

Special Issue

Functional Proteomics in Cell Biology and Beyond

Message from the Guest Editor

Advances in proteomics have been driven by the development of new and advanced mass spectrometers as well as better algorithms and bioinformatics software. The complementary coupling of mass spectrometry with different chromatographic separation techniques has improved the analysis of complex biological mixtures as well as the enhanced molecular characterization of proteins at the proteome or sub-proteome levels, and this information is being applied in the context of cell biology and diseases. Researchers investigating complex cell biology and diseases such as Alzheimer's disease, neurodegenerative disease, diabetes, and cancer are taking advantage of these advanced proteomics technologies. Therefore, MS-based proteomics is now increasingly applied in many labs to address a large range of biological questions.

In this Special Issue, we focus on the development and application of new and emerging proteomics technologies to study basic cell biology and diseases including biomarker discovery, molecular signaling, disease mechanisms, drug resistance, the roles and regulation of post-translational modifications, protein complexes, and interactions in cell biology and diseases.

Guest Editor

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Message from the Editor-in-Chief

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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