



# ECMM2017

6<sup>TH</sup> EUROPEAN CONFERENCE ON  
MOLECULAR MAGNETISM

August 27<sup>th</sup> - 31<sup>st</sup>, 2017 | BUCHAREST (ROMANIA)

## Poster Session II - August 29<sup>th</sup>

### II.1

COMPUTATIONAL STUDY OF SPIN CROSSOVER IN ZEOLITE CAVITY

J. Pavlik, A. Missana, L.M. Lawson Daku and A. Hauser

### II.2

PHOTOMAGNETIC EFFECT IN  $[\text{Cd}(\text{bpy})_2]_4[\text{M}(\text{CN})_8]_2$  ( $M = \text{Mo}, \text{W}$ ) COORDINATION CLUSTERS

R. Jankowski, T. Korzeniak, D. Pinkowicz and B. Sieklucka

### II.3

COBALT CONTAINING CALCIUM APATITES AS A NOVEL SOLID STATE INORGANIC SINGLE ION MAGNETS:  
EFFECT OF APATITE'S ALKALINE EARTH METAL TYPE ON MAGNETIC PROPERTIES

M.A. Zykin, K.A. Babeshkin, M. Jansen and P.E. Kazin

### II.4

FIELD EFFECT TO SLOW MAGNETIC RELAXATION IN A MONONUCLEAR NICKEL(II) COMPLEX

D. Lomjanský, J. Moncol, C. Rajnák, J. Titiš and R. Boča

### II.5

CYANIDO-BRIDGED  $\{\text{Ln}^{\text{III}}\text{W}^{\text{VI}}\}$  HETEROBINUCLEAR COMPLEXES: SYNTHESIS AND MAGNETO-STRUCTURAL STUDY

D. Visinescu, M.-G. Alexandru, S. Shova, F. Lloret and M. Julve

### II.6

EXPLOITING THE ANION- $\pi$  INTERACTIONS BETWEEN POLYCYANIDOMETALATES AND MULTISITE ANION RECEPTOR  $\text{HAT}(\text{CN})_6$

J. Kobylarczyk, D. Pinkowicz and R. Podgajny

### II.7

NEW MAGNETICALLY ACTIVE HETEROMETALLIC COMPOUNDS BASED ON  $[\text{VO}(\text{CBDC})_2(\text{H}_2\text{O})]^{2-}$  BUILDING BLOCKS AND LANTHANIDE(III) IONS

E. Bazhina, G. Aleksandrov, N. Efimov, A. Bogomyakov, A. Korlyukov, M. Kiskin, A. Sidorov and I. Eremenko

### II.8

PORTRAYING ENTANGLEMENT BETWEEN MOLECULAR QUBITS WITH FOUR-DIMENSIONAL INELASTIC NEUTRON SCATTERING

E. Garlatti, T. Guidi, S. Ansbrosio, P. Santini, G. Amoretti, J. Ollivier, H. Mutka, G. Timco, I.J. Vitorica-Yrezabal, G.F.S. Whitehead, R.E.P. Winpenny and S. Carretta

## II.9

Co<sup>II</sup> AND Ni<sup>II</sup> COORDINATION COMPOUNDS WITH ANIONS OF SUBSTITUTED MALONIC ACIDS: STRUCTURE AND MAGNETIC PROPERTIES

E. Zorina-Tikhonova, A. Sidorov, M. Kiskin, A. Vologzhanina, A. Bogomyakov, N. Efimov, V. Mironov and I. Eremenko

## II.10

NEW Co(II)-Ce(III) HETEROMETALLIC COORDINATION POLYMER PRESENTING A 3D STRUCTURE AND WEAK FERROMAGNETIC BEHAVIOUR

C. Cruz, E. Spodine, D. Venegas-Yazigi and V. Paredes-García

## II.11

STRUCTURAL AND MAGNETIC CHARACTERIZATION OF HETEROMETALLIC COORDINATION POLYMERS BASED ON Cu<sup>II</sup>/Ln<sup>III</sup> AND 4-IMIDAZOLEACRYLIC ACID LIGAND

