Tentative Outline

Special Thematic Issue for Current Microwave Chemistry

Title of the Thematic Issue: Microwave-assisted carbon-carbon and carbon-heteroatom bond forming reactions-Part 2

Guest Editors: Dr. Bubun Banerjee

• Scope of the Thematic Issue:

Now-a-days, carbon-carbon and carbon-heteroatom bond-forming reactions are the backbone of synthetic organic chemistry. Scientists are constantly trying to develop new methods or modify techniques for such bond forming reactions leading to the syntheses of structurally diverse molecular entities. On the other hand, to save our 'Mother Nature' from the ever increasing chemical pollution, scientists are continuously modifying their chemical processes to make them sustainable. As a result, last decade has shown a tremendous outburst to carry out carbon-carbon and carbon-heteroatom bond-forming reactions by following green credentials. Application of microwave in organic synthesis sometimes fulfills the goal of sustainable developments. In many occasions it was found that the microwave-irradiated pathway is much more advantageous than the conventional processes. This thematic issue intends to highlight the current progress on the development of carbon-carbon and carbon-heteroatom bond forming reactions with special emphasis on microwave irradiated pathway. The submitted Review Article/Mini-review/Current Frontier should consist of novel approaches and related to recent advances based on the sustainable developments.

Keywords: Microwave, organic synthesis, carbon-carbon bond formation, carbon-hetero atom bond formation, sustainable synthesis, fast reactions

Subtopics:

The subtopics to be covered within this issue must be provided:

- Microwave-assisted C-C and C-heteroatom bond formations in aqueous medium
- > Microwave-assisted carbon-carbon and carbon-heteroatom cross-coupling reactions in organic synthesis
- Microwave assisted synthesis of bioactive heterocycles
- Microwave-assisted domino cyclization reactions.
- Microwave-assisted C-C and C-heteroatom bond formations via multi-component reactions
- > Microwave-assisted C-C and C-heteroatom bond formations at ambient temperature
- Microwave-assisted C-C and C-heteroatom bond forming reactions under neat conditions
- Microwave-assisted magnetic nano-catalyzed C-C and C-heteroatom bond forming reactions
- Microwave-assisted organo-catalyzed C-C and C-heteroatom bond forming reactions

Tentative titles of the articles and list of contributors:

Sl.	Name	Address	Proposed title
No.			
1	Prof. Rakesh	Professor, Department of Chemistry	Microwave-assisted C-C and
	Kumar	University of Delhi, Delhi-110007, India.	C-heteroatom bond formation using
	Sharma	Email: rksharmagreenchem@hotmail.com	magnetic retrievable nanocatalysts
2.		Professor, Department of Chemistry	Microwave-assisted C-C and
	Dr. Pranab	North Bengal University, Darjeeling,	C-heteroatom bond formations in
	Ghosh	India. Email: pizy12@yahoo.com	aqueous medium
3.		Assistant Professor in chemistry Vaagdevi	Microwave Assisted synthesis of
	Dr. Srinivas	degree and Pg college Hanamkonda	methylene bis and hybrid heterocycles
	Reddy	Telangana, Email:	
		avula.sathwikreddy@gmail.com	
4.	Dr. Ram	Associate Professor;	Microwave-assisted reaction in water
	Singh	Department of Applied Chemistry, Delhi	
		Technological University, Bawana Road,	

		Delhi-42, INDIA, Email:	
		singh_dr_ram@yahoo.com	
5	Prof. Bimal	Professor, Department of Mathematics	Microwave Induced Green chemistry
	Krishna	and Natural Sciences. College of Sciences	approach towards synthesis of
	Banik	and Human Studies, Deanship of	heterocyclic compounds via C-N Bond
		Research Development, Al Khobar 31952,	Forming Reactions.
		Kingdom of Saudi Arabia. Email:	
		bimalbanik10@gmail.com	
6	Dr. Dipak	School of Chemical Sciences, Kavayitri	Microwave-assisted domino cyclization
	Sharadrao	Bahinabai Chaudhari North Maharashtra	reactions
	Dalal	University, Jalgaon - 425 001(M. S.),	
		India	
		Email: dsdalal2007@gmail.com	

♦ Manuscript submission deadline: 31.3.2021

♦ Peer Review Due: 30.4.2021
♦ Revision Due: 15.5.2021

♦ Announcement of acceptance by the Guest Editors: 10.6.2021

♦ Final manuscripts due: 30.6.2021

Contacts:

Guest Editor: Dr. Bubun Banerjee, MRSC

Affiliation: Assistant professor, Department of Chemistry, Indus International University, Bathu, Una, Himachal Pradesh, India-174507.

Email: banerjeebubun@gmail.com/<u>bubun.banerjee@jiuedu.in</u>