

Tentative Outline (Preliminary Proposal of Thematic Issue)

Special/Thematic Issue for the journal "Current Medicinal Chemistry - CMC"

Title: Matrix metalloproteinase in cells, tissues, and diseases

Guest Editor: Cheorl-Ho Kim

Scope of the Thematic Issue:

Matrix metalloproteinases (MMPs), also known as metalloproteinases, are enzymes that degrade proteins and require the presence of active metal atoms. There are more than 20 types of MMPs, which promote cell migration through proteolysis of basement membrane and cell matrix. MMPs tend to be upregulated in tumors and inflamed tissues. MMPs have three highly conserved domains (pro, catalytic, and hemopexin domains). Through these domains, MMPs cleave tissues, remove physical barriers, and release signaling molecules like proteases that cleave the extracellular matrix (ECM). In other words, they decompose most of the components related to the ECM and play an essential role in physiological and pathological processes in the body.

Keywords: MMP inhibitors, TIMPs, Cancer, Development, Remodeling, Synthesis, Discovery, Chemical Biology, Cell/tissue

Sub-topics:

- Roles of MMP inhibitors in cell-cell recognition
- Pharmacology of MMP inhibitors
- MMP inhibitors in immune responses
- MMP inhibitors in cancer therapy
- MMP inhibitors in development
- MMP inhibitors in dental and related field
- MMP inhibitors in remodeling
- MMP inhibitors in natural and synthetic resources
- Tissue inhibitors of MM

Schedule:

- ✧ Complete Thematic issue submission deadline: March 31, 2023

Details of Guest Editors:

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