Special Issue

Recent Developments in Chromatographic Applications in Medicine

Message from the Guest Editors

Chromatographic techniques are incredibly versatile, enabling the analysis of a wide range of complex samples. These include gas chromatography (GC), high-performance liquid chromatography (HPLC), and ion chromatography, among others. In recent years, the integration of chromatographic methods with modern detection systems has demonstrated remarkable capabilities for separation, identification, and quantification, which are essential for pharmaceutical analysis. These precise and sensitive analyses empower pharmaceutical scientists to assess purity, stability, and consistency during the stages of drug development and quality control. Furthermore, the development of biomimetic stationary phases has unfolded new perspectives in the simulation of biological processes in order to assess the pharmacokinetic and toxicological profile of candidate drugs and bioactive compounds. This Special Issue, entitled "Recent Developments in Chromatographic Applications in Medicine", aims to present the latest advancements in the development and application of chromatographic techniques in medicinal chemistry.

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Deadline for manuscript submissions

30 November 2025

Molecules

an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed

mdpi.com/si/235090

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As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

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