

Dr. Abdul Hameed

(PhD UK, MRSC UK, Post-Doc Germany, MCSP Pakistan)

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Education

Postdoctoral Research Fellow

Max-Planck Institute for Polymer Research, Germany

Research focuses on functionalization of adenylyl cyclase inhibitors, NKY80 and MDL 12330A and anticancer drug, Doxorubicin. (January 2012 to June 2013)

Postdoctoral Research Fellow

School of Chemistry, University of Nottingham, UK

Research Topic: Toward the total synthesis of (-)-Cephalotaxine by using hypervalent iodine reagents to build key *N*-bearing quaternary center in the compound's structure. (2008-2009)

PhD Chemistry (Synthetic Organic Chemistry)

School of Chemistry, University of Nottingham, UK

Research Topic: Enantioselective formal syntheses of (+)-Lactacystin, (-)-Cephalotaxine and progress towards (-)-Kaitocephaline via Alkylidenecarbene 1,5-CH insertion reaction. (2005-2008)

M. Phil Chemistry

The University of Punjab (2003-2005)

M. Sc. Chemistry

The University of Punjab (2001-2003)

Research Experience

Postdoctoral Research Fellow:

Max-Planck Institute for Polymer Research, Mainz, Germany

Adenylyl cyclase inhibitors, NKY80 and MDL 12330A, were functionalized with cross-linker, 3-(2-pyridyldithio)propionyl hydrazide (PDPH), having activated thiol moiety for the conjugation with monoclonal antibody to explore their biological potential in Regulatory T cells (Treg). Synthetic routes for desired chemical modifications of the cAMP inhibitors were successfully established. Along with drug-antibody conjugates synthetic studies, the pH sensitive pro-drugs of doxorubicin was also prepared to reverse drug resistant mediated by efflux pumps like - P-glycoproteins in cancer cells. Techniques used include synthesis, solid-phase peptide synthesis, purification by silica gel column chromatography and HPLC, and NMR spectroscopy and mass spectroscopy including ESI, MALDI-TOF for the characterization of compounds. As a post-doctoral fellow, many additional responsibilities were also performed including training, supervision and help in the projects of undergraduate or diploma students and new PhD students in setting up their chemical reactions, purification *via* column chromatography or HPLC and data analysis of their end products. I was also involved organizing the monthly group meetings and managing the laboratory accessories. (January 2012 to June 2013)

DAAD Fellow 2016: Institut für Chemie, Universität Rostock, 18059 Rostock, Germany

PhD Scholar: The University of Nottingham, Nottingham, UK

Advisor: Dr. Christopher J. Hayes

PhD research work was focused on the stereoselective synthesis α,α -dialkyl- α -amino acid moiety presents in a number of natural products, lactacystin, cephalotaxine, kaitocephalin etc. Alkylidenecarbene 1,5-CH insertion reaction was developed and utilized to build the key *N*-bearing quaternary center in these molecules. The enantioselective formal syntheses of (-)-cephalotaxine and (+)-Lactacystin were successfully completed and published in peer review journals (see publication section). Towards the project of (-)-kaitocephalin total synthesis, advance intermediates have been efficiently prepared and well characterized for further development.

(2005-2009)

Research Projects (As PI and Co-PI)

Higher Education Commission (HEC) 0.5 Million Rs grant title "*Synthesis of Lipophilic - Doxorubicin Conjugates via pH Sensitive cleavable Cross-linker and evaluation of their Anticancer Activities*" has been completed.

Higher Education Commission (HEC) 5.5 Million Rs grant title "*Towards the Total Enantioselective Synthesis of (-)-Kaitocephalin via Alkylidene Carbene 1,5-insertion Reaction*" has been completed.

Higher Education Commission as Co-PI (HEC) 10.8 Million Rs grant title "*Development of potent modulators of alkaline phosphatase from natural products as well as synthetic derivatives as lead structure*" has been awarded.

Pakistan Academy of Sciences as Co-PI (PAS) grant title "*Design, synthesis, α amylase and α -glucosidase inhibition study of pyridine derivatives for the treatment of diabetes complications and other pathologies*" has been awarded.

Research and Teaching Experience

Currently Associate Professor – Organic Chemistry, Department of Chemistry, University of Sahiwal, Sahiwal, Pakistan

Assistant professor – Organic Chemistry International Center for Chemical and Biological Sciences (ICCBS), University of Karachi, Pakistan.

Teaching organic chemistry include laboratory practical courses at MSc, MPhil/PhD level.

Supervision of research students @ MPhil/PhD level in the area of organic synthesis.

Assistant professor – Organic Chemistry Department of Chemistry, Forman Christian College (A Chartered University).

Research work was focused on the synthesis biological active compounds with novel methodologies.

Teach general organic chemistry courses and related laboratory techniques, wrote problem sets and conducted exams.

