

## Personal Profile

**Dr. Sabir Ahammed**  
**Assistant Professor**  
**Department of Chemistry,**  
**Bankura Sammilani College**



### Address

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Date of Joining: 1<sup>st</sup> July, 2017

### Educational Qualification

**MSc. (Organic Chemistry),** Jadavpur University, Kolkata-700032, India.

**PhD. (Chemistry),** Indian Association for the Cultivation of Science, Kolkata-700032, India.

### Area of Teaching

Organic and General Chemistry.

### Research Interest

The development of new synthetic method based on the Radical processes, Organocatalysis and Transition metal catalysis, Organometallic Chemistry-Particularly Transition metal catalyzed cross coupling, Multicomponent reaction, Preparation of solid supported nano-

catalyst and exploit its application in organic transformation, visible light / sunlight catalyzed organic transformation.

## Awards and Fellowships

1. National Eligibility Test (NET- CSIR)
2. Graduate Aptitude Test (GATE)
3. Junior Research Fellow
4. Senior Research Fellow
5. DST-SERB Young Scientist Fellow

## Research Project

### DST-SERB Project:

**Principal Investigator:** Dr. Sabir Ahammed

**Project Title:** Synthesis of Palladium Pincer Catalysts and Their Application in Amination and Oxygenation Through C-H Bond Functionalization.

**Project Type:** Major Project (32 Lakhs)

**Current Status:** Running (From 01-10-2015 to Till Now)

**Duration of Project:** 3 Years

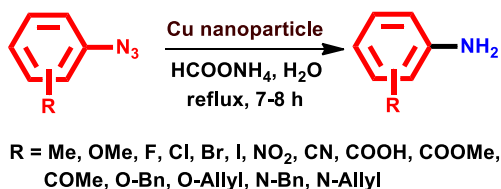
## Member of Personal Body

**Life member:** Indian Association for the Cultivation of Science (IACS)

**Editorial Board Member:** *Journal of Toxicology and Molecular Biology*

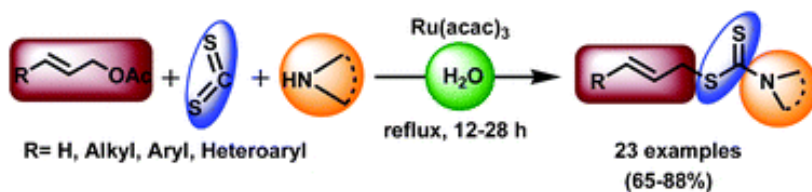
## List of Research Papers in International Journal

1. Hydrogenation of Azides over Copper Nanoparticle Surface Using Ammonium Formate in Water. **S. Ahammed**, A. Saha, B. C. Ranu, *J. Org. Chem.*, **2011**, 76, 7235-7239.



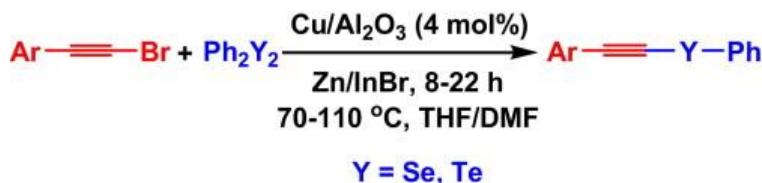
2. Ruthenium (III)-Catalyzed One-pot Synthesis of S-allyl and Cinnamyl Dithiocarbamates using Allyl and Cinnamyl Acetates in Water.

**S. Ahammed**, A. Saha, B. C. Ranu, *RSC Advances*, 2012, 2, 6329-6335.



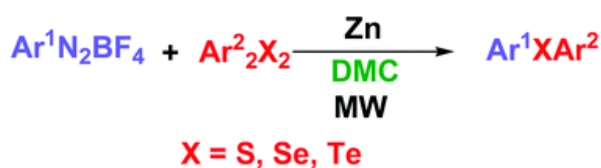
3. An efficient and general procedure for the synthesis of alkynyl chalcogenides (selenides and tellurides) by alumina-supported Cu(II)-catalyzed reaction of alkynyl bromides and diphenyl dichalcogenides.

