

Tentative Outline (Preliminary Proposal of Thematic Issue)

Special/Thematic Issue for the journal *Current Chemical Biology*

Stilbene-based compounds: present studies and future challenge.

Guest Editors: *Barbara De Filippis*

• Scope of the Thematic Issue (Brief introduction / abstract explaining the Thematic Issue):

Stilbene represents a versatile molecular framework in medicinal chemistry; thanks to its multiple pharmacological effects could be considered a good potential therapeutic candidate. It is present in many natural compounds, moreover it is easily synthesized, and many substituents may be inserted by specific synthetic route. The stilbene core is often combined with different pharmacophores in a single compound, leading to a multitarget compound able to acts on several factors involved in multifactorial diseases.

The main aim of this thematic issue is to collect and summarize the recent review of all aspects concerning the beneficial effects of stilbenes in different illness. It collects the more significant papers among the broad literature on this topic, ranging from drug design to biology and medicinal chemistry.

The current thematic issue offers the recent trend of new stilbene derivatives involved in different pathologies, draws the main SAR (Structure-Activity Relationship) principle and reports on major developments from rational design to pharmacokinetic studies.

Keywords: stilbene, natural compounds, synthetic derivatives, rational design, in-silico methods, pharmacokinetic studies, biology activities

Sub-topics:

The sub-topics includes, but are not confined to, the following areas:

- Natural or synthetic stilbene-containing compounds involved in different diseases.
- SAR reports for the development of stilbene derivatives.
- Molecular hybridization strategy for the generation of multitarget ligands.
- Recent advances in rational design of stilbene derivatives and Computer-aided drug design
- Novel molecular targets of bioactive stilbenes.

Schedule:

- ✧ Complete Thematic issue submission deadline: **31st of December 2022**

Details of Guest Editor:

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