Chemistry Courses:

Chem-702: Organic Mechanism-Reactive Intermediates (Carbene chemistry, Nitrenes and Free Radicals)

Chem-704: Laboratory Techniques in Chemistry (Introduction to Good Laboratory Practices (GLP) and Thesis Research, Practical training on the Operation and Use of the UV spectrometry, IR spectrometry, NMR spectrometer, Data Analysis including UV, IR, NMR and Mass spectroscopy).

Chem-706: Organic Synthesis-Reduction (including asymmetric reductions): Reduction of carbonyl compounds, C-N multiple bond reductions including imines and N-heterocycles, C-C multiple bond reductions, catalytic reductions, homogenous and heterogeneous catalysis etc. and selective reduction of multifunctional species.).

Chem 707: Advance Synthetic Techniques in Organic Chemistry (Handling of reagents, Demonstration of various reactions commonly employed in organic synthesis, Demonstration of various methods employed for characterization of synthesized compounds etc.)

2) Société Generale de Surveillance (SGS), Switzerland

Lahore office, Pakistan

Chemist and customer service advisor, Environmental Division, Lahore office, Pakistan. I was responsible for dealing with queries of existing and new customers. I was involved in the sampling and testing of drinking and waste water from different industries in Pakistan, and in organizing of laboratory data and security system. (January to August 2005)

Scholarships & Awards

1. Awarded Gold Medal (2017-2018) from The Chemical Society of Pakistan for Chemist under 40
2. Research Productivity award by Pakistan council of Science and Technology (PCST) 2015-16
3. Post-Doctoral Fellowship from Max-Planck Institute for Polymer Research, Mainz, Germany (2012)
4. Awarded PhD Scholarship from Higher Education Commission, Islamabad, Pakistan (2005)
5. Awarded Merit Scholarship at MSc level from Institute of Chemistry, University of the Punjab (2001)

Research Publications

PhD Publications

- A second generation formal synthesis of (–)-cephalotaxine, **A. Hameed**, A. J. Black and C. J. Hayes, *The Journal of Organic Chemistry*, **73** (20), 8045-8048, (2008). I. F. (4.785)
- An enantioselective formal synthesis of (+)-lactacystin from hydroxymethyl glutamic acid (HMG), **A. Hameed**, A. J. Black and C. J. Hayes, *Synlett*, (4), 535-538, (2010). (*Professor Gerry Pattenden 70th Birthday Special Edition*) I. F. (2.419)

Total Publications

- A patent update on therapeutic applications of urease inhibitors (2012-2018), **A. Hameed**, M. al-Rashida, M. Uroos, S. U. Qazi, S. Naz, M. Ishtiaq, K. M. Khan *Expert Opinion on Therapeutic Patents* **29**, 181-189, (2019) (accepted & online). I. F. (2.867)
- A Novel and Efficient Colorimetric Assay for Quantitative Determination of Amlodipine in Environmental, Biological and Pharmaceutical Samples, S. Yaqoob, S. Rahim, A. M. Bhayo, M. R. Shah, **A. Hameed**, and M. I. Malik, *ChemistrySelect* **4**, 10046-10053, (2019) I. F. (1.716)
- Exploring Antidiabetic Potential of Adamantyl-Thiosemicarbazones via Aldose Reductase (ALR2) Inhibition, M. T. Shehzad, **A. Hameed**, M. al-Rashida, A. Imran, M. Uroos, A. Asari, H. Mohamad, M. Islam, S. Iftikhar, Z. Shafiq and J. Iqbal *Bioorganic Chemistry* **92**, 103244, (2019) <https://doi.org/10.1016/j.bioorg.2019.103244>. I. F. (3.926)
- Synthesis of sensitive novel dual Signaling Pyridopyrimidine-Based Fluorescent “Turn off” Chemosensors for Anions determination, A. Ashraf, M. Khizar, M. Islam, **A. Hameed**, S. T. Moin, M. Yaqub, W. Rauf, M. M. Naseer, M. T. Ahsan, Z. Shafiq, J. Hussain, A. Al-Harrasi, R. Boqué, F. Jabeen, F. Mabood, *Measurement* **151**, 107267, (2019). I. F. (2.791)
- Synthesis, characterization and molecular docking of some novel hydrazonothiazolines as urease inhibitors, M. T. Shehzad, A. Khan, M. Islam, S. Ahsan H., M. Khiat, M. U. Anwar, J. Hussain, **A.**

Hameed, A. R. Pasha, F. A. Khan, A. Al-Harrasi, Z. Shafiq, *Bioorganic Chemistry* **xx**, 103-404, (2019) <https://doi.org/10.1016/j.bioorg.2019.103404>. I. F. (3.926)

