Special Issue

Coumarins as Effective Therapeutic Agents: Mechanism of Action and Diverse Activity

Message from the Guest Editor

Coumarins are heterocyclic compounds belonging to the class of benzopyrenes, found in various plants, fungi and microorganisms. Coumarins and their derivatives show great chemical diversity and include furanocoumarins, pyranocoumarins, as well as simple coumarins. These natural compounds exhibit bioactive properties such as anticoagulant, antimicrobial, anti-inflammatory, antioxidant, antimalarial, anticancer, antiviral and enzyme inhibitory effects, including acetylcholinesterase, COX or tyrosinase. In recent years, there has been an increasing number of reports on the activity of coumarins in the central nervous system, and they have exhibited neuroprotective, anticonvulsant and anti-anxiety effects.

This Special Issue will include a selection of articles highlighting the current challenges in phytochemical research on coumarins and determining their pharmacological activity and possible applications.

We invite you to participate in this Special Issue by submitting original research, short communications and review manuscripts. This is a great opportunity to contribute to the search for new natural medicines.

Guest Editor

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Deadline for manuscript submissions

closed (20 July 2025)



International Journal of Molecular Sciences

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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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