**S. Ahammed**, S. Bhadra, D. Kundu, B. Sreedhar, B. C. Ranu, *Tetrahedron*, 2012, 68, 10542-10549.



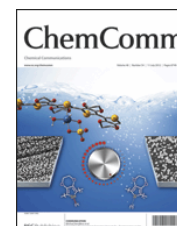
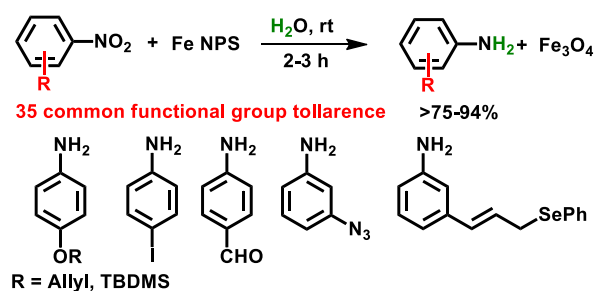
4. Microwave-assisted reaction of aryl diazonium fluoroborate and diaryl dichalcogenides in dimethyl carbonate: a general procedure for the synthesis of unsymmetrical diaryl chalcogenides.

D. Kundu, **S. Ahammed**, B. C. Ranu, *Green Chem.*, 2012, 14, 2024-2030.



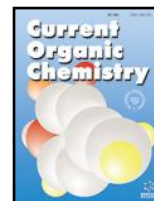
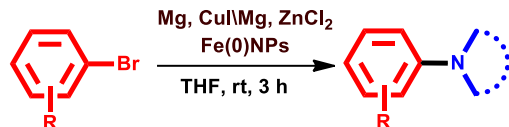
5. Highly Selective Reduction of Nitro Arenes by Iron (0) Nanoparticles in Water

R. Dey, N. Mukherjee, **S. Ahammed** and B.C. Ranu, *Chem. Commun.* 2012, 48, 7982-7984



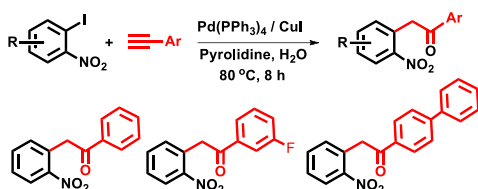
6. Iron Nano-particle Catalysed Electrophilic Amination of Functionalized Organocopper and Organozinc Reagents.

S. Bhadra, **S. Ahammed**, B. C. Ranu, *Current Organic Chemistry*, 2012, 16, 1453-1460.



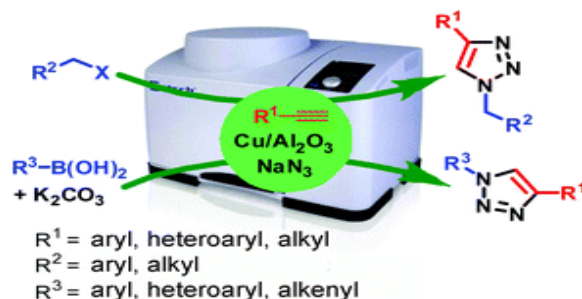
7. Palladium and Copper Catalyzed One-pot Sonogashira Reaction of 2-Nitroiodobenzenes with Aryl Acetylenes and Subsequent Regioselective Hydration in Water: Synthesis of 2-(2-Nitrophenyl)-1-aryl Ethanones.

**S. Ahammed**, R. Dey and B. C. Ranu, *Tetrahedron Lett.* 2013, 54, 3697-3701.



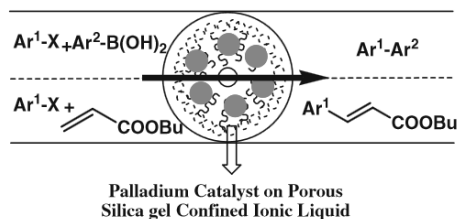
8. Solvent-free one-pot synthesis of 1,2,3-triazole derivatives by 'Click' reaction of alkyl halides or aryl boronic acids, sodium azide and terminal alkynes over Cu/Al<sub>2</sub>O<sub>3</sub> surface under ball milling.

N. Mukherjee, **S. Ahammed**, S. Bhadra, B. C. Ranu, *Green. Chem.*, 2013, 15, 389-397.



9. Palladium Supported on Silica Gel Confined Ionic Liquid as a Reusable Catalyst for Carbon-Carbon Cross Coupling Reaction in Water.