- Acridine-Thiosemicarbazones Stabilized Silver Nanoparticles as a Selective Sensor for Copper(II)-Ion in Tap Water, I. Ali, I. O. Isaac, F. Ahmed, F. Aslam, S. Ali, M. Imran, R. D. Alharthy, M. R. Shah, M. I. Malik, **A. Hameed**, *ChemistrySelect* **4**, 8757 – 8763, (2019). I. F. (1.716)
- Synthetic Dihydropyridines as Novel Antiacanthamoebic Agents, A. Anwar, R. Siddiqui, **A. Hameed**, M. R. Shah, N. A. Khan., *Medicinal Chemistry*, **x**, xxx – xxx, (2019). I. F. (2.53) DOI: 10.2174/1573406415666190722113412
- Synthesis, *in vitro* urease inhibitory activity, and molecular docking studies of (perfluorophenyl)hydrazone derivatives, M. Khan, G. Ahad, A. Manaf, R. Naz, S. R. Hussain, F. Deeba, S. Shah, A. Khan, M. Ali, K. Zaman, S. Zafar, U. Salar, **A. Hameed**, K. M. Khan *Medicinal Chemistry Research*, **28**, 873–883, (2019). I. F. (1.72)
- Synthesis and characterization of new thiosemicarbazones, as potent urease inhibitors: *In vitro* and *in silico* studies, M. Islam, A. Khan, M. T. Shehzad, **A. Hameed**, N. Ahmed, S. A. Halim, M. Khiaf, M. U. Anwar, J. Hussain, R. Csuke, Z. Shafiq, A. Al-Harrasi *Bioorganic Chemistry* **87**, 155-162, (2019). I. F. (3.93)
- Acridine-based (Thio)semicarbazones and Hydrazones: Synthesis, *In Vitro* Urease Inhibition, Molecular Docking and *In-Silico* ADME Evaluation, I. O. Isaac, M. al-Rashida, S. Ur Rahman, R. D. Alharthy, A. Asari, **A. Hameed**, K. M. Khan, J. Iqbal *Bioorganic Chemistry* **82**, 6-16 (2019). I. F. (3.93)
- Coumarinyl Aryl/Alkyl Sulfonates with Dual Potential: Alkaline Phosphatase and ROS Inhibitory Activities; *In Silico* Molecular Modeling and ADME Evaluation, U. Salar, K. M. Khan, S. A. Ejaz, **A. Hameed**, M. Al-Rashida, S. Perveen, M. N. Tahir, J. Iqbal, M. Taha, *Letters in Drug Design & Discovery* **16**, 256-272. I. F. (1.17)
- Synthesis, X-ray crystal and monoamine oxidase inhibitory activity of 4,6-dihydrobenzo[c]pyrano[2,3-e][1,2]thiazine 5,5-dioxides: *In vitro* studies and docking analysis, S. Ahmad, S. Jalil, S. Zaib, S. Aslam, M. Ahmad, A. Rasul, M. N. Arshad, S. Sultan, **A. Hameed**, A. M. Asiri, J. Iqbal, *European Journal of Pharmaceutical Sciences*, **131**, 9-22 (2019). I. F. (3.466)
- Synthesis and urease inhibitory potential of benzophenone sulfonamide hybrid *in vitro* and *in silico*, Arshia, F. Begum, N. B. Almandil, M. A. Lodhi, K. M. Khan, **A. Hameed**, and S. Perveen *Bioorganic & Medicinal Chemistry*, **27**, 1009-1022 (2019). I. F. (2.881)
- 8-Hydroxyquinoline-Methionine Mixed Ligands Metal Complexes: Preparation and Their Antioxidant Activity, N. Qamar, H. Sultan, K. M. Khan, R. Azmat, R. Naz, **A. Hameed** and M. Lateef *ChemistrySelect* **4**, 3058 –3061 (2019) (accepted). I. F. (1.716)
- Benzoxazinone-thiosemicarbazones as antidiabetic leads *via* aldose reductase inhibition: Synthesis, biological screening and molecular docking study, M. T. Shehzad, A. Imran, G. S. S. Njateng, **A. Hameed**, M. Islam, M. al-Rashida, M. Uroos, A. Asari, Z. Shafiq, J. Iqbal *Bioorganic Chemistry* **87**, 857-866 (2019). I. F. (3.93).
- Synthesis, characterization, biological activities and molecular modeling of Schiff bases of benzene sulphonamides bearing curcumin scaffold, M. A. Qadir, M. I. Shafiq, M. Muddassar, Z. Q. Samra, **A. Hameed**, *Arabian Journal of Chemistry* **12**, 41-53, (2019). I. F. (4.55)
- Morpholinium and Piperidinium Based Deep Eutectic Solvents for Synthesis of Pyrazole-5-Carbonitriles, Indoles and Tetrazoles: Bulk Properties *via* Molecular Dynamics Simulations, Sanam, K. Bux, M. al-Rashida, R. D. Alharthy, S. T. Moin, **A. Hameed** *ChemistrySelect* **3**, 12907– 12917 (2018). I. F. (1.505)
- Synthesis, molecular modeling and biological evaluation of 5-arylidene-*N,N*-diethylthiobarbiturates as potential α -glucosidase inhibitors, M. Khan, S. Khan, A. Ul Mulk, A. Ur Rahman, A. Wadood, S. Shams, M. Ashraf, J. Rahman, **A. Hameed**, Z. Hussain, A. Khan, K. Zaman, K.

