



Journal of Chemistry

Special Issue on

**Enzyme Inhibitors from Medicinal Natural Products**

# CALL FOR PAPERS

The deficiencies or hyperfunctions of enzymes cause a number of diseases. Overproduction or upregulation of certain enzymes may cause other diseases. Enzymes activities can be blocked or modulated by specific inhibitors. Enzyme inhibition is an important area of pharmaceutical research since studies in this field have already led to the discovery of wide variety of drugs useful in a number of diseases. Specific inhibitors interact with enzymes and block their activity towards their corresponding natural substrates. The importance of enzyme inhibitors as drugs is enormous since these molecules have been used for treating a number of physiological conditions. Natural products can provide good pharmacophore templates for new drugs associated with various diseases. New drug discovery is facing serious challenges due to reduction in number of new drug approvals coupled with exorbitant rising cost. Advent of combinatorial chemistry provided new hope of higher success rates of new chemical entities (NCEs); however, even this scientific development has failed to improve the success rate in new drug discovery. This scenario has prompted us to come out with a novel approach of integrated drug discovery, where healthy life can synergize with drug discovery from plant sources. Initial steps in new drug discovery involve identification of NCEs, which can be either sourced through chemical synthesis or can be isolated from natural products through biological activity guided fractionation. The sources of many of the new drugs and active ingredients of medicines are derived from natural products.

This special issue is intended to present and discuss high quality, original research articles as well as review articles focused on new, novel, and known active enzyme inhibitor from natural sources. There is also lot of interest to discover potential enzyme inhibitor from medicinal plants.

Potential topics include, but are not limited to:

- ▶ New, novel, and known active enzyme inhibitors from natural sources
- ▶ Pharmacological activities of plants and phytochemicals
- ▶ In vitro and in vivo assays of enzyme inhibitors
- ▶ Robotic methods to isolate phytochemicals from complex plant matrixes
- ▶ Computational chemistry and biology
- ▶ Nanoparticles and their enzyme inhibitory activities

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/jchem/medicinal.chemistry/ein/>.

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