

Tentative Outline

Special Thematic Issue for the journal "Current Organic Synthesis"

Title: Organic Synthesis Involving Transition Metal Catalysed C-C Bond Formation Reactions

Guest Editor: Dr. Fateh V Singh

• **Scope of the Thematic Issue:**

Chemistry of carbon-carbon bond formation reactions is now become an integral part of synthetic organic chemistry. The scope of carbon-carbon bond formation reactions is not only limited to the synthetic organic chemistry but also played a vital role in medicinal chemistry, natural product chemistry and material chemistry. Various transition metals have been used as catalyst to achieve several carbon-carbon bond formation reactions. Both metal catalysed cross-coupling and homo-coupling approaches have been employed to achieve different C-C bond formation reactions. These coupling reactions have been developed by using variety of electrophilic and nucleophilic partners. Areas to be covered in this Research Topic may include, but are not limited to: Transition metal-catalysed Kumada, Negishi, Fukuyama, Hiyama-Denmark, Mozoriki-Heck, Stille, Suzuki-Miyaura, Sonogashira, Buchwald-Hartwig and Chan-Lam.

Keywords: Transition metal, cross-coupling, homo-coupling, electrophilic and nucleophilic partners

Sub-topics:

- Metal-Catalyzed Coupling Reactions Involving Organotin Reagents
- Metal-Catalyzed Coupling Reactions Involving Organoborane Reagents
- Metal-Catalyzed Coupling Reactions Involving Organozinc Reagents
- Metal-Catalyzed Coupling Reactions Involving Organomagnesium Reagents
- Metal-Catalyzed Coupling Reactions Involving Amines
- Metal-Catalyzed Coupling Reactions Involving Amines

Schedule:

- ✧ Thematic issue submission deadline: 31st March 2023

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