M. Khan, S. Perveen *Medicinal Chemistry* **xx**, xxx -xxx (2019) I. F. (2.631) (E-pub Abstract Ahead of Print) DOI : 10.2174/1573406414666180912114814.

- Quinazoline and Quinazolinone as important Medicinal Scaffolds: A Comparative Patent Review (2011-2016), **A. Hameed**, M. al-Rashida, M. Uroos, S. A. Ali, Arshia, M. Ishtiaq, and K. M. Khan, *Expert Opinion on Therapeutic Patents* **28**, 281-297 (2018). I. F. (3.04)
- Novel acridine-based thiosemicarbazones as 'turn-on' chemosensors for selective recognition of fluoride anion: a spectroscopic and theoretical study, I. O. Isaac, I. Munir, M. al-Rashida, S. A. Ali, Z. Shafiq, M. Islam, R. Ludwig, K. Ayub, K. M. Khan and **A. Hameed**, *Royal Society Open Science* **5**, 180646 -xxx (2018). I. F. (2.505)
- Acridinedione as Selective Fluoride ion Chemosensor: A Detailed Spectroscopic and Quantum Mechanical Investigation, N. Iqbal, S. A. Ali, I. Munir, S. Khan, K. Ayub, M. al-Rashida, M. Islam, Z. Shafiq, R. Ludwig, and **A. Hameed**, *RSC Advances* **8**, 1993-2003, (2018). I. F. (2.936)
- Ring-Opening Polymerization of Propylene Carbonate: Microstructural Analysis of the Polymer and Selectivity of Polymerization by 2D-NMR Techniques, R. A.-Karim, **A. Hameed**, M. I. Malik, *European Polymer Journal* **105**, 95-106 (2018). I. F. (3.53)
- Receptor-Spacer-Fluorophore Based Coumarin-Thiosemicarbazones as Anion Chemosensors with "Turn on" Response: Spectroscopic and Computational (DFT) Studies, M. Islam, **A. Hameed**, K. Ayub, M. M. Naseer, J. Hussain, R. D. Alharthy, A. Asari, R. Ludwig, M. al-Rashida, Z. Shafiq, *ChemistrySelect* **3**, 7633 - 7642 (2018). I. F. (1.505)
- Semicarbazone Derivatives as Urease Inhibitors: Synthesis, Biological Evaluation, Molecular Docking Studies and *In-Silico* ADME Evaluation, S. U. Qazi, S. Ur Rahman, A. N. Awan, M. al-Rashida, R. D. Alharthy, A. Asari, **A. Hameed**, and Jamshed Iqbal, *Bioorganic Chemistry* **79**, 19-26 (2018). I. F. (3.93)
- Investigations of Structural Requirements for BRD4 Inhibitors through Ligand- and Structure-Based 3D QSAR Approaches, A. Tahir, R. D. Alharthy, S. Naseem, N. Mahmood, M. Ahmed, K. Shahzad, M. N. Akhtar, **A. Hameed**, I. Sadiq, H. Nawaz and M. Muddassar, *Molecules* **23**, 1527 (2018). I. F. (3.098)
- New analogs of temporin-LK1 as inhibitors of multidrug-resistant (MDR) bacterial pathogens, Z. A. Shah, S. Farooq, S. A. Ali, **A. Hameed**, M. I. Choudhary and Farzana Shaheen, *Synthetic Communications*, **48**, 1172-1182 (2018). I. F. (1.38)
- Distinctive Inhibition of Alkaline Phosphatase Isozymes by thiazol-2-ylidene-Benzamide Derivatives: Functional insights into their Anticancer Role, S. A. Ejaz, A. Saeed, S. J. A. Shah, **A. Hameed**, J. Lecka, J. Sévigny, and J. Iqbal, *Journal of Cellular Biochemistry*, **119**, 6501-6513 (2018). I. F. (2.959).
- Synthesis and Characterisation of Calix[4]arene based bis(triazole)-bis(hexahydroquinoline): Probing highly Selective Fluorescence Quenching towards Mercury (Hg²⁺) Analyte, B. Khan, **A. Hameed**, A. Minhaz, M. R. Shah, *Journal of Hazardous Materials* **34**, 349-358, (2018). I. F. (6.434).
- Sulfonamides containing curcumin scaffold: Synthesis, characterization, carbonic anhydrase inhibition and molecular docking studies, M. Ahmed, M. A. Qadir, **A. Hameed**, M. N. Arshad, A. M. Asiri, and M. Muddassar, *Bioorganic Chemistry* **76**, 218-227, (2018). I. F. (3.939).
- Screening of curcumin derived isoxazole, pyrazoles and pyrimidines for their anti-inflammatory, antinociceptive and cyclooxygenase-2 inhibition, M. Ahmed, M. A. Qadir, **A. Hameed**, M. Imran, M. Muddassar, *Chemical Biology & Drug Design* **91**, 338-343, (2018). I. F. (2.396).
- Schiff bases in medicinal chemistry: a patent review (2010-2015), **A. Hameed**, M. al-Rashida, M. Uroos, S. A. Ali, and K. M. Khan, *Expert Opinion on Therapeutic Patents* **27**, 63-79, (2017). I. F. (3.04).

