BIOGRAPHICAL SKETCH

NAME: Mohammad Abrar Alam

eRA COMMONS USER NAME (credential, e.g., agency login): mabraralam

POSITION TITLE: Assistant Professor of Chemistry

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	Completion Date MM/YYYY	FIELD OF STUDY
Aligarh Muslim University, Aligarh, India	B.Sc.	06/2002	Chemistry & Biology
Aligarh Muslim University, Aligarh, India	M.Sc.	06/2004	Organic Chemistry
Indian Institute of Technology, Kanpur, India	Ph.D.	06/2010	Organic Synthesis
University of Minnesota, Duluth, MN	Postdoctoral	05/2012	Medicinal Chemistry

Positions and Employment

2004-2009 General Aptitude Test in Engineering fellowship, IIT Kanpur, India (GATE, 99.24 percentile)
2004-2006 Junior Research Fellow, Center for Scientific and Industrial Research, New Delhi, India
2006-2009 Senior Research Fellow, Center for Scientific and Industrial Research, New Delhi, India
2009-2012 Postdoctoral Fellow University of Minnesota, Duluth, MN
2012-2014 Adjunct Assistant Professor (Rowan University, Glassboro, NJ)
2014-2015 Visiting Assistant Professor (Arkansas State University, Jonesboro, AR)
2015-2019 Assistant Professor (Arkansas State University, Jonesboro, AR)
2019- Associate Professor (Arkansas State University, Jonesboro, AR)

Honors and Awards

2004-2009 General Aptitude Test in Engineering Fellowship, IIT Kanpur, India (GATE, 99.24 percentile)
2004-2006 Junior Research Fellow, Center for Scientific and Industrial Research, New Delhi, India
2006-2009 Senior Research Fellow, Center for Scientific and Industrial Research, New Delhi, India
2017 Arkansas Biosciences Institute New Investigator of the Year Award
2019-2024 Buddy Beck Faculty Fellowship Award

Other Experience and Professional Memberships

2011- Member, American Chemical Society

Complete List of Published Work in My Bibliography:

https://www.ncbi.nlm.nih.gov/myncbi/collections/bibliography/44707082/

List of Patents and Publications

Patents

1. Antimicrobial agents and the methods of synthesizing antimicrobial agents. United States Patent Application 20170340609, **2018**
2. Cytotoxic agents, anticancer agents and the methods of synthesizing the cytotoxic and anticancer agents. **2019** (Patent pending)

Manuscripts

1. Whitt, J.; Duke, C.; Ali, M. A.; Chambers, S. A.; Khan, M. M. K.; Gilmore, D.; Alam, M. A., Synthesis and Antimicrobial Studies of 4-[3-(3-Fluorophenyl)-4-formyl-1H-pyrazol-1-yl]benzoic Acid and 4-[3-(4-Fluorophenyl)-4-formyl-1H-pyrazol-1-yl]benzoic Acid as Potent Growth Inhibitors of Drug-Resistant Bacteria. *ACS Omega* **2019**, *4*, 14284-14293.

2. Alam, M. A. Catalysis and the Synthesis of Pharmacologically Small Molecules. *Curr. Org. Chem*., **2019**, *23*, 976 – 977.
3. Whitt, J.; Duke, C.; Sumlin, A.; Chambers, S. A.; Alnufaie, R.; Gilmore, D.; Fite, T.; Basnakian, A. G.; Alam, M. A. Synthesis of Hydrazone Derivatives of 4-[4-Formyl-3-(2-oxochromen-3-yl)pyrazol-1-yl]benzoic acid as Potent Growth Inhibitors of Antibiotic-resistant Staphylococcus aureus and Acinetobacter baumannii. *Molecules* **2019**, *24*, 2051-2063.
4. Ali, M. A.; Okolo, C.; Alsharif, Z. A.; Whitt, J.; Chambers, S. A.; Varma, R. S.; Alam, M. A., Benign Synthesis of Thiazolo-androstenone Derivatives as Potent Anticancer Agents. *Org. Lett*., **2018**, *20*, 5927-5932.
5. Okolo, C.; Ali, M. A.; Newman, M.; Alsharif, Z. A.; Whitt, J.; Chambers, Hexafluoroisopropanol-Mediated Domino Reaction for the Synthesis of Thiazolo-androstenones: Potent Anticancer Agents. *ACS Omega* **2018**, *3*, 17991-18001.
6. Zakeyah, A. A.; Whitt, J.; Duke, C.; Gilmore, D. F.; Meeker, D. G.; Smeltzer, M. S.; Alam, M. A., Synthesis and antimicrobial studies of hydrazone derivatives of 4-[3-(2,4-difluorophenyl)-4-formyl-1H-pyrazol-1-yl]benzoic acid and 4-[3-(3,4-difluorophenyl)-4-formyl-1H-pyrazol-1-yl]benzoic acid. *Bioorg. Med. Chem. Lett*. **2018**, *28*, 2914-2919.
7. Alsharif, Z.; Ali, M. A.; Alkhattabi, H.; Jones, D.; Delancey, E.; Ravikumar, P. C.; Alam, M. A. Hexafluoroisopropanol mediated benign synthesis of 2H-pyrido[1,2-a]pyrimidin-2-ones by using a domino protocol. *New J. Chem*., **2017**, *41*, 14862.
8. Ali, M. A.; Alam, M. A., Theoretical studies on the structure and thermochemistry of cyclicparaphenylenediazenes. *RSC Adv*., **2017**, *7*, 40189.
9. Alsharif, Z. A.; Alam, M. A., Modular synthesis of thiazoline and thiazole derivatives by using a cascade protocol. *RSC Adv.,* **2017**, *7*, 32647.
10. Allison, D.; Delancey, E.; Ramey, H.; Williams, C.; Alsharif, Z. A.; Al-Khattabi, H.; Ontko, A.; Gilmore, D.; Alam, M. A., Synthesis and antimicrobial studies of novel derivatives of 4-(4-formyl-3-phenyl-1H-pyrazol-1-yl)benzoic acid as potent anti-*Acinetobacter baumannii* agents. *Bioorg. Med. Chem. Lett.* **2017**, 27, 387.
11. Brider, J.; Rowe, T.; Gibler, D. J.; Gottsponer, A.; Delancey, E.; Branscum, M. D.; Ontko, A.; Gilmore, D.; Alam, M. A., Synthesis and antimicrobial studies of azomethine and N-arylamine derivatives of 4-(4-formyl-3-phenyl-1H-pyrazol-1-yl)benzoic acid as potent anti-methicillin-resistant *Staphylococcus aureus* agents. *Med. Chem. Res*. **2016**, *25*, 2691.
12. Alam, M. A.; Alsharif, Z.; Alkhattabi, H.; Jones, D.; Delancey, E.; Gottsponer, A.; Yang, T., Hexafluoroisopropyl alcohol mediated synthesis of 2,3-dihydro-4H-pyrido[1,2-a]pyrimidin-4-ones. *Scientific Reports* **2016**, *6*, 36316.
13. Gurrapu, S.; Jonnalagadda, S. K.; Alam, M. A.; Ronayne, C. T.; Nelson, G. L.; Solano, L. N.; Lueth, E. A.; Drewes, L. R.; Mereddy, V. R., Coumarin carboxylic acids as monocarboxylate transporter 1 inhibitors: In vitro and in vivo studies as potential anticancer agents. *Bioorg. Med. Chem. Lett.* **2016,** *26*, 3282.
14. Alam, M. A.; Arora, K.; Gurrapu, S.; Jonnalagadda, S. K.; Nelson, G. L.; Kiprof, P.; Jonnalagadda, S. C.; Mereddy, V. R., Synthesis and evaluation of functionalized benzoboroxoles as potential anti-tuberculosis agents. *Tetrahedron* **2016**, 72, 3795.
15. Gurrapu, S.; Jonnalagadda, S. K.; Alam, M. A.; Nelson, G. L.; Sneve, M. G.; Drewes, L. R.; Mereddy, V. R. Monocarboxylate Transporter 1 Inhibitors as Potential Anticancer Agents. *ACS Med. Chem. Lett*. **2015**, *6*, 558.
16. Alam, M. A.; Reddy, Y. S.; Ali, A. New and Under Explored Epigenetic Modulators in Search of New Paradigms. *Med. Chem*. **2015**, 11*,* 271.
17. Alam, M. A. Potential Therapeutic Agents from the Red Sea Organisms. *Med. Chem*. **2014**, *10*, 550.

18. Nelson, G.; Alam, M. A.; Atkinson, T.; Gurrapu, S.; Kumar, J. S.; Bicknese, C.; Johnson, J. L; Williams, M. Synthesis and Evaluation of *p*-*N*, *N*-Dialkyl Substituted Chalcones as *anti*-Cancer agents. *Med Chem Res.* **2013,** *22*, 4614.