S. Ghosh, R. Dey, **S. Ahammed** and B. C. Ranu, *Clean Tech. & Env. Policy*, 2013, DOI 10.1007/s10098-013-0658-7



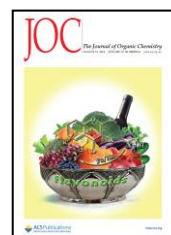
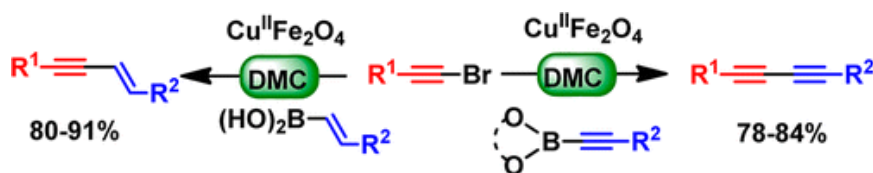
10. Visible light photocatalyzed direct conversion of aryl/heteroarylamines to selenides at room temperature.

D. Kundu, **S. Ahammed**, B. C. Ranu. *Org. Lett.*, **2014**, *16*, 1814-1817.



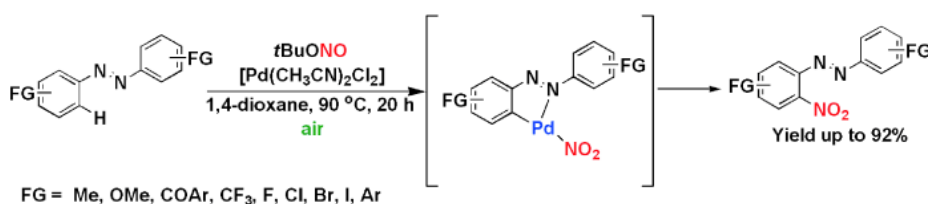
11. Cu-Catalyzed Fe-driven  $C_{sp}-C_{sp}$  and  $C_{sp}-C_{sp^2}$  cross-coupling: An access to 1,3-diyne and 1,3-enynes.

**S. Ahammed**, D. Kundu, B. C. Ranu, *J. Org. Chem.*, **2014**, *79*, 7391-7398.



12. *Tert*-butyl nitrite mediated regioselective nitration of (*E*)-azoarenes through Palladium-catalyzed directed C-H activation.

B. Majhi, D. Kundu, **S. Ahammed**, B. C. Ranu, *Chem. Eur. J.* **2014**, *20*, 9862-9866.



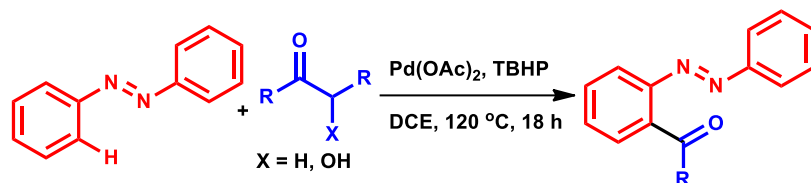
13. Metal and Solvent Free Selective Oxidation of Sulfides to Sulfone using Bifunctional Ionic Liquid [pmim]IO<sub>4</sub>.

**S. Ahammed**, D. Kundu, M. N. Siddiqui, B. C. Ranu, *Tetrahedron Lett.* **2015**, *56*, 335-337.



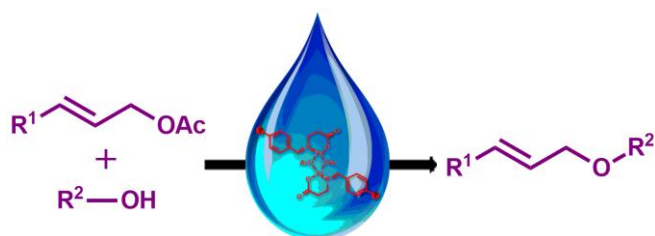
14. Pd-Catalyzed Oxidative C-C Bond Cleavage of  $\alpha$ -Hydroxy Ketone: Application to *C-H* Acylation of Azoarenes and Synthesis of a Liver(X) Receptor Agonist.

