

Dr. Asadulla Mallick, PhD

Address: Y-268/1 Mallick Para Lane, Kolkata, West Bengal, India

Pin: 700018

Email: asadullamallick@gmail.com

Ph: 8777272676

Designation: Assistant Professor (July, 2017- Present)

Academic profile

Program

Project description

Post-Doctoral Fellow

(March 2015 – June 2017)

Supervisor: Prof. Liu Xuewei

Nanyang Technological

University, Singapore

1. Development of new degradable polymer
2. pH sensitive polymer
3. Glycopolymer as anti-bacterial agents
4. Chitosan, Dextrin based modified polymer as new tools for drug delivery

PhD Research

(2008-2014)

CGPA: 9.67 (10)

Supervisor: Prof. Y. D. Vankar

Indian Institute of Technology,

Kanpur, India

1. Synthesis of new isofagomine derivatives and their biological evaluation
2. Synthesis and glycosidase inhibition study of branched piperidines
3. A concise synthesis of hydroxypipercolic acids from D-glycals
4. Total synthesis of (-)-deoxoprosopinine and (+)-2-*epi*-deoxoprosopinine from D-glycals
5. Gold (III)/Phenyl acetylene catalyzed glycosylation

M.Sc. in Chemistry

CGPA: 8.04 (10)

(2006-08)

Indian Institute of Technology,

Delhi, India

1. Chemistry (Organic major)
2. M.Sc. project: Bile acid based polymer synthesis and selective metal absorption

B.Sc in Chemistry (Hons)

First Class

(2003-2006)

University of Calcutta,

Kolkata, India

1. Chemistry (Organic, Inorganic and Physical-Honors Subjects)
2. Physics, Mathematics, English, Bengali and ENVIS (Pass Subjects)

Professional skills and experiences

- Associate Research Scientist at Integral BioScience, Noida from July, 2014 to February 2015. Designing and synthesizing new drugs for BTK inhibitor as a cure for blood cancer.
- Chromatographic techniques such as column chromatography, Flash chromatography and HPLC.
- Carried out enzyme (Glycosidase) inhibition studies on the designed and synthesized molecules.
- Experience in IR, NMR (^1H , ^{13}C , COSY, NOSY, NOE), Mass, UV-Vis Spectral analysis etc.

- Experience in GPC (gel permeation chromatography), SEM (Scanning electron microscopy), TEM (Transmission electron microscopy), TGA (Thermogravimetric analysis), DSC (Differential scanning calorimetry), CHN-analyzer, and X-ray crystallography.

Awards and achievements

- Qualified **JAM** in 2006 for M. Sc, All India Rank **121**.
- Qualified National Entrance Test (**NET**) conducted by Council for Scientific and Industrial Research in 2007.
- Qualified Graduate Aptitude Test in Engineering (**GATE**) in 2008.
- Promoted from Junior Research fellow (**JRF**) to Senior Research Fellow (**SRF**) by Council for Scientific and Industrial Research in 2010.
- Received **Best Teaching Assistant award** at IIT Kanpur.
- **Cash Award** (twice) for publishing articles in international journals at IIT Kanpur.
- Led the Dean of Academic affairs' council for IIT- Kanpur infrastructure election commission.
- **Post-doctoral Fellowship** at Nanyang Technological University, Singapore.

Title of PhD thesis

“Synthesis of biologically active nitrogen heterocycles from carbohydrates and Au(III) halides/phenylacetylene catalyzed glycosylations”

Publications

1. “Raman-encoded, Multivalent Glycan-nanoconjugates for traceable specific binding and killing of bacteria”. Surendra H Mahadevegowda, Shuai Hou, Jielin Ma, Damien Keogh, Jianhua Zhang, **Asadulla Mallick**, Xuewei Liu, Hongwei Duan, Marry B Chan-Park”. *Biomaterials Science* 6, (6), 1339-1346, 2018. DOI: 10.1039/C8BM00139A.
2. “Oxadiazabicyclooctenone as a versatile monomer for construction of pH sensitive functional polymer via ROMP”. **Asadulla Mallick**, Yuan Xu, Yichao lin, Jingxi He, Mary B Chan-Park, Xuewei Liu. *Polymer Chemistry* 9, (3), 372-377, 2018. DOI:10.1039/c7py01413a.
3. “AuCl₃-AgOTf catalysed O-glycosylation using anomeric sulfoxides as glycosyl donors at room temperature” Ashokkumar Palanivel, Ande Chennaiah, Sateesh Dubbu, **Asadulla Mallick**, Yashwant D. Vankar. *Carbohydrate Research*, **2017**, 437, 43-49. DOI: 10.1016/j.carres.2016.11.012.

3 | Curriculum Vitae/Asadulla Mallick

4. "Interrupting Nazarov Reaction with New Trapping Modality: Utilizing Potassium Alkynyltrifluoroborate as σ -Nucleophile" Ronny William, Wang Siming, **Asadulla Mallick**, Liu Xuewei. *Org. Lett.* **2016**, *18*, 4458-4461, DOI: 10.1021/acs.orglett.6b01606.
5. "Au^{III}-Halide/Phenylacetylene-Catalysed Glycosylations Using 1-*O*-Acetylfuranoses and Pyranose 1,2-Orthoesters as Glycosyl Donors" **Asadulla Mallick**, Y. Mallikharjunarao, Parasuraman Rajasekaran, Rashmi Roy and Yashwant D. Vankar *Eur. J. Org. Chem.*, **2015**. DOI:10.1002/ejoc.201501245.
6. "Comparative study of AuCl₃ and AuCl₃-Phenylacetylene catalyzed glycosylations using glycosyl trichloroacetimidates" Rashmi Roy, Ashok kumar Palanivel, **Asadulla Mallick** and Yashwant D. Vankar *Eur. J. Org. Chem.*, **2015**, *18*, 4000-4005. DOI:10.1002/ejoc.201500137.
7. "Synthesis and glycosidase inhibition study of 2-*C*-hydroxymethyl- and 6-*C*-hydroxymethyl-branched piperidines from D-glucose using Ene-Yne metathesis as a key step" **Asadulla Mallick**, Yashwant D. Vankar. *Eur. J. Org. Chem.*, **2014**, *19*, 4155-4161. DOI:10.1002/ejoc.201402142.
8. "A concise synthesis of (2*R*,3*R*)-, (2*R*,3*S*)-3-hydroxypipercolic acids and total synthesis of (-)-deoxoprosopinine and (+)-2-*epi*-deoxoprosopinine from D-glycals" **Asadulla Mallick**, Nitee Kumari, Rashmi Roy, Ashokkumar Palanivel, Yashwant D. Vankar. *Eur. J. Org. Chem.*, **2014**, *25*, 5557-5563. DOI: 10.1002/ejoc.201402603.
9. "Gold(III) Chloride and Phenylacetylene: A Catalyst System for the Ferrier Rearrangement, and *O*-Glycosylation of 1-*O*-Acetyl Sugars as Glycosyl Donors" Rashmi Roy, Parasuraman Rajasekaran, **Asadulla Mallick**, Yashwant D. Vankar (*Eur. J. Org. Chem.*, **2014**, *25*, 5564-5573, DOI: 10.1002/ejoc.201402606.
10. "Synthesis of L-3-*epi*-isofagomine, its homo-, n-butyl and bicyclic analogues from D-glucose as glycosidase inhibitors" **Asadulla Mallick**, Adabala Pal John Pal, Yashwant D. Vankar. *Tetrahedron Letters*, **2013**, *54*, 6549-6552. DOI: 10.1016/j.tetlet.2013.09.102.
11. "Synthesis of sugar-derived spiroaminals *via* lactamization and metathesis reactions" Adabala Pal John Pal, Parasuraman Kadigachalam, **Asadulla Mallick**, Venkata Ramana Doddi, Yashwant D. Vankar. *Org. Biomol. Chem.*, **2011**, *9*, 809-819. DOI: 10.1039/c0ob00555j.
12. "Molecular iodine-promoted N- and C-glycosylation of 1-*C*-alkyl (or phenyl)-glycopyranoses" Adabala Pal John Pal, **Asadulla Mallick**, Y. Suman Reddy, Yashwant. D. Vankar. *Tetrahedron Letters*, **2010**, *51*, 6334-6337. DOI: 10.1016/j.tetlet.2010.09.124.

SEMINARS, CONFERENCES, WORKSHOP AND COURSE ATTENDED

1. "Faculty Development Programme" at Ramakrishna Mission Vidyamandira, Belur Math, Howrah, March, 2020.
2. "An International Seminar on Itinerary of Classical to Modern Era of Chemistry" at The Bhawanipur Educational Society College, November, 2019.
3. "Workshop on Chemistry Honors Practical" at Asutosh College, July, 2019.

4 |Curriculum Vitae/Asadulla Mallick

4. “Experiments in the New Syllabus of Chemistry under CBCS” at Basanti Devi College, October, 2018.
5. “Synthesis of natural Products Today and Challenges of Tomorrow” at Ramakrishna Mission Institute of Culture, Golpark, September. 2018.
6. “Indian Culture and spiritual Heritage” at Ramakrishna Mission Vidyamandira, May, 2018.
7. “Revised Assessment and Accreditation Procedure” at Ramakrishna Mission Vidyamandira, May, 2018.