- *N,N*-Dimethylpyridin-4-Amine (DMAP) Based Ionic Liquids: Evaluation of Physical Properties via Molecular Dynamics Simulations and Application as Catalyst for Fisher Indole and 1*H*-Tetrazole Synthesis, S. A. Ghumro, S. Saleem, M. al-Rashida, N. Iqbal, R. D. Alharthy, S. Ahmed, S. T. Moin and **A. Hameed**, *RSC Advances* **7**, 34197-34207, (2017). I. F. (3.11).
- *N*-Alkylated 1,4-Diazabicyclo[2.2.2]octane–Polyethylene Glycol Melt as Deep Eutectic Solvent for the Synthesis of Fisher Indoles and 1*H*-Tetrazoles, S. A. Ghumro, R. D. Alharthy, M. al-Rashida, S. Ahmed, M. I. Malik, and **A. Hameed**, *ACS Omega* **2**, 2891–2900, (2017).
- Ring-opening polymerization of ethylene carbonate: comprehensive structural elucidation by 1D & 2D-NMR techniques, and selectivity analysis, R. A.-Karim, **A. Hameed**, M. I. Malik, *RSC Advances* **7**, 11786-11795, (2017). I. F. (3.11).
- Aminoquinoline Schiff Bases as Non-Acidic, Non-Steroidal, Anti-Inflammatory Agents, B. Bano, K. M. Khan, A. Jabeen, **A. Hameed**, A. Faheem, M. Taha, S. Perveen, and S. Iqbal, *Chemistry Select* **5**, 10050–10054, (2017). I. F. (1.505)
- Design, Synthesis and Antibacterial Activities of New Azo-compounds: An Experimental and a Computational Approach, J. Ashraf, E. U. Mughal, S. Murtaza, A. Sadiq, S. A. K. Tanoli, A. Mumtaz, **A. Hameed**, K. M. Khan, I. Ahmed, B. Khalid, and A. Javid., *Letters in Drug Design & Discovery*, **14** (10), 1145-1154, (2017). I. F. (1.17).
- Small molecules as activators in medicinal chemistry (2000-2016), **A. Hameed**, M. al-Rashida, R. D. Alharthy, M. Uroos, E. U. Mughal, S. A. Ali, and K. M. Khan, *Expert Opinion on Therapeutic Patents* **10**, 1089-1110 (2017). I. F. (3.04)
- Ectonucleotidase Inhibitors: A Patent Review (2011-2016), M. al-Rashida, S. U. Qazi, N. Batool, A. Hameed, and J. Iqbal, *Expert Opinion on Therapeutic Patents* **27**, 1291-1304, (2017), I. F. (3.04).
- Identification of New Potent Inhibitor of Aldose Reductase from *Ocimum Basilicum*, H. A. Bhatti, Y. Tehseen, K. Maryam, M. Uroos, B. S. Siddiqui, **A. Hameed** and J. Iqbal, *Bioorganic Chemistry* **75**, 62–70, (2017). I. F. (3.231)
- Thymidine Esters as Substrate Analogue Inhibitors of Angiogenic Enzyme Thymidine Phosphorylase *In vitro*, S. Javaid, M. Ishtiaq, M. Shaikh, **A. Hameed**, and M. I. Choudhary, *Bioorganic Chemistry* **70**, 44-66, (2017). I. F. (3.231).
- Azomethines, isoxazole, *N*-substituted pyrazoles and pyrimidine containing curcumin derivatives: Urease inhibition and molecular modeling studies, M. Ahmed, M. A. Qadir, **A. Hameed**, M. N. Arshad, A. M. Asiri, M. Muddassar, *Biochemical and Biophysical Research Communications* **490**, 434-440, (2017). I. F. (2.47).
- Curcumin: Synthesis optimization and *in silico* interaction with cyclin dependent kinase, M. Ahmed, M. A. Qadir, M. I. Shafiq, M. Muddassar, **A. Hameed**, M. N. Arshad, A. M. Asiri, *Acta pharmaceutica* **67**, xx-xx, (2017). I. F. (1.29). DOI: 10.1515/acph-2017-0023
- Synthesis, Spectroscopic Characterization and Antimicrobial Activities of Benzoxazolone Derivatives, N. I. Siddiqui, M. A. Versiani, K. Jawaid, M. Shafique, **A. Hameed**, N. Ambreen, A. Karim, K. M. Khan., *Medicinal Chemistry* **13**, 384-390, (2017). I. F. (2.331)
- Facile Dimethyl Amino Group Triggered Cyclic Sulfonamides Synthesis and Evaluation as Alkaline Phosphatase Inhibitors, H. A. Bhatti, M. Khatoon, M. al-Rashida, H. Bano, N. Iqbal, Z.-un-Nisa, S. Yousuf, K. M. Khan, **A. Hameed** and J. Iqbal *Bioorganic Chemistry* **71**, 10-18, (2017). I. F. (3.231).
- Protein–Drug Nanoconjugates: Finding the alternative proteins as drug carrier, I. Munir, S. Ajmal, M. R. Shah, A. Ahmad, **A. Hameed**, S. A. Ali, *International Journal of Biological Macromolecules*, **101**, 131-145, (2017). I. F. (3.67).
- Synthesis, Structure-Activity Relationship and Molecular Docking of 3-Oxoaurones and 3-Thioaurones as Acetylcholinesterase and Butyrylcholinesterase Inhibitors, E. Ullah Mughal, A.