B. Majhi, **S. Ahammed**, D. Kundu, B. C. Ranu, *Asian J. Org. Chem.* **2015**, *4*, 154-163.

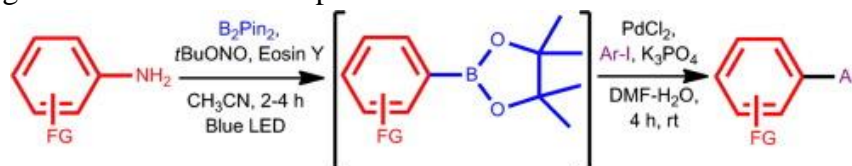


15. Polymeric  $\beta$ -alanine incarcerated Pd(II) catalyzed allylic etherification in water: A mild and efficient method for the formation of C(sp<sup>3</sup>)-O bond

M. Halder, M. M. Islam, **S. Ahammed**,\* S. M. Islam \*, *RSC Advances*, **2016**, DOI: 10.1039/C5RA26182A.

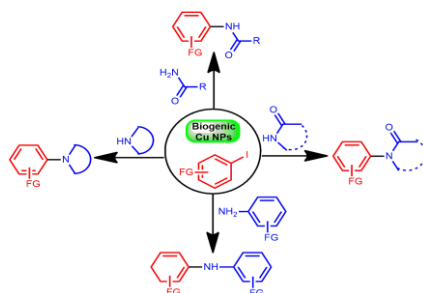


16. One-pot Suzuki coupling of aromatic amines *via* visible light photocatalyzed metal free borylation using *t*-BuONO at room temperature.



**S. Ahammed**, S. Nandi, D. Kundu, B. C. Ranu, *Tetrahedron Lett.* **2016**, *57*, 1551-1554.

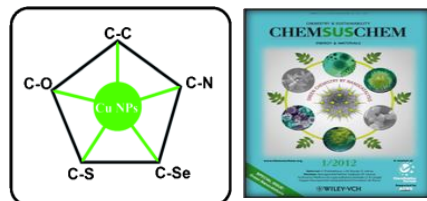
17. Biogenic Nano-CuO-Catalyzed Facile C-N Cross-Coupling Reactions: Scope and Mechanism.



M. Halder, M. M. Islam, Z. Ansari, **S. Ahammed**\*, K. Sen, and S. M. Islam, *ACS Sustainable Chem. Eng.*, **2017**, *5*, 648-657.

## Review Articles

18. Copper Nanoparticles Catalyzed Carbon-Carbon and Carbon-Hetero Atom Bond Formation with Greener Perspective.



B. C. Ranu, R. Dey, T. Chatterjee and **S. Ahammed**, *ChemSusChem*, 2012, 5, 22-44

19. Microwave Assisted Synthesis of Chalcogenides.

**S. Ahammed**, D. Kundu, N. Mukherjee and B. C. Ranu, *Current Microwave Chemistry*, 2016, 2, 1-11.

## International / National Patent

20. Preparation of (benzotriazin-3(4H)-yl)butanoic acid derivatives as matrix metalloproteinase inhibitors.

M. K. Khera, A. Soni, J. Sattigeri, V. Sattigeri, B. Das, I. A. Cliffe, P. K. Bhatnagar, A. R. A. Rauf, A. Musib, **S. Ahammed**, S. Saha, N. K. Yadav, R. R. Reddy, A. Ray, P. Srivastava, S. G. Dastidar, *PCT Int. Appl.* (2012), WO 2012038942 A1 20120329.

## National / International Seminars / Workshop / Conference

Name of Symposium/ Conference/Workshop	Topic	Duration	Nature of Participation
1. 13 <sup>th</sup> CRSI National Symposium in Chemistry (NISER, Bhubaneswar, India)	Copper Nanoparticles: An Efficient Catalyst For Chemoselective Azide Reduction	February 4-6, 2011	Poster Presentation
2. International Symposium on Chemistry and Complexity (IACS, Kolkata, India)	Highly selective reduction of nitroarenes by	December 6-8, 2011	Poster Presentation

	iron(0) NPs in water		
3. Chemical Research Society of India (North Zone Meeting) Symposium (University of Jammu, Jammu, India)	Ruthenium Catalyzed One-pot S-Allylation of Dithiocarbamate in Water	September 22-24, 2011	Poster Presentation
4. 14 <sup>th</sup> CRSI National Symposium in Chemistry (CSIR-NIIST, Thiruvananthapuram, India)		February 3-5, 2012	Attendee
6. 8 <sup>th</sup> J-NOST Conference (IIT Guwahati, Guwahati, India)	Synthesis of alkynyl chalcogenides by Al <sub>2</sub> O <sub>3</sub> -Cu(II) catalyzed reaction	December 15-17, 2012	Poster Presentation
7. RSC-India Road Show ( IACS, Kolkata, India )		February 5, 2013	Attendee
8. ACS on Campus (IACS, Kolkata, India)		October 12, 2012	Attendee