Name: Dr. Sarifuddin Gazi Date of Birth: 22nd May, 1984

Sex: Male

Marital Status: Married Nationality: Indian Religion: Islam

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Police Station- Diamond Harbour West Bengal. India. Pin No.-743368



Current Positions and address for Correspondence:

Dr. Sarifuddin Gazi

Associate Professor & HoD School of Applied Sciences Department of Chemistry

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Google Scholar: https://scholar.google.com.sg/citations?user=PXMPPtsAAAAJ&hl=en

Career Highlights:

Total research Publications / Communicated / Under process	12/0/1
Total citations / h-index / i-10 index (Data from Google Scholar	573 / 12 / 12
Total impact factor / Average impact factor	111.112 / 9.25
Number of main author / Impact factor as a main author	09 / 100.681
Number of Research Publication selected as HOT Article by	the referees 01
Patent	01
Postdoctoral Research experiences / Institute	4.3 yrs / NTU Singapore
Teaching experiences (UGC regulations excluding doctoral peri	iod) 4.0 yrs
Competitive examination / Award / Rank	NET-CSIR 2009 / JRF / AIR 296
	GATE 2007 / AIR 141
Academic record	First Class in all academic stages

Educational Qualifications:

Ph.D. (2013): Under the guidance of Prof. Rajakumar Ananthakrishnan, at the Department of Chemistry, Indian Institute of Technology Kharagpur, India.

Ph.D. Thesis title: Visible Light Assisted Photodegradation of Organic Dyes and Photocatalysis of Selective Organic Reactions.

Master of Science: (2007, Chemistry): First Class (CPI 8.38/10), Indian Institute of Technology Guwahati, India.

M.Sc. Thesis title: Bromodimethylsufonium Bromide (BDMS) Mediated Synthesis of Flavones and Aurones.

Bachelor of Science: (2005, Chemistry Honors): First class (63.625%), Scottish Church College under University of Calcutta, India.

12th **Standard:** 2001, First class (80.2%), W.B.C.H.S.E. **10**th **Standard:** 1999, First class (73.625%), W.B.B.S.E.

Research Experience:

Postdoctoral: (21st February, 2013 to 20th June 2017 at NTU Singapore under Prof. Soo Han Sen)

Project Topic: Photocatalysis for the selective cleavage of biomass to value-added chemicals.

Teaching Experience:

Currently I am working as an associate professor (Organic chemistry) & HoD in the department of chemistry, school of applied sciences, University of Science and Technology, Meghalaya and I joined the university on 10th July, 2017.

Patent:

1. Soo, H. S.; Gazi, S.; Dokic, M. Selective carbon-carbon bond cleavage by earth abundant vanadium compound under visible light photocatalysis (Patent No. 11201705500Q, PRIORITY DATA. 3 FEBRUARY 2015 - PATENT APPLICATION NO. 10201500823Q (SINGAPORE), Date of Filing. 3rd February 2016, Date of Grant. 6th October 2020).

List of Publications in International Journals:

- 1. Gazi, S.; Đokić, M.; Chin, K. F.; Ng, P. R.; Soo, H. S. * Visible Light Driven Cascade Carbon-Carbon Bond Scission for Organic Transformations and Plastics Recycling. *Adv. Sci.* 2019, doi.org/10.1002/advs.201902020 (I.F. 16.806).
- **2. Gazi, S.*** Valorization of wood biomass-lignin *via* selective bond scission: a minireview. *Appl. Catal. B: Environ.* **2019**, doi.org/10.1016/j.apcatb.2019.117936 (**I.F. 19.503**).
- **3. Gazi, S.**; Đokić, M.; Moeljadi, A. M. P.; Ganguly, R.; Hirao, H.; * Soo H. S.* Kinetics and DFT studies of photoredox carbon-carbon bond cleavage reactions by molecular vanadium catalysts under ambient conditions. *ACS Catal.* **2017**, *7*, 4682-4691. **(I.F. 13.084)**.
- **4.** Gong, Y.; Wang, D.; Wu, R.; **Gazi, S.**; Soo, H. S.; Sritharan, T.; Chen, Z. New insights into the photocatalytic activity of 3-D core-shell P25@silica nanocomposites: impact of mesoporous coating. *Dalton Trans.* **2017**, 46, 4994-5002. (**I.F. 4.390**).
- **5. Gazi, S.**; Ng, W. K. H.; Ganguly, R.; Moeljadi, A. M. P.; Hirao, H.; * Soo, H. S.* Selective photocatalytic C-C bond cleavage under ambient conditions with earth abundant vanadium complexes. *Chem. Sci.* **2015**, *6*, 7130-7142. (**I.F. 9.825**).
- **6.** Rakibuddin, Md.; **Gazi, S.**; Rajakumar, A.* Iron(II) phenanthroline-resin hybrid as a visible light-driven heterogeneous catalyst for green oxidative degradation of organic dye. *Catal. Commun.* **2015**, *58*, 53-58. (**I.F. 3.626**).
- **7. Gazi, S.**; Rajakumar, A.* Bromodimethylsulfonium bromide (BDMS) as a potential candidate for photocatalytic selective oxidation of benzylic alcohols using oxygen and visible Light. *RSC Advances* **2012**, 2, 7781-7787. (**I.F. 3.361**).
- **8. Gazi, S.**; Rajakumar, A.* [Ru(bpy)₃]²⁺ aided photocatalytic synthesis of 2- arylpyridines *via* Hantzsch reaction under the visible irradiation and oxygen atmosphere. *Catal. Sci. Technol.* **2012**, 2, 1463-1471. (*Selected as HOT article: http://blogs.rsc.org/cy/2012/04/10/shining-light-on-the-hantzsch-reaction/*) (**I.F. 6.119**).
- **9. Gazi, S.**; Rajakumar, A.* Semi-quantitative determination of hydroxyl radicals by benzoic acid hydroxylation: an analytical methodology for photo-Fenton Systems. *Curr. Anal. Chem.* **2012**, 8, 143-149. (**I.F. 1.892**).
- **10. Gazi, S.**; Rajakumar, A.* Metal-free-photocatalytic reduction of 4-nitrophenol by resinsupported dye under the visible irradiation. *Appl. Catal. B* **2011**, *105*, 317-325. (**I.F. 19.503**).

- **11. Gazi, S.**; Rajakumar, A.*; Singh, N. D. P. Photodegradation of organic dyes in the presence of [Fe(III)-salen]Cl complex and H₂O₂ under visible light irradiation. *J. Hazard Mater.* **2010**, *183*, 894-901. (**I.F. 10.588**).
- **12.** Khan, A. T.*; Parvin, T.; **Gazi, S.**; Choudhury, L. H. Bromodimethylsulfonium bromide mediated aza-Micheal addition of amines to electron deficient alkenes. *Tetrahedron Lett.* **2007**, *48*, 3805-3808. (**I.F. 2.415**).

List of Presentations in Conferences:

- **1. Gazi, S** "Photoredox Carbon-Carbon Bond Activation by Molecular Vanadium Catalyst under Ambient Conditions" 9th Asian & Oceanian Photochemistry Conference (**APC-2016**), 5-8th December, 2016 held at NTU Singapore. (Oral presentation).
- **2. Gazi, S.**; Soo, H. S. "Photochemical depolymerization of biomass with molecular catalysts" 41st International Conference on Coordination Chemistry (**ICCC41-2014**), 21-25th July, 2014 held at Suntec Singapore Convention & Exhibition Centre-Singapore.
- **3. Gazi, S.**; Rajakumar, A. "[Ru(bpy)₃]²+ aided photolysis of dihydropyridine under the visible light" 14th National Symposium in Chemistry (**CRSI-2012**), 3-5th February, 2012 held at NIIST Trivandrum.
- **4. Gazi, S.**; Rajakumar, A. "Visible light aided photocatalysis: A green chemical way for the organic transformation and remediation of organic pollutants" International Conference-Diamond Jubilee Symposium on Recent Trends in Chemistry (**DJSRTC- 2011**), 21-23rd October, 2011 held at IIT Kharagpur.
- **5.** Rajakumar, A.; **Gazi, S.** "Cooperativity of resin supported Eosin Y in photocatalysis: a first study on metal-free reduction of 4-nitrophenol under the visible light" 28-29th Sept 2011, 2nd European Symposium on Photocatalysis (**JEP-2011**), Bordeaux, France.
- **6.** Rajakumar, A.; **Gazi, S.** "Effect of sensitizers on the photooxidation of dye by resin supported Iron(II) bipyridine complex under the visible Light" 27-29th May 2011, 5th International Congress of Chemistry and Environment (**ICCE-2011**), Port Dickson, Malaysia.
- **7. Gazi, S.**; Rajakumar, A. "A non-classical rout of photo-Fenton process aided by Fe(III)-salen complex for the treatment of Rhodamine B dye under visible light" National conference on Frontiers in Chemical Sciences (**FICS-2010**), 3-4th December, 2010 held at IIT Guwahati.

