Bernal, J. A. Pérez-Omil, J. J. Calvino

15:00-15:40

Golden Anniversary of the Judd-Ofelt Theory

15:40-16:10

Coffee break

16:10-17:10

Golden Anniversary of the Judd-Ofelt Theory

17:10-18:30

Poster session B

Room B

9:00-9:50

Plenary lecture (Room A)

9:50-10:20

Coffee break

Coordination, organic and organometallic chemistry

Session chair: P. Junk

10:20-10:40	COO 130	The influence of basic reagent identity and acidic residue on the formation of heteronuclear 3d-4f compounds: from ionic complexes to polymers <i>G. G. Aleksandrov, M. A. Kiskin, N. N. Efimov, A. S. Bogomyakov, A. A. Sidorov, I. L. Eremenko, N. P. Burkovskaya</i>
10:40-11:00	COO 140	Lanthanoid complexes of group 13 and 14 pyridyl metallates; coordination chemistry and redox processes <i>K. Zeckert</i>
11:00-11:20	COO 150	Volatility of homo- and heteroligand β -diketonates and carboxylates of REE: mononuclear and discrete polynuclear species <i>N. Kuzmina, I. Malkerova, A. Alikhanyan</i>
11:20-11:40	COO 160 <i>invited</i>	Design of luminescent molecular materials: the synergy between lanthanoid complexes and inorganic materials <i>L. Armelao, G. Bottaro, E. Tondello, S. Quici, M. Cavazzini, G. Accorsi</i>
11:40-12:00	COO 170	Ultra-Rigid Pincer Ligands for the Synthesis of Actinide Chloro and Alkyl Complexes: Bonding and Polymerization Activity <i>C. A. Cruz, B. Vidjayacoumar, N. R. Andreychuk, D. J. H. Emslie</i>
12:00-12:20	COO 180	Cation-Cation Complexes of pentavalent uranyl: a powerful tool for the design of polymetallic assemblies <i>V. Mougel, L. Chatelain, J. Pécaut, M. Mazzanti</i>

12:20-14:00 *Lunch*

14:00-14:50 **Plenary lecture (Room A)**

Applications in biology and medicine

Session chair: J. A. Capobianco

15:00-15:40	KN 15	Sequestration and Excitation of the Lanthanides for Time Resolved Luminescence <i>K. N. Raymond</i>
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15:40-16:10 *Coffee break*

Coordination, organic and organometallic chemistry

Session chair: N. Kuzmina

16:10-16:30	COO 190	Luminescent Analysis of New Catalysts for Aqueous, Enantioselective Bond Formation <i>D. J. Averill, P. Dissanayake, Y. Mei, Z. Lin, M. J. Allen</i>
16:30-16:50	COO 200	Asymmetric Catalysis with Reusable Diionic Chiral Rare Earth Metal Complex-Ionic Liquid Systems <i>H. Furuno, S. Fujii, S. Onitsuka, J. Inanaga</i>

17:10-18:30 **Poster session B**

Room C

9:00-9:50 **Plenary lecture (Room A)**

9:50-10:20 *Coffee break*

Solid state chemistry and physics, intermetallic compounds, materials

Session chair: S. Bobev

10:20-11:00	KN 16	CeO ₂ -based materials for energy related application
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	Jr Award	<i>T. Montini</i>
11:00-11:20	SST 01O	High pressure synthesis of $M_3Pt_4Ge_{13}$ ($M = Ca, Y, Pr, Sm, Gd, Tb, Tm, Yb$) phases <i>R. Gumeniuk, M. Schöneich, L. Akselrud, K. O. Kvashnina, W. Schnelle, U. Schwarz, Y. Grin, A. Leithe-Jasper</i>
11:20-11:40	SST 02O	Phase-selective synthesis of rare earth phosphors from ionic liquids <i>P. Campbell, J. Cybinska, P. Ghosh, C. Lorbeer, A.-V. Mudring</i>
11:40-12:00	SST 03O <i>invited</i>	Production of fine crystal alloy for sintered magnet using twin roll casting method <i>T. Onimura, S. Tabata, K. Yamamoto, T. Irie</i>
12:00-12:20	SST 04O	Comparative Study of the Photophysical and Structural Properties of Nanoluminofors based on fluorides, oxyfluorides, oxides, borates, vanadates and phosphates doped with Ln^{3+} ions <i>S. Lis, T. Grzyb, A. Szczeszak, M. Runowski, A. Shyichuk, M. Weclawiak, N. Andrzejewska, A. Gruszczyńska, K. Kubasiewicz</i>
12:20-14:00		<i>Lunch</i>
14:00-14:50		Plenary lecture (Room A)
Session chair: T. Schleid		
15:00-15:40	KN 17	Discovery and Growth of Magnetic Materials with Competing Interactions <i>J. Chan</i>
15:40-16:10		<i>Coffee break</i>
Session chair: T. Schleid		
16:10-16:30	SST 05O	Structure Control and Luminescence Enhancement of Rare Earth Nanocrystals: by Chance or by Design? <i>L.-D. Sun, W. Feng, C.-J. Jia, Y.-F. Wang, C.-H. Yan</i>
16:30-16:50	SST 06O	Optically induced core-like emission from ultra-small $NaGdF_4:Eu^{3+}$ nanocrystals <i>M. Banski, A. Podhorodecki, J. Misiewicz, M. Afzaal, A. L. Abdelhady, P. O'Brien</i>
17:10-18:30		Poster session B

Room D

9:00-9:50	Plenary lecture (Room A)
9:50-10:20	<i>Coffee break</i>

Catalysis, energy and fuel cells

Session chair: V. Palma

10:20-11:00	KN 16 Jr Award	CeO_2 -based materials for energy related application (Room C) <i>T. Montini</i>
11:00-11:20	CAT 06O	How much can lanthanides help photovoltaics? <i>J.-C. G. Bünzli</i>
11:20-11:40	CAT 07O <i>invited</i>	Ceria-zirconia for oxygen storage capacity, its materials and catalysis designed with nanometer scale <i>M. Ozawa</i>
11:40-12:00	CAT 08O <i>invited</i>	Preparation of Perovskite-type Oxide Catalysts by Thermal Decomposition of Cyano Complexes <i>H. Yahiro, M. Asamoto</i>
12:00-12:20	CAT 09O	Exceptional activity for methane oxidation with catalysts prepared by modular assembly of $Pd@CeO_2$ subunits <i>M. Cargnello, J. J. Delgado Jaén, J. C. Hernández Garrido, K. Bakhmutsky, T. Montini,</i>

		J. J. Calvino Gamez, R. J. Gorte, P. Fornasiero
12:20-14:00		<i>Lunch</i>
14:00-14:50		<i>Plenary lecture (Room A)</i>
Session chair: A. M. Venezia		
15:00-15:40	KN 18	Nano Size Effects of CeO ₂ on Particulate Matter Oxidation of Pr _{4.8} Bi _{1.2} O ₁₁ <i>T. Ishihara, S. Hamamoto, K. Ogawa</i>
15:40-16:10		<i>Coffee break</i>
Magnetism		
Session chair: R. Sessoli		
16:10-16:30	MGN 08O	Lanthanide-based Single Molecule Magnets: Theoretical models and relativistic <i>ab initio</i> calculations <i>J. Luzon, R. Sessoli</i>
16:30-16:50	MGN 09O	Magnetism and Structure of Rare Earth-Rich Binary Compounds with Group 14 Elements <i>V. K. Pecharsky, Y. Mudryk, D. Paudyal, K. A. Gschneidner Jr.</i>
16:50-17:10	MGN 10O	Quantum Molecular Spintronics Based on Multiple-Decker Phthalocyaninato Lanthanide(III) Single-Molecule Magnets <i>M. Yamashita</i>
17:10-18:30		<i>Poster session B</i>

Friday, August 31, 2012

Room A

9:00-9:50

PL 8

Plenary lecture – chair: S. Bernal

Controllable Synthesis and Catalytic Property of Ceria-based Nano- and Meso-Materials
C.-H. Yan, L.-D. Sun, Y.-W. Zhang

9:50-10:20

Coffee break

Optical materials (lasers, telecommunication, lighting, sensors, photovoltaics.....)

Session chair: L. Carlos

10:20-11:00

KN 19

Persistent Luminescence: From Origins to Applications

J. Hölsä, H. F. Brito, T. Laamanen, M. Lastusaari, L. C. V. Rodrigues

11:00-11:20

OPT 42O

CdSiO₃:R³⁺ Persistent Luminescence Materials

H. F. Brito, J. Hölsä, M. Lastusaari, M. C. F. C. Felinto, J. M. Carvalho, L. C. V. Rodrigues

11:20-11:40

OPT 43O

Synthesis and characterization of Ca₃Sc₂Si₃O₁₂ garnet doped with Ce³⁺ and Ce³⁺-Tb³⁺ ions obtained by drying freezer method

J. J. Velázquez, J. Marrero-Jerez, V. D. Rodríguez, P. Núñez, J. Méndez-Ramos, J. del Castillo, A. C. Yanes

11:40-12:00

OPT 44O
invited

Rare earths electron traps for enhance persistent luminescence in medical imaging application

B. Viana, A. Lecointre, S. Blahuta, A. Bessiere, D. Gourier, T. Maldiney, C. Richard, D. Scherman

12:00-12:20

OPT 45O

Influence of coating on toxicity of rare-earth doped NaGdF₄ luminescent nanocrystals
W. Kalas, E. Ziolo, L. Strzqdala, J. Cichos, M. Karbowskiak, L. Marciniak, W. Stręk, D. Hreniak

12:20-12:35

Closing ceremony

12:45-14:00

Lunch

Room B

9:00-9:50

Plenary lecture (Room A)

9:50-10:20

Coffee break

Spectroscopy and theory

Session chair: M. F. Reid

10:20-11:00

KN 20

Computational Methods Applied to Lanthanide Compounds

R. L. Longo

11:00-11:20

SPC 18O

Hypersensitivity of Eu³⁺ in ultrasmall nanocrystals

A. Bednarkiewicz, D. Wawrzynczyk, W. Stręk, M. Samoc

11:20-11:40

SPC 19O

Spectral properties of ordered nano structures on surface of oxides doped with RE or/and ME ions

N. A. Kulagin

11:40-12:00

SPC 20O

Direct Energy Transfer in Impurity Nanoparticles

Y. V. Orlovskii, S. G. Fedorenko, A. V. Popov, V. V. Platonov, I. Sildos, H. Mandar, K. Utt, V. V. Osipov, T. T. Basiev

12:00-12:20

SPC 21O

Controlling the luminescence emission of Ln³⁺ doped nanomaterials

H. Zheng, D. Gao, E. He, W. Gao

12:20-12:35

Closing ceremony (Room A)

12:45-14:00

Lunch

Room C

9:00-0:50

Plenary lecture (Room A)

9:50-10:20

Coffee break

Applications in biology and medicine

Session chair: S. Aime

10:20-10:40

MED 06O
invited

Gadolinium Complexes in Diagnostic Imaging: from Contrast Media to Molecular Probes
F. Uggeri, A. Maiocchi

10:40-11:00

MED 07O

How endogenous ligands can affect the kinetic inertness of linear Gd(III)-based contrast agents
Z. Baranyai, Z. Pálkás, F. Uggeri, S. Aime, E. Brücher, A. Maiocchi

11:00-11:20

MED 08O

Synthesis, Surface Modification and Bioapplications of Rare Earth optical/Magnetic Nanocrystals
J.-C. Zhou, L.-D. Sun, C.-H. Yan

11:20-11:40

MED 09O

Lanthanide Porpholactonates as NIR Fluorescence Bioprobes
B. Yang, J.-L. Zhang

11:40-12:00

MED 10O

A new ditopic Gd(III) complex functionalized with an adamantyl moiety as a versatile building block for the preparation of supramolecular assemblies
J. Martinelli, G. Gambino, S. De Pinto, K. Thangavel, C. Cassino, L. Tei, M. Botta

12:00-12:20

MED 11O

Near-Infrared Emitting Lanthanide Metal-organic Frameworks for Biological Imaging
S. Petoud, A. Foucault, K. A. Gogick, S. Vilette, N. L. Rosi

12:20-12:35

Closing ceremony (Room A)

12:45-14:00

Lunch

Room D

9:00-9:50

Plenary lecture (Room A)

9:50-10:20

Coffee break

Solid state chemistry and physics, intermetallic compounds, materials

Session chair: J. Chan

10:20-11:00

KN 2I

Crystal Chemistry of New (and some old) Rare-Earth Metal Germanides
S. Bobev

11:00-11:20

SST 08O

DFT Calculations, Trap Filling and Fading Abilities of $\text{SrAl}_2\text{O}_4\text{:Eu}^{2+}, \text{Nd}^{3+}$
K. O. Eskola, J. Hölsä, H. Jungner, T. Laamanen, M. Lastusaari, P. Novák

11:20-11:40

SST 09O

One Century of Divalent Rare-Earth Halides
G. Meyer

11:40-12:00

SST 10O

Rare Earth Chalcogenide-based Nanocrystals and Heterostructures
Y. Ding, J. Gu, T. Zhang, J. Ke, Y.-W. Zhang, C.-H. Yan

12:00-12:20

SST 11O

Reactions of uranium(VI)acetate with highly concentrated acids under harsh conditions: characterization of hexa- and tetravalent uranumsulfates and -methanesulfonates



U. Betke, J. Kramer, C. Wickleder, M. S. Wickleder

12:20-12:35

Closing ceremony (Room A)

12:45-14:00

Lunch

Poster Program

Tuesday, August 28, 2012

17:10-18:30

Poster session A

Spectroscopy and theory

- | | |
|---------|--|
| SPC 01P | Influence of Defects on the Luminescence and Trap Structure of $\text{Sr}_2\text{MgSi}_2\text{O}_7:\text{Eu}^{2+}, \text{Dy}^{3+}$
<i>K. O. Eskola, J. Holsa, H. Jungner, T. Laamanen, M. Lastusaari, P. Novák</i> |
| SPC 02P | Ultra-low temperature spectroscopy of high surface area Eu-doped ceria nanocrystals
<i>P.-A. Primus, M. U. Kumke</i> |
| SPC 03P | Effect on the absorption bands of Nd^{3+} - ion in ceramic glasses and error calculation in oscillator strength and intensity parameters using the Judd-Ofelt intensity model
<i>A. Florez</i> |
| SPC 04P | Caged Lanthanides; Structural and Spectroscopic Properties
<i>A. Kedzioriski, B. Andes Hess Jr., L. Smentek</i> |
| SPC 05P | Plasmon-modified Nd^{3+} luminescence
<i>E. Yraola, P. Molina, M. O. Ramirez, L. E. Bausá</i> |
| SPC 06P | Lanthanide tetracarboxylates - spectroscopy and electronic structure
<i>R. Janicki, A. Mondry, P. Starynowicz</i> |
| SPC 07P | FEL and synchrotron investigation of impurity-trapped excitons in two sites of Yb^{2+} doped NaMgF_3
<i>R. B. Hughes-Currie, M. F. Reid, J.-P. R. Wells, K. Ivanovskikh, P. Senanayake, G. Berden, A. Meijerink, R. J. Reeves</i> |
| SPC 08P | Two-colour excitation of impurity-trapped excitons in fluoride materials doped with Yb^{2+}
<i>M. F. Reid, J.-P. R. Wells, P. Senanayake, R. Hughes-Currie, G. Berden, A. Meijerink, A. J. Salkeld, R. J. Reeves, C.-K. Duan</i> |
| SPC 09P | Optical properties and spectroscopic parameters of Pr^{+3} and Nd^{+3} complexes with S(+)-mandelic acid
<i>M. Babij, A. Mondry, P. Starynowicz</i> |
| SPC 10P | Low Temperature Synthesis of $\text{R}_2\text{O}_3:\text{Eu}^{3+}$ (R: Y, Gd and Lu) Nanophosphor Using Trimellitic Acid Precursors
<i>L. C. V. Rodrigues, J. Kai, M. C. F. C. Felinto, J. Hölsä, H. F. Brito, I. G. N. Silva</i> |
| SPC 11P | Luminescent properties of lanthanides complexes using carboxylate, phosphinate and seleninate as ligands
<i>J. H. S. K. Monteiro, A. L. B. Formiga, F. A. Sigoli</i> |
| SPC 12P | Radiative transitions from upper $4f^{11}5d$ states of Tm^{3+}
<i>K. V. Ivanovskikh, M. F. Reid, A. Meijerink</i> |
| SPC 13P | Spectroscopic properties of $\text{Mg}_{1-x}\text{Ca}_x(\text{Al}_{2-y}\text{Ga}_y)_2\text{O}_4$ doped with neodymium spinel nanopowders
<i>K. Maleszka-Bagińska, P. J. Dereń</i> |
| SPC 14P | Charge-transfer and f-f luminescence of the impurity Yb^{3+} ions in the PbWO_4 crystals
<i>O. V. Chukova, S. G. Nedilko</i> |
| SPC 15P | Luminescent spectroscopy of the Eu^{3+} ions in the LaVO_4 matrix
<i>O. V. Chukova, S. A. Nedilko, S. G. Nedilko, V. P. Scherbatskii, T. Voytenko</i> |
| SPC 16P | 5d-4f transitions of Ce^{3+} in different the YPO_4 nanophases
<i>A. V. Popov, Y. V. Orlovskii, A. S. Vanetsev, O. M. Gaitko, S. Lange, E. O. Orlovskaya, C.-G. Ma, I. Sildos</i> |
| SPC 17P | Theoretical study of the 4f-5d transition spectra of lanthanide ions in low symmetry systems based on the exchange charge model
<i>C.-G. Ma, M. G. Brik</i> |
| SPC 18P | Ab initio theoretical study of the electronic spectra of Tb^{3+} -doped BaF_2
<i>J. L. Pascual, Z. Barandiaran, L. Seijo</i> |
| SPC 19P | Investigating the solution photophysical properties of uranium complexes
<i>L. S. Natrajan, M. P. Redmond, S. M. Cornet, S. D. Woodall, D. Whittaker, D. Collison, J. J. W. McDouall</i> |
| SPC 20P | High pressure luminescence spectra of Eu^{2+} activated nitridosilicates derived phosphors |

SPC 21P	<i>A. Lazarowska, S. Mahlik, M. Grinberg, T.-C. Liu, R.-S. Liu</i>
	Luminescence dynamics of CaWO_4 and CaMoO_4 doped with Tb^{3+} and Pr^{3+} under high hydrostatic pressure
SPC 22P	<i>S. Mahlik, M. Grinberg, E. Cavalli, M. Bettinelli</i>
	Spectroscopic characterization of $\beta\text{-Ca}_2\text{SiO}_4\text{:Eu}^{3+}$ and $\beta\text{-Ca}_2\text{SiO}_4\text{:Eu}^{2+}$ at ambient and high hydrostatic pressure
	<i>A. Baran, J. Barzowska, S. Mahlik, K. Szczodrowski, M. Grinberg</i>

Optical materials (lasers, telecommunication, lighting, sensors, photovoltaics.....)

OPT 01P	EPR properties of $\text{KHo}(\text{WO}_4)_2$ single crystals <i>H. Fuks, S.M. Kaczmarek, T. Bodziony, J. Hanuza, L. Macalik, A. Majchrowski, T. Skibinski</i>
OPT 02P	Magnetic and structural phase transitions of $\text{PbMoO}_4\text{:Co}$ single crystals <i>S. M. Kaczmarek, T. Tsuboi, Y. Nakai, M. Berkowski, G. Leniec, T. Skibiński</i>
OPT 03P	Magnetic properties of $\text{KGd}(\text{WO}_4)_2$ single crystal studied by EPR spectroscopy <i>S. M. Kaczmarek, H. Fuks, T. Bodziony, T. Skibiński, J. Hanuza, L. Macalik</i>
OPT 04P	Effect of substitution of lutetium by gadolinium on optical properties of $(\text{Lu}_x\text{Gd}_{1-x})_2\text{SiO}_5\text{:Sm}^{3+}$ single crystals <i>G. Dominiak-Dzik, A. Strzép, W. Ryba-Romanowski, M. Berkowski</i>
OPT 05P	A green- to red-emitting Eu^{3+} , Tb^{3+} codoped amorphous calcium silicate phosphor <i>Y. Kojima, M. Numazawa, T. Umegaki</i>
OPT 06P	Cathodoluminescence of $\text{LuPO}_4\text{:Pr}^{3+}$ single crystals and nanopowders <i>A. Leto, F. Piccinelli, G. Pezzotti, A. Speghini, L. Nodari, M. Bettinelli</i>
OPT 07P	Fast UV luminescence of Nd^{3+} in BaMgF_4 single crystals <i>M. Trevisani, M. Bettinelli, E. G. Villora, K. Shimamura, M. O. Ramírez, P. Molina, L. E. Bausá</i>
OPT 08P	Conversion of ultrashort infrared pulses into visible emission in vanadate crystals undoped and doped with erbium or thulium <i>W. Ryba-Romanowski, R. Lisiecki, A. Strzép, G. Dominiak-Dzik, B. Macalik, M. Kowalski</i>
OPT 09P	Nanosize induced symmetry lowering in Nd^{3+} doped CaTiO_3 nanocrystals probed by optical spectroscopy <i>I. Carrasco, P. Molina, D. Rudnika, P. Dereń, L. E. Bausá, M. O. Ramírez</i>
OPT 10P	Ce^{3+} : A sensitizer of the $\text{Pr}^{3+}\text{-Yb}^{3+}$ couple quantum-cutting in CaYAlO_4 ? <i>A. Guille, A. Pereira, A. Bensalah-Ledoux, B. Moine</i>
OPT 11P	Thermoluminescence Excitation Spectroscopy of the $\text{Y}_2\text{O}_2\text{S:Eu}^{3+}, \text{Mg}^{2+}, \text{Ti}$ Persistent Luminescence Phosphor <i>J. Hölsä, A. J. J. Bos, P. Dorenbos, T. Laamanen, M. Lastusaari, M. Malkamäki</i>
OPT 12P	Synthesis and optical spectra of transparent YAG ceramics activated with Er^{3+} <i>E. Cavalli, L. Esposito</i>
OPT 13P	Synthesis, Structure and Luminescence Properties of Eu^{2+} doped $\text{Sr}_3\text{Si}_2\text{O}_4\text{N}_2$ for pc-LEDs <i>X.-M. Wang, C.-H. Wang, X.-J. Kuang, R.-Q. Zou, Y.-X. Wang, X.-P. Jing</i>
OPT 14P	Ultra Stable Hydroxynaphthylidine-Derived Europium Complex for Photoluminescent and Electroluminescent Applications <i>H. Wei, J. Bai, Z. Zhao, Z. Liu, Z. Bian, C. Huang</i>
OPT 15P	Methods for producing powders of rare earth metals trifluorides LnF_3 ($\text{Ln} = \text{La-Lu, Y, Sc}$) <i>I. A. Razumkova, O. G. Mikhalkina, A. N. Boiko</i>
OPT 16P	Optical pressure sensors based on the luminescence properties of Nd^{3+} ion in garnet crystals <i>U. R. Rodríguez-Mendoza, S. F. León-Luis, J. E. Muñoz-Santiuste, D. Jaque, V. Lavín</i>
OPT 17P	Luminescent properties of Eu-doped Y-stabilized ZrO_2 microtubes <i>K. Utt, V. Kiisk, M. G. Brik, I. Sildos</i>
OPT 18P	A chemically unlocked binary molecular switch <i>G. Chen, J. L. Sarris, N. J. Wardle, S.W. A. Bligh, N. P. Chatterton</i>
OPT 19P	Luminescence properties of Tm^{3+} -doped metaphosphate glasses <i>K. Linganna, C. K. Jayasankar</i>
OPT 20P	Effect of dopant quantity on Er:YAG structure: an electron microscopic investigation through SAED <i>M. L. Saladino, G. Nasillo, E. Caponetti</i>
OPT 21P	Infrared-to-visible energy upconversion in $\text{Yb}^{3+}\text{-Er}^{3+}$ and $\text{Yb}^{3+}\text{-Ho}^{3+}$ doped $\text{Y}_3\text{Ga}_5\text{O}_{12}$ nano-garnets <i>V. Monteseuro, V. Venkatramu, S. F. León-Luis, U. R. Rodríguez-Mendoza, A. Muñoz, C. K.</i>

	<i>Jayasankar, V. Lavin</i>
OPT 22P	Yb:CaGdAlO ₄ : 1 μm laser with different architectures <i>S. Ricaud, A. Jaffres, A. Suganuma, P. Loiseau, B. Viana, B. Weichelt, M. Abdou-Ahmed, A. Voss, T. Graf, D. Rytz, M. Delaigue, E. Mottay, F. Druon, F. Balembois, P. Georges, J. Didierjean</i>
OPT 23P	Spectroscopic analysis of Sm ³⁺ in C ₂ and C _{3i} sites of Y ₂ O ₃ <i>A. Lupei, C. Tiseanu, C. Gheorghe, F. Voicu</i>
OPT 24P	Specific features of time kinetics in Er-Ce co-doped telluride glasses in the green emission range <i>M. G. Brik, J. Wasylak, M. Reben, W. Kuznik, I. V. Kityk</i>
OPT 25P	Error calculation in oscillator strength and intensity parameters of Pr ³⁺ , Er ³⁺ doped fluorindate and fluorophosphates glasses using the Judd-Ofelt intensity model and effect of the odd order intensity parameter. <i>A. Florez</i>
OPT 26P	Nd ³⁺ and Yb ³⁺ in disordered garnet crystals and ceramics <i>V. Lupei, A. Lupei, A. Ikesue, C. Gheorghe, L. Gheorghe, A. Achim, F. M. Voicu</i>
OPT 27P	Europium based crystalline nano-aggregates in silica <i>A. Vedda, N. Chiodini, M. Fasoli, A. Lauria, F. Moretti, A. Baraldi, E. Buffagni, R. Capelletti, M. Mazzera</i>
OPT 28P	Thulium concentration quenching in the up-converting colloidal α-Tm ³⁺ /Yb ³⁺ NaYF ₄ nanocrystals <i>M. Misiak, K. Prorok, A. Bednarkiewicz</i>
OPT 29P	NIR luminescence at 1800 nm and up-conversion processes in lead germanate glasses co-doped with Yb ³⁺ and Tm ³⁺ <i>J. Pisarska, L. Grobelny, J. Janek, W. A. Pisarski, R. Lisiecki, W. Ryba-Romanowski</i>
OPT 30P	Structure and spectroscopy of rare earth - doped lead phosphate glasses <i>W. A. Pisarski, J. Pisarska, L. Žur</i>
OPT 31P	Luminescence properties in ZrO ₂ nanoparticles doped with Er and Yb <i>C. Matei, S. Georgescu, D. Berger, S. Nastase, A.-M. Voiculescu, A. Stefan</i>
OPT 32P	Upconversion processes in langasite nanopowders doped with erbium and ytterbium <i>A.-M. Voiculescu, S. Georgescu, S. Nastase, O. Toma, C. Matei, A. Stefan</i>
OPT 33P	Photodynamic process and laser performances of RE:LYLF (RE=Ce, Yb) <i>L. Nurdinova, V. Semashko, S. Korableva</i>
OPT 34P	Anti-Stokes luminescence of SiO ₂ -(Er _x Yb _{1-x}) ₂ O ₃ glass nanoceramics <i>V. Kouhar, G. Malashkevich, I. Khodasevich, A. Sukhodola, E. Pestryakov</i>
OPT 35P	Multifunctional REPO ₄ :Yb ³⁺ , Tb ³⁺ nanoparticles – UV luminescence, up-conversion and magnetic properties (RE = Y, La and Gd) <i>T. Grzyb, A. Gruszczyka, R. J. Wiglus, B. Idzikowski, S. Lis</i>
OPT 36P	Rare earth doped submicron-sized silica spheres for temperature sensing <i>M. Trevisani, L. Martínez Maestro, D. Jaque, J. García Sole, M. Bettinelli, S. Polizzi, P. Haro-Gonzalez</i>
OPT 37P	Microspheres made from erbium doped barium titanium silicate glass as an active and passive optical micro-resonator <i>L. L. Martin, D. Navarro-Urrios, F. Ferrareze-Lupi, I. R. Martín, C. Pérez-Rodríguez, N. E. Capuj</i>
OPT 38P	Hydrothermal Synthesis and Radioluminescence Properties of NaLu(WO ₄) ₂ :Eu ³⁺ <i>Z. Wang, J. Zhong, C. Mao, H. Liang, Q. Su</i>
OPT 39P	Synthesis and luminescent properties of monodispersed spherical Ce(IV)-Gd(III)-Eu(III) oxides <i>C. Sorbello, M. Jobbágy, B. C. Barja</i>
OPT 40P	Nanoscaled phosphors based on strontium/barium and rare earths mixed borates <i>A. Shyichuk, S. Lis</i>
OPT 41P	First-Principles calculation of 4f ⁿ -4f ⁿ⁻¹ 5d ¹ absorption spectra of Nd ³⁺ and Eu ²⁺ in fluoride crystals <i>M. Kobayashi, K. Higashiura, K. Ogasawara</i>
OPT 42P	Nitridosilicates phosphor for white LEDs. <i>D. Rudnicka, P. J. Dereń, P. Gluchowski</i>
OPT 43P	Energy up-conversion in Tb ³⁺ /Yb ³⁺ codoped colloidal α-NaYF ₄ nanocrystals <i>K. Prorok, A. Gnach, A. Bednarkiewicz</i>
OPT 44P	Concentration dependence of excitation spectra of LiLa _{1-x} Nd _x P ₄ O ₁₂ nanocrystals <i>W. Strek, L. Marciniak, D. Hreniak</i>
OPT 45P	Luminescent properties of Ho ³⁺ ions in LaAlO ₃ nano-perovskites <i>K. Lemański, P. J. Dereń</i>
OPT 46P	Optical properties of RE ₂ (MoO ₄) ₃ molybdate crystals

	<i>C. Guzmán-Afonso, S. F. León-Luis, M. E. Torres, C. González-Silgo, U. R. Rodríguez-Mendoza, P. Rodríguez-Hernández, R. Valiente, V. Lavín</i>
OPT 47P	Ytterbium luminescence in K-Sr-Al phosphate glasses <i>V. Venkatramu, R. Vijaya, M. Rathaiah, P. Haritha, C. K. Jayasankar, V. Lavín</i>
OPT 48P	Synthesis, structure, and spectroscopic properties of $\text{Pr}^{3+}:\text{LiLa}(\text{PO}_3)_4$ nanopowders <i>A. Lukowiak, R. J. Wiglusz, T. Grzyb, W. Strek</i>
OPT 49P	(Ln,Yb):KLu(WO ₄) ₂ nanophosphors for white light emission by up-conversion <i>W. Barrera, M. C. Pujol, C. Cascales, J. J. Carvajal, X. Mateos, A. Speghini, M. Bettinelli, M. Aguiló, F. Díaz</i>
OPT 50P	Enhancing solar cell response by photon conversion in rare-earth doped nano-glass-ceramics <i>V. D. Rodríguez, J. Méndez-Ramos, V. K. Tikhomirov, V. V. Moshchalkov, A. C. Yanes, J. del Castillo, J. J. Velázquez</i>
OPT 51P	Tuneable up-conversion and bright white light in Yb^{3+} , Er^{3+} and Tm^{3+} co-doped KYF ₄ nanocrystals embedded in a transparent sol-gel silica matrix <i>A. C. Yanes, A. Santana-Alonso, J. Méndez-Ramos, J. del Castillo, V. D. Rodríguez</i>
OPT 52P	Structure and high efficiency UV up-conversion in sol-gel glass-ceramics comprising Ln^{3+} -doped YF ₃ nanocrystals <i>J. Méndez-Ramos, A. C. Yanes, A. Santana-Alonso, J. del Castillo, V. D. Rodríguez</i>
OPT 53P	Highly Transparent Luminescent Silicone Hybrids based on Rare Earth Complexes <i>T. H. Tran, M. Lezhnina, U. Kynast</i>
OPT 54P	Synthesis and optical properties of ultrasmall nanocrystals as optical markers based on lanthanides emission controlled by ion-ion interactions <i>A. Podhorodecki, M. Banski, A. Nocolak, B. Sojka, J. Misiewicz</i>
OPT 55P	Luminescence characteristics and the second harmonic generation in powdered Yb^{3+} -doped $\text{ZnY}_4\text{W}_3\text{O}_{16}$ tungstate <i>M. Guzik, E. Tomaszewicz, Y. Guyot, J. Legendziewicz, G. Boulon</i>
OPT 56P	Calibration of an Er^{3+} -doped fluorotellurite glass as an optical temperature sensor for high pressure experiments <i>S. F. León-Luis, V. Monteseuro, U. R. Rodríguez-Mendoza, F. J. Manjón, V. Lavín</i>
OPT 57P	Multicolour PHB and PMMA Luminescent Films Doped with $[\text{Eu}(\text{tta})_3(\text{tppo})_2]$ and $[\text{Tb}(\text{acac})_3(\text{tppo})_2]$ Complexes <i>J. Kai, G. S. Hachisu, H. F. Brito, O. L. Malta, M. C. F. C. Felinto</i>
OPT 58P	Luminescent Properties of Rare Earth Carboxylate Complexes in Nanoscaled Layer Structures <i>T. Grewe, M. Lezhnina, M. Bentlage, U. Kynast</i>
OPT 59P	Spectroscopic properties and heat generation of $\text{Yb}^{3+}/\text{Ho}^{3+}$ and $\text{Tm}^{3+}/\text{Ho}^{3+}$ co-doped aluminosilicate glasses for emission around 2 μm <i>G. S. N. Eliel, N. G. C. Astrath, P. T. Udo, L. C. Malarne, M. L. Baesso, T. Catunda, C. Jacinto</i>
OPT 60P	High pressure optical properties of Er^{3+} ions in $\text{Lu}_3\text{Ga}_2\text{O}_{12}$ nanocrystals <i>U. Rodríguez-Mendoza, S. F. León-Luis, V. Venkatramu, V. Lavín</i>
OPT 61P	Up-conversion processes in sol-gel LaF_3 nanostructured glass-ceramics doped with Yb^{3+} and Tb^{3+} ions <i>J. J. Velázquez, A. C. Yanes, J. Méndez-Ramos, J. del Castillo, V. D. Rodríguez</i>
OPT 62P	Fotoluminescent behavior of luminescent polymer based on polycaprolactone doped with europium complex <i>P. L. Forster, J. Kai, H. F. Brito, D. F. Parra</i>
OPT 63P	Band Structure calculations of $\text{Sr}_2\text{Si}_5\text{N}_8$ and $\text{Sr}_2\text{Si}_5\text{N}_8:\text{Eu}$ crystals <i>L. Wang, H. Ni, Q. Zhang, F. Xiao</i>
OPT 64P	Role of grain size on the nonlinear refraction and absorption in Nd-doped Yttrium Aluminum Garnet Ceramics <i>W. Q. Santos, D. Jaque, A. Benayas, J. García-Solé, C. Jacinto</i>
OPT 65P	The Effects of Particle Size and Temperature on the $^1\text{D}_2$ Emissions of $\text{Pr}^{3+}:\text{YAG}$ <i>G. Wiggins, F. Steponzi, L. Ma, L. Wang, J. H. Zhang, X. J. Wang</i>
OPT 66P	Energy transfer investigations in Dy^{3+} and Yb^{3+} -co-doped $\text{LiLaP}_4\text{O}_{12}$ nanocrystals <i>L. Marciniak, W. Strek, A. Bednarkiewicz, D. Hreniak</i>
OPT 67P	$\text{NaYF}_4:\text{Yb}^{3+},\text{Er}^{3+}$ Nanocrystallites for Optimized Up-Converting Assay Performance <i>R. Arppe, E. Harju, J. Hölsä, J. Kankare, T. Laamanen, M. Lastusaari, L. Pihlgren, M. Schäferling, T. Soukka, M. Tuomisto</i>
OPT 68P	Local Structure and Dopant Valences in $\text{Sr}_3\text{SiO}_5:\text{Eu}^{2+},\text{R}^{3+}$ Persistent Luminescence Materials <i>R. Chernikov, J. Hölsä, T. Laamanen, M. Lastusaari, M. Lindström, M. Malkamäki, E. Welter</i>

Applications in biology and medicine

MED 01P	NaREF4@CaF ₂ Core/Shell Nanostructures for Upconversion Bioimaging <i>Y.-F. Wang, L.-D. Sun, W. Feng, C.-H. Yan</i>
MED 02P	<i>In vivo</i> efficacy test of the BNCT treatment mediated by a theranostic Gadolinium/Boron agent <i>S. Geninatti-Crich, D. Alberti, A. Toppino, I. Szabo, A. Deagostino, P. Venturello, N. Protti, S. Bortolussi, S. Altieri, S. Aime</i>
MED 03P	Development of bifunctional lanthanide complexes for imaging and inhibiting Alzheimer's disease <i>G.-L. Law</i>
MED 04P	Adsorption and nano-particles formation of f-elements on microbial cell surface <i>T. Ohnuki, M. Jiang, S. Utsunomiya, N. Kozai, K. Kato</i>
MED 05P	Synthesis and characterization of new versatile Lanthanide MRI contrast agents <i>S. N. Murthy Chilla, S. Laurent, L. Vander Elst, R.N. Muller</i>
MED 06P	pH-Sensitive Contrast Agents: the Influence of N-Substitution on [Gd(AE-DO3A)] complexes <i>G. A. Rolla, R. Negri, L. Tei, M. Botta, G. B. Giovenzana</i>
MED 07P	Antibacterial activity of biscoumarins and of their lanthanoid complexes <i>V. Kircheva, I. Pantcheva, I. Manolov, M. Milanova</i>
MED 08P	Hyperfine Coupling Constants on Inner-Sphere Water Molecules of Gd(III)-Based MRI Contrast Agents: A DFT Study <i>D. Esteban-Gómez, A. de Blas, T. Rodríguez-Blas, L. Helm, C. Platas-Iglesias</i>
MED 09P	GdHPDO3A: slightly anomalous relaxometric properties explained by elusive isomeric structures in solution <i>D. Delli Castelli, M. C. Caligara, E. Terreno, S. Aime, M. Botta</i>
MED 10P	Magneto-luminescent particles. [Eu(tta) ₃ (Bpy-Si)] modified gFe ₂ O ₃ @SiO ₂ particles <i>R.R. Silva, A. P. Duarte, M. Gressier, M. J. Menu, J. Dexpert-Ghys, J. M. A. Caiut, A. Franco Jr., S. J. L. Ribeiro</i>
MED 11P	Chemoenzymatic Approach to Bifunctional AAZTA-like Contrast Agents <i>P. Minazzi, G. B. Giovenzana, C. Cavallotti, I. Menegotto</i>
MED 12P	Synthesis, Characterization and Spectroscopic Studies of Tin/Titanium Mixed Oxide Nanoparticles Doped with Europium for use in Biomarkers <i>P. P. Paganini, L. C. V. Rodrigues, J. Holsa, L. A. O. Nunes, O. L. Malta, H. F. Brito, M. C. F. C. Felinto</i>

Catalysis, energy and fuel cells

CAT 01P	Deposition of Pd-Fe bimetal nanoparticles onto CeO ₂ by using dual arc-plasma <i>S. Hinokuma, Y. Katsuhara, E. Ando, M. Machida</i>
CAT 02P	SOFC Performances of Ni/SDC Anode Fabricated <i>M. Asamoto, K. Sugihara, Y. Itagaki, Y. Sadaoka, H. Yahiro</i>
CAT 03P	Ceria-zirconia composite catalyst for oxygen storage capacity and its model exhaust removal performance <i>M. Ozawa, T. Kimura, A. Takayama, H. Sawada, T. Okouchi, K. Kobayashi, N. Kamiuchi, M. Haneda</i>
CAT 04P	Novel Ce _{0.85} Sm _{0.15} O _{1.9} -BaCe _{0.8} Y _{0.2} O _{2.9} as electrolytes for intermediate temperature solid oxide fuel cell <i>J. Yu, X. Liu, L. Pei, H. Bi, F. Han, H. Wang, Y. Yuan, W. Su</i>
CAT 05P	Mössbauer Investigation on SCR FeVO ₄ /Fe _{0.5} Er _{0.5} VO ₄ based Catalysts <i>L. Nodari, M. Casanova, A. Trovarelli</i>
CAT 06P	Preparation and structural investigation of MCM-41 impregnated with ceria nanoparticles <i>M. L. Saladino, A. Spinella, E. Caponetti</i>
CAT 07P	Are all high surface area CeO ₂ strongly reducible? <i>D. M. Gómez, J. J. Calvino, G. A. Cifredo, J. M. Gatica, H. Vidal</i>
CAT 08P	Electrocatalysts based on Pt and lanthanum oxide for the oxygen reduction reaction and application in PEM fuel cell

	CAT 09P	<i>M. E. de Vasconcellos, T. B. Gomes, T. A. B. Santoro, A. Oliveira Neto, E. V. Spinace, D. F. da Silva, A. N. Gerales, M. Linardi, C. A. L. G. de O. Forbicini</i>
	CAT 10P	Ni-modified La _{0.6} Sr _{0.4} Fe _{0.8} Co _{0.2} O ₃ catalysts for Autothermal Reforming of Sulfur-containing Hydrocarbons <i>P. Frontera, P. L. Antonucci, C. Busacca, G. Panzera, V. Modafferi, M. Lo Faro, A. S. Arico</i>
	CAT 11P	Electrochemical behaviour of a fuel flexible anode based on Ni modified perovskite for Solid Oxide Fuel Cells <i>M. Lo Faro, G. Monforte, M. Minutoli, V. Modafferi, P. Frontera, C. Busacca, P. Antonucci, A. S. Arico</i>
	CAT 12P	Effect of CeO ₂ Nanoparticle Distribution on the Chemical and Estructural Evolution of CeO ₂ -SiO ₂ Systems <i>L. González-Souto, I. Cabeza, J. López-Castro, J. M. Pintado, M. Rocha, C. Pereira, C. Freire, G. Blanco</i>
	CAT 13P	Effect of re-oxidation temperature on the redox behaviour of two heavily reduced Ce/Zr and Ce/Pr/Zr mixed oxides <i>M. P. Yeste, G. Blanco, J. M. Pintado, S. Bernal, J. J. Calvino</i>
	CAT 14P	Influence of reducing pre-treatments on the CO oxidation activity of a Au/Ce _{0.62} Zr _{0.38} O ₂ catalyst <i>E. del Rio, S. E. Collins, M. Lopez-Haro, J. M. Cies, J. J. Delgado, J. J. Calvino, G. Blanco, X. Chen, J. A. Pérez-Omil, S. Bernal</i>
	CAT 15P	Structural, catalytic and electrical investigation on La _{1-x} Sr _x Cr _{1-y} Fe _y O _{3-δ} as anodes for IT-SOFCs <i>C. Aliotta, F. Deganello, L. F. Liotta, A. Martorana</i>
	CAT 16P	Synthesis and Microstructure of CeO ₂ Nanocrystals for cataytic devices <i>K. Kobayashi, M. Amimoto, M. Haneda, M. Ozawa</i>
	CAT 17P	Catalytic partial oxidation of methane to syngas over La ₂ O ₃ supported Ni catalysts <i>M. Alterno, V. La Parola, G. Pantaleo, A. M. Venezia</i>
	CAT 18P	Catalytic role of the metal-support interface in d ⁸ -ceria systems prepared using artificial atoms <i>M. Cargnello, V. Doan-Nguyen, T. R. Gordon, K. Bakhmutsky, R. E. Diaz, E. A. Stach, R. J. Gorte, C. B. Murray, P. Fornasiero</i>
	CAT 18P	Glycine-Solution Combustion Synthesis of Pd-CeO ₂ Catalysts and their Application in SOFC Anode <i>M. Ferluga, S. Colussi, J. Llorca, C. Abate, M. Boaro, C. de Leitenburg, A. Trovarelli</i>

Coordination, organic and organometallic chemistry

	COO 01P	Physicochemical properties of a uranyl bimetallic complex formed with an octaphosphinoylated para-tertbutylcalix[8]arene <i>K. Palomares-Castillo, B. Ocampo-García, E. Morales-Avila, J.-C. Bünzli, S. Varbanov, F. de M. Ramírez</i>
	COO 02P	f-Element—Crown-Ether Complexes: Synthesis and Crystal Structure of [Eu ₂ (b18c6) ₂ (OH) ₂ (CH ₃ CN) ₂](I ₃) ₄ <i>C. Walbaum, I. Pantenburg, G. B. Deacon, P. C. Junk, G. Meyer</i>
	COO 03P	Complexes of some REE carboxylates with ethanolamines and polyethylenepolyamines: role of ion pairs in syntheses and structures <i>I. Martynova, D. Tsybarenko, N. Kuzmina</i>
	COO 04P	Synthesis and characterization of some lanthanides(III) complexes with flexible polycarboxylic acid (H ₄ THFTC) <i>A. Bartyzel</i>
	COO 05P	Synthesis, crystal structures and magnetic properties of Ni ^{II} –4f–Ni ^{II} Schiff base complexes <i>B. Cristóvão, B. Mirosław, J. Klak, W. Ferenc</i>
	COO 06P	What do we know about the thermodynamic behavior of b-diketonates complexes in solution? <i>H. Nozary, L. Guénée, C. Piguet, A. Zaim</i>
	COO 07P	Upconversion luminescence in co—doped tungstate nanoparticles <i>A. M. Kaczmarek, R. Van Deun</i>
	COO 08P	Optical Properties of Heavy Lanthanide Maleates in Solution and Crystal Forms <i>G. Oczko, N. Pawlak</i>
	COO 09P	Structure and properties of Eu(II) ethylenedisulfonate hydrate <i>P. Starynowicz</i>
	COO 10P	Exploring Axial Bonding in the Coordination Chemistry of High Valent Uranium

COO 11P	<i>A. J. Lewis, J. M. Kikkawa, E. Nakamura-Ogiso, P. J. Carroll, E. J. Schelter</i> Rare-Earth Metal Hydride Complexes Stabilized by [NNNN] Macrocyclic Ancillary Ligands <i>P. Cui, J. Okuda</i>
COO 12P	Rare Earth Based Luminescent Materials by Soft Chemical Route <i>G. Bottaro, L. Armelao, E. Tondello, S. Quici, M. Cavazzini, G. Accorsi</i>
COO 13P	REE cymantrenecarboxylate complexes with Ln:Mn=1:2 ratio. Synthesis, structure, physicochemical properties and thermolysis. <i>P. S. Koroteev, A. B. Ilyukhin, Z. V. Dobrokhotova, N. N. Efimov, S. A. Kozyukhin, V. M. Novotortsev</i>
COO 14P	Chirality Transfer between a Lanthanide Complex and a Carboxylate Anion on Ternary Complexation <i>S. Shinoda, Y. Yasueda, H. Miyake, H. Tsukube</i>
COO 15P	REE(III)-Ni(II) heterometallic complexes with compartmental Schiff base ligands: composition in solutions, crystal structures and thermal behavior <i>A. Makarevich, A. Kharchenko, A. Shchukin, A. Grigoriev, S. Kardashev, K. Lyssenko, N. Kuzmina</i>
COO 16P	Rigid Uranium(IV) Bis(Amido) Alkyl Complexes: Mixed Alkyl Formation <i>via</i> Toluene C-H Activation <i>N. R. Andreychuk, D. J. H. Emslie, B. Vidjayacoumar, S. Ilango</i>
COO 17P	Tetrazolate-based Eu(III) Photoluminescent Ternary Complexes: An Outstanding Impact of Aromatic Phosphine Oxide Co-ligands on the Photoluminescence Quantum Yields <i>O. Pietraszkiewicz, M. Pietraszkiewicz, S. Mal</i>
COO 18P	Research in the f-element coordination chemistry lab at the Department of Inorganic and Physical Chemistry of Ghent University (Belgium) <i>R. Van Deun</i>
COO 19P	Synthesis and Characterization of Two New Lanthanide Metal-Organic Framework Based on the Tm(III) Ion and Succinate Ligand. <i>S. A. Júnior, F. F. da Silva, V. dos S. Malta, C. A. F. de Oliveira</i>
COO 20P	Synthesis, structure and luminescence of novel lanthanide containing coordination polymers <i>R. Decadt, D. Depla, K. Van Hecke, R. Van Deun</i>
COO 21P	New Rigid Dianionic Ligands for Actinide and Rare Earth Metal Chemistry <i>K. S. A. Motolko, D. J. H. Emslie</i>
COO 22P	Lanthanide Complex Synthesis by Solvent-drop Assisted Grinding <i>U. Baisch</i>
COO 23P	Synthesis and characterization of complexes of lanthanoids with biscoumarins <i>D. Elenkova, J. Zaharieva, M. Getsova, I. Manolov, M. Milanova</i>
COO 24P	Rare-Earth Metal Benzoates, R(OBz) ₃ <i>T. Bierke, S. Gomez Torres, J. Sierau, G. Meyer</i>
COO 25P	Synthesis, Characterization and Emission Properties of Pseudo-Helical Rare Earth Complexes <i>M. Kanosato, Y. Wakayama, A. Kashiwada, K. Matsuda, Y. Kikkawa, Y. Sonoda, M. Goto</i>
COO 26P	Studying the Coordination Chemistry and Luminescence Spectroscopy of Uranyl Complexes <i>S. Woodall, L. Natrajan, Q. Whittaker</i>
COO 27P	Luminescent sol-gel materials based on lanthanide complexes with polydentate acyclic and cyclic ligands <i>E. Fadeev, S. Smola, O. Alyeksyeyeva, N. Rusakova, E. Trunova, O. Snurnikova</i>
COO 28P	Lanthanide complexes with carbacylamidophosphate type ligands: structure and photoluminescence of Eu(NO ₃) ₂ (L)(HL)(H ₂ O) ₂ and Eu ₂ Mf ₆ • μ-γ,γ'Dipy <i>O. Litsis, V. Ovchinnikov, T. Sliva, D. Kozak, V. Scherbatskii, S. Nedilko, V. Amirkhanov</i>
COO 29P	Mechanism of in situ formation of oxalic acid in mixed fumarato-oxalato lanthanide (Eu, Tb and Gd) frameworks <i>C. K. Oliveira, J. R. de Menezes Vicenti, R. A. Burrow, S. Alves Jr., R. L. Longo, I. Malvestiti</i>

Magnetism

MGN 01P	Magnetocaloric effect in Ce-based Kondo systems <i>T. Toliński, K. Synoradzki</i>
MGN 02P	Synthesis and magnetic study of new lanthanide carboxylates <i>V. M. Novotortsev, P. S. Koroteev, I. G. Fomina, Z. V. Dobrokhotova, V. S. Mironov, A. S. Bogomyakov, I. L. Eremenko</i>
MGN 03P	Magnetocaloric effect in the DyNi ₄ Si compound

MGN 04P	<i>M. Falkowski, T. Toliński, A. Kowalczyk</i> Slow relaxation of the magnetization in families of Lanthanide-dioxolene complexes: exchange and crystal field effects. <i>G. Poneti, A. Dei, L. Sorace</i>
MGN 05P	Oxygen Effects on Unusual Pr Reordering in $\text{PrBa}_2\text{Cu}_3\text{O}_{6+x}$ system <i>M. Lahoubi, M.-L. Soltani</i>
MGN 06P	Electron transport properties of $\text{Eu}_{0.72}\text{Ca}_{0.28}(\text{Fe}_{0.82}\text{Co}_{0.18})_2\text{As}_2$ single crystal <i>L. M. Tran, Z. Bukowski, A. J. Zaleski</i>
MGN 07P	Study of Magnetic Anisotropy of an Organometallic Single Ion Magnet <i>M.-E. Boulon, G. Cucinotta, S.-S. Liu, S.-D. Jiang, B.-W. Wang, R. Sessoli, S. Gao</i>
MGN 08P	A Complete Family of Asymmetric $[\text{Ln}_2]$ Complexes and (almost) Any of the heterometallic $[\text{LnLn}']$ Analogues; Structures and Magnetism <i>G. Aromí, L. A. Barrios, D. Aguilà, O. Roubeau, F. Luis, S. J. Teat, V. Velasco</i>

Solid state chemistry and physics, intermetallic compounds, materials

SST 01P	Photoluminescence and Magnetic Properties of Hexagonal YMnO_3 Nanofibers Prepared by Electrostatic Spinning <i>H. Fan</i>
SST 02P	The Preparation and Some Properties of Active Rare Earth Nitrides by Reaction of Hydrides with Ammonia <i>H. Imamura, M. Kawazoe, Y. Sakata</i>
SST 03P	Luminescence spectroscopy of Eu^{3+} in barium zirconate based proton conductors <i>P. Haro, M. Karlsson, C. Mburu, S. Gaita, C. Knee, M. Bettinelli</i>
SST 04P	Magnetic Properties of Quadruple Perovskites $\text{Ba}_4\text{LnM}_3\text{O}_{12}$ (Ln = Rare Earths; M = Ru, Ir) <i>Y. Hinatsu, Y. Doi, M. Wakeshima</i>
SST 05P	Oligomeric Rare-Earth Cluster Complexes: 2+2 condensed $\{\text{ZHo}_6\}$ Octahedra in $\{\text{Ru}_4\text{Ho}_{16}\}\text{Br}_{20}$ and $\{\text{Ir}_4\text{Ho}_{16}\}\text{Br}_{24}(\text{HoBr}_3)_4$ <i>E. Meyer, G. Meyer</i>
SST 06P	Low Temperature Thermal Expansion of $\text{YBa}_2\text{Cu}_3\text{O}_7$ and $\text{DyBa}_2\text{Cu}_3\text{O}_7$ Ceramics Revisited <i>M. Lahoubi, M.-L. Soltani</i>
SST 07P	Effects of Fluorine Deficiency in $\text{Sr}_{1-x}\text{R}_x\text{FeAsF}_{1-y}$ ($\text{R}=\text{La, Nd, Sm}$) <i>Y. Murata, S. Ohoka, T. Watanabe, K. Takase, Y. Takano</i>
SST 08P	Lanthanide complexes with aromatic o-phosphorylated phenols – new precursors of electroluminescent materials <i>S. Shuvaev, O. Kotova, V. Baulin, A. Vaschenko, N. Kuzmina, L. Marciniak</i>
SST 09P	Electrical Properties of $\text{Sr}_{1-x}\text{R}_x\text{FeAsF}$ ($\text{R} = \text{Pr, Nd}$) <i>S. Ohoka, T. Watanabe, K. Takase, Y. Takano</i>
SST 10P	Synthesis and Crystal Structures of Anhydrous Rare Earth Metal Nitrates $\text{R}(\text{NO}_3)_3$ ($\text{R} = \text{Y, La-Yb}$) <i>C. Heinrichs, G. Meyer, U. Ruschewitz</i>
SST 11P	On the Yb^{3+} - R^{3+} Up-Conversion Luminescence in NaYF_4 <i>H. F. Brito, J. Hölsä, T. Laamanen, T. Laihinén, M. Lastusaari, L. A. O. Nunes, L. Pihlgren</i>
SST 12P	Role of Er^{3+} Impurity in the Yb^{3+} - Tb^{3+} Up-Conversion Luminescence in NaYF_4 <i>H. F. Brito, J. Hölsä, T. Laamanen, T. Laihinén, M. Lastusaari, L. A. O. Nunes, L. Pihlgren</i>
SST 13P	Microalloying of metals with rare earths for advanced technological and functional properties <i>O. M. Ogorodnikova, E. V. Maksimova</i>
SST 14P	Synthesis and characterization of efficient heterogeneous oxidation catalyst based on mesoporous CeO_2 <i>R. F. Martins, K. Krambrock, A. Righi, D. C. Ferreira, L. F. Nascimento, O. A. Serra</i>

Solution chemistry, extraction, separations

SOL 01P	Theoretical study of the complexation of uranyl(VI) with acetate in dimethylsulfoxide <i>P. Di Bernardo, P. L. Zanonato, L. Rao, M. Tolazzi, A. Melchior</i>
SOL 02P	Extraction capability of an octaphosphinoylated para-tertbutylcalix[8]arene towards uranyl ions in an acidic-nitrate medium

SOL 03P

E. Serrano-Valero, J.-C. Bünzli, S. Varbanov, F. de M. Ramírez
A Novel Macrocyclic Chelate with Remarkable Affinity for Thorium(IV)
T. A. Pham, J. Xu, K. N. Raymond

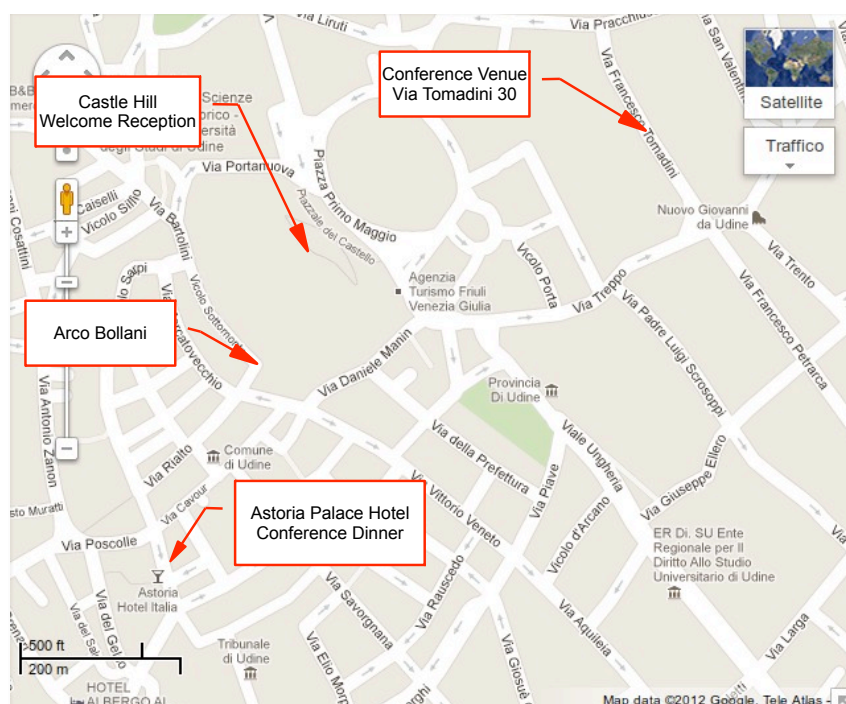
Social Program

Included in the registration fee, all participants are invited to the following events:
Welcome reception on Sunday, August 26th at 7:00 pm at the “Casa della contadinanza” at the top of the hill of the Castle of Udine.

Excursion, on Wednesday 29th afternoon followed by prosciutto and wine buffet (vegetarian food available).

Not included in the registration fee, the Social Dinner.

You'll find the various locations on the map.



WELCOME RECEPTION

On August 26th, Sunday evening at 7.00 p.m at the top of the Castle Hill, Casa della Contadinza (check the map). The entrance to the hill of the Castle is from Arco Bollani, Piazza Libertà, Udine.



EXCURSION

Excursion to Aquileia and the Ancient Roman ruins on Wednesday, 29th afternoon, followed by prosciutto and wine buffet reception at Prosciuttificio Dall'Ava, San Daniele del Friuli. (Departure from the Congress site at 2.30 p.m.)



Aquileia (in Friuli-Venezia Giulia), one of the largest and wealthiest cities of the Early Roman Empire, was destroyed by Attila in the mid-5th century. Most of it still lies unexcavated beneath the fields, and as such it constitutes the greatest archaeological reserve of its kind. The patriarchal basilica, an outstanding building with an exceptional mosaic pavement, played a key role in the evangelization of a large region of central Europe.



The social dinner will be on Thursday 30th at the Astoria Hotel Italia at 8.00 p.m., piazza XX Settembre (map), in the centre of Udine (maximum 10 min walk separates the Astoria Hotel Italia from all the other accommodations chosen by the ICFE 8 participants). Additional information regarding accompanying people will be available on the website. Please check regularly web site for program and excursions for accompanying persons.



57	138.91	La	58	140.12	Ce	59	140.91	Pr	60	144.24	Nd	61	144.91	Pm	62	150.36	Sm	63	150.36	Fu
89	(227)	Ac	90	232.04	Th	91	231.04	Pa	92	238.03	U	93	(237)	Np	94	(242)	Am	95	(243)	Pu
Actinium			Thorium			Protactinium			Uranium			Neptunium			Plutonium			Americium		
64	139.90	Gd	65	140.91	Tb	66	140.91	Dy	67	144.91	Ho	68	144.91	Er	69	168.93	Tm	70	173.04	Yb
71	174.97	Lu	72	175.04	Hf	73	178.49	Ta	74	180.95	W	75	183.84	Re	76	186.21	Os	77	188.91	Ir
78	187.04	Pt	79	188.91	Au	80	197.04	Hg	81	200.59	Tl	82	204.38	Pb	83	208.98	Bi	84	209.98	Po
85	(210)	At	86	(210)	Rn	87	(223)	Fr	88	(226)	Ra	89	(227)	Ac	90	(232)	Th	91	(231)	Pa
92	(226)	Ra	93	(227)	Np	94	(238)	U	95	(243)	Am	96	(244)	Cm	97	(247)	Bk	98	(250)	Cf
99	(251)	Es	100	(252)	Fm	101	(257)	Md	102	(259)	No	103	(261)	Lr	104	(263)	Uu	105	(265)	Uub
106	(269)	Uuh	107	(271)	Uus	108	(270)	Uuo	109	(277)	Uut	110	(285)	Uuq	111	(286)	Uuh	112	(289)	Uub
113	(288)	Uut	114	(289)	Uuq	115	(291)	Uup	116	(293)	Uus	117	(294)	Uuh	118	(296)	Uuo	119	(297)	Uuq
120	(299)	Uub	121	(301)	Uut	122	(303)	Uuq	123	(305)	Uup	124	(307)	Uuh	125	(309)	Uuo	126	(311)	Uuq
127	(312)	Uuh	128	(314)	Uuo	129	(316)	Uuq	130	(318)	Uup	131	(320)	Uuh	132	(322)	Uuo	133	(324)	Uuq
134	(326)	Uub	135	(328)	Uut	136	(330)	Uuq	137	(332)	Uup	138	(334)	Uuh	139	(336)	Uuo	140	(338)	Uuq
141	(340)	Uuh	142	(342)	Uuo	143	(344)	Uuq	144	(346)	Uup	145	(348)	Uuh	146	(350)	Uuo	147	(352)	Uuq
148	(354)	Uub	149	(356)	Uut	150	(358)	Uuq	151	(360)	Uup	152	(362)	Uuh	153	(364)	Uuo	154	(366)	Uuq
155	(368)	Uuh	156	(370)	Uuo	157	(372)	Uuq	158	(374)	Uup	159	(376)	Uuh	160	(378)	Uuo	161	(380)	Uuq
162	(382)	Uub	163	(384)	Uut	164	(386)	Uuq	165	(388)	Uup	166	(390)	Uuh	167	(392)	Uuo	168	(394)	Uuq
169	(396)	Uuh	170	(398)	Uuo	171	(400)	Uuq	172	(402)	Uup	173	(404)	Uuh	174	(406)	Uuo	175	(408)	Uuq
176	(410)	Uub	177	(412)	Uut	178	(414)	Uuq	179	(416)	Uup	180	(418)	Uuh	181	(420)	Uuo	182	(422)	Uuq
183	(424)	Uuh	184	(426)	Uuo	185	(428)	Uuq	186	(430)	Uup	187	(432)	Uuh	188	(434)	Uuo	189	(436)	Uuq
190	(438)	Uub	191	(440)	Uut	192	(442)	Uuq	193	(444)	Uup	194	(446)	Uuh	195	(448)	Uuo	196	(450)	Uuq
197	(452)	Uuh	198	(454)	Uuo	199	(456)	Uuq	200	(458)	Uup	201	(460)	Uuh	202	(462)	Uuo	203	(464)	Uuq
204	(466)	Uub	205	(468)	Uut	206	(470)	Uuq	207	(472)	Uup	208	(474)	Uuh	209	(476)	Uuo	210	(478)	Uuq
211	(480)	Uuh	212	(482)	Uuo	213	(484)	Uuq	214	(486)	Uup	215	(488)	Uuh	216	(490)	Uuo	217	(492)	Uuq
218	(494)	Uub	219	(496)	Uut	220	(498)	Uuq	221	(500)	Uup	222	(502)	Uuh	223	(504)	Uuo	224	(506)	Uuq
225	(508)	Uuh	226	(510)	Uuo	227	(512)	Uuq	228	(514)	Uup	229	(516)	Uuh	230	(518)	Uuo	231	(520)	Uuq
232	(522)	Uub	233	(524)	Uut	234	(526)	Uuq	235	(528)	Uup	236	(530)	Uuh	237	(532)	Uuo	238	(534)	Uuq
239	(536)	Uuh	240	(538)	Uuo	241	(540)	Uuq	242	(542)	Uup	243	(544)	Uuh	244	(546)	Uuo	245	(548)	Uuq
246	(550)	Uub	247	(552)	Uut	248	(554)	Uuq	249	(556)	Uup	250	(558)	Uuh	251	(560)	Uuo	252	(562)	Uuq
253	(564)	Uuh	254	(566)	Uuo	255	(568)	Uuq	256	(570)	Uup	257	(572)	Uuh	258	(574)	Uuo	259	(576)	Uuq
260	(578)	Uub	261	(580)	Uut	262	(582)	Uuq	263	(584)	Uup	264	(586)	Uuh	265	(588)	Uuo	266	(590)	Uuq
267	(592)	Uuh	268	(594)	Uuo	269	(596)	Uuq	270	(598)	Uup	271	(600)	Uuh	272	(602)	Uuo	273	(604)	Uuq
274	(606)	Uub	275	(608)	Uut	276	(610)	Uuq	277	(612)	Uup	278	(614)	Uuh	279	(616)	Uuo	280	(618)	Uuq
281	(620)	Uuh	282	(622)	Uuo	283	(624)	Uuq	284	(626)	Uup	285	(628)	Uuh	286	(630)	Uuo	287	(632)	Uuq
288	(634)	Uub	289	(636)	Uut	290	(638)	Uuq	291	(640)	Uup	292	(642)	Uuh	293	(644)	Uuo	294	(646)	Uuq
295	(648)	Uuh	296	(650)	Uuo	297	(652)	Uuq	298	(654)	Uup	299	(656)	Uuh	300	(658)	Uuo	301	(660)	Uuq
302	(662)	Uub	303	(664)	Uut	304	(666)	Uuq	305	(668)	Uup	306	(670)	Uuh	307	(672)	Uuo	308	(674)	Uuq
309	(676)	Uuh	310	(678)	Uuo	311	(680)	Uuq	312	(682)	Uup	313	(684)	Uuh	314	(686)	Uuo	315	(688)	Uuq
316	(690)	Uub	317	(692)	Uut	318	(694)	Uuq	319	(696)	Uup	320	(698)	Uuh	321	(700)	Uuo	322	(702)	Uuq
323	(704)	Uuh	324	(706)	Uuo	325	(708)	Uuq	326	(710)	Uup	327	(712)	Uuh	328	(714)	Uuo	329	(716)	Uuq
330	(718)	Uub	331	(720)	Uut	332	(722)	Uuq	333	(724)	Uup	334	(726)	Uuh	335	(728)	Uuo	336	(730)	Uuq
337	(732)	Uuh	338	(734)	Uuo	339	(736)	Uuq	340	(738)	Uup	341	(740)	Uuh	342	(742)	Uuo	343	(744)	Uuq
344	(746)	Uub	345	(748)	Uut	346	(750)	Uuq	347	(752)	Uup	348	(754)	Uuh	349	(756)	Uuo	350	(758)	Uuq
351	(760)	Uuh	352	(762)	Uuo	353	(764)	Uuq	354	(766)	Uup	355	(768)	Uuh	356	(770)	Uuo	357	(772)	Uuq
358	(774)	Uub	359	(776)	Uut	360	(778)	Uuq	361	(780)	Uup	362	(782)	Uuh	363	(784)	Uuo	364	(786)	Uuq
365	(788)	Uuh	366	(790)	Uuo	367	(792)	Uuq	368	(794)	Uup	369	(796)	Uuh	370	(798)	Uuo	371	(800)	Uuq
372	(802)	Uub	373	(804)	Uut	374	(806)	Uuq	375	(808)	Uup	376	(810)	Uuh	377	(812)	Uuo	378	(814)	Uuq
379	(816)	Uuh	380	(818)	Uuo	381	(820)	Uuq	382	(822)	Uup	383	(824)	Uuh	384	(826)	Uuo	385	(828)	Uuq
386	(830)	Uub	387	(832)	Uut	388	(834)	Uuq	389	(836)	Uup	390	(838)	Uuh	391	(840)	Uuo	392	(842)	Uuq
393	(844)	Uuh	394	(846)	Uuo	395	(848)	Uuq	396	(850)	Uup	397	(852)	Uuh	398	(854)	Uuo	399	(856)	Uuq
400	(858)	Uub	401	(860)	Uut	402	(862)	Uuq	403	(864)	Uup	404	(866)	Uuh	405	(868)	Uuo	406	(870)	Uuq
407	(872)	Uuh	408	(874)	Uuo	409	(876)	Uuq	410	(878)	Uup	411	(880)	Uuh	412	(882)	Uuo	413	(884)	Uuq
414	(886)	Uub	415	(888)	Uut	416	(890)	Uuq	417	(892)	Uup	418	(894)	Uuh	419	(896)	Uuo	420	(898)	Uuq
421	(900)	Uuh	422	(902)	Uuo	423	(904)	Uuq	424	(906)	Uup	425	(908)	Uuh	426	(910)	Uuo	427	(912)	Uuq
428	(914)	Uub	429	(916)	Uut	430	(918)	Uuq	431	(920)	Uup	432	(922)	Uuh	433	(924)	Uuo	434	(926)	Uuq
435	(928)	Uuh	436	(930)	Uuo	437	(932)	Uuq	438	(934)	Uup	439	(936)	Uuh	440	(938)	Uuo	441	(940)	Uuq
442	(942)	Uub	443	(944)	Uut	444	(946)	Uuq	445	(948)	Uup	446	(950)	Uuh	447	(952)	Uuo	448	(954)	Uuq
449	(956)	Uuh	450	(958)	Uuo	451	(960)	Uuq	452	(962)	Uup	453	(964)	Uuh	454	(966)	Uuo	455	(968)	Uuq
456	(970)	Uub	457	(972)	Uut	458	(974)	Uuq	459	(976)	Uup	460	(978)	Uuh	461	(980)	Uuo	462	(982)	Uuq
463	(984)	Uuh	464	(986)	Uuo	465	(988)	Uuq	466	(990)	Uup	467	(992)	Uuh	468	(994)	Uuo	469	(996)	Uuq
470	(998)	Uub	471	(1000)	Uut	472	(1002)	Uuq	473	(1004)	Uup	474	(1006)	Uuh	475	(1008)	Uuo	476	(1010)	Uuq
477	(1012)	Uuh	478	(1014)	Uuo	479	(1016)	Uuq	480	(1018)	Uup	481	(1020)	Uuh	482	(1022)	Uuo	483	(1024)	Uuq
484	(1026)	Uub	485	(1028)	Uut	486	(1030)	Uuq	487	(1032)	Uup	488	(1034)	Uuh	489	(1036)	Uuo	490	(1038)	Uuq
491	(1040)	Uuh	492	(1042)	Uuo	493	(1044)	Uuq	494	(1046)	Uup	495	(1048)	Uuh	496	(1050)	Uuo	497	(1052)	Uuq
498	(1054)	Uub	499	(1056)	Uut	500	(1058)	Uuq	501	(1060)	Uup	502	(1062)	Uuh	503	(1064)	Uuo	504	(1066)	Uuq
505	(1068)	Uuh	506	(1070)	Uuo	507	(1072)	Uuq	508	(1074)	Uup	509	(1076)	Uuh	510	(1078)	Uuo	511	(1080)	Uuq
512	(1082)	Uub	513	(1084)	Uut	514	(1086)	Uuq	515	(1088)	Uup	516	(1090)	Uuh	517	(1092)	Uuo	518	(1094)	Uuq
519	(1096)	Uuh	520	(1098)	Uuo	521	(1100)	Uuq	522	(1102)	Uup	523	(1104)	Uuh	524	(1106)	Uuo	525	(1108)	Uuq
526	(1110)	Uub	527	(1112)	Uut	528	(1114)	Uuq	529	(1116)	Uup	530	(1118)	Uuh	531	(1120)	Uuo	532	(1122)	Uuq
533	(1124)	Uuh	534	(1126)	Uuo	535	(1128)	Uuq	536	(1130)	Uup	537	(1132)	Uuh	538	(1134)	Uuo	539	(1136)	Uuq
540	(1138)	Uub	541	(1140)	Uut	542	(1142)	Uuq	543	(1144)	Uup	544	(1146)	Uuh	545	(1148)	Uuo	546	(1150)	Uuq
547	(1152)	Uuh	548	(1154)	Uuo	549	(1156)	Uuq	550	(1158)	Uup	551	(1160)	Uuh	552	(1162)	Uuo	553	(1164)	Uuq
554	(1166)	Uub	555	(1168)	Uut	556	(1170)	Uuq	557	(117										