Meeting Papers

Poster presentation

1. Whitt, J.; Okolo, C; Duke, C.; Gilmore, D.; Alam, M. Development of Halogenated Pyrazole-based Antimicrobial agents. ABI Fall Research Symposium, Fayetteville, AR, 09/15/2017
2. Alam, M. A.; Gilmore, D.; Conrad, W.; Whitt, J.; Laws, J. A. Synthesis and antibacterial studies of difluorophenyl pyrazole derivatives. Central Arkansas Summer Undergraduate Research Symposium: UAMS Little Rock, 07/26/2017.
3. Ramey, H.; Laws, H.; Gilmore, D.; Alam, M. A. Synthesis and antibacterial studies of coumarin-derived pyrazole derivatives, Council on Undergraduate Research: **2017**; University of Memphis, Tennessee.
4. Allison, D.; Williams, C.; Gilmore, D.; Alam, M. A. Synthesis and and antibacterial studies of pyrazole-derived alkenes, Council on Undergraduate Research: **2017**; University of Memphis, Tennessee.
5. Alam, M.; Allison, D.; Delancey, E.; Jones, D.; Gottsponer, A.; Gilmore, D. Synthesis and antimicrobial studies of hydrophilic pyrazole derivatives as potent antibacterial agents, American Chemical Society: Philadelphia, PA, **2016**; pp MEDI-126.
6. Alam, M.; Jones, D.; Alsharif, Z.; Alkhattabi, H. In Synthesis and antimicrobial studies of hydrophilic pyrazole derivatives as potent antibacterial agents, American Chemical Society: **2016**; pp MEDI-156.
7. Alam, M.; Alsharif, Z.; Alkhattabi, H.; Jones, D.; Ramey, H. Sustainable synthesis of pyrido pyrimidinones, American Chemical Society: Philadelphia, PA, **2016**; pp ORGN-680.
8. Alam, M.; Alkhattabi, H.; Alsharif, Z.; Jones, D. In Synthesis and biological studies of dihydropyrido pyrimidinones, American Chemical Society: 2016; pp MEDI-365
9. Trent, R.; Gibler, D. J.; Jamarcus, B.; Ontko, A. C.; Gilmore, D. Alam, M. A. Synthesis and antimicrobial studies of pyrazole derivatives as potent antibacterial agents. 67th Southeast/71st Southwest Joint Regional Meeting of the American Chemical Society, Memphis, TN, United States, November 4-7, **2015**. SERMACS-SWRM-254.
10. Rowe, T.; Brider, J.; Branscum, M.; Alam, M. A. Synthesis of pyrazole derivatives as potential cytotoxic agents. 249th ACS National Meeting & Exposition, Denver, CO, United State, March 22-26, **2015**.
11. Branscum, M.; Rowe, T.; Brider, J.; Alam, M. A. Design and synthesis of coumerin-aminoethylphenol hybrids as potential epigenetic modulators. 249th ACS National Meeting & Exposition, Denver, CO, United State, March 22-26, **2015**.
12. Shirisha, G.; Jonnalagadda, S. K.; Alam, M. A.; Nelson, G. L.; Murthy, M. S.; Hill, M. A.; Ronayne, C. T. Novel small molecule MCT inhibitors as anticancer agents. 247th ACS National Meeting & Exposition, Dallas, TX, United States, March 16-20, **2014.**
13. Alam, M. A.; Bacani, M. R.; Holt, C. M.; Murthy, M. S. R. C.; Jonnalagadda, S. C. 39th Northeast Regional Meeting of the American Chemical Society, New Haven, CT, United States, October 23-26, **2013**.
14. Yeruva, S. R.; Fishbein, S. H.; Chary, P. K.; **Alam, M. A**.; Murthy, M. S. R. C.; Jonnalagadda, S. C. Synthesis and Biological Evaluation of Novel Aminobenzoboroxoles as Potential Anti-Cancer Agents. 39th Northeast Regional Meeting of the American Chemical Society, New Haven, CT, United States, October 23-26, **2013**.
15. Alam, M. A.; Just, M. J.; Johnson, J. L.; Berry, S. M.; Jonnalagadda, S. C.; Mereddy, V. R. Stereoselective synthesis of chiral borono-pyroglutamates. 243rd ACS National Meeting & Exposition, San Diego, CA, United States, March 25-29, **2012**
16. Alam, M. A.; Atkinson, Mereddy, V. R. Synthesis and evaluation of p-N,N-dialkyl substituted chalcones as potential anticancer agents. 243rd ACS National Meeting & Exposition, San Diego, CA, United States, March 25-29, **2012**

17. Alam, M. A.; Nelson, G.; Gurrapu, Mereddy, V. R. 243rd ACS National Meeting & Exposition, San Diego, CA, United States, March 25-29, **2012**
18. Alam, M. A.; Gurrapu, Shirisha; Mereddy, Venkatram R. 244th ACS National Meeting & Exposition, Philadelphia, PA, United States, August 19-23, **2012**.
19. Williams, M. J.; Corsello, M. A.; Alam, M. A.; Mereddy, V. R. 244th ACS National Meeting & Exposition, Philadelphia, PA, United States, August 19-23, **2012**.

Oral presentations

20. Delancey, E.; Nakaya, K.; Williams, C.; Gilmore, D.; Alam, M. A. Synthesis and antibacterial studies of naphthalene containing pyrazole-derived hydrazones, Council on Undergraduate Research: **2017**; University of Memphis, Tennessee.
21. Williams, C.; Duke, C., Whitt, J.; Laws, J. Synthesis and antibacterial studies of difluorophenyl pyrazole derivatives, Central Arkansas Undergraduate Summer Research Symposium: **2017**, University of Arkansas for Medical Sciences, Little Rock.