Notable Research Works

- Research work has been selected as HOT article: http://blogs.rsc.org/cy/2012/04/10/shining-light-on-the-hantzsch-reaction/
 - $[Ru(bpy)_3]^{2+}$ aided photocatalytic synthesis of 2- arylpyridines *via* Hantzsch reaction under the visible irradiation and oxygen atmosphere. *Catal. Sci. Technol.* **2012**, 2, 1463-1471.
- Research work has got international media attention
 - Visible Light Driven Cascade Carbon-Carbon Bond Scission for Organic Transformations and Plastics Recycling. *Adv. Sci.* **2019**, doi.org/10.1002/advs.201902020
 - Featured in: ChannelNewsAsia, Science Daily, Agence France-Presse, Today Online, <u>France24</u>, The Online Citizen, Mirage News, Gulf News, Journal du Cameroun, <u>8world</u>, <u>Yahoo Taiwan</u>, The Hindu, <u>Chemeurope</u>, <u>New Atlas</u>, <u>India Times Post</u>, <u>NY Post</u>, <u>Intellasia</u>, Global Times, <u>Straits Times</u>, <u>Economic Times</u>, <u>DTI News</u>, <u>Science Alert</u>, <u>SciTechDaily</u>, <u>Phys.org</u>, <u>Eureka Alert</u>, <u>Raw</u>

Story, Packaging Insights

Research article has ranked in top most read articles (Wiley)

Visible Light Driven Cascade Carbon-Carbon Bond Scission for Organic Transformations and Plastics Recycling. *Adv. Sci.* **2019**, doi.org/10.1002/advs.201902020.

Research article got Nobel Citation

Article published in *Appl. Catal. B* **2011**, *105*, 317-325 has been cited (Citation 51) by David W. C. MacMillam (2021 Nobel Prize Winner) in *Chem. Rev.* **2013**, *113*, 5322–5363.

Awards and Honours:

- (1) Awarded with certificate of recognition by Wiley Publication House for the research article *Adv. Sci.* **2019**, **doi.org/10.1002/advs.201902020** being the topmost read article.
- (2) Winner of the research leadership award by RULA AWARDS in 2020 as International Distinguished Researcher.
- (3) Awarded with certificate of recognition by ERDF Guwahati for winning the research Grant SRG from DST –SERB, 2019.
- (4) Rewarded with highly competitive Start-up Research Grant (SRG) by DST –SERB Government of India, in 2019.
- (5) GATE (2007 All India Rank 141).
- (6) CSIR-UGC NET (2009, All India Rank: 296): Qualified for JRF (CSIR).

Reviewer of International Journals

Elsevier Reviewer Recognition

(1) Applied Catalysis B, (2) Journal of Catalysis, (3) Catalysis Today

Member of International Society

Regular member of American Chemical Society (ACS).

Research Area of interest:

Catalysis, photochemistry and development of new organic reactions, small molecule activation *via* metal and metal-free photo and thermo-catalytic route, room temperature catalysis for C-C and C-heteroatom bond formation as well as selective bond cleavage of macromolecules to yield value added fine chemicals.

MSc. Project Guided:

13 M.Sc. students completed their academic project work under my supervision at USTM.

Current Research Group

> Research Scholar

Two research scholars working under my guidance.

M.Sc. Project Students

Five M.Sc. final year students completed project work in the current year.

Research Grant

Currently there is one major project ongoing, entitled "Synthesis of Reusable Metal-free Photocatalysts for Visible Light Aided Generation of Benzyne Intermediate: A Key Route of C-C & C-hetero-atom Bond Formation" funded by SERB DST under the SRG, 2019.

References

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Declaration:

Sarifuddin garj

I hereby declare that the information given above is true to the best of my knowledge.

Signature

Date: