

KHAIR ZAMAN Ph.D
Associate Professor (Tenured)
 Department of Chemistry,
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Nationality: Pakistani
 Date of Birth: 19th May 1980
 Postal Address: Dr. Khair Zaman Associate Professor, Department of Chemistry, Abdul Wali Khan University, Mardan, Khyber Pukhtonkhwa, Pakistan.

ACADEMIC QUALIFICATIONS

- Ph.D (2010) Organic Chemistry, University of Peshawar
- M.Sc (2003) Organic Chemistry, University of Peshawar
- B.Sc (2000) Botany, Zoology and Chemistry, University of Peshawar

TEACHING AND RESEARCH EXPERIENCE

- Associate Professor of Chemistry at Department of Chemistry, Abdul Wali Khan University, Mardan October 14, 2017 to date
- Assistant Professor of Chemistry at Department of Chemistry, Abdul Wali Khan University, Mardan July 2010 to October 14, 2017
- Teaching and supervision of M.Sc, M.Phil and PhD Research Scholar in the Department of Chemistry, Abdul Wali Khan University, Mardan, Pakistan (July 2010 to date)
- Six months research experience at University of Bradford, UK from October 2007 to March, 2008

PERSONAL SKILLS

Effective leadership, communication, strong analytical and problem solving abilities. Excellent interpersonal skills necessary to influence and interact effectively with project teams to provide the best solutions, the ability to be a solid team player and has the ability to work effectively with people whom different backgrounds and skills.

I have a strong motivation to pursue career in the areas of Isolation, Characterization of Organic Compounds and evaluating them for various biological activities

ACQUIRED WORKING SKILLS

- Spectral interpretation of the molecular structures of complex organic compounds
- Excellent knowledge of Spectroscopic techniques, UV, IR, ¹HNMR, ¹³CNMR, 2D and Mass spectrometry.
- Extensive Experience to purify Natural Products by Chromatographic Techniques.

RESEARCH INTERESTS

- Establishment of methods for biological screening of natural products.
- Phytochemical investigation of medicinal plants, isolation, characterization and biological screening of natural compounds as potential therapeutic agents.
- Synthesis and evaluation of Organic compounds with promising properties and applications in Medicinal Chemistry.

RESEARCH PUBLICATIONS

1. Momin Khan, Ghulam Ahad, Abdul Manaf, Reshma Naz, Syed Roohul Hussain, Farah Deeba, Sana Shah, Ajmal Khan, Majid Ali, Khair Zaman, Salman Zafar, Uzma Salar, Abdul Hameed, Khalid Mohammed Khan. Synthesis, in vitro urease inhibitory activity, and molecular docking studies of (perfluorophenyl)hydrazone derivatives. *Medicinal Chemistry Research* <https://doi.org/10.1007/s00044-019-02341-5>
2. Gauhar Rehman, Saba Arshad, Muhammad Hamayun, Amjad Iqbal, Waqas Ahmad Shams, Anwar Hussain, **Khair Zaman**, Ayaz Ahmad, Muhib Shah, Sahib Gul. Novel bioactivities of Cassia nemophila Pods against Diabetic Nephropathy: In Vitro and In Vivo Study. *Fresenius Environmental Bulletin*, **2019**, 28, 2656-2663.
3. Momin Khan, Sehrish Khan, Amir Ul Mulk, Anis Ur Rahman, Abdul Wadood, Sulaiman Shams, Muhammad Ashraf, Jameel Rahman, Abdul Hameed, Zahid Hussain, Abbas Khan, **Khair Zaman**, Khalid Mohammed Khan and Shahnaz Perveen. Synthesis, molecular modeling and biological evaluation of 5-arylidene-N,N-diethylthiobarbiturates as potential α -glucosidase inhibitors. *Medicinal Chemistry*. **2019**, 15, 175-185. <https://doi.org/10.2174/1573406414666180912114814>
4. Gauhar Rehman, Muhammad Hamayun, Amjad Iqbal, **Khair Zaman**, Saba Arshad, Anwar Hussain, Muhib Shah, Sahib Gul, Sang-Mo Kang, In-Jung Lee. Hypoglycemic

