



# ICMM 2012

The 13th International Conference  
on Molecule-based Magnets

Orlando, Florida/USA

October 7-11 2012

Webpage: [www.icmm2012.us](http://www.icmm2012.us)

Conference e-mail: [icmm2012us@gmail.com](mailto:icmm2012us@gmail.com)

Organized by  
University of Central Florida

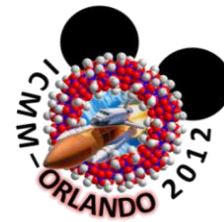


*Stephen Hill - Enrique del Barco*  
(Conference Chairs)

Conference venue  
**Scientific Program**

PROGRAM BOOKLET





We are extremely excited to host the **13th International Conference on Molecule-based Magnets** (ICMM-2012) in the United States, where it has been 12 years since the last gathering in San Antonio, Texas (ICMM-VII), Chaired by Kim Dunbar and Greg Girolami. In particular, it is a pleasure to welcome you to Orlando during one of the most pleasant times of the year in Florida.\* We hope that you will have some time to enjoy the outdoors during your stay, if only to soak up some sun before many of you return to cooler places for the long winter. We are particularly excited to see such a great turnout from all corners of the globe – especially during these tough economic times that have undoubtedly affected science funding in most countries. We think the strong turnout is once again a true testament to the quality of ICMM; we are anticipating around 300 participants, which is up slightly from the last North American meeting six years ago in Victoria (ICMM-2006).

ICMM has become the premiere international forum for scientists and junior researchers to present and discuss the most exciting new developments in molecule-based magnetism. This research field continues to grow, whilst also responding rapidly to exciting new opportunities. This healthy outlook can surely be attributed to the multidisciplinary nature of the collaborations and networks that have been fostered between physicists, chemists, materials scientists and others who have come together to discuss their work at international meetings such as the ICMM. We hope that you will agree that we have been able to put together a rich program of plenary, invited and contributed presentations given by a mix of established experts and younger rising stars both from within our community and from closely related research fields. In particular, we have made great efforts to involve student researchers in the main program of talks. Contributions span all areas of molecular magnetism, including: organic/inorganic/hybrid magnetic molecular materials; multifunctional and/or switchable molecule-based magnetic materials and devices; single-molecule and single-chain magnets; nanostructured molecular magnets and molecular spintronics; and magnetism in biology. On the evidence of the many breathtaking contributions in this program, it is clear that progress over the past two years has been stronger than ever.

Finally, if you are able to remain in the area for a day or two extra, we urge you to explore the numerous possibilities that the City of Orlando provides to its visitors, from spectacular weather and the nearby coast with Caribbean beaches, to top-notch amusement parks and amenities, including Disney, Universal Studios and, of course, the Kennedy Space Center which many of you will visit on the Wednesday of the conference.

*\*At the time of writing this welcome message, there was no sign of any hurricane, 😊 and we sincerely hope that it will remain that way.*

Conference Chairs:

*Stephen Hill (FSU/NHMFL)*

*Enrique del Barco (UCF)*

Florida – September 16, 2012

WELCOME



## We thank the following sponsors:



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## Our gratitude for their invaluable assistance to:

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### ADMINISTRATIVE/TECHNICAL SUPPORT:

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**Daniel Talham** (UF - Chemistry)  
**John Yelton** (UF - Physics, Chair)

And to all the members of the

**ICMM International Advisory Board.**

*\*We specially want to thank these individuals for putting a lot of work into this enterprise.*

### STUDENTS SUPPORT:

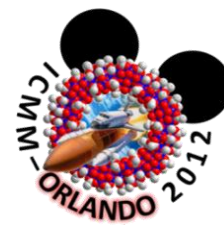
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**Asma Amjad\*** (University of Central Florida)  
**Matthew Andrus** (University of Florida)  
**Marta Anguera\*** (University of Central Florida)  
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**Stephen Hill** and **Enrique del Barco**  
ICMM 2012 Chairmen

**On behalf of the Local Organizing Committee**

**Stephen Hill** (Florida State University)  
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**James Brooks** (Florida State University)  
**Daniel Talham** (University of Florida)  
**Mark Meisel** (University of Florida)  
**Christos Lampropoulos** (University of North Florida)

**ACKNOWLEDGEMENTS**



## Previous ICMM Meetings

- 1989 Dallas, USA Joel Miller, Dennis Dougherty
- 1990 Il Ciocco, Italy Dante Gatteschi, Olivier Kahn, Joel Miller, Fernando Palacio
- 1992 Tokyo, Japan Hiizu Iwamura
- 1994 Salt Lake City, USA Joel Miller, Art Epstein
- 1996 Osaka, Japan Koichi Itoh, T. Takuo
- 1998 Seignosse, France Olivier Kahn
- 2000 San Antonio, USA Kim Dunbar, Greg Girolami
- 2002 Valencia, Spain Eugenio Coronado, Fernando Palacio, Jaume Veciana
- 2004 Tsukuba, Japan Tadashi Sugawara
- 2006 Victoria, Canada Robin Hicks
- 2008 Florence, Italy Dante Gatteschi, Roberta Sessoli
- 2010 Beijing, China Song Gao
- 2012 Orlando, USA Stephen Hill, Enrique del Barco

## International Advisory Board

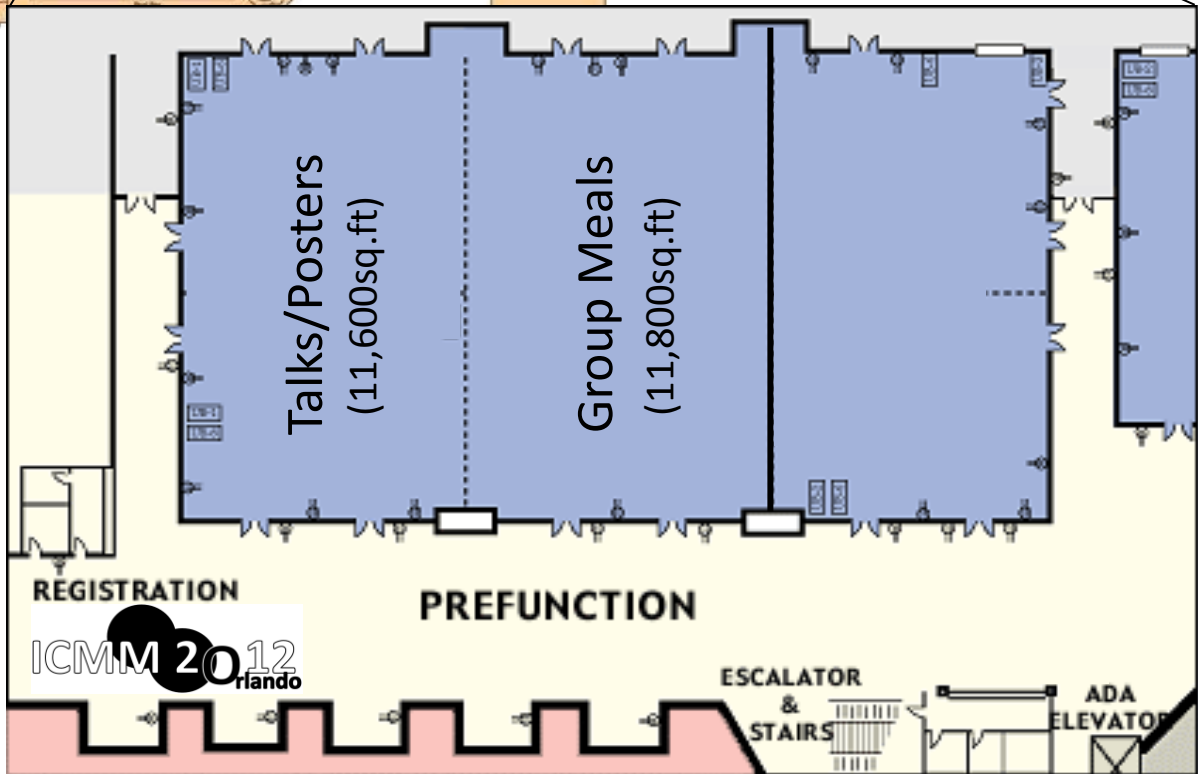
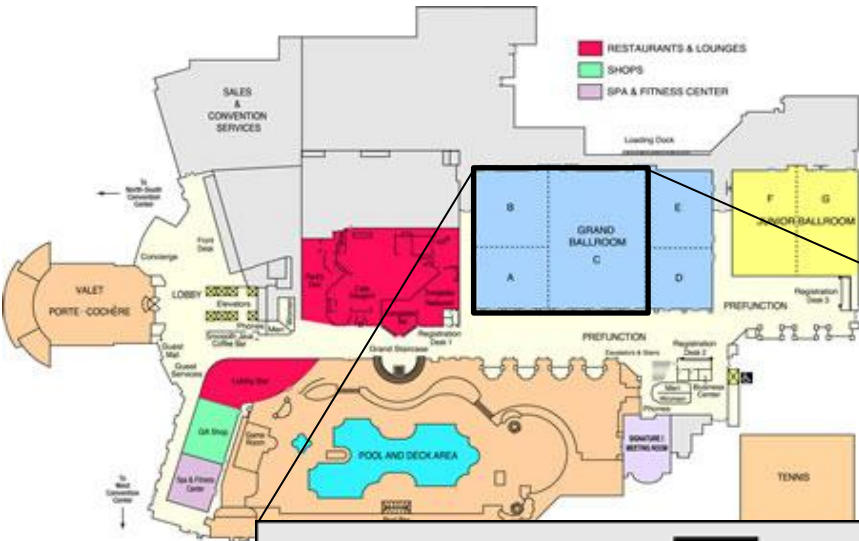
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**GRAND BALLROOMS A-C**

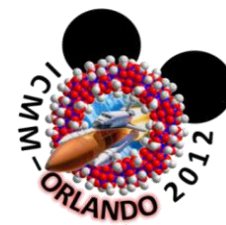
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**ICMM 2012 Orlando**



**MEETING SPACE**

**ICMM 2012 Orlando**



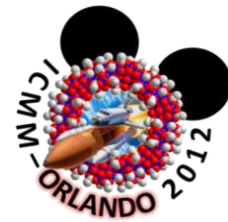
# Scientific Sessions

time	min	MONDAY 8th	TUESDAY 9th	WEDNESDAY 10th	THURSDAY 11th
8:10am-8:30am	20	<b>welcome</b>			
8:30am-9:20am	50	PL1 - <i>Kahn Lect. /Iwamura</i>	PL2 - <i>van der Zant</i>	PL3 - <i>Boebinger</i>	PL4 - <i>Neese</i>
9:20am-9:35am	15	MC1 - <i>Affronte</i>	TuC1 - <i>Hong</i>	WC1 - <i>Baker</i>	ThC1 - <i>Mathonière</i>
9:35am-9:50am	15	MC2 - <i>Preuss</i>	TuC2 - <i>Takano</i>	WC2 - <i>Dunbar</i>	ThC2 - <i>Ouahab</i>
9:50am-10:15am	25	MI1 - <i>Carretta</i>	Tu1 - <i>Frank</i>	WI1 - <i>Morita</i>	Th1 - <i>Zapf</i>
10:15am-10:45am	30	<i>coffee break</i>	<i>coffee break</i>	<i>coffee break</i>	<i>coffee break</i>
10:45am-11:10am	25	<b>FLASH1</b>	<b>FLASH3</b>	WI2 - <i>Collet</i>	Th2 - <i>Catala</i>
11:10am-11:25am	15	MC3 - <i>Tuna</i>	TuC3 - <i>Miyasaka</i>	WC3 - <i>Awaga</i>	ThC3 - <i>Tasiopoulos</i>
11:25am-11:50am	25	MI2 - <i>Dehnen</i>	Tu2 - <i>Manson</i>	WI3 - <i>Chandrasekhar</i>	Th3 - <i>Meisel</i>
11:50am-12:05pm	15	MC4 - <i>Miller</i>	TuC4 - <i>Park</i>	(11:50am) <i>boxed-lunch</i>	ThC4 - <i>Murray</i>
12:05pm-12:30pm	25	MI3 - <i>Bogani</i>	Tu3 - <i>Mas Torrent</i>		Th4 - <i>Wang</i>
12:30pm-2:00pm	90	<i>lunch</i>	<i>lunch</i>		<i>lunch</i>
2:00pm-2:25pm	25	MI4 - <i>Murugesu</i>	Tu4 - <i>Sarachik</i>	KSC TOUR	Th5 - <i>McInnes</i>
2:25pm-2:40pm	15	MC5 - <i>Landee</i>	Tu5 - <i>Oshio</i>		ThC5 - <i>Cornia</i>
2:40pm-2:55pm	15	MC6 - <i>Novoa</i>	Tu6 - <i>Boskovic</i>		ThC6 - <i>Tong</i>
2:55pm-3:20pm	25	MI5 - <i>Luis</i>	Tu7 - <i>Betley</i>		Th6 - <i>Tokoro</i>
3:20pm-3:35pm	15	MC7 - <i>Sato, K.</i>	Tu8 - <i>Palacio</i>		ThC7 - <i>Veciana</i>
3:35pm-3:50pm	15	MC8 - <i>Shores</i>	Tu9 - <i>Powell</i>		ThC8 - <i>Ohba</i>
3:50pm-4:15pm	25	<i>coffee break</i>	<i>coffee break</i>		<i>coffee break</i>
4:15pm-4:35pm	20	<b>FLASH2</b>	<b>FLASH4</b>		Th7 - <i>Miranda</i>
4:35pm-4:50pm	15	MC9 - <i>Friedman</i>	Tu10 - <i>Sato, O.</i>		ThC9 - <i>Brooker</i>
4:50pm-5:15pm	25	MI6 - <i>Yamashita</i>	Tu11 - <i>Shatruk</i>		Th8 - <i>Aromí</i>
5:15pm-5:30pm	15	MC10 - <i>Demir</i>	Tu12 - <i>Novak</i>	ThC10 - <i>Schnack</i>	
5:30pm-5:45pm	15	MC11 - <i>Coronado</i>	Tu13 - <i>Holmes</i>	Th9 - <i>Oakley</i>	
		<i>short break</i>	<i>short break</i>		<b>Concluding Remarks</b>
6:00pm-8:00pm	120	<b>posters</b>	<b>Posters and EDUCATION SESSION:</b> 6:00pm - <i>John Risley</i> 6:30pm - <i>Kader Kara</i> 6:45pm - <i>Jackelyn Chini</i>		<b>BANQUET (7:00pm)</b>
8:00pm		<b>Group Dinner</b>			

Plenary talks (4)
  Invited talks (24)
  Contributed talks (35)
  Flash talks (19)

Education talks (3) On the evening of Tuesday, October 9<sup>th</sup>, in parallel with the posters, there will be a session dedicated to science education sponsored by **Webassign**, with talks by *John Risley* (WebAssign CEO), *Jackelyn Chini* (UCF) and *Kader Kara* (UCF).

SCHEDULE



## Polyhedron – Special ICMM 2012 Issue:

The conference is sponsored by Elsevier and its results will be published in a **2013 special issue** “[Proceedings of the 12<sup>th</sup> International Conference on Molecule-based Magnets \(ICMM2012\)](#)” of **Polyhedron**. Papers will be considered for all talks and posters, and will be peer reviewed before publication. Manuscripts must be submitted on-line before December 16<sup>th</sup>, 2012.

There will be two types of papers: shorter ones of length 4-5 printed pages (Communications), and longer ones of length 6-12 printed pages (Full Paper). As a general guide, papers based on posters and contributed talks could be of either length, but papers based on invited talks should be of the longer variety, either as original full papers or short reviews.

### For Instructions to Authors:

(1) Download the document “[Website Submission Information](#)” from the ICMM website:

([http://icmm2012.cos.ucf.edu/?page\\_id=102](http://icmm2012.cos.ucf.edu/?page_id=102))

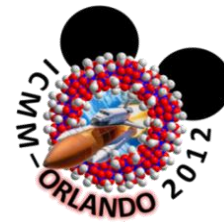
(2) See the journal website at: <http://ees.elsevier.com/poly/>

(\*) See also published issues of the journal, such as the special issue ICMM 2010 “Proceedings of the 12th International Conference on Molecule-based Magnets (ICMM 2010)”, which can be found at Polyhedron, 2011, Volume 30, Issue 18, pages 2959-3302.

Authors of shorter papers containing original work in previous ICMM Proceedings have also later published full papers of this work. If you plan to do this, you should ensure that your manuscript is written in Communication style. There are cases where referees of subsequent full papers have recommended rejection of the paper because the material had already been published in the ICMM Proceedings







## Olivier Kahn Lecture at ICMM:

The Olivier Kahn Lecture, which will be presented by Hiizu Iwamura to open the scientific program of the 13th ICMM, is named after one of the true pioneers of “Molecular Magnetism”. This tradition dates back to the 10th ICMM in Victoria (Chairman, Robin Hicks) [1].

Olivier was a brilliant chemistry student at Ecole Nationale Supérieure de Chimie de Paris, where he completed his PhD under the supervision of Prof. Bigorgne. In the 70s, he proposed with Briat a model of exchange interaction in molecules based on a Heitler-London approach. At the same time, he launched an active research group – “Spectrochimie des Eléments de Transition” – at Orsay, where he explored new compounds to test the limits of the molecular exchange interaction model. He later moved to Bordeaux where he created the group of “Sciences Moléculaires” in the Institut de Chimie de la Matière Condensée de Bordeaux, and established many international collaborations.

Olivier Kahn was one of the pioneers who moved magnetochemistry into “Molecular Magnetism”. He revitalized areas like spin crossover, and developed a new language that was a mix of chemistry and physics, largely using theoretical models. Among his everlasting contributions to the field are: his rational approach to the Cu(II)-VO(IV) triplet ground state; ferrimagnetic Cu(II)-Fe(III) dinuclear complexes; Cu(II)-Mn(II) bimetallic chains that order ferrimagnetically via supramolecular arrangement; and room-temperature Fe(II)-triazole spin crossover chains with hysteresis, and related devices.

Olivier Kahn was an outstanding lecturer, able to fascinate broad audiences about the eternal gladiators’ fight between overlap and orthogonality with vividly raised hands. His book “Molecular Magnetism” bares witness to his scientific enthusiasm and his educational talents. He was also an enthusiastic scientific mentor: many of the PhD students and post-doctoral researchers trained in his group are now leading researchers in this field.

Tragically, his vibrant life was cut short at age 57 [2], at a time when he was a celebrated scientist, member of the French Academy of Sciences, and doctor Honoris Causa of several universities.

*Dante Gatteschi, Stephen Hill, Joel S. Miller, Michel Verdaguer*

Firenze, Tallahassee, Salt Lake City, Paris

September, 2012

[1] ICMM Kahn Lecturers: Dante Gatteschi (Firenze) in Victoria, Canada in 2006; Joel S. Miller (Salt lake City) in Florence, Italy in 2008; Michel Verdaguer (Paris) in Beijing, China in 2010; Hiizu Iwamura (Tokyo) in Orlando, FL, USA in 2012.

[2] P. Day, “Olivier Kahn”, Nature, 2000, 403, 498; Inorg. Chim. Acta, 2001, 326, 1-111 (Special O. Kahn Issue).

Olivier Kahn  
(Courtesy JK, MV)

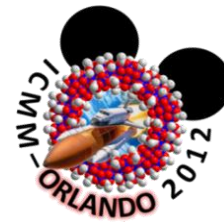


KAHN LECTURE



# Plenary Speakers

**PLENARY**



### Biographical Sketch

## **Professor Hiizu Iwamura (KAHN LECTURER)**

Professor of Chemistry, College of Science and Technology, Nihon University

Hiizu Iwamura received his D.Sc. degree from The University of Tokyo (1962). After serving as assistant and associate professors in Tokyo, he became professors at the Institute for Molecular Science in Okazaki (1977), The University of Tokyo (1987), Kyushu University (1994), National Institute for Academic Degrees (1998), The Open University of Japan (2000), and Nihon University (2005). Overseas, he served as a post-doctoral research associate in Wisconsin (1967-69), a DAAD visiting scientist in Tübingen (1974), a Julia and Edward Lee Lecturer in Chicago (1987), and a visiting professor in Strasbourg (1995). He hosted Olivier Kahn's first visit to Japan as a JSPS Distinguished Scientist in 1990 and organized the ICMM1992 in Tokyo. His research interest lies in a wide range of the synthesis and analysis of organic molecules of theoretical interest. His accomplishments published in more than 400 original papers in international journals earned a number of awards as represented by The Japan Academy Prize in 2003 for the design and construction of molecule-based magnets. He served as President of the Chemical Society of Japan in 2001-2002 and the first President of the Japan Union of Chemical Science and Technology in 2007-2008



PLENARY SPEAKERS

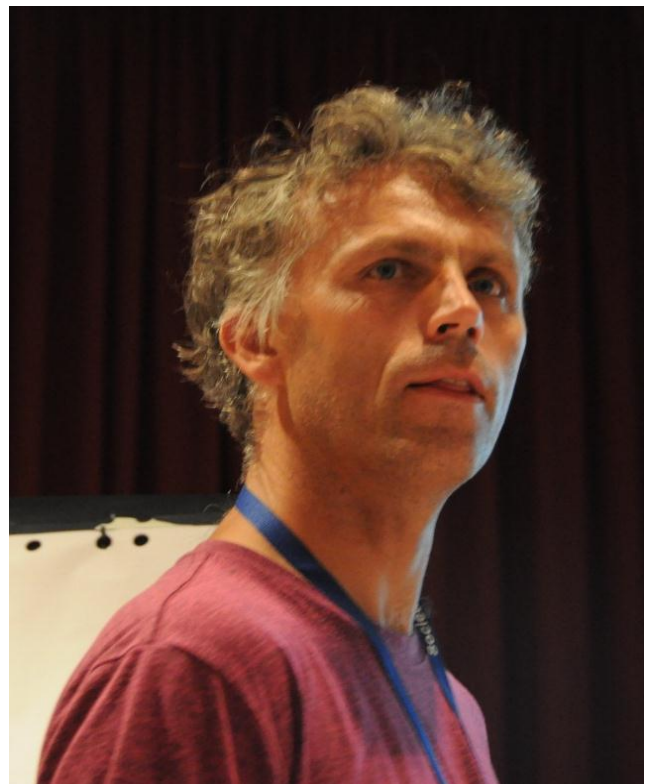


## Biographical Sketch

### **Professor Herre van der Zant**

Professor, Delft University of Technology

Herre van der Zant finished his Ph.D in 1991 under supervision of Hans Mooij at the Delft University of Technology. His thesis was about experiments on classical and quantum phase transitions in Josephson junction arrays. After his Ph.D, he went to the Massachusetts Institute of Technology to work with Terry Orlando on superconducting electronics. After three years, Herre van der Zant returned to the group of Hans Mooij at Delft to work on mesoscopic charge density waves. On this subject he received a five year fellowship from the Royal Academy for Sciences. In 2005, he cofounded the Molecular Electronics and Devices group in the Kavli Institute for Nanoscience at the Delft University of Technology. As a professor in this group, his research focuses on transport through single molecules and nano-electromechanical systems.



PLENARY SPEAKERS



## Biographical Sketch

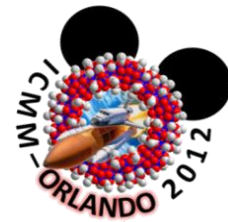
### **Professor Gregory Boebinger**

Director, National High Magnetic Field Laboratory

Gregory Boebinger received Bachelors Degrees in Physics, Electrical Engineering and Philosophy in 1981 from Purdue University. With a Churchill Scholarship, he traveled to the University of Cambridge for one year of research under Professor Sir Richard Friend, studying the temperature dependent structural changes in one-dimensional organic superconductors. He received his Ph.D. in Physics in May 1986 from the Massachusetts Institute of Technology, where he held Compton and Hertz Foundation Fellowships. His thesis research utilized high magnetic fields and ultra-low temperatures to study the fractional quantum Hall effect with Nobel Laureates Horst Stormer and Dan Tsui. Boebinger then spent a year as a NATO Postdoctoral Fellow in Paris at the École Normale Supérieure. In 1987, he joined the research staff at Bell Laboratories, where he remained until joining the MagLab in 1998 as head of its pulsed field facility in Los Alamos. In 2004, he moved to Florida State University to become Director of the MagLab, with responsibility for all three campuses: the headquarters at Florida State University, the pulsed magnet laboratory at Los Alamos National Laboratory, and the ultra-low temperature and magnetic resonance imaging laboratories at the University of Florida. The MagLab is the world leading magnet laboratory that develops and operates high magnetic field facilities that scientists use for research in physics, biology, bioengineering, chemistry, geochemistry, biochemistry, materials science, and engineering. Boebinger is a Fellow of the American Physical Society and the American Association for the Advancement of Science.



PLENARY SPEAKERS



## Biographical Sketch

### **Professor Dr. Frank Neese**

Director, Max Planck Institute for Chemical Energy Conversion

Frank Neese received both his Diploma (Biology – 1993) and PH.D (Dr. rer. Nat. – 1997) working with Prof. P. Kroneck at the University of Konstanz. He performed Postdoctoral work at Stanford University with Prof. E. I. Solomon from 1997 to 1999, then returned to Konstanz where he completed his Habilitation in 2001. He joined the Max Planck Institute (MPI) for Bioinorganic Chemistry in 2001 as a group leader, where he directed a research group until accepting the position of full professor and Chair of Theoretical Chemistry at the University of Bonn in 2006. In 2008, Neese returned part time to the MPI as one of its rare “Max Planck Fellows” within the Department of Inorganic Chemistry. In 2011, he became Director of the MPI for Chemical Energy Conversion where he heads the department of Molecular Theory and Spectroscopy. In 2005, Prof. Neese received the Hellmann Award of the German Theoretical Chemical Society for the Development and Application of new Theoretical Methods and subsequently the Klung-Wilhelmy Weberbank award in 2008 and the Gottfried Wilhelm Leibniz Award of the German Science foundation in 2010. He is Associate Editor (since 2012) of the journal PhysChemChemPhys; and is a Member of the International Academy of Quantum Molecular Sciences (IAQMS, since 2012). Prof. Neese is the author of more than 250 scientific articles in journals of chemistry, biochemistry and physics. His work focuses on the theory of magnetic spectroscopies (electron paramagnetic resonance, magnetic circular dichroism) and their experimental and theoretical application, local pair natural orbital correlation theories, spectroscopy oriented configuration interaction, electronic and geometric structure and reactivity of transition metal complexes and metalloenzymes. He is lead author of the ORCA program.



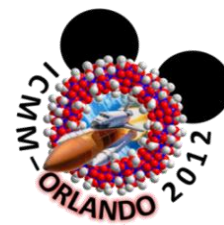
**PLENARY SPEAKERS**



# Scientific Program

**PROGRAM**

# Monday, October 8



8:10 Welcome

## **Session I**

Chair: **Joel Miller**

- 8:30 [\[PL-01\]](#) **Olivier Kahn Lecture**  
What Role Has Organic Chemistry Played in the Development of Molecule-based Magnets?  
Hiizu Iwamura
- 9:20 [\[MC-01\]](#) Magnetic Anisotropy of Molecular Rings Self-assembled on Au Surface  
A. Ghirri, V. Corradini, V. Bellini, U. del Pennino, S. Carretta, E. Garlatti, P. Santini, G. Timco, R. Winpenny, Marco Affronte
- 9:35 [\[MC-02\]](#) Thiazyl Radical Ligands: Coordination Complexes and Intermolecular Interactions  
Kathryn E. Preuss, R. Clérac, M. Jennings, D. Soldatov, E. M. Fatila, D. J. Sullivan, I. S. Morgan, D. J. McDonald, A. Maahs
- 9:50 [\[MI-01\]](#) Heterometallic Rings for Quantum Information Processing  
Stefano Carretta
- 10:15 *Coffee Break*

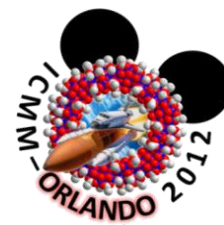
## **Session II**

Chair: **Andrea Cornia**

- 10:45 [\[MF-01-05\]](#) FLASH PRESENTATIONS
- 11:10 [\[MC-03\]](#) Lanthanide Complexes Featuring Single-Molecule Magnet Behaviour  
Floriana Tuna, R. A. Layfield, R. E. P. Winpenny
- 11:25 [\[MI-02\]](#) Electronic and Magnetic Properties of Ternary Main Group–Transition Metal Clusters  
Stefanie Dehnen



# Monday, October 8



- 11:50 [MC-04] Antiferromagnetic Ordering and Pressure-Induced Transition to a High  $T_c$  Ferrimagnetic State for  $M^{II}(\text{TCNE})[\text{C}_4(\text{CN})_8]_{1/2} \cdot z\text{CH}_2\text{Cl}_2$  (TCNE = Tetracyanoethylene; M = Mn, Fe)  
Joel S. Miller, A. C. McConnell, P. W. Stephens, R.S. Fishman
- 12:05 [MI-03] Controlling Nanomagnets with Light: a Journey Between Chemistry and Physics  
E. Heintze, M.-Y. Zhang, C. Clauss, F. El Hallack, F. Totti, M.G. Pini, A. Rettori, M. Dressel, Lapo Bogani
- 12:30 *Lunch*

## **Session III**

Chair: **Daniel Talham**

- 2:00 [MI-04] Lessons Learned From Dinuclear Lanthanide Nano-Magnets  
Muralee Murugesu
- 2:25 [MC-05] An AFM/FM Spin Ladder  
Christopher P. Landee, F. F. Awwadi, L. N. Dawe, M. M. Turnbull
- 2:40 [MC-06] Bistability in the TTTA Molecule-Based Magnet  
Juan J. Novoa, M. Deumal, F. Mota, S. Vela, J. Ribas-Ariño
- 2:55 [MI-05] Polyoxometalate Single-Ion Magnets: Molecular Design of Spin Qubits  
Fernando Luis, M. J. Martínez, S. Cardona-Serra, E. Coronado, J. M. Clemente-Juan, A. Gaita-Ariño, H. Prima-García, A. Camón, P. Alonso, M. Evangelisti, J. van Slageren, J. Sesé
- 3:20 [MC-07] Quantum State Manipulation of Molecular Spins by Pulse-based Electron Multiple Resonance Technique for Molecular Spin Quantum Computers  
Kazunobu Sato, A. Tanaka, T. Yoshino, S. Nakazawa, S. Nishida, R. Rahimi, T. Ise, K. Toyota, D. Shiomi, Y. Morita, M. Kitagawa, T. Takui
- 3:35 [MC-08] Controlling Electronic Structures of Paramagnetic Metal Alkynyl Complexes Toward Organometallic Single Molecule magnets  
Matthew P. Shores, S. R. Fiedler, W. A. Hoffert, B. S. Newell, A. K. Rappé
- 3:50 *Coffee break*

# Monday, October 8



## Session IV

Chair: **Andrew Kent**

- 4:15            **[MF-06-09]**        FLASH PRESENTATIONS
- 4:35            **[MC-09]**            Collective Coupling of  $\sim 10^{16}$  Fe<sub>8</sub> Single-Molecule Magnets to a Resonant Cavity  
Jonathan R. Friedman, A. W. Eddins, C. C. Beedle, D. N. Hendrickson
- 4:50            **[MI-06]**            Quantum Molecular Spintronics Based on Single-Molecule Magnets  
Masahiro Yamashita
- 5:15            **[MC-10]**            Exchange Coupling and Magnetic Blocking in Radical-Bridged Lanthanide Complexes  
Selvan Demir, J. M. Zadrozny, M. Nippe, J. R. Long
- 5:30            **[MC-11]**            Fe<sup>III</sup> Complexes with LIESST Effect Inserted into Oxalate-Based Network. Photophysical and Magnetic Studies  
Eugenio Coronado, M. López-Jordà, M. Clemente-León, A. Tissot, A. Hauser, C. Desplanches, H. Wang, J.-F. Létard
- 5:45                            *Break*
- 6:00                            POSTERS
- 8:00                            *Dinner*

ORAL SESSION

# Tuesday, October 9



## Session V

Chair: **Roberta Sessoli**

- 8:30 [PL-02] Transport through magnetic molecules  
Herre S. J. van der Zant
- 9:20 [TuC-01] Azido/Cyano Based Coordination Polymers Exhibiting Exotic Magnetic Properties  
J. H. Yoon, I. Young Yoo, D. W. Ryu, W.R. Lee, Chang Seop Hong
- 9:35 [TuC-02] Magnetism of the Organic Quantum Spin Trimer TNN  
  
K. Takada, S. Iisaka, J.-H. Park, T. P. Murphy, H. Yamaguchi, T. Ono, Y. Shimura, T. Sakakibara, H. Nakano, Y. Hosokoshi, Yasu Takano
- 9:50 [Tul-01] Photoswitching the Magnetization in Photochromic Metal Complex Thin Films at Room Temperature  
D. Plaul, M. Paquette, B. Patrick, Natia Frank
- 10:15 *Coffee Break*

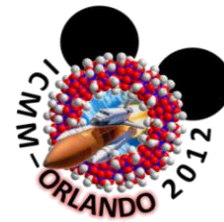
## Session VI

Chair: **Christopher Landee**

- 10:45 [TF-01-05] FLASH PRESENTATIONS
- 11:10 [TuC-03] Magnetic Control by Tuning Charge-Transfer in Donor/Acceptor–Metal–Organic Frameworks  
Hitoshi Miyasaka
- 11:25 [Tul-02] Metal-organic Polymers Composed of Fluoride or Bifluoride Ligands  
Jamie L. Manson
- 11:50 [TuC-04] Interactions Between a Single-Molecule Magnet Mn<sub>12</sub> and a Bi Substrate  
Kyungwha Park, J.-Z. Wang

ORAL SESSION

# Tuesday, October 9



12:05 [TuI-03] Organic Radicals as Active Components in Molecular Junctions and Molecular Switches  
Marta Mas-Torrent, C. Simao, N. Crivillers, J. M. Artés, P. Gorostiza, C. Munuera, M. Paradinas, C. Ocal, S. T. Bromley, C. Rovira, J. Veciana

12:30 *Lunch & International Advisory Board Meeting*

## **Session VII**

Chair: **George Christou**

2:00 [TuI-04] Random Fields in Molecular Magnets  
Myriam P. Sarachik, B. Wen, S. Li, P. Subedi, A. D. Kent, Y. Yeshurun, A. Millis, G. Christou

2:25 [TuC-05] Metal Complexes with Multi-Bistability  
Y. Sekine, Y. Okamoto, M. Nihei, Hiroki Oshio

2:40 [TuC-06] Dinuclear Cobalt-Dioxolene Complexes: A Two-Step Valence Tautomeric Transition  
K. G. Alley, G. Poneti, J. B. Aitken, R. K. Hocking, K. S. Murray, B. F. Abrahams, H. H. Harris, L. Sorace, Colette Boskovic

2:55 [TuI-05] Requiring High-Spin Formulations for Small Molecule Reactivity in Polynuclear Complexes  
Theodore Betley, T. Powers, A. Fout, B. Lin, Q. Zhao

3:20 [TuC-07] Thermometry at the Nanoscale  
Fernando Palacio, L.D. Carlos, C.D.S. Brites, P.P. Lima, N.J.O. Silva, A. Millán, V.S. Amaral, V. Sorribas

3:35 [TuC-08] Supramolecular Approaches in the Quest for Improved Molecular Magnets  
Annie K. Powell

3:50 *Coffee Break*

ORAL SESSION

Tuesday, October 9



**Session VIII**

Chair: **Richard Oakley**

4:15	<a href="#">[TF-06-10]</a>	FLASH PRESENTATIONS
4:35	<a href="#">[TuC-09]</a>	Phototunable Single Chain Magnets <u>Osamu Sato</u> , S. Kanegawa, S. Kang, T. Liu, C.-Y. Duan
4:50	<a href="#">[TuI-06]</a>	Spin Crossover in Fe(II) Complexes of Alkylated Biimidazoles H. V. Phan, P. Chakraborty, Y. M. Calm, M. Chen, K. Kovnir, L. K. Keniley, Jr., J. M. Hoyt, E. S. Knowles, M. W. Meisel, C. Achim, A. Hauser, <u>Michael Shatruk</u>
5:15	<a href="#">[TuC-10]</a>	Mn and Co Ferrimagnetic Chains with a Large Polycyclic Aromatic Substituted Nitronylnitroxide M. G. F. Vaz, R. A. Allão, H. Akpınar, J. A. Schlueter, P. M. Lahti, <u>Miguel A. Novak</u>
5:30	<a href="#">[TuC-11]</a>	Tuning Magnetic and Optical Bistability in Fe/Co Squares Y.-Z. Zhang, D.-F. Li, C. Mathonière, R. Clérac, <u>Stephen M. Holmes</u>
5:45		<i>Break</i>
6:00		POSTERS/EDUCATION/DEMONSTRATIONS
8:00		<i>Close</i>

ORAL SESSION

# Wednesday, October 10



## Session IX

Chair: **Richard Winpenny**

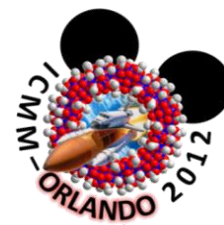
- 8:30 [PL-03] Electrons, Energy and Health: the sometimes hidden research applications of high magnetic fields  
Gregory Boebinger
- 9:20 [WC-01] Spin Dynamics of Molecular Nanomagnets Fully Unraveled by Four-Dimensional Inelastic Neutron Scattering.  
Michael L. Baker, T. Guidi, S. Carretta, J. Ollivier, H. Mutka, H. U. Güdel, G.A. Timco, E. J. L. McInnes, G. Amoretti, R. E. P. Winpenny, P. Santini
- 9:35 [WC-02] Magnetic Architectures Derived from Heptacyanomolybdate(III)  
Kim R. Dunbar, X.-Y. Wang, Q.-L. Wang, H. Southerland, H. Zhao, A. Prosvirin
- 9:50 [WI-01] Molecular Spin Battery: Tailor-made Rechargeable Battery Based on Air-stable Neutral Radicals  
Yasushi Morita
- 10:15 *Coffee Break*

## Session X

Chair: **Mark Meisel**

- 10:45 [WI-02] Ultrafast Photo-switching in Spin-Crossover Molecular Crystals  
Eric Collet, R. Bertoni, W. Kazsub, A. Marino, M. Cammarata, M. Lorenc, M. Buron, M. Servol, H. Cailleau, M.-L. Boillot, J.-F. Létard
- 11:10 [WC-03] Molecular Magnetism of Redox Active Materials at Electrode Interfaces  
Kunio Awaga
- 11:25 [WI-03] Phosphorus-Supported Ligands for the Assembly of Molecule-based Magnetic Materials  
Vadapalli Chandrasekhar, T. Senapati, B. Murugesu Pandian, A. Dey, S. Das, M. Kalisz, R. Clérac
- 11:50 *Boxed Lunch and Kennedy Space Center Tour*

# Thursday, October 11



## Session XI

Chair: **Jürgen Schnack**

- 8:30            **[PL-04]**            Quantum Chemistry and Molecular Magnetism  
Frank Neese
- 9:20            **[ThC-01]**            Photo-Induced Electron Transfer in Cyanido Molecular Complexes  
Corine Mathonière, S. M. Holmes, R. Clérac
- 9:35            **[ThC-02]**            Single Molecule Magnet Behaviour and Luminescence in Lanthanide Complexes Based on Redox Active Ligands Derived from Tetrathiafulvalene  
Lahcene Ouahab, F. Pointillart, O. Cador, S. Golhen
- 9:50            **[ThI-01]**            Magnetolectric Coupling in Organo-Metallics  
Vivian S. Zapf, P. Jain
- 10:15                            *Coffee Break*

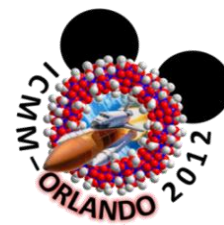
## Session XII

Chair: **Talal Mallah**

- 10:45            **[ThI-02]**            Tunable Bistability in Coordination Nanoparticles  
Laure Catala, Y. Raza, N. Dia, Y. Prado, F. Volatron, L. Lisnard, A. Gloter, O. Stéphan, C. Mathonière, G. Rogez, T. Mallah
- 11:10            **[ThC-03]**            High Nuclearity, High Spin Clusters and Single Molecule Magnets from the use of 1,3-Propanediol in Mn Chemistry  
Anastasios J. Tasiopoulos, E. E. Moushi, M. Charalambous, C. Papatrifiatayflopoulou, C. Lampropoulos, T. C. Stamatatos, V. Nastopoulos, W. Wernsdorfer, G. Christou
- 11:25            **[ThI-03]**            Controlling Magnetism by Light in Nanosized Heterostructures: the Role of Increased Complexity  
Mark W. Meisel, D. R. Talham

ORAL SESSION

# Thursday, October 11

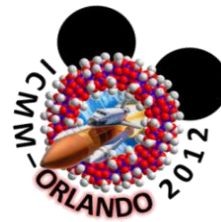


- 11:50      [\[ThC-04\]](#)      SMM Behaviour in Single-ion Lanthanide Complexes and in Mixed d-f Clusters  
Keith S. Murray, S. K. Langley, N. F. Chilton, I. A. Gass, B. Moubaraki, L. Chibotaru, L. Ungur
- 12:05      [\[ThI-04\]](#)      Recent Progress in Single-Ion-Magnet  
Bing-Wu Wang, S. D. Jiang, Y. Y. Zhu, K. Qian, Z. M. Wang, S. Gao
- 12:30      *Lunch*
- Session XIII**  
Chair: **Stephen Holmes**
- 2:00      [\[ThI-05\]](#)      C.W. and Pulsed EPR Studies of Electronic Structure and Spin Dynamics in Antiferromagnetic Rings  
M. Albring, M. Baker, G. A. Timco, F. Tuna, F. Moro, R. E. P. Winpenny, A. Webber, D. Kaminski, A. Ardavan, Eric J. L. McInnes
- 2:25      [\[ThC-05\]](#)      The Realization of Magnetic Dilution in Crystals of Polynuclear Single Molecule Magnets  
Andrea Cornia, A.-L. Barra, F. Luis, R. Sessoli, L. Sorace, W. Wernsdorfer
- 2:40      [\[ThC-06\]](#)      Assembly Chemistry and Magneto-Structural Correlations of 4f/3d-4f Molecular Nanomagnets  
J.-L. Liu, F.-S. Guo, J.-D. Leng, Z.-S. Meng, Ming-Liang Tong
- 2:55      [\[ThI-06\]](#)      Photomagnetic Phenomenon in Cyano-Bridged Bimetallic Assemblies  
Hiroko Tokoro, K. Imoto, S. Ohkoshi
- 3:20      [\[ThC-07\]](#)      Chiral Conformation at a Molecular Level of a Propeller-Like Open-Shell Molecule on Au(111)  
V. Mugnaini, F. Grillo, M. Oliveros, S. M. Francis, D.-J. Choi, M. V. Rastei, L. Limot, C. Cepek, M. Pedio, S. T. Bromley, N. V. Richardson, J.-P. Bucher, Jaume Veciana
- 3:35      [\[ThC-08\]](#)      Correlation Between Porous and Magnetic Properties in Porous Magnets  
Masaaki Ohba, R. Ohtani, K. Yoneda, A. B. Gaspar, J. A. Real, S. Kitagawa
- 3:50      *Coffee Break*

ORAL SESSION



# Thursday, October 11



## Session XIV

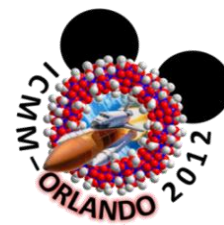
Chair: **Rodolphe Clérac**

- 4:15            [\[ThI-07\]](#)            Evidence for Magnetic Order in a Purely Organic 2D Layer Adsorbed on Epitaxial Graphene  
M. Garnica, D. Stradi, S. Barja, C. Díaz, F. Calleja, M. Alcamí, N. Martín, A. L. Vázquez de Parga, F. Martín, Rodolfo Miranda
- 4:40            [\[ThC-09\]](#)            A Triply Switchable (T, P and redox) Cobalt Complex: Abrupt, Complete, Reversible and Hysteretic Spin Crossover  
M. G. Cowan, J. Olguín, S. Narayanaswamy, J. L. Tallon, Sally Brooker
- 4:55            [\[ThI-08\]](#)            Lanthanide Complexes Intended as Realizations of Quantum Gates  
Guillem Aromí, D. Aguilà, L. A. Barrios, V. Velasco, O. Roubeau, F. Luis
- 5:20            [\[ThC-10\]](#)            Advanced Quantum Methods for the Largest Magnetic Molecules  
Jürgen Schnack
- 5:35            [\[ThI-09\]](#)            Heavy Atom Radicals as Molecular Materials: from Mott Insulators to Magnets to Metals  
Richard T. Oakley
- 6:00                                *Concluding Remarks*
- 7:00                                *Banquet*

ORAL SESSION

# Monday, October 8

10:45 – 11:10am



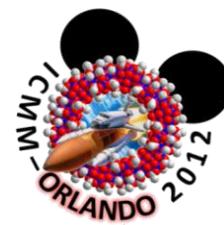
- [MF-01]** Magnetic and Optical Bistability of Molecular Fe/Co Complexes  
Jeon, S. Calancea, A. Panja, D. Pinero, P. Dechambenoit, C. Mathonière, R. Clérac
- [MF-02]** Tuning the Magneto-structural Properties of Non-porous Coordination Polymers by HCl Chemisorption  
Monica Giménez-Marqués, G. Mínguez Espallargas, E. Coronado
- [MF-03]** Strong 1D Antiferromagnetic Coupling in Cobalt Phthalocyanine (CoPc)  
Michele Serri, W. Wu, A. Fisher, G. Aeppli, C. Hirjibehedin, S. Heutz
- [MF-04]** Molecular Symmetry and Magnetic Anisotropy of Lanthanide- Based Single Ion Magnets  
Nick Chilton, S. K. Langley, A. Soncini, S. R. Batten, K. S. Murray
- [MF-05]** Quantum Tunneling of Magnetization in Trigonal Single-Molecule Magnets  
Junjie Liu, E. del Barco, S. Hill

4:15 – 4:35pm

- [MF-06]** Quantum Deflagration in  $Mn_{12}$ -acetate in the Presence of a Transverse Field  
Pradeep Subedi, S. Velez, F. Macia, S. Li, M. P. Sarachik, J. Tejada, S. Mukherjee, G. Christou, A. D. Kent
- [MF-07]** Distinct Anisotropy Tuning of Series of Dysprosium(III) Organometallic Single-Ion Magnets *via* Ligand Modification  
Shan-Shan Liu, L. Xu, S.-D. Jiang, Z.-T. Wang, K. Qian, W.-X. Zhang, B.-W. Wang, Z.-F. Xi, S. Gao
- [MF-08]** Hybrids of Molecular Clusters and Superconducting Cavities in the Strong Coupling Regime  
Ming-Yee Tsang, M. Scheffler, L. Bogani
- [MF-09]** Enhancing Magnetic Properties of Molecular Magnetic Materials: The Role of Single Ion Anisotropy  
Mohamed R. Saber, A. P. Prosvirin, K. R. Dunbar

# Tuesday, October 9

10:45 – 11:10am

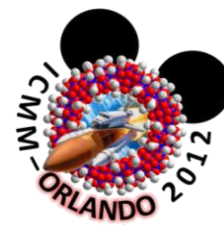


- [TF-01] Probing Donor Atom Importance in f-element Molecular Magnets  
Katie R. Meihaus, J. R. Long
- [TF-02] Crystal Engineering and Spin State Correlations in Novel Fe(II) Complexes  
Gavin A. Craig, J. S. Costa, O. Roubeau, S. J. Teat, G. Aromí
- [TF-03] Heterometallic  $Mn_{36}Ni_4$  'Loop-of-Loops-and-Supertetrahedra' Aggregates Possessing a High-Spin Ground State  
Maria Charalambous, E. E. Moushi, C. Papatrifiantafyllopoulou, W. Wernsdorfer, V. Nastopoulos, G. Christou, A. J. Tasiopoulos
- [TF-04] Photocontrol via Strain in Core-Shell Prussian Blue Analogues  
Elisabeth S. Knowles, C. H. Li, M. F. Dumont, M. K. Peprah, O. N. Risset, M. J. Andrus, D. R. Talham, M. W. Meisel
- [TF-05] A New  $Mn_{18}$  Double-Layer Grid Complex Comprising Two [3X3] Grids  
Katye M. Poole, K. A. Abboud, G. Christou

4:15 – 4:35pm

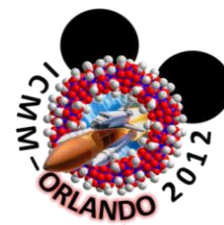
- [TF-06] Chemical Tailoring of  $Fe_4$  Single-Molecule Magnets for Oriented Molecular Layers: A Synchrotron-based Study  
Eric Tancini, M-J. Rodriguez-Douton, M. Mannini, Ph. Sainctavit, L. Armelao, L. Poggini, L. Malavolti, E. Otero, P. Ohresser, F. Bondino, E. Magnano, R. Sessoli, A. Cornia
- [TF-07] Clusters and Chains of a Macrocyclic {3d-4f} Single Molecule Magnet  
Sebastien Dhers, R. Clérac, S. Brooker
- [TF-08] Controlling Slow Magnetic Relaxation in Field-Induced Single-Molecule Magnets Using Supramolecular Architectures  
Fatemah Habib, J. Long, P.-H. Lin, I. Korobkov, L. Ungur, W. Wernsdorfer, L. F. Chibotaru, M. Murugesu
- [TF-09] Magnetic Anisotropy in Tetracoordinate Co(II) Complexes  
Monika Idešicová, R. Boča
- [TF-10] Rational Design of Single Ion Magnets  
Jose Jaime Baldoví, S. Cardona-Serra, J. M. Clemente-Juan, E. Coronado, A. Gaita-Ariño, A. Palli

# Monday, October 8



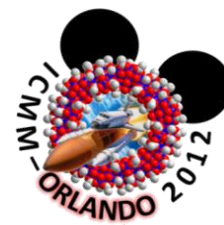
- [MP-001]** Exploring Old and New Redox-active Ligands as Scaffolds for Molecule-based Magnetic Materials  
M. T. Lemaire, K. Revunova, N. vanDamme
- [MP-002]** Functionalization of Molecule-based Magnets: Toward Magnetic Liquids and Liquid Crystals  
Dmitri Mitcov, Diana Siretanu, Pierre Dechambenoit, Rodolphe Clérac
- [MP-003]** Ising Exchange Interaction in an Asymmetric Dy<sub>2</sub> Single-Molecule Magnet  
Yunnan Guo
- [MP-004]** Precise Electrochemical Control of Ferromagnetism in a Bimetallic NiFe Prussian Blue Analog  
Y. Mizuno, M. Okubo, K. Kagesawa, D. Asakura, T. Kudo, H. Zhou, K. Oh-ishi, A. Okazawa, N. Kojima
- [MP-005]** Synthesis, Structures and Magnetic/Dielectric Properties of Mixed-Metal Formates of [NH<sub>4</sub>][Mn<sub>1-x</sub>Co<sub>x</sub>(HCOO)<sub>3</sub>]  
Ran Shang, Zheming Wang, Song Gao
- [MP-006]** Design of Nitronyl Nitroxide Columnar Self-Assemblies Exhibiting Strong Intermolecular Magnetic Interactions  
N. Yoshioka, Y. Yamaguchi, M. Sugawara, S. Tajima, S. Jyo, T. Muraoka, C. Maeda
- [MP-007]** Synthesis and Properties of 2D Perovskite Organic-Inorganic Hybrid Multiferroic Compound  
Jing Han, Atsushi Tsuruta, Motoko Akita, Sadafumi Nishihara, Katsuya Inoue
- [MP-008]** Synthesis and Structure of Palladium Complexes Coordinated by Nitronyl Nitroxides  
H. Yokoi, X. Zhang, S. Suzuki, M. Kozaki and K. Okada
- [MP-009]** Synthesis and Redox Properties of Nitronyl Nitroxide-Pt Pincer-Type Complexes  
X. Zhang, S. Suzuki, M. Kozaki, K. Okada
- [MP-010]** Conjunction of Chirality, Magnetic Anisotropy and Microporosity in the Supramolecular Network Constructed of Crossed Cyano-Bridged Co<sup>II</sup>-W<sup>V</sup> Molecular Chains  
S. Chorazy, K. Nakabayashi, K. Imoto, B. Sieklucka, S. Ohkoshi

# Monday, October 8



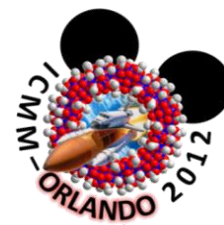
- [MP-011]** A New Heptanuclear Ni(II) Cluster: Synthesis, Structure and Magnetism  
Chen-I Yang, Chang-Jui Lin, Long-Li Lai, Gene-Hsiang Lee
- [MP-012]** Employing Fluoride Bridging as a Synthetic Strategy for New Types of Polynuclear Magnetic Systems  
K. S. Pedersen, J. Bendix, J. Dreiser, M. Evangelisti, M. Schau-Magnussen, S. Singh, G. Rajaraman, T. Birk, S. Piligkos, C. Aagaard Thuesen
- [MP-013]** Tetranuclear  $3d-4f$  Complexes of Hexamine Macrocycles as Potential Single-Molecule Magnets  
H. Feltham, R. Clérac, L. Ungur, L. Chibotaru, A. K. Powell, S. Brooker
- [MP-014]** Unexpected Reversible Solid State Redox Phenomena Exhibited by Members of a Family of Putative Molecular Magnets Based on Iron Dimers and Di-oxygen  
W.M. Reiff, J. Kreis, R. U. Kirss
- [MP-015]** Direct First Order Orbital vs Strong Spin-Orbit Coupling Contributions to the Paramagnetism of Linear Non-Jahn-Teller Distorted Divalent Cr, Fe, and Co Complexes: Observation of Mega-Gauss Internal Hyperfine Fields at Fe<sup>57</sup> for the First Time  
J. N. Boynton, W. A. Merrill, A. M. Bryan, P. P. Power and W.M. Reiff
- [MP-016]** Co-NC-W and Fe-NC-W Electron-Transfer Channels for Thermal Bistability in Fe-Co-[W(CN)<sub>8</sub>] Systems  
R. Podgajny, S. Choraży, M. Wis, W. Nitek, A. M. Majcher, M. Rams, B. Marszałek, B. Gil-Knap, J. Żukrowski, C. Kapusta, B. Sieklucka
- [MP-017]** Multinuclear Fe(II) Spin-Crossover Complexes with Cyanometalate Bridging Ligands: Structural Variations and Magnetic Properties  
O. Hietsoi, A. Arroyave, P. Dunk, C. Achim, M. Shatruk
- [MP-018]** Strong Orientation Dependence of Electron Spin Decoherence in a Molecular Magnet  
J.Wang, Z. Wang, A.Ozarowski, J.van Tol, N. S. Dalal
- [MP-019]** Effect of Symmetry on Spin-Orbital Coupling along the Cr-Cr-Cr Chains in Cr<sub>3</sub>(dpa)<sub>4</sub>Cl<sub>2</sub> and Cr<sub>3</sub>(dpa)<sub>4</sub>CIBF<sub>4</sub>: High-Field EPR Study and DFT Calculation  
J.Wang, Z. Wang, A.Ozarowski, J.van Tol, N. S. Dalal

# Monday, October 8



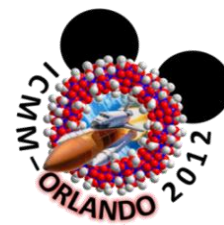
- [MP-020]** SQUID Measurement in Molecule-Based Magnets  
G. Yue, W. Wernsdorfer, I. Chiorescu
- [MP-021]** Pulsed EPR in Molecule-Based Magnets  
J. van Tol, S. Takahashi, Z. Wang, J. Wang
- [MP-022]** Salen Type Triple-decker Trinuclear Dy<sub>3</sub> Complexes Showing Slow Magnetic Relaxation Behavior  
F. Yang, P. Yan, Q. Li, P. Chen, G. Li
- [MP-023]** Metallo(II)-Phthalocyanines with Coordinated Ruthenium on Surfaces  
J. Klanke, K. Medjanik, G. Schönhense, H.-J. Elmers, E. Rentschler
- [MP-024]** A Two-Dimensional Alkali Metals-based Spin-Crossover Coordination Compound that Exploits Cation- $\pi$  Interactions  
S. Kang, Y. Shiota, A. Kariyazaki, S. Kanegawa, K. Yoshizawa, O. Sato
- [MP-025]** Evidence of Electron-transfer Ferromagnetism in Mixed-valent Fe Anilato-bridged 2D-networks  
N. Ovanesyan, Z. Nikitina, G. Shilov, S. Aldoshin, V. Makhaev, Y. Li, M. Gruselle, C. Train
- [MP-026]** Simulation of Single Crystal High Frequency EPR spectra of Fe<sub>8</sub> and Quantum Magnetic Phase Transitions  
J.A. Campos, J.G. Hirsch
- [MP-027]** Strong-Coupled Stable Triplet Biradicals  
S. Tolstikov, S. Fokin, E. Tretyakov, G. Romanenko, A. Bogomyakov, D. Stass, A. Maryasov, N. Gritsan, V. Ovcharenko
- [MP-028]** “Jumping crystals”: Packing Plays a Key Role  
V. Ovcharenko, S. Fokin, E. Fursova, O. Kuznetsova, E. Tretyakov, G. Romanenko, A. Bogomyakov, S. Tolstikov, R. Z. Sagdeev
- [MP-029]** Thermally and Photoinduced Spin Transition in Mononuclear iron(II)-bis(pyrazolyl)pyridine Complexes  
I. Šalitroš, Bernard Schäfer, M. Ruben, R. Boča, W. Linert

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- [MP-030]** Measuring Magnetic Anisotropy of an Individual Fe<sub>4</sub> SMM  
E. Burzuri, A.S. Zyazin, A. Cornia, H.S.J. van der Zant
- [MP-031]** Magnetic Property on Layered Assembly of Inorganic Nanosheets  
T. Yamamoto, H. Namba, Y. Einaga
- [MP-032]** A Novel 3-fold Interpenetrated Iron(II) Square-grid Framework with SCO Property  
Takayoshi Kuroda-Sowa, Takayuki Masuda, Takashi Okubo, Masahiko Maekawa
- [MP-033]** Cyanide- And Phenoxide-Bridged FeIII MnIII Single-molecule Magnet Constructed by Highly Protected Paramagnetic Precursors  
D. W. Ryu, K. J. Cho, H. Y. Kwak, K. S. Lim, C. S. Hong
- [MP-034]** Role of Organic Spin in Heterospin Single-molecule Magnets  
S. Karasawa, N. Koga
- [MP-035]** Proton-Coupled Ligand Tautomerism-Induced Multi-Step Spin and Phase Transition in Mononuclear Fe<sup>III</sup> Compound  
Z. Y. Li, J. W. Dai, S. Kanegawa, S. C. Kang, O. Sato
- [MP-036]** Heterospin Chain Magnets Consisted of Aminoxyl and Cobalt(II) Ion  
Kensuke Murashima, Satoru Karasawa, Noboru Koga
- [MP-037]** Magnetic Anisotropy and Spin Parity Effect Along the Series of Late Lanthanide DOTA complexes  
M.-E. Boulon, G. Cucinotta, C. degl'Innocenti, M. Perfetti, J. Luzon, R. Sessoli
- [MP-038]** Stepwise Spin-Peierls-Like Transitions in  $\pi$ -Extended Cyclic Thiazyl Biradicals  
R. Suizu, Y. Shuku, K. Awaga
- [MP-039]** Controlling the Coordination Geometries and Magnetic Behaviors of [Ln(hfac)<sub>4</sub>]<sup>-</sup> through Alkali Metal Counterions  
Dai Zeng, Song-song Bao, Li-min Zheng

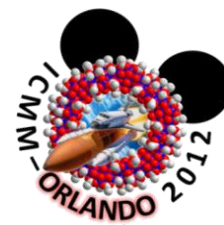
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- [MP-040]** A Molecular Multiferroic Based on Single-Molecule Magnet Assembly  
Y.-X. Wang, W. Shi, H. Li, Y. Song, L. Fang, Y.-H Lan, A. K. Powell, W. Wernsdorfer, L. Ungur, L. F. Chibotaru, M. Shen, P. Cheng
- [MP-041]** Magnetic Blocking from Exchange Interaction  
T. Han, W. Shi, P. Cheng
- [MP-042]** Theory of Chemical Bonds in Metalloenzymes XVI. A New Strategy for Rational Design of Artificial Water Oxidation Systems based on Hole-doped Mott Insulators  
K. Yamaguchi, H. Isobe, M. Shoji, S. Yamanaka, S. Yamada, T. Kawakami, Y. Kitagawa, M. Okumura
- [MP-043]** Highly Anisotropic Mononuclear Rhenium(IV) Complexes: New Examples of Single Molecule Magnets  
J. Martínez-Lillo, T. F. Mastropietro, E. Lhotel, C. Paulsen, G. De Munno, J. Faus, F. Lloret, M. Julve, S. Nellutla, J. Krzystek
- [MP-044]** Structural Study of Vanadium Tetracyanoethylene  
D.M. Pajeroski, C.M. Kareis, J.L. Arthur, K.L. Page, J.L. Miller, J.W. Lynn
- [MP-045]** Syntheses and Magnetic Properties of Stable-radicals-substituted  $\pi$ -Donor Molecules  
S. Suzuki, A. Nagata, M. Kozaki, D. Shiomi, K. Sato, T. Takui, K. Okada
- [MP-046]** Pulsed Electron Spin Nutation Spectroscopy of Weakly Exchanged-Coupled Biradicals: A General Theoretical Approach to the Transition Moment Spectroscopy and Determination of the Spin Dipolar Interaction  
Kazuki Ayabe, Kazunobu Sato, Shinsuke Nishida, Tomoaki Ise, Shigeaki Nakazawa, Kenji Sugisaki, Yasushi Morita, Kazuo Toyota, Daisuke Shiomi, Masahiro Kitagawa, Takeji Takui
- [MP-047]** Molecular Spin Manipulation of Isotope-labeled Diphenylnitroxides in Single Crystals by a Pulsed ELDOR-NMR Technique  
A. Tanaka, K. Sato, T. Yoshino, S. Nishida, S. Nakazawa, R. Rahimi, K. Toyota, D. Shiomi, Y. Morita, M. Kitagawa, T. Takui
- [MP-048]** Syntheses and Magnetic Properties of Nitronyl-Nitroxides with an Adjacent Chiral Group  
R. Tanimoto, S. Suzuki, M. Kozaki, D. Shiomi, K. Sato, T. Takui, K. Okada



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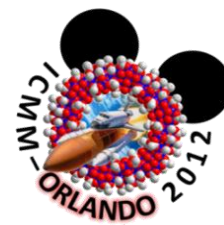
- [MP-049]** Spin Dynamics and Photoexcited High-Spin State of Functionality  $\pi$ -Radical via Quantum-Mixed State  
Yoshio Teki, Takafumi Matsumoto, Yohei Takemoto, Yusuke Kawanaka
- [MP-050]** DFT Studies of Weak Magnetic Interactions between Oxovanadiums in  $(VO)_n$  Magnetic Rings  
Y. Kitagawa, N. Yasuda, H. Hatake, T. Matsui, T. Kawakami, S. Yamanaka, M. Nihei, H. Oshio, M. Okumura, K. Yamaguchi
- [MP-051]** Degeneracy Lifting of Spin Ground States in Cubic-Symmetry Single-Molecule Magnets  
M. Nakano
- [MP-052]** Ordered Chiral *yfh* Type Magnetic Net in Azido System with 2,6-Pyridinedicarboxylate as Co-ligand  
Qian Yang, Jiong-Peng Zhao, Xian-He Bu
- [MP-053]** An Endohedral Single-ion Magnet with Long Relaxation Times:  $DySc_2N@C_{80}$   
R. Westerström, J. Dreiser, C. Piamonteze, R. Stania, F. Matsui, S. Weyeneth, S. Rusponi, H. Brune, F. Nolting, S. Yang, M. Muntwiler, A. Popov, L. Dunsch, T. Greber
- [MP-054]** Two Anthracene-Based Mononuclear Dysprosium Complexes: Slow Magnetic Relaxation Behaviors and Fluorescent Properties  
D.-K. Cao, Z.-S. Cai, S.-S. Bao, L.-M. Zheng
- [MP-055]** How Large is the Zero-Field Splitting in Co(II) Complexes?  
L. Dlháň, M. Rábeková, R. Boča
- [MP-056]** Bimetallic Ferrimagnetic Molecular Nanotube Based on  $[Fe(bpy)(CN)_4]^-$  unit  
Xiao-Jiao Song, You Song
- [MP-057]** Azido-Bridged Lanthanides: Structures and Magnetic Properties  
X. C. Huang, X. Y. Wang
- [MP-058]** Single-Ion Anisotropy in  $Ti^{III}$  Building Blocks  
Andrew Brown, Andrey Prosvirin, and Kim R. Dunbar

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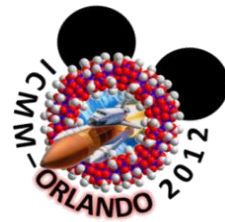
- [MP-059]** Investigating the Role of 4d and 5d Trivalent Hexacyanometallate Anions in Analogs of Prussian Blue and Prussian Blue-type Magnetic Materials  
C. Sanders, A. Prosvirin, C. Achim, K. Dunbar
- [MP-060]** Exploring the Magnetic Coupling Capabilities of a Tetrazine-Based Radical Ligand  
T. J. Woods, J. V. Frank, A. Prosvirin, K. R. Dunbar
- [MP-061]** Magnetic Coupling in Metal-Organic Frameworks through 7,7,8,8-Tetracyanoquinodimethane Dianion  
Xuan Zhang, Lei Sun, Andrey V. Prosvirin, Kim R. Dunbar
- [MP-062]** A series of One Dimensional Compounds Based on the Hexacyanomanganate(III) Anion Including a Single Chain Magnet  
Hanhua Zhao, Andrew Prosvirin and Kim R. Dunbar
- [MP-063]** Exploring Spintronic Device Applications for the Organic Magnet,  $V[TCNE]_{x-2}$   
M. Harberts, B. Li, C. Kao, H. Yu, J. Yoo, Y. Lu, V. Prigodin, E. Johnston-Halperin, A. Epstein
- [MP-064]** Hexachlororhenate(IV) Salts of cationic salicylamidoxime-based  $Mn^{III}_6$  Single-Molecule Magnets  
J. Martínez-Lillo, E. K. Brechin
- [MP-065]** Magnetic and EPR Studies on Radical-Lanthanide-Based Single-Molecule Magnets  
Takayuki Ishida, Rina Murakami, Takuya Kanetomo, Michael L. Baker, Shunsuke Yoshii, Hiroyuki Nojiri
- [MP-066]** Crystal Structures and Magnetic Properties of Two-dimensional Copper(II) Complexes Bridged with Pyrazine-2-carboxamide  
Mizuki Yoshida, Takashi Shimada, Takayuki Ishida, Tamizo Kogane
- [MP-067]** Observation of High Curie Temperature in a Cyano-bridged V-Nb Bimetallic Assembly  
K. Imoto, M. Takemura, H. Tokoro, S. Ohkoshi
- [MP-068]** Electric-Field Manipulation of the Spin State in Transparent pH-Sensitive Spin-Crossover Complex,  $[Fe^{II}(diAMsar)]@Nafion$   
H. Kamebuchi, T. Jo, A. Okazawa, M. Enomoto, N. Kojima

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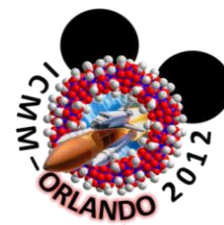
- [MP-069]** Chemical Modification of 4f–3d Heterometallic [Ln<sub>2</sub>Ni]-type Single-Molecule Magnets  
A. Okazawa, T. Ishida, H. Nojiri, S. Yoshii, N. Kojima
- [MP-070]** Peculiarity in the Spin-crossover Process in Model Heme Complexes  
Y. Ohgo, K. Takahashi, M. Takahashi, Y. Namatame, H. Konaka, H. Mori, S. Neya, D. Hashizume
- [MP-071]** XMCD Investigation of Charge Transfer Induced Spin Crossover in a One Dimensional Fe-Co Complex  
M. L. Baker, K. Tazoe, T. Nakamura, Y. Narumi, H. Oshio, H. Nojiri
- [MP-072]** Magnetic Properties of Tb(III)-Cd(II)-Phthalocyaninato Complexes  
Y. Horii, K. Katoh, M. Yamashita
- [MP-073]** Synthesis and Magnetic Study of Novel Mononuclear Re(II) Complexes  
M. Pacheco, A. Cuevas, J. González-Platas, M. Julve, F. Lloret, C. Kremer
- [MP-074]** Structure and Magnetic Behaviour of Co(II) and Ni(II) Tetranuclear Cubane-Like Complexes  
C. Pejo, G. Pereira, M. Novak, M. Vaz, F. Lloret, R. Chiozzone, R. González
- [MP-075]** General Research on the Electronic, Band Structures and the Magnetic Properties of the Sr<sub>2</sub>DyRuO<sub>6</sub>  
C. A. Triana, D. A. Landínez Téllez, J. Roa-Rojas
- [MP-076]** Magneto-structural Study of the Three-dimensional 2,5-pyrazinedicarboxylate-containing Nd(III) Complex  
D. O. Reis, M. V. Marinho, W. X. C. Oliveira, H. O. Stumpf, C. B. Pinheiro, J. Vallejo, F. Lloret, M. Julve
- [MP-077]** Magnetic Properties of a 2D Oxamato-Based Magnet Containing Imidazolium and its SWCNT-Composite  
W. D. Pim, G. A. M. Sáfar, W. P. Barros, K. R. Pirota, C. L. M. Pereira, H. O. Stumpf
- [MP-078]** Volatile Fe<sub>4</sub> Single Molecule Magnets with Fluorinated Ligands  
Luca Rigamonti, Roberta Sessoli, Andrea Cornia, Marco Piccioli, Luigi Malavolti

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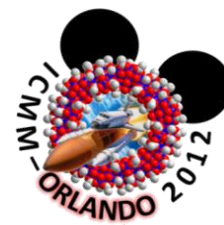
- [MP-079]** First Manganese Complexes with 2-Acetonitrilepyridyloximate: Synthesis and Magnetic Study  
J. Esteban, A. Escuer, B. Cordero, L. Alcázar, M. Font-Bardia, V. Tangoulis
- [MP-080]** Magnetic Anisotropy and Exchange studies of One-dimensional Co(II) Molecular Chains  
A. Amjad, J. Liu, G. M. Espallargas, M. Shiddiq, J. M. Clemente-Juan, E. del Barco, S. Hill, E. Coronado, M. Evangelisti
- [MP-081]** Exploration of the Berry Phase Interference in Low Nuclearity Single-molecule Magnets  
H. M. Quddusi, J. Liu, P. L. Feng, K. J. Heroux, E. del Barco, S. Hill, D. N. Hendrickson
- [MP-082]** Electronic Transport of Mn<sup>4+</sup> Single-molecule Magnet in a Single-Electron Transistor  
A. Rodriguez, S. Singh, F. Haque, E. del Barco, T. Nguyen, G. Christou
- [MP-083]** Electronic Structure Characterization of a Series of [Mn<sub>3</sub>O]<sup>7+</sup> Core Single Molecule Magnets by Inelastic Neutron scattering  
M. Sigrist, H. Mutka, K. S. Pedersen, M. Schau-Magnussen, J. Bendix
- [MP-084]** High Nuclearity Clusters and Single Molecule Magnets from the combination of Diols and Oxime Ligands  
M. Manoli, R. Inglis, M. J. Manos, E. K. Brechin, A. J. Tasiopoulos
- [MP-085]** Heterostructured Prussian Blue Analogue Films with Imbedded Nanoparticles Constructed using Langmuir-Blodgett and Sequential Absorption Techniques  
Allison L. Garnsey, Marcus Peprah, Mark W. Meisel, Daniel R. Talham
- [MP-086]** Magnetic Response of MnF(salen) at Low Temperatures and in High Magnetic Fields: a New S = 2 Haldane System  
Ju-Hyun Park, Olivia N. Risset, Muhandis Shiddiq, Marcus K. Peprah, Elisabeth S. Knowles, Christopher C. Beedle, Matthieu F. Dumont, Stephen Hill, Daniel R. Talham, Mark W. Meisel
- [MP-087]** Deposition of Photomagnetic CoFe Prussian Blue Analogue Films on Thin LPCMO Substrates  
M. F. Dumont, P.A. Quintero, D. M. Grant, E. S. Knowles, H. J. Jeon, A. Biswas, D. R. Talham, M. W. Meisel

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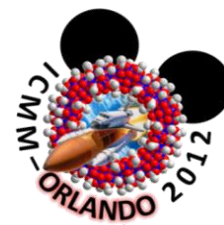
- [MP-088]** Effects of Pressure on the Magnetic Properties of CuFe Prussian Blue Analogue Heterostructures  
M. K. Peprah, C. H. Li, D. R. Talham, M. W. Meisel
- [MP-089]** Attempts to Assess the Dimensionality-Property Relationship in Single-Molecule Magnets  
C. McDaniel, A. Castro, C. Papatriantafyllopoulou, A. M. Mowson, A. J. Tasiopoulos, G. Christou, C. Lampropoulos
- [MP-090]** Magnetic Clusters as Analyte Recognition Compounds in Sensors  
J. Henthorn, N. Mishra, J. S. Huebner, C. Lampropoulos
- [MP-091]** Structural and Magnetic Properties of Four Layered Dicyanamide-Based Coordination Polymers:  $M\{N(CN)_2\}_2(DMSO)_2$ , [M = Mn, Fe, Co, Ni]  
Divya Rajan, Pedro A. Quintero, Khalil A. Abboud, Mark W. Meisel, Daniel R. Talham
- [MP-092]** The Magnetocaloric Effect of Lanthanide-based Materials  
J. W. Sharples, F. Tuna, R. Pritchard, D. Collison
- [MP-093]** Intramolecular Electron-transfer-coupled Spin Transition in a CoFe Square Controlled by Chemical Modifications  
Y. Sekine, M. Nihei, H. Oshio
- [MP-094]** EPR Studies of the Coordination-Polymer  $[CuF_2(H_2O)_2(pyrazine)]$  Under Pressure  
C. C. Beedle, C. Morien, A. Prescimone, S. Tozer, J. Manson, J. A. Schlueter, E. K. Brechin, S. Hill
- [MP-095]** Pressure-dependence of Magnetic Anisotropy in Heavy-atom Organic Radical Ferromagnets  
C.C. Beedle, K. Thirunavukkuarasu, S.M. Winter, A.E. Kovalev, S. Tozer, S. Hill, R.T. Oakley
- [MP-096]** Cavity Perturbation Technique: The Effects of Crystal Size on the EPR Spectra of  $Fe_8$   
M. Shiddiq, J. Liu, C. C. Beedle, S. Hill
- [MP-097]** Pressure-induced Spin Crossover in a Prussian Blue Analogue  
G. J. Halder, K. W. Chapman, P. J. Chupas, J. A. Schlueter, A. M. Dos Santos

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- [MP-098]** A Rare Behavior in Fe<sup>III</sup> Complexes: LIESST Effect in Oxalate-based Multifunctional Materials. Photophysical and Magnetic Studies  
M. López-Jordà, M. Clemente-León, E. Coronado, A. Tissot, A. Hauser, C. Desplanches, H. Wang, J.-F. Létard
- [MP-099]** Toward to Spin Phase Control in Macroscopic Scale by Chiral Helical Magnetic Structures  
K. Inoue, J. Kishine, J. Akimitsu, Y. Togawa, S. Nishihara, S. Mori, Y. Kosaka, M. Miyagawa
- [MP-100]** Role of Intrinsic Stresses on Critical Spin-Crossover Diagram in Molecular Magnet: Monte Carlo Simulation  
Y. Laosiritaworn
- [MP-101]** Optimization of Optical Properties of Annealed Cadmium Selenide (CdSe) Thin Films Grown by Chemical Bath Deposition Technique  
E.I. Ugwu, H.U. Igwe, D.U Onah
- [MP-102]** The Structure and Magnetic Properties of a 3d-4f Co<sup>III</sup><sub>2</sub>Dy<sup>III</sup><sub>4</sub> Cluster  
Siang-Yu Jhan, Siang-Hua Huang, Chen-I Yang, Hui-Lien Tsai

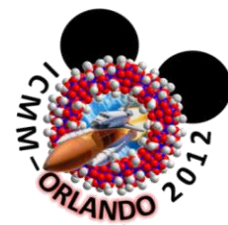
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- [TuP-001] Self-Assemblies of Oxovanadium(IV) and Nitridochromium(V) Complexes with Tetradentate Schiff Base Ligands and Their Intermolecular Magnetic Interactions  
N. Yoshioka, N. Matsuoka, Y. Watanabe, C. Maeda
- [TuP-002] Slow-Magnetic Relaxation in a Ln<sub>2</sub>-based Coordination Polymer  
Zih-Rong Jhu, Gene-Hsiang Lee, Shie-Ming Peng, Chen-I Yang
- [TuP-003] On the Possibility of Detecting Different Deca-Methyl Ferricenium Based Conformers Via Nuclear Gamma Resonance Spectra of Slowly Relaxing or Long Range Ordered Molecular Magnetic Phases  
William M. Reiff, Joel S. Miller
- [TuP-004] Magnetic Dipolar Order and Quantum Phase Transition in an Fe<sub>8</sub> SMM Crystal  
E. Burzuri, F. Luis, B. Barbara, R. Ballou, E. Ressouche, O. Montero, J. Campo, S. Maegawa
- [TuP-005] Transmission Band Gaps in Quasiperiodic Magnonic Crystals  
P.W. Mauriz, U.L. Fulco
- [TuP-006] Full Geometry Optimizations of XMn<sub>4</sub>O<sub>5</sub> (X=Mg, Ca, Sr, Ba, Zn) Clusters by the UB3LYP Method. Substitution Effects of the Ca Ion with Other Divalent Ions in the Active Site of Water Splitting Reaction  
K. Yamaguchi, H. Isobe, M. Shoji, S. Yamanaka, Y. Umena, K. Kawakami, N. Kamiya, J. R. Shen, T. Konno, M. Okumura
- [TuP-007] A Tetrakaidecanuclear Manganese Complex Exhibits Slow Magnetic Relaxation Behaviors  
Siang-Hua Huang, Chen-I Yang, Siang-Yu Jhan, Hui-Lien Tsai
- [TuP-008] X-ray Structural Studies of Photomagnetic Prussian Blue Analogue Heterostructures  
D. M. Pajerowski, B. Ravel, C. H. Lib, M. F. Dumont, D. R. Talham
- [TuP-009] ESR Study of Light-Induced Valence Tautomerism of a Co Mononuclear Complex: [Co(phen)(3,5-DTBSQ) (3,5-DTBCat)]  
Yoshio Teki, Atsushi Tashiro, Shinji Kanegawa, Osamu Sato

POSTER SESSION TUP

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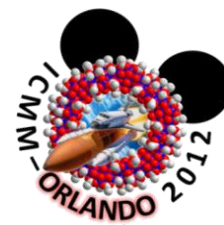


- [TuP-010] A New Isomer of the Single Molecule Magnet  $Mn_{12}O_{12}(CH_3COO)_{16}(H_2O)_4$   
Hanhua Zhao, Andrew Prosvirin, Kim R. Dunbar
- [TuP-011] Spintronics Properties of Graphene Nanoflakes  
E.L. Albuquerque, U.L. Fulco, L.R da Silva
- [TuP-012] Magnetic Polaritons in Metamagnet Nanostructures  
U.L. Fulco, E.L. Albuquerque, P.W. Mauriz
- [TuP-013] Molecular Chains Containing Bis-  $\beta$ -Diketone as Ligands  
Leoní A. Barrios, Jorge Salinas, Ivana Borilovic, Guillem Aromí, Olivier Roubeau
- [TuP-014] Pressure-Induced Ferromagnetic Interactions in  $Mn(N(CN)_2)_2$   
P. A. Quintero, D. Rajan, M. K. Peprah, M. W. Meisel, D. R. Talham
- [TuP-015] EPR Studies of CN bridged  $Fe_2^{III}Ni^{II}$  Complexes and Their  $Fe^{III}$  Mononuclear Building-Blocks  
C.C. Beedle, A. E. Kovalev, Y.-Z. Zhang, S. M. Holmes, S. Hill
- [TuP-016] EPR Studies on a Holmium Based Single-Molecule Magnet  
K. Thirunavukkuarasu, S. Ghosh, M. Muhandis, S. Datta, L. Friend, S. Cardona-Serra, E. Coronado, S. Hill
- [TuP-017] High-Field Electron Paramagnetic Resonance Studies of Anisotropic Molecular Magnets  
Junjie Liu, Xiaowen Feng, Joseph Zadrozny, Luke Batchelor, Talal Mallah, Jeffrey Long, Stephen Hill
- [TuP-018] Direct Observation of Large Zero Field Splitting in a Tetrahedral  $Ni^{(II)}$  Complex  
S.-D. Jiang, S. Haas, L. Bogani, M. Dressel, N. Levesanos, D. Maganas, P. Kyritsis
- [TuP-019] Hydrogen Bonding and Pressure Dependent Magnetic Behavior in  $CuF_2(H_2O)_2(3-CIPyridine)$   
S. H. Lapidus, G. Halder, A. Clement, J. Schlueter
- [TuP-020] Modulating Relaxation Dynamics of Lanthanide Single-Molecule Magnets  
J. Tang

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- [TuP-021] Computational Design of Novel Spintronic Materials  
Zhijian Wu, Jing Wang
- [TuP-022] A Lanthanide Single-Ion Magnet  $[\text{Hex}_4\text{N}][\text{Dy}(\text{DBM})_4]$  with Multiple Relaxation Controlled by External Field  
Wen-Bin Sun, Bing Yan, Bing-Wu Wang, Zhe-Ming Wang, Jun-Hua Jia, Song Gao
- [TuP-023] Cobalt-Formate Frameworks of Binodal  $(4^{12}\cdot 6^3)(4^9\cdot 6^6)_n$  ( $n = 1, 2, 3$ ) Topologies, Templated by Protonated Linear Polyamines, Showing Weak Ferromagnetism and Slow Dielectric Relaxation  
Z.-M. Wang, R. Shang, K.-L. Hu, Z.-C. Jiang, S. Gao
- [TuP-024] Probing Anion Dependence of Homo- and Hetero-armed Tripodal Iron Spin-crossover Complexes  
C.M. Klug, S. R. Fiedler, A. M. McDaniel, M. P. Shores
- [TuP-025] A Diamond Interpenetrated 3D Network Based on Cobalt-Citrate Cubanes with SMM Behavior  
Elena Forcén-Vázquez, Javier Campo, Larry R. Falvello, Fernando Palacio, Cristina Sáenz de Pipaón, Milagros Tomás
- [TuP-026] Guest-Dependent Spin Crossover in a Hofmann type Coordination Polymer  $\text{Fe}(4,4'\text{-bipyridyl})[\text{Au}(\text{CN})_2]_2 \cdot n\text{Guest}$   
Kazuki Yoshida, Daisuke Akahoshi, Toshiaki Saito, Takafumi Kitazawa
- [TuP-027] Thermodynamical Analysis for the Charge-Transfer-induced Spin Transition in a Co-W Bimetal Assembly  
Y. Miyamoto, N. Ozaki, H. Tokoro, S. Ohkoshi
- [TuP-028] Photomagnetic Phenomenon in Co-W Bimetal Assembly with a Large Coercive Field and a High Curie Temperature  
N. Ozaki, H. Tokoro, S. Ohkoshi
- [TuP-029] Cyano-Bridged Bimetal Assemblies Exhibiting Novel Magnetic Functionalities  
S. Ohkoshi
- [TuP-030] About the Hysteresis of Terbium(III) bis(phthalocyaninato) in Different Environments  
L. Malavolti, A. Hofmann, M. Mannini, G. Campo, F. Pineider, Z. Salman, R. Sessoli

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# Tuesday, October 9



- [TuP-031] Two Novel Copper(II) Clusters with Di-2-pyridylketone  
A. Acosta, P. Rosa, G.E. Kostakis, A.K Powell, F. Lloret, R. González, R. Chiozzone
- [TuP-032] The Hybrid Inorganic-organic Coordination Networks Based on  $[M^V(CN)_8]^{3-}$  (M=Mo,W) and  $Cu^{II}$  Complex with Pyrazine  
Tomasz Korzeniak, Olaf Stefańczyk, Robert Podgajny, Michał Rams, Marcin Koziół, Wiesław Łasocha, Dariusz A. Zając, Barbara Sieklucka
- [TuP-033] On-Chip, Low Temperature Setup for Magnetic Resonance Studies  
M.Martens, K.Serniak, S. Bertaina, and I. Chiorescu
- [TuP-034] Facile Functionalization of Fe(II) Spin-crossover Complexes  
Hoa Phan, Michael Shatruk
- [TuP-035] Electrically Controlled Superparamagnetism Induced by Spin-transport  
M. Misiorny, M. Hell, M. Wegewijs
- [TuP-036] Temperature-Dependent Intramolecular Exchange Interactions of *p*-Phenylenebis (nitronylnitroxide) Biradicals in the Solid State  
Y. Kanzaki, D. Shiomi, K. Sato, T. Takui
- [TuP-037] Effect of Hydrogen Bonds on Magnetic Interaction of Oxidized [2Fe-2S] Ferredoxin Active Site  
N. Yasuda, H. Hatake, Y. Kitagawa, T. Kawakami, S. Yamanaka, M. Okumura
- [TuP-038] Theoretical Study of Alkali Metal, Copper, Silver, and Gold Clusters: Stable Structures and Linear Response Functions  
K. Ueda, S. Yamanaka, Y. Kitagawa, K. Kawakami, K. Yamaguchi, H. Nakamura, M. Okumura
- [TuP-039] Slow Relaxation Processes of Unique Triple-Decker Sandwich  $Dy_2$  Complex and 1D Spiral  $Dy_n$  Coordination Polymer  
Jing Zhu, Guang-Ming Li, Guang-Feng Hou, Peng Chen, Peng-Fei Yan
- [TuP-040] Conducting and Magnetic Properties of Assemblies of Gold Nano-Particles Stabilized by Phthalocyanine Double Decker Type Metal Complexes with Rare-Earth Metals (M = Tb,Dy,Er)  
K. Kubo, M. Araki, Y. Noda, S. Noro, T. Akutagawa, T. Nakamura

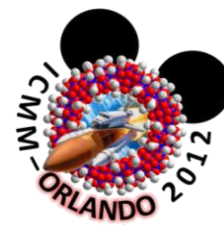
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## Tuesday, October 9



- [TuP-041] A New Family of Carbonato-bridged  $\text{Ln}^{\text{III}}_2$  Compounds with Slow Magnetic Relaxation  
I. Castro, J. Vallejo, F.R. Fortea-Pérez, R. Ruiz-García, J. Cano, M. Julve, F. Lloret, O. Fabelo, E. Pardo
- [TuP-042] Field-Induced Slow Magnetic Relaxation in a Six-Coordinated Mononuclear Cobalt(II) Complex with a Positive Anisotropy  
Julia Vallejo, Isabel Castro, Rafael Ruiz-García, Joan Cano, Miguel Julve, Francesc Lloret, Giovanni De Munno, Wolfgang Wernsdorfer, Emilio Pardo
- [TuP-043] Theoretical Perspective on the Magnetic Coupling of {3d-4f} and {2p-4f} Molecular Nano Magnets  
Saurabh K. Singh, T. Rajeshkumar, T. Gupta, G. Rajaraman
- [TuP-044] Influence of Counter Cations on the Magnetization Relaxation Dynamics of  $[\text{Mn}^{\text{III}}_{20-x}\text{Mn}^{\text{II}}_x]^{n-}$  (where X = 2, or 4 or 6) Clusters  
Maheswaran Shanmugam, Apoorva Upadhyay, Guillaume Chastanet, Roberta Sessoli, Wolfgang Wernsdorfer, Richard E. P. Winpenny
- [TuP-045] Synthesis, Structure and Magnetic Properties of Cobalt(II) Di-nuclear Complexes Bridged by Verdazyl Radical Ligand  
S. Kanegawa, S. Akiyoshi, S. Kang, O. Sato
- [TuP-046] Controlling Conductivity in Magnetic Conductors of Cu-Ox Layer  
B. Zhang, D. Zhu
- [TuP-047] Paramagnetic Building Units for CuAAC Click Reactions  
C. Plenck, E. Rentschler
- [TuP-048] Crucial Role of Paramagnetic Ligands for Magnetostructural Anomalies in Copper-Nitroxide Complexes  
E. Tretyakov, A. Suvorova, S. Tolstikov, G. Romanenko, A. Bogomyakov, S. Veber, M. Fedin, V. Ovcharenko
- [TuP-049] Flexible Metallocrowns for a Rational Synthesis of SMMs  
P. Happ, E. Rentschler

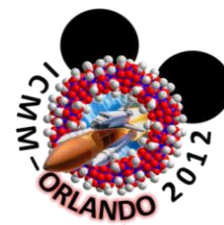
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- [TuP-050]** Reversible Crystal-To-Amorphous Structural Transformation In the Co(II) Complex With a Single Azide End-On Bridge: Coexistent Color and Magnetic Alterations  
Kwang Soo Lim, Dae Won Ryu, Chang Seop Hong
- [TuP-051]** Photomagnetism in Copper Octacyanomolybdate Molecular Compounds: A Neutron Diffraction Investigation  
K. Ridier, N. Bridonneau, V. Marvaud, A. Hammerschmied, B. Gillon, G. Chaboussant
- [TuP-052]** Molecular Magnetic Anisotropy and Polarized Neutron Diffraction: The Local Susceptibility Tensor Approach  
Dominique Luneau, Ana Borta, Olga Iasco, Béatrice Gillon, Arsen Gukasov, Karl Ridier, Hiroshi Sakiyama, Masahiro Mikuriya
- [TuP-053]** Tuning of Magnetic Exchange Interactions of Antiferromagnetically Coupled Biradicals by Changing Radical Moiety for Quantum Computing  
Prince Ravat, Martin Baumgarten
- [TuP-054]** Controlling Interchain Interaction in Weak-Ferromagnet  $[\text{CrCyclam}(\text{C}\equiv\text{C-MeEDT-TTF})_2](\text{Anion})_2(\text{Solvent1})(\text{Solvent2})_2$   
J. Nishijo
- [TuP-055]** Anion Dependent Redox Changes in Iron and Cobalt Nitronyl Nitroxides  
I. A. Gass, C. J. Gartshore, D. W. Lupton, B. Moubaraki, A. Nefady, A. M. Bond, J. F. Boas, J. D. Cashion, G. Rajaraman, C. Milsman, K. Wieghardt, K. S. Murray
- [TuP-056]** Electrochemically-Controlled Magnetism of Prussian Blue Analogues  
T. Yamada, K. Morita, H. Yoshikawa, K. Awaga
- [TuP-057]** Single-Molecule Magnetism of the Mononuclear Co-based Complexes  
Gao-Feng Wang, You Song, Xue-Tai Chen
- [TuP-058]** The O-P-O Bridged  $\text{Mn}^{\text{III}}$ -Salen Compounds: From Single-Molecule Magnet to Single-Chain Magnet?  
Ting-Ting Wang, Song-Song Bao, Ze-Hua Zheng, Zhong-Li Xu, Li-Min Zheng

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- [TuP-059] Topotactic Solid State Redox of a Cyano-bridged Magnet  
M. Okubo, K. Kagesawa, Y. Mizuno, D. Asakura, H. S. Zhou, A. Okazawa, N. Kojima
- [TuP-060] Double Quantum Transitions of Ground-state Triplet Iminonitroxide-nitroxide as Studied by Pulsed ESR Nutation Spectroscopy  
Shigeaki Nakazawa, Moeko Kawamori, Kenji Sugisaki, Kazuo Toyota, Daisuke Shiomi, Kazunobu Sato, Takanori Furui, Masato Kuratsu, Shuichi Suzuki, Masatoshi Kozaki, Keiji Okada, Takeji Takui
- [TuP-061] Theoretical Studies on the Interaction of Oxygen Molecule to Graphene and Aromatic Hydrocarbons  
Keiji Kinoshita, Akira Ito, Shohei Yoshimura, Takashi Kawakami, Yasutaka Kitagawa, Shusuke Yamanaka, Mitsutaka Okumura
- [TuP-062] Proton-induced Switching of the Single Molecule Magnetic Properties of a Porphyrin Based Tb<sup>III</sup> Double-decker Complex  
D. Tanaka, T. Inose, H. Tanaka, S Lee, N. Ishikawa, T. Ogawa
- [TuP-063] Field-Induced Slow Magnetic Relaxation of Isolated Nd(III) ion  
Li-Hui Jia, Yan-Jun Wang, Bing-Wu Wang, Song Gao
- [TuP-064] Structures and Magnetic Properties of Transition Metal Complexes of Radical Anion Ligand tdpO<sub>2</sub>  
Y. Shuku, R. Suizu, K. Awaga
- [TuP-065] Magnetic Deposits in Human Organs  
R. Boča, L. Dlháň, M. Kopáni, M. Miglierini
- [TuP-066] Spatially Resolved Magnetization Tunneling in the Fe<sub>8</sub> Nano-Magnet  
Tom Leviant, Eli Zeldov, Yuri Myasoedov, Amit Keren
- [TuP-067] Development of Metal-TCNQ Conductors and Magnets: (TCNQ=7,7,8,8-tetracyanoquinodimethane)  
Zhongyue Zhang, Hanhua Zhao, Kim R. Dunbar

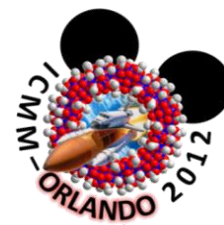
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## Tuesday, October 9



- [TuP-068] Magnetic and EPR Studies of  $S = 3$  nickel(II) Triangular Complexes Having  $\mu_3$ -hydroxo- and  $\mu_3$ -halogeno-bridges  
Yumi Ida, Keiko Miyamoto, Ernst Horn, Michael L. Baker, Hiroyuki Nojiri, Takayuki Ishida
- [TuP-069] Multilayered Networks Built from Polyoxometalates and Cyanometalates  
J-D. Compain, K. Nakabayashi, S. Ohkoshi
- [TuP-070] Two-dimensional Cobalt-octacyanotungsten Bimetallic Assemblies  
K. Nakabayashi, D. Takahashi, T. Kinoshita, Shin-ichi Ohkoshi
- [TuP-071] 2-D Manganese(II) Octacyanonitobate(IV) Bimetallic Assembly with 3-Hydroxypyridine as an Organic Ligand  
D. Takahashi, K. Nakabayashi, S. Tanaka, S. Ohkoshi
- [TuP-072] Optical Response in CuMo Bimetallic Assembly Around Room Temperature  
Y. Umeta, H. Tokoro, S. Ohkoshi
- [TuP-073] Cation Size Effect on Photomagnetism and Charge Transfer Phase Transition of Iron Mixed-valence Complexes with Spiropyrans  
J. Yoshida, N. Kida, A. Okazawa N. Kojima
- [TuP-074] Magneto-Structural Study of a Pd<sup>II</sup>Co<sup>II</sup> Chain Compound  
W. X. C. Oliveira, M. A. Ribeiro, H. O. Stumpf, C. B. Pinheiro, W. C. Nunes, M. Julve, Francesc Lloret, Y. Journaux, C. L. M. Pereira
- [TuP-075] Flattened-tetrahedral Weak-field Co<sup>II</sup> Complexes: Candidates for Single-ion Based Single-molecule Magnets?  
J. Titiš, M. Idešicová, R. Boča
- [TuP-076] A New Oxamate-containing Cobalt(II) Chain: Synthesis, Crystal Structure and Magnetic Properties  
L. H. G. Kalinke, T. L. Oliveira, D. C. C. Gomes, F. T. Martins, J. A. Ellena, J. Ferrando, M. Julve, F. Lloret

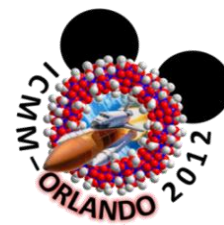
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- [TuP-077] Synthesis, Crystal Structure and Magnetic Properties of the Helical Oxalate-bridged Copper(II) Chain  $\{[(\text{CH}_3)_4\text{N}]_2[\text{Cu}(\text{C}_2\text{O}_4)_2] \cdot \text{H}_2\text{O}\}_n$   
Ramon S. Vilela, Thiago L. Oliveira, Felipe T. Martins, Javier A. Ellena, Francesc Lloret, Miguel Julve, Danielle Cangussu
- [TuP-078] A Two-Dimensional Oxamate and Oxalate-Bridged  $\text{Cu}^{\text{II}}\text{Mn}^{\text{II}}$  Motif: Crystal Structure and Magnetic Properties  
T. R. G. Simões, M. V. Marinho, M. A. Ribeiro, C. L. M. Pereira, C. B. Pinheiro, Miguel Julve, F. C. Machado, H. O. Stumpf
- [TuP-079] Fluorescent Nanomagnets: Towards New Nanostructured Materials  
Daniel Reta Mañeru, E. Carolina Sañudo
- [TuP-080] Calculating Magnetic Anisotropy Parameters  
J. Cano
- [TuP-081] Photomagnetic Effect in Cyanide-bridged Molecular Squares  
A. Mondal, R. Lescouëzec, Y. Li, P. Herson, M. Seuleiman, M-L. Boillot, E. Riviere, L. Rechinat, A. Bousseksou, M. Julve
- [TuP-082] A Novel Series of Mononuclear Spin Crossover Iron(III) and Manganese(III) Complexes  
M. Harris, G. G. Morgan, H. Müller-Bunz, B. Gildea
- [TuP-083] Large Spin-Reversal Barriers in Molecules that Contain a Single Transition-Metal Ion  
J. M. Zadrozny, M. A. Atanasov, A. M. Bryan, C.-Y. Lin, B. D. Rekker, P. P. Power, F. Neese, J. R. Long
- [TuP-084] Single-electron Transport and Correlations in a Quantum-dot Molecule  
Javier Romero, Eduardo R. Mucciolo
- [TuP-085] Linking  $[\text{M}^{\text{III}}_3]$  Triangles with “Double Headed” Phenolic Oximes  
K. Mason, J. Chang, A. Prescimone, E. Garlatti, S. Carretta, P. A. Tasker, E. K. Brechin

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- [TuP-086]** Nickel/Lanthanide Single-Molecule Magnets Derived from a Metal Ion-Promoted Ligand Reduction  
C.G. Efthymiou, C. Papatriantafyllopoulou, T. Stamatatos, W. Wernsdorfer, G. Christou, A. J. Tasiopoulos, S. P. Perlepes
- [TuP-087]** Interchangeable  $\text{Ln}^{\text{III}}\text{M}^{\text{II}}_8$  Compounds as Molecular Refrigerants  
T. N. Hooper, J. Schnack, S. Piligkos, M. Evangelisti, E. K. Brechin
- [TuP-088]** Supramolecular Assemblies Constructed From Molecular Nanomagnets  
R. Inglis, S. Sanz, A. D. Katsenis, G. S. Papaefstathiou, P. Lusby, E. K. Brechin
- [TuP-089]** Pressure-Driven Orbital Reorientations and Coordination-Sphere Reconstructions in  $[\text{CuF}_2(\text{H}_2\text{O})_2(\text{pyz})]$   
A. Prescimone, S. Parsons, E. K. Brechin, S. Hill J. Schlueter
- [TuP-090]** Calixarene[4]-supported  $\text{Ln}^{\text{III}}$  clusters  
S. Sanz, R. McIntosh, C. Beavers, S. Teat, M. Evangelisti, E. Brechin, S. Dalgarno
- [TuP-091]** Tuning the Physical Properties of  $\text{Rb}_y\text{Co}_x[\text{Fe}(\text{CN})_6]_z \cdot n \text{H}_2\text{O}$  Prussian Blue Analogues with Surfactant Coatings  
Matthew J. Andrus, Katherine A. Somodi, Pedro A. Quintero, Khalil A. Abboud, Mark Meisel, Daniel R. Talham
- [TuP-092]** Solvent Induced Solid-Solid Phase Transitions in Layered-Perovskite Compounds  
Caue Favero Ferreira, Daniel R. Talham
- [TuP-093]** Thin Film Heterostructures of Prussian Blue Analogues and Hofmann-type Porous Coordination Polymers  
Corey R. Gros, Pedro A. Quintero, Mark W. Meisel, Daniel R. Talham
- [TuP-094]**  $\text{RbM}^{\text{II}}[\text{Fe}(\text{CN})_6]$  (M = Co, Ni) Prussian Blue Analogue Hollow Nanocubes: a New Example of a Multilevel Pore System  
Olivia N. Risset, Elisabeth S. Knowles, Shengqian Ma, Mark W. Meisel, Daniel R. Talham

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- [TuP-095] Surface Stabilized Core-Shell Prussian Blue Analogue Nanoparticles Used as Electrode Materials in Li-ion Battery Studies  
Carissa H. Li, Daniel R. Talham
- [TuP-096] Supramolecular Aggregates of Single Molecule Magnets from Bis-oxime Ligands  
Tu N. Nguyen, Wolfgang Wernsdorfer, Khalil. A. Abboud, George Christou
- [TuP-097] A New Family of  $Mn^{III}_8Ln^{III}_4$  Manganese-Lanthanide Single-Molecule Magnets From the Use of 2-(Pyridine-2-yl)propan-2-ol  
Linh Pham, Maria Ghicas, Khalil A. Abboud and George Christou
- [TuP-098] Spin Resolved Measurements of Single Molecular Magnets on Surfaces  
Jens Brede, Régis Decker, Jörg Schwöbel, Andrew Dilullo, Germar Hoffmann, Svetlana Klyatskaya, Mario Ruben, Roland Wiesendanger
- [TuP-099] Cyanide-Bridged Chiral Cage Molecules: High-Spin Clusters and Spin-Transition Phenomena  
T. Shiga, T. Tetsuka, G.N. Newton, M. Nihei, H. Oshio
- [TuP-100] Magnetically Ordered Non-Prussian Blue Structured Manganese(II) Prussian Blue Analogues  
C. M. Kareis, J. S. Miller, S. H. Lapidus, J. H. Her, P. W. Stephens
- [TuP-101] A Strictly Molecular Flexible Crystal as a Robust ON-OFF Switch at Room Temperature  
J. S. Costa, S. Rodriguez, G. A. Craig, O. Roubeau, C. Beavers, S. J. Teat, G. Aromí
- [TuP-102] Controlling Spin in Molecule-Based Magnets  
S. White, P. Pan, W. van Oz, H. Potter
- [TuP-103] Modeling of Thermal-Hysteresis Behavior of Spin-Transition in Molecular Magnet: The Artificial Neural Network Analysis  
Wimalin Laosiritaworn, Yongyut Laosiritaworn

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