Special Issue

New Insights into Coordination Compounds and Ligand Design

Message from the Guest Editors

Coordination compounds play a crucial role in various scientific disciplines. The design of ligands—molecules that can bind to a central metal atom—has significant implications for the functionality and properties of these compounds. Recent developments in synthetic methodologies and computational techniques have enabled researchers to explore novel coordination environments and ligand architectures. Topics of interest include but not limited to: (1) Synthesis of novel ligands: Iligand synthesis that enhance the properties of coordination compounds.
Characterization techniques: methods for analyzing coordination compounds, including spectroscopy, crystallography, and computational modeling.
(2) Applications in catalysis: the role of ligands and coordination compounds in catalyzing chemical reactions, with a focus on green chemistry and sustainable practices.
(3) Biological applications: the role of ligands and metal complexes in biological systems, including drug design and biomimetic chemistry.
(4) Theoretical studies: computational studies that provide insights into ligand–metal interactions and predict the behavior of coordination complexes.

Guest Editors

Dr. Agnieszka Czylkowska

Institute of General and Ecological Chemistry, Faculty of Chemistry, Lodz University of Technology, Zeromskiego 116 st, 90-924 Lodz, Poland

Dr. Anita Raducka

Institute of General and Ecological Chemistry, Faculty of Chemistry, Lodz University of Technology, Zeromskiego 116 st, 90-924 Lodz, Poland

Deadline for manuscript submissions

closed (20 June 2025)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/223598

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

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

High Visibility:

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

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)