B. Baldo, N. Audebrand, D. Venegas-Yazigi and V. Paredes-García

## II.12

FERROTOROIDIC GROUND STATE IN A HETEROMETALLIC Cr<sup>III</sup>Dy<sup>III</sup><sub>6</sub> MOLECULAR MAGNET

A. Soncini, K.R. Vignesh, S.K. Langley, W. Wernsdorfer, K.S. Murray and G. Rajaraman

## II.13

CHOLESKY REPRESENTATION OF THE TWO-ELECTRON SPIN-ORBIT INTEGRALS

M. Piccardo and A. Soncini

## II.14

LANTHANOID DIOXOLENE SYSTEMS: MAGNETIC AND PHOTOPHYSICAL INVESTIGATION OF A VERSATILE FAMILY

E. Rousset, M. Piccardo, R.W. Gable, B. Moubaraki, K. Murray, M. Massi, A. Soncini, L. Sorace and C. Boskovic

## II.15 Flash Presentation 15

ROLE OF THE HYPERFINE INTERACTIONS IN THE ISOTOPICALLY ENRICHED SINGLE MOLECULE MAGNET

J. Flores González, L. Ouahab, F. Pointillart and O. Cadot

## II.16 Flash Presentation 16

MOLECULAR MAGNETISM IN LANTHANIDE METAL-ORGANIC FRAMEWORKS

M. Wang, W. Shi and P. Cheng

## II.17 Flash Presentation 17

DRASTIC DECREASE OF ZERO-FIELD SPLITTING IN A COBALT(II) COMPLEX UNDER MAGNETIC DILUTION: A FD-FT THZ-EPR STUDY

I.A. Valuev, S.L. Veber, J. Nehr Korn, M.A. Kiskin, K. Holldack, A. Schnegg and M.V. Fedin

## II.18 Flash Presentation 18

THE EXTENSION OF CYANIDO-BRIDGED CLUSTERS WITH N,O-DONATING LINKERS TOWARDS NEW MULTIMETALL SYSTEMS

K. Bednarek, B. Nowicka, D. Pinkowicz, S. Chorąży, J. Kobylarczyk, R. Podgajny

## II.20 Flash Presentation 19

A MONOMETALLIC LANTHANIDE BIS(METHANEDIIDE) SINGLE MOLECULE MAGNET WITH A LARGE ENERGY BARRIER AND COMPLEX SPIN RELAXATION BEHAVIOUR

A.M. Ariciu, F. Tuna, N.F. Chilton, I.F. Crowe, W. Lewis, A.J. Blake, M. Kern, J. Van Slageren, D. Collison, E.J.L. McInnes, R.E.P. Winpenny and S. Liddle

## II.21 Flash Presentation 20

UNDERSTANDING MOLECULE-SURFACE INTERACTION IN MOLECULAR SPINTRONIC DEVICES

E. Carolina Sañudo, L. Rosado Piquer and J. Dreiser

## II.22 Flash Presentation 21

RADICAL-BRIDGED LANTHANIDE SINGLE-MOLECULE MAGNETS

S. Demir and J. R. Long

## II.23 Flash Presentation 22

NOVEL STRATEGIES TO OBTAIN ROOM TEMPERATURE SENSING MOLECULAR-BASED SPIN CROSSOVER MATERIALS

J. Sanchez Costa, E. Fernandez-Bartolome, L. McCormick and S.J. Teat

### **II.24 Flash Presentation 23**

SUPRAMOLECULAR ARRAYS OF CLUSTERS: FROM  $\text{Cr}_7\text{Ni}$  TO NEW HETEROMETALLIC WHEELS CONTAINING SPIN CENTRES

A.K. Kostopoulos, G.A. Timco, I.J. Vitorica-Yrezabal, A. Brookfield, D. Collison, E.J.L. McInnes, F. Tuna and R.E.P. Winpenny

### **II.26 Flash Presentation 24**

SPIN-STATE VERSATILITY IN A SERIES OF  $[\text{2x2}]$  IRON(II)-GRID COMPLEXES: EFFECTS OF COUNTERANIONS, SOLVENTS AND INTRAMOLECULAR COOPERATIVITY