- effect of *Cassia nemophila* pods extract in stz-induced diabetic Mice. *Fresenius Environmental Bulletin*, **2018**, 27 (12A) 9329-9335.
5. Momin Khan, Muhammad Yousaf, Abdul Wadood, Zahid Hussain, Muhammad Naeem, **Khair Zaman**, Sana Shah, Khalid Mohammed Khan, Shahnaz Perveen. 2-Indolinone Derivatives as Potent Urease Inhibitors. *Letters in Drug Design & Discovery*. **2018**, 15, 814-821. DOI: 10.2174/1570180814666171116154110
 6. Gauhar Rehman, Saif Ul Islam, Saba Arshad, **Khair Zaman**, Ayaz Ahmad, Muhammad Hamayun, Amjad Iqbal, Adeeb Shehzad, Anwar Hussain, and InJung Lee. In vitro antidiabetic effects and antioxidant potential of *Cassia nemophilla* pods. *BioMed Research International*. **2018**, 2018, Article ID 1824790, 6 pages <https://doi.org/10.1155/2018/1824790>
 7. Hussan Ara Begum, Muhammad Hamayun, **Khair Zaman**, Zabta Khan Shinwari and Anwar Hussain. Heavy Metal Analysis in Frequently Consumable Medicinal Plants of Khyber Paktunkhwa, Pakistan. *Pak. J. Bot.*, **2017**, 49, 1155-1160.
 8. Zahid Hussain, Khalid Mohammed Khan, Ghazanfar Hayat, **Khair Zaman**, Aneela Karim, Shahnaz Perveen and Syed Moazzam Haider. Investigation of the Chemical Composition of the n-Hexane Fraction of the Spirogyra. *J. Chem. Soc. Pak.*, **2016**, 38, 600-603
 9. Natasha Anwar, Abbas Khan, Mohib Shah, Andaleeb Azam, **Khair Zaman**, and Zahida Parven. The green synthesis of fine particles of Gold using an aqueous extract of *Monothecca Buxifolia* (Flac.). *Russian Journal of Physical Chemistry A*, **2016**, 90, 13, 123–130.
 10. Taj Ur Rahman, Khanzadi Fatima Khattak, Wajiha Liaqat, **Khair Zaman**, Syed Ghulam Musharraf. Characterization of one Novel Flavone and four New Source Compounds from the Bark of *Millettia ovalifolia* and In-Vitro Inhibition of Carbonic Anhydrase-II by the Novel Flavonoid. *Rec. Nat. Prod.* **2015**, 9, 553-560
 11. Muhammad Nasimullah Qureshi, **Khair Zaman**, Muhammad Rafiullah Khan. Quantification of fatty acids in the oil from seeds of *Cassia artemisioides* by gas chromatography–mass spectrometry, *Journal of Food Science and Technology*, **2015**, 52, pp 7540-7544.

12. Taj Ur Rahman, Mohammad Arfan, Tariq Mahmood, Wajiha Liaqat, Mazhar Amjad Gilani, Ghias Uddin, Ralf Ludwig, **Khair Zaman**, M. Iqbal Choudhary, K.F Khattak, Khurshid Ayub. Isolation, spectroscopic and density functional theory studies of 7-(4-methoxyphenyl)-9H-furo[2,3-f]chromen-9-one: a new flavonoid from the bark of *Millettia ovalifolia*. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*. **2015**, 146, 24–32.
13. Zahid Hussain, Khalid Mohammed Khan, Shahnaz Perveen, **Khair Zaman**, Ghazanfar Hayat, Aneela Karim, Momin Khan, Shad Ali Khan. The long chain alcohols of the n-hexane fraction of water Hyacinth (*Eichhornia crassipes*): Extraction, estimation, GC-MS analysis and antimicrobial activity. *J. Chem. