



## Metals in Neurodegenerative Diseases

Guest Editor:

### **Prof. Dr. Blaine Roberts**

The Florey Institute of  
Neuroscience and Mental Health,  
The University of Melbourne,  
Parkville, Victoria, Australia

[blaine.roberts@florey.edu.au](mailto:blaine.roberts@florey.edu.au)

Deadline for manuscript  
submissions:

**closed (30 June 2019)**

### **Message from the Guest Editor**

Dear Colleagues,

The human brain is perhaps the most complex organ in existence. As a direct consequence of high nutrient input, the brain is rich in essential elements (particularly Fe, Cu, and Zn), with concentrations in some regions of the brain equalling or exceeding those found in the liver. Alarming, during neurodegeneration, the balance of essential trace elements and the metalloenzymes that use them is disrupted. Although the measurement of total essential element abundances is important, it only yields a fraction of the story. Currently, our understanding of the relationships between changes in trace elements and the function of their related metalloproteins is limited. In this Special Issue, we highlight the most current discoveries in this area: (1) The consequences of metal mis-incorporation and absence to proper protein structure and function, (2) The recent advances made in speciation techniques and their application to direct measurement of metalloenzymes, and (3) New therapeutic strategies aimed at targeting metal dyshomeostasis.

Prof. Dr. Blaine Roberts  
*Guest Editor*





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Duncan H. Gregory**

School of Chemistry, University of  
Glasgow, University Avenue,  
Glasgow, G12 8QQ, UK

## Message from the Editor-in-Chief

Inorganic chemistry remains a lynchpin of modern chemistry, not only embracing the function and reactivity of combinations of most elements of the periodic table, but also providing a footing for studies of materials, catalysts, drugs, fuels and industrial chemicals. Arguably, the role and reach of inorganics in society have never been as great as today. Adventurous research at the heart and at the extremes of inorganic chemistry is vital to further advances and *Inorganics* offers authors the opportunity to publish exciting new research in an open access format.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High visibility:** Indexed in the Emerging Sources Citation Index (ESCI - Web of Science) and in **Scopus**.

**Rapid publication:** manuscripts are peer-reviewed and a first decision provided to authors approximately 17.3 days after submission; acceptance to publication is undertaken in 4.9 days (median values for papers published in this journal in the second half of 2018).

## Contact Us

---

*Inorganics*  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
Fax: +41 61 302 89 18  
www.mdpi.com

mdpi.com/journal/inorganics  
inorganics@mdpi.com  
@inorganics\_MDPI