S. Demeshko, M. Steinert, S. Dechert and F. Meyer

### **II.27 Flash Presentation 25**

OPTICAL PROPERTIES OF PHOTO- AND THERMOSWITCHABLE COMPOUNDS BASED ON COPPER(II) IONS AND STABLE NITROXIDE RADICALS

S.L. Veber, I.Yu. Barskaya, E.A. Suturina, P.S. Sherin, K.Yu. Maryunina, N.A. Artiukhova, R.Z. Sagdeev, V.I. Ovcharenko, N.P. Gritsan and M.V. Fedin

### **II.28 Flash Presentation 26**

POINT AND LINE TO PLANE: AN AB INITIO STUDY OF SINGLE CHAIN MAGNETS ADSORBED ON SURFACE

M. Briganti, F. Totti and M.G.F. Vaz

### **II.29 Flash Presentation 27**

SYMMETRY AND MAGNETISM: EASY AXIS TO EASY PLANE ANISOTROPY CONVERSION VIA TEMPERATURE CHANGE

M. Perfetti, M. A. Sørensen, U. B. Hansen, T. Fennell, G. G. Simeoni, K. Lefmann, H. Weihe, J. van Slageren and J. Bendix

### **II.30**

COMPLETE MAGNETIC AND SPECTROSCOPIC CHARACTERIZATION OF A DYSPROSIUM-BASED SMM BUILDING BLOCK

M. Perfetti, M. Gysler, Y. Rechkemmer, F. Fisher, J. Netz, H. Tastan, P. Zhang, T. Brock-Nannestad, M. Orlita, L. Ungur, L. Chibotaru, S. Piligkos and J. Van Slageren

### **II.31**

CONTROL OF THE MAGNETIC BEHAVIOUR OF CYANIDE COORDINATION POLYMERS BY THE INTRODUCTION OF SUPPORTING BRIDGING LIGANDS

G. Handzlik, B. Sieklucka and D. Pinkowicz

### **II.33**

“STRENGTH GROWS OUT OF WEAKNESS” – EXPERIMENTAL AND THEORETICAL STUDIES ABOUT ANION- $\pi$  INTERACTIONS OF TETRACYANIDOMETALLATES(II)

E. Kuźniak, D. Pinkowicz, M. Srebro-Hooper, J.G. Hooper and R. Podgajny

### **II.34**

IS LIESST EFFECT THAT UNIQUE? A PHOTOMAGNETIC STUDY OF OCTACYANIDOTUNGSTATE(IV) MOLECULAR ASSEMBLIES

M. Magott, B. Sieklucka and D. Pinkowicz

### **II.35**

LANTHANIDE-RADICAL COMPLEXES WITH TWO DIFFERENT CENTERS: CRYSTAL STRUCTURE, MAGNETIC AND LUMINESCENT PROPERTIES

S.G. Reis, M. Briganti, S. Soriano, G.P. Guedes, S. Calancea, C. Tiseanu, M.A. Novak, M.A. del Águila-Sánchez, F. Totti, F. Lopez-Ortiz, M. Andruh and M.G.F. Vaz

### **II.37**

RATIONAL DESIGN OF A CHIRAL ONE-DIMENSIONAL Dy(III)-RADICAL MAGNET

X. Liu, W. Shi and P. Cheng

### **II.38**

VISUALIZING AND TUNING ANISOTROPY: THEORETICAL STUDY ON DY(III) BASED SINGLE-MOLECULE MAGNETS WITH TRITOPIC SCHIFF-BASE LIGANDS

M. Böhme, B. Kintzel, A. Buchholz and W. Plass

### II.39

POLYNUCLEAR 3d- AND 4f-METAL COMPLEXES FOR POTENTIAL MOLECULAR SPINTRONICS APPLICATIONS  
B. Kintzel and W. Plass

### II.40

3d- AND 4f-METAL COMPLEXES BASED ON AMPHIPHILIC TRIAMINOQUINIDIN AND OTHER NOVEL C<sub>3</sub>-SYMMETRIC LIGANDS.  
M. Pohle, B. Kintzel and W. Plass

### II.41

DISCRETE MOLECULAR CLUSTERS AS CRYOGENIC MAGNETIC REFRIGERANT  
A. Adhikary and S. Konar

### II.42

DEVELOPING NANOSTRUCTURED MAGNETIC MATERIALS FOR INDUSTRIAL APPLICATIONS  
A. Caneschi, M. Albino, M. Petrecca, A. Lopez-Ortega and C. Sangregorio

### II.43

PREDICTION OF CHERN INSULATOR WITH HIGH-TEMPERATURE FERROMAGNETISM IN NICKEL CHLORIDE MONOLAYER  
J. He, X. Li, P. Lyu and P. Nachtigall

### II.44

CLOSE ENCOUNTERS OF THE WEAK KIND: STUDIES OF AX ELECTRON SPIN-SPIN INTERACTION IN SUPRAMOLECULAR COMPLEXES  
S. Lockyer, G.A. Timco, E.J.L. McInnes and R.E.P. Winpenny

### II.45

XMCD STUDIES IN URANIUM SIM COMPOUNDS  
L.C.J. Pereira, M.A. Antunes, J.T. Coutinho, M. Almeida, A. Hen and A. Rogalev

### II.46

SYNTHESIS, CRYSTAL STRUCTURE AND MAGNETIC PROPERTIES OF THE CU<sup>II</sup> COMPLEX OF A NEW P-STEREOGENIC ORTHO-(4-AMINO-TEMPO) PHOSPHINIC AMIDE RADICAL  
Y. Navarro García, F. López Ortiz, F. Lloret, G.P. Guedes and M.J. Iglesias

### II.47

CRYPTANDS AS A LIGAND SCAFFOLD FOR THE SYSTEMATIC INVESTIGATION OF THE LANTHANIDS MAGNETIC PROPERTIES  
E. Kreidt and M. Seitz

### II.48

REAL-TIME OBSERVATION OF PHASE TRANSITION IN SELF-ASSEMBLED MOLECULAR LAYERS ON SURFACES  
J. Čechal, P. Procházka, L. Kormoš and T. Šikola

### II.49

INVESTIGATION OF A NEW SERIES OF Ni<sup>II</sup>-Ln<sup>III</sup>-W<sup>V</sup> HETEROTRIMETALLICS: UNDERSTANDING THE SMM BEHAVIOR OF MIXED POLYNUCLEAR COMPLEXES  
V. Vieru, T.D. Pasatoiu, L. Ungur, E. Suturina, A.M. Madalan, C. Duhayon, J.P. Sutter, M. Andruh and L.F. Chibotaru

### II.50

SYNTHESIS AND CHARACTERISATION OF CHIRAL MAGNETIC [Ln<sup>III</sup>(TMU)<sub>5</sub>][W<sup>V</sup>(CN)<sub>8</sub>] (Ln = Gd - Tm) COORDINATION CHAINS  
O. Stefanczyk, K. Imoto, K. Nakabayashi and S. Ohkoshi

### II.51

HETEROMETALLIC Mn<sup>III</sup><sub>4</sub>Ln<sub>2</sub> (Ln = Dy, Gd, Tb) CROSS-SHAPED CLUSTERS AND THEIR HOMOMETALLIC Mn<sup>III</sup><sub>4</sub>Mn<sup>II</sup><sub>2</sub> ANALOGUES  
J. Tasiopoulos, M. Savva, K. Skordi, A.D. Fournet, A.E. Thuijs, G. Christou, S.P. Perlepes and C. Papatriantafyllou

### II.52

THE FIRST TETRAOXOLENE RADICAL-BRIDGED LANTHANIDE SINGLE MOLECULE MAGNET  
P. Zhang, M. Perfetti, M. Kern and J. van Slageren

## II.53

PHOTOEXCITED STATES OF THE PORHYRIN DIMERS AND TRIMER PROBED BY TIME-RESOLVED AND PULSE EPR

V.K. Voronkova, A.A. Sukhanov and V.S. Tyurin

## II.54

LANTHANIDE-BASED ONE DIMENSIONAL COMPOUNDS CONTAINING NITRONYLNITROXIDE RADICAL LIGAND

C.V. Sarmiento, R.A. Allão Cassaro, T.S. Araujo, S.G. Reis, M.A. Novak and M.G.F.Vaz

## II.55

GIANT SPIN-PHONON BOTTLENECK CHARACTERIZATION IN VANADYL-BASED MOLECULES WITH LONG SPIN COHERENCE TIME

L. Tesi, A. Lunghi, E. Lucaccini, L. Sorace, F. Luis, F. Totti and R. Sessoli

## II.56

PROCESSING OF HOFMANN CHLORATES AS ULTRATHIN FILMS: INVESTIGATION OF SPIN-CROSSOVER AND CHARGE TRANSPORT AT THE NANOSCALE

V. Rubio-Giménez, M. Galbiati, G. Escorcía Ariza, G. Salvan, C. Bartual-Murgui, S. Tatay, J. Antonio Real, E. Coronado and C. Martí-Gastaldo

## II.57

MESO AND NON-MESO FORMS OF Fe(III) SPIN CROSSOVER CHELATES

I.A. Kühne, S. Sundaresan, A. Barker, H. Müller-Bunz and G.G. Morgan

## II.58

COORDINATION COMPLEXES OF COPPER(II) ION WITH SCHIFF BASE AS LIGAND: SYNTHESIS, CRYSTAL STRUCTURE AND MAGNETIC PROPERTIES

M. Bută, C. Crețu, D. Aparaschivei, N. Stănică, P. Löennecke, C. Maxim, E. Hey-Hawkins, M. Andruh and O. Costișor

## II.59

LACUNARY POLYOXOMOLYBDATES DERIVED FROM THE WELLS-DAWSON STRUCTURE

K. Wrighton-Araneda, V. Paredes-García and D. Venegas-Yazigi

## II.60

MAGNETIC AND ELECTRONIC DESCRIPTION OF THE FAMILY OF DIFFERENT  $[V_x^{IV}V_y^{V}O_7(OCH_3)_{3-12}]^n$

K. Wrighton-Araneda, N. Soto-Donoso, P. Hermosilla-Ibañez, V. Paredes-García and D. Venegas-Yazigi

## II.61

MAGNETIC PROPERTIES OF A SERIES OF FOURFOLD NITROGEN-COORDINATED TRANSITION METAL COMPLEXES

H. Bamberger, D. Hunger, U. Albold, B. Sarkar and J. van Slageren

## II.62

HOMO AND HETEROMETALLIC CLUSTERS OF V(IV), Mn(II/III), Co(II/III)/Cu(II), Co(II/III)/Mn(II/III), Co(II/III)/Fe(III) WITH AMINOALCOHOLS AND CARBOXYLIC ACIDS: SYNTHESIS, CRYSTAL STRUCTURES AND MAGNETIC PROPERTIES

V. Tudor, C. Maxim, A. Tanase, A. Topor, R. Poenaru, D. Hiuhiu, F. Lloret, M. Julve and M. Andruh

## II.63

TTF-HELICENES FOR CONDUCTING MOLECULAR MATERIALS

K. Martin and N. Avarvari

## II.64

SYNTHESIS, STRUCTURAL AND MAGNETIC CHARACTERISATION OF TWO ISOSTRUCTURAL  $[Co^{II}Co^{III}]_2$  COMPLEXES

A. Collet, G. Craig, M. Heras Ojea, C. Wilson and Mark Murrie

## II.65 Flash Presentation 28

COHERENT COUPLING BETWEEN VANADYL PHTHALOCYANINE SPIN ENSEMBLE AND MICROWAVE PHOTONS: TOWARDS INTEGRATION OF MOLECULAR SPIN QUBITS INTO QUANTUM CIRCUITS

C. Bonizzoni, A. Ghirri, M. Atzori, L. Sorace, R. Sessoli, and M. Affronte

## **II.66**

SPIN FLIP INDUCED BY MICROWAVE PULSES IN A MOLECULAR SPIN TRANSISTOR

C. Godfrin, S. Lumetti, H. Biard, S. Klyatskaya, M. Ruben, A. Candini, M. Affronte, W. Wernsdorfer and F. Balestro

## **II.67**

MAGNETO-OPTICAL MOLECULAR DEVICE: ENTANGLEMENT OF SPIN CROSSOVER, LUMINESCENCE, LIESST EFFECT AND PHOTOCHROMISM

M. Estrader, J. Salinas Uber, L. A. Barrios, J. García, P. Lloyd-Williams, O. Roubeau, S. J. Teat, G. Aromí

---