

Special Issue on The Application of Phosphorylation in Biological Chemistry

Call for Papers

Phosphorylation is the addition of a phosphate group to a protein or other organic molecule. Phosphorylation turns many protein enzymes on and off, thereby altering their function and activity. Protein phosphorylation is one type of post-translational modification. Protein phosphorylation in particular plays a significant role in a wide range of cellular processes. Its prominent role in biochemistry is the subject of a very large body of research.

A detailed characterization of the sites of phosphorylation is very difficult, and the quantitation of protein phosphorylation by mass spectrometry requires isotopic internal standard approaches. A relative quantitation can be obtained with a variety of differential isotope labeling technologies. There are also several quantitative protein phosphorylation methods, including fluorescence immunoassays, Microscale Thermophoresis, FRET, TRF, fluorescence polarization, fluorescence-quenching, mobility shift, bead-based detection, and cell-based formats. Antibodies can be used as powerful tools to detect whether a protein is phosphorylated at a particular site. Antibodies bind to and detect phosphorylation-induced conformational changes in the protein. Such antibodies are called phospho-specific antibodies; hundreds of such antibodies are now available. They are becoming critical reagents both for basic research and for clinical diagnosis.

In this special issue, we intend to invite front-line researchers and authors to submit original research and review articles on exploring **The Application of Phosphorylation in Biological Chemistry**.

Authors should read over the journal's [Author's Guidelines](#) carefully before submission, Prospective authors should submit an electronic copy of their complete manuscript through the journal [Paper Submission System](#).

Please kindly notice that the “**Special Issue**” under your manuscript title is supposed to be specified and the research field “**Special Issue — The Application of Phosphorylation in Biological Chemistry**” should be chosen during your submission.

According to the following timetable:

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Special Issue Editor

For further questions or inquiries
Please contact Editorial Assistant at
abc@scirp.org