Sadiq, S. Murtaza, H. Rafique, N. Zafar, T. Riaz, B. A. Khan, **A. Hameed** and K. M. Khan, *Bioorganic & Medicinal Chemistry* **25**, 100-107, (2017). I. F. (2.93).

- Coumarin sulfonates: New alkaline phosphatase inhibitors; in vitro and in silico studies, U. Salar, K. M. Khan, J. Iqbal, S. A. Ejaz, **A. Hameed**, M. al-Rashida, S. Perveen, M. N. Tahir, *European Journal of Medicinal Chemistry* **131**, 29-47, (2017). I. F. (4.52).
- The Role of Naked Fluoride Ion as Base or Catalyst in Organic Synthesis, **A. Hameed**, R. D. Alharthy, J. Iqbal, and P. Langer, *Tetrahedron*, **72**, 2763-2812, (2016). I. F. (2.645)
- Facile Synthesis and Electrochemical Evaluation of Coumarin-Tagged Pyridine and Thiophene Derivatives, R. D. Alharthy, **A. Hameed**, M. al-Rashida, A. Al-Moubaraki, and S. R. Al-Mhyawi, *ChemistrySelect*, **1**, 1596 – 1601, (2016). I. F. (1.505)
- Synthesis, *in vitro* α -glucosidase inhibitory activity and molecular docking studies of new thiazole derivatives, K. M. Khan, S. Qurban, U. Salar, M. Taha, S. Hussain, S. Perveen, **A. Hameed**, N. H. Ismail, M. Riaz, A. Wadood, *Bioorganic Chemistry* **68**, 245–258, (2016). I. F. (3.231).
- One-Pot Synthesis of Tetrazole-1,2,5,6-Tetrahydropyridinonitriles and Cholinesterase Inhibition: Probing the Plausible Reaction Mechanism *via* Computational Studies, **A. Hameed**, S. T. Zehra, S. A., R. Un Nisa, T. Mahmood, K. Ayub, M. al-Rashida, J. Bajorath, K. M. Khan and J. Iqbal, *Bioorganic Chemistry*, **65**, 38–47, (2016). I. F. (3.231)
- Novel Quinoxaline Based Chemosensors with Selective Dual Mode of Action: Nucleophilic Addition and Host-Guest Type Complex Formation, M. Ishtiaq, I. Munir, M. al-Rashida, Maria, K. Ayub, J. Iqbal, R. Ludwig, K. M. Khan, S. A. Ali and **A. Hameed**, *RSC Advances* **6**, 64009–64018, (2016). I. F. (3.11).
- Antimicrobial, antioxidant and butyrylcholinesterase inhibition activities of extracts and isolated compounds from *Scadoxus pseudocaulis* and semi-synthetic farrerol derivatives, A. L. Ngankeu Panging, M. L. Khan, M. I. Ali, **A. Hameed**, D. Ngnokam, L. A. Tapondjou, J.-R. Kuate and M. S. Ali, *South African Journal of Botany*, **102**, 166–174, (2016). I. Factor (1.42).
- The Immunomodulation Potential of the Synthetic Derivatives of Benzothiazoles: Implications in Immune System Disorders through in vitro and in silico Studies, K. M. Khan, M. A. Mesaik, O. M. Abdalla, F. Rahim, S. Soomro, S. A. Halim, G. Mustafa, N. Ambreen, A. S. Khalid, M. Taha, S. Perveen, M. T. Alam, **A. Hameed**, Z. Ul-Haq, H. Ullah, Z. Ur Rehman, R. A. Siddiqui and W. Voelter, *Bioorganic Chemistry*, **64**, 21-28, (2016). I. F. (3.231)
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- Mariam Ishtiaq, Mariya al-Rashida, Rima D. Alharthy, **Abdul Hameed** chapter title “*Ionic liquid Based Colloidal Nanoparticles: Applications in Organic Synthesis*” in *Metal Nanoparticles for Drug Delivery and Diagnostic Applications*, Publisher Elsevier. DOI: <https://doi.org/10.1016/B978-0-12-816960-5.00015-X>

Conference and symposiums

- Delivered Invited talk in 30th National & 18th International Chemistry Conference on Recent Trends in Chemistry- CCUMT-2019” on November 27-29, 2019 at Department of Chemistry, University of Management & Technology (UMT), C-II Johar Town, Lahore – Pakistan.
- Invited lecture presentation in 2nd International Conference on Chemistry (ICC) Advances in the field of Polymer, Material and Bio-Chemistry to be held during April 26-27, 2019 April 26-27, 2019, Organized by Faculty of Chemistry, Lahore Garrison University, Lahore, Pakistan, entitled, “*Deep Eutectic Solvents: Green Media for Fisher Indole and 1H-Tetrazole Synthesis*”

- Attended one-week workshop on Synthesis & Applications of Polyurethane (PU) Hydrogels organized by Department of Chemistry & Center for Learning & Teaching (CLT), Forman Christian College (A Chartered University) 17-21th June 2019
- Attended/completed module via webinar titled “How to secure funding – ECR edition” on Monday 10th June 2019 organized by Elsevier Research Academy.
- Attended workshop on fundamentals of Research organized by Faculty of Natural Sciences in Collaboration with Office of Research Innovation and Commercialization (ORIC) 6th March 2019.
- Invited lecture presentation in 3 days International Conference on “Chemical & Pharmaceutical Sciences: Recent Approaches in Research & Applications January 17-19th **2018**, Department of Chemistry, Forman, Christian College (A Chartered University), Lahore Pakistan, *Ionic Liquids/Salts Applications in Organic Synthesis*.
- Invited lecture presentation in 5th International Conference on “Current Approaches and Emerging Trends for the Development and Discovery of Drugs” to be held during June 28-29, **2018** in COMSATS University Islamabad, Abbottabad, entitled, “*(Thio)Semicarbazones: Urease Inhibition*”.
- Session lecture presentation in 2nd International Symposium on Natural Products for the Future (ISNPF-2) to be held during November 4-6, **2018** in H.E.J., Research Institute of Chemistry, International Center for Chemical and Biological Sciences, University of Karachi, Karachi, Pakistan, entitled, “*Semi(Thio)carbazones: Synthetic Approaches*”.
- Poster presentation in 6th International Symposium-cum-Training Course on Molecular Medicine and Drug Research, Dr. Panjwani Center for Molecular Medicine and Drug Research, International Center for Chemical and Biological Sciences, University of Karachi, Karachi, Pakistan, November 6 - 9, **2017**, entitled, “*Novel Quinoxaline Based Chemosensors with Selective Dual Mode of Action: Nucleophilic Addition and Host-Guest Type Complex Formation*”.
- Attended as member organizing committee the 6th International Symposium-cum-Training Course on Molecular Medicine and Drug Research at Dr. Panjwani Center for Molecular Medicine and Drug Research, International Center for Chemical and Biological Sciences, University of Karachi, Karachi, Pakistan, November 6 - 9, 2017.
- Participated “*National Training Course on Chemical Industry Standards*” on March 7-18, **2016** jointly organized by International Center for Chemical and Biological Sciences (ICCBS, Pakistan), Federation of Pakistan Chambers of Commerce and Industry (FPCCI, Pakistan), Sandia National Laboratories (SNL, USA), and CRDF Global (USA)
- Session lecture at the 14th Eurasia Conference on Chemical Sciences entitled, “*Synthesis and Mechanistic Studies of Tetrazole bearing Tetrahydronicotinonitrile and Their Biological Evaluation as Cholinesterases Inhibitors*”, organized by International Center for Chemical and Biological Sciences (ICCBS), from December 15-18, **2016**, at the ICCBS, University of Karachi, Karachi-75270, Pakistan.
- Session lecture at the 13th Biennial Conference entitled, “*Tetrazole linked Tetrahydronicotinonitriles as Cholinesterases inhibitors: Probing the Reaction Mechanism via Computational Method*”, organized by Center for Advanced Drug Research (CADR), from August 25-27, **2016**, at the CADR, Comsats Institute of Information Technology, Abbottabad, Pakistan.
- Attended “*National Seminar on the Plant Remedies Used against Skin Diseases in Sindh.*” hold on October 09, **2015** at International Center for Chemical and Biological Sciences, University of Karachi, Pakistan

- Participated “Scientific Writing.” hold on January 5-7, **2015** organized by International Center for Chemical and Biological Sciences, University of Karachi, Pakistan
- Participated in 5th International Symposium-cum-Training course on Molecular Medicine and Drug Research” hold on January 12-15, **2015** at International Center for Chemical and Biological Sciences, University of Karachi, Pakistan
- Attended “*How to give an effective Lecture.*” hold on May 27, **2015** at, L. E. J. National Science Information Center, International Center for Chemical and Biological Sciences, University of Karachi, Pakistan
- Attended “*The International Perspectives on Industrial Chemical Safety & Security Webinar Series*” hold on May 29, June 8, and June 12 **2015** at International Center for Chemical and Biological Sciences, University of Karachi, Pakistan
- Attended “*National Seminar on the Plant Remedies Used against Skin Diseases in Sindh.*” hold on October 09, **2015** at International Center for Chemical and Biological Sciences, University of Karachi, Pakistan
- Participated in “*4th Pak-France Bi-national Workshop on Drug Discovery and Molecular Medicine*” hold on October 12-14, **2015** at International Center for Chemical and Biological Sciences, University of Karachi, Pakistan
- Session lecture “*Synthesis of 5,6-dihydropyridine derivatives from Arylidene malononitrile under solvent-free condition.*” **Hameed, A.** 12th International and 24th National Chemistry Conference held on held on October 28-30, **2013** at Bahauddin Zakariya University Multan Pakistan. October 28, **2013**. Oral presentation
- Poster presentation “*Synthesis and conjugation of cancer pro-drugs with branched cell penetrating peptides (CPPs) via pH sensitive crosslinkers.*” Ragg, R.; **Hameed, A.**; Peneva, K.; Müllen, K. Max-Planck Institute for Polymer Research, Mainz, Germany, October 10, **2012**.
- Session lecture “*A Formal Synthesis of (+)-lactacystin from Hydroxy Methyl Glutamic Acid and Synthetic Approach Towards (-)-kaiotocephalin total Synthesis via Carbene Insertion Reaction*”. **Hameed, A.**; Anwar, A.; Irshad, M.; Basha, F. Z.; Blake, A. J.; Hayes, C. J. 9thInternational and 21th National Chemistry Conference at Department of Chemistry, University of Karachi, Pakistan March 4, **2011**. Oral Presentation
- Session lecture “*A Synthetic Studies Towards the Enantioselective Total Synthesis of (-)-Kaiotocephalin via AlkylideneCarbene 1,5-CH Insertion Reaction*”. **Hameed, A.**; Anwar, A.; Irshad, M.; Basha, F. Z.; Choudhary, M. I.; Blake, A. J.; Hayes, C. J. 12thInternational Symposium on Natural Product Chemistry at International Center for Chemical and Biological Sciences, University of Karachi, Pakistan, November 22-25, **2010**. Poster presentation
- Oral Presentation “*Enantioselective formal syntheses of (-)-Cephalotaxine and (+)-Lactacystin*”. **Hameed, A.**; Blake, A. J.; Hayes, C. J. 8thInternational and 20thNational Chemistry Conference at Quaid-i-Azam University, Islamabad, Pakistan, February 15, **2010**.
- Oral Presentation “*Enantioselective formal syntheses of (-)-Cephalotaxine and progress towards the (+)-Lactacystin total synthesis*”. **Hameed, A.**; Blake, A. J.; Hayes, C. J. Postgraduate Research Symposium, The University of Nottingham, UK, July, **2008**.

Newspaper Articles/Blogs:

- **Neglected tropical diseases: an issue** by *A. Hameed* dated OCTOBER 23, 2018
<https://dailytimes.com.pk/313446/neglected-tropical-diseases-an-issue/>
- **https://dailytimes.com.pk/240083/secrets-of-life/** by *A. Hameed* dated MAY 15, 2018
<https://dailytimes.com.pk/240083/secrets-of-life/>
- **Higher education: a paradigm shift in Pakistan** by *A. Hameed* dated FEBRUARY 11, 2018
<https://dailytimes.com.pk/199336/higher-education-paradigm-shift-pakistan/>
- **Collective responsibility** by *A. Hameed* dated OCTOBER 22, 2017
<https://dailytimes.com.pk/128578/collective-responsibility/>
- **Re-evaluation: A backward step to move forward** by *A. Hameed* dated OCTOBER 22, 2017
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- **Science and politics — preventive measures** by *A. Hameed* dated MARCH 21, 2017
<http://dailytimes.com.pk/blog/21-Mar-17/science-and-politics-preventive-measures>
- **Science and politics — positive attitude: a way to success** by *A. Hameed* dated DECEMBER 23, 2016
<http://dailytimes.com.pk/opinion/24-Dec-16/science-and-politics-positive-attitude-a-way-to-success>
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<http://dailytimes.com.pk/opinion/26-Nov-16/science-and-politics-team-dedication>

Skill Profile

1. Experienced in prioritization of own work
2. Working under pressure to ensure successful completion of project to meet the deadlines
3. Proficient in budget management and financial analysis required for projects completion
4. Presentation of research results in the annual meetings
5. Ability to communicate with individuals at all levels
6. Established experience in use and maintenance of a wide range of software (MS Office, ChemDraw Ultra 11.0, NMR processing softwares (MestReNova, Topspin and xwinnmr), Scifinder Scholar for literature searching etc.)
7. Skilled in the all data collection (NMR spectrums, Mass spectrum, Optical rotation data, Infrared spectrum, X-ray crystallographic data, CHN analysis etc.) and its interpretation.
8. Experienced in presentation of results and skilled in manuscript preparation for Peer-reviewed journals.

Activities

Member, Pakistan Society, The University of Nottingham, UK (2005-2009); Member cricket team, School of chemistry, The University of Nottingham, UK (2005-2009); Selected as the best batsman in Interdepartmental Nottingham University Cricket League (2008).

References:

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