## Special Issue

# Transition Metal (3d,4d,5d) Single-Ion Magnets

## Message from the Guest Editor

Single-ion magnets (SIMs) are, in theory, the smallest possible components for spin-based electronic devices, among which data storage is one of the most laureate applications. Taking into account that the energy barrier (*Ueff*) is governed by the magnetic anisotropy of the complex and the spin ground state, transition metals (TM) have proven to be good candidates to give rise to SIMs since, coordinated to adequate ligands, their d orbitals are propitiously split by the field while they are spatially arranged into isolated molecules or 1, 2 and 3dimensional materials which present interesting structural and physical properties. This Special Issue of the open access journal Magnetochemistry, devoted to SIMs, provides an excellent opportunity for researchers working in the field to publish their most recent discoveries. Keywords

- Transition metal ions
- Slow relaxation of the magnetization
- SIMs based on isolated molecules
- SIMs consisting of coordination polymers
- Alternating current (ac) susceptibility

## **Guest Editor**

Dr. Javier Cepeda

Department of Applied Chemistry, Chemistry Faculty, University of the Basque Country (UPV/EHU), Paseo Manuel de Lardizabal, no. 3, Donostia-San Sebastián, Spain

## Deadline for manuscript submissions

closed (30 April 2019)



## Magnetochemistry

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 4.6



mdpi.com/si/15149

Magnetochemistry
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41616837734
magnetochemistry@mdpi.com

mdpi.com/journal/ magnetochemistry





## Magnetochemistry

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 4.6



## **About the Journal**

## Message from the Editor-in-Chief

Magnetochemistry constitutes a multidisciplinary field where chemists and physicists not only study magnetic properties but also design and synthesize chemical compounds with desired magnetic properties.

Magnetochemistry is inviting contributions in any field related with this area, such as theoretical models, crystal engineering, molecular magnetism, SMM, SIM, SCM, SCO, magnetic nanostructures, magnetic MOFs, magnetic recording, qubits, magneto-caloric materials, etc. Our goal is to share your contribution in a timely fashion and in a manner that will be valued by the scientific community.

#### Editor-in-Chief

Prof. Dr. Carlos J. Gómez García

Department of Inorganic Chemistry, Faculty of Chemistry, University of Valencia, C/Dr. Moliner 50, 46100 Burjasot, Spain

## **Author Benefits**

## **High Visibility:**

indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

#### **Journal Rank:**

JCR - Q2 (Chemistry, Inorganic and Nuclear) / CiteScore - Q2 (Electronic, Optical and Magnetic Materials)

## Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).

