

# European Journal of Chemistry

An International Open Access Journal

---

## Editor-in-Chief

Hakan Arslan

Department of Chemistry, Faculty of Science, Mersin University, 33343, Mersin, Turkey

E-mail: [editor@eurjchem.com](mailto:editor@eurjchem.com)

---

## Associate Editors

Syed A. A. Rizvi, *College of Biomedical Sciences, Larkin University, Miami, FL, United States*

İskender Yılğör, *Koç University, Istanbul, Turkey*

---

## Editorial Board

İlhan A. Aksay, *Princeton University, Princeton, NJ, United States*

Mauricio Federico Erben, *Universidad Nacional de La Plata, La Plata, Buenos Aires, Argentina*

Puthiya Veetil Nidheesh, *Council of Scientific and Industrial Research - National Environmental Engineering Research Institute, India*

Miral Dizdaroğlu, *The National Institute of Standards and Technology, Gaithersburg, MD, United States*

Anna Beata Błażewicz, *Medical University of Lublin, Poland*

Bryan M. Wong, *University of California-Riverside, Riverside, CA, United States*

Lan-Chang Liang, *National Sun Yat-sen University, Taiwan*

Biljana Balabanova, *Goce Delcev University, Faculty of Agriculture, Macedonia, the former Yugoslav Republic of*

Diane J. Burgess, *University of Connecticut, Connecticut, CT, United States*

Hon Man Lee, *National Changhua University of Education, Taiwan*

David Morales-Morales, *Universidad Nacional Autónoma de México, Mexico City, Mexico*

Luca Gonsalvi, *Istituto di Chimica dei Composti OrganoMetallici-CNR, Firenze, Italy*

Mehmet Sarikaya, *University of Washington, Seattle, WA, United States*

Vinod Kumar Gupta, *Indian Institute of Technology, Roorkee, India*

Mehmet A. Oturan, *Université Gustave Eiffel, France*

Cora E. MacBeth, *Emory University, Atlanta, GA, United States*

Andrei Rotaru, *National Institute for Laser, Plasma and Radiation Physics, Bucharest, Romania*

Bekir Çetinkaya, *Ege University, İzmir, Turkey*

Djamaladdin G. Musaev, *Emory University, Atlanta, GA, United States*

Satoshi Kaneco, *Mie University, Tsu, Japan*

Atta-ur-Rahman, *University of Karachi, Karachi, Pakistan*

Suleyman I. Allakhverdiev, *Russian Academy of Sciences, Pushchino, Russian Federation*

Xueming Yang, *Chinese Academy of Sciences, Dalian, China*

Abdelwahab Omri, *Laurentian University, Sudbury, ON, Canada*

Dilhan M. Kalyon, *Stevens Institute of Technology, Hoboken, NJ, United States*

Marko D. Mihovilovic, *Vienna University of Technology, Vienna, Austria*

Veysel Turan Yılmaz, *Karadeniz Technical University, Turkey*

Jinlong Gong, *Tianjin University, Tianjin, China*

İsmail Özdemir, *İnönü University, Malatya, Turkey*

Paraskevas D. Tzanavaras, *Aristotle University of Thessaloniki, Greece*

Tahir Cagin, *Texas A&M University, College Station, TX, United States*

---

## Copyeditors

Duc P. Do, *University of Georgia, GA, United States*

Syed A. A. Rizvi, *College of Biomedical Sciences, Larkin University, Miami, FL, United States*

---

*European Journal of Chemistry* is a peer-reviewed journal that publishes original research and review articles as well as letters in all areas of chemistry (Analytical Chemistry, Inorganic Chemistry, Organic and Bioorganic Chemistry, Biochemistry, Theoretical and Applied Physical Chemistry, Pharmaceutical Chemistry, Applied and Materials Chemistry, Chemical Technology, Agro Chemical Technology, Pharmaceutical Technology, Colloid Chemistry, Interfacial Chemistry, Surface Chemistry, Chemical Engineering, Green Chemistry, etc.). For full details, see the Guide for Authors.

*European Journal of Chemistry* (ISSN: 2153-2249 (print) / 2153-2257 (online)) is published quarterly and is available exclusively at [www.eurjchem.com](http://www.eurjchem.com)

*European Journal of Chemistry* is a member of Crossref (The Digital Object Identifier (DOI®) System), Crossref Cited-by Linking and Crossref Crossmark® Service.

---

*European Journal of Chemistry*

ISSN 2153-2249 (Print) / ISSN 2153-2257 (Online) – Copyright © 2025 Atlanta Publishing House LLC – Printed in the USA.

This work is published and licensed by Atlanta Publishing House LLC – CC BY NC – Some Rights Reserved.

<https://dx.doi.org/10.5155/eurjchem.16.4.i-ii.2729>

---

*European Journal of Chemistry* is indexed and/or abstracted by ■ Chemical Abstracts Service (USA) (CODEN: EJCUA9) ■ CAS Source Index (CASSI) ■ Cambridge Structural Database (CSD) ■ Ulrich's Periodicals Directory ■ Scilit database (MDPI) ■ The Library of Congress (USA) ■ Harvard Library's Catalog (HOLLIS+) ■ China Knowledge Resource Integrated Database (CNKi) ■ European Virtual Institute for Speciation Analysis (EVISA) ■ Scite ■ Fatcat ■ Collections of the National Library of Medicine (NLM) ■ Elektronische Zeitschriftenbibliothek (EZB) ■ SWB-Online-Catalogue - Bibliotheksservice-Zentrum Baden-Württemberg (BSZ) ■ CiteSeerX ■ Zeitschriftendatenbank (ZDB) - German National Library ■ ROAD: Directory of Open Access Scholarly Resources ■ Citefactor Academic Scientific Journals ■ WorldCat ■ SHERPA/RoMEO Journals database ■ Google Scholar ■ Open Access Library (OALib) ■ Directory of Research Journals Indexing (DRJI) ■ Research.com ■ Advanced Sciences Index ■ J-Gate ■ OpenAIRE ■ ScienceGate ■ Index Copernicus ■ CORE ■ National Center for Biotechnology Information ■ Semantic Scholar - Allen Institute ■ ResearchGate ■ Exaly ■ The Lens ■ wizzard.ai ■ LibKey.io ■ Open Ukrainian Citation Index ■ Dimension - Digital Science.

Publication program, **2025**: Volume **16** (4 issues). Subscription prices, per volume, including postage and handling: 800 USD (Print). Subscription should be sent to *European Journal of Chemistry*, USA Office: 1062 Union Center Drive, Suite A5, Alpharetta, GA 30004-0760, USA. Orders and enquiries for earlier volumes should be sent the subscription address.

Production and Advertising USA Office: 1062 Union Center Drive, Suite A5, Alpharetta, GA 30004-0760, USA. Telephone: +1.678.7703902.

Production/Managing Editor: Ergah Pektaş.

European Journal of Chemistry Online. Visit our website at <https://www.eurjchem.com>

© 2025 European Journal of Chemistry. Printed in USA on acid-free paper, bleached without the use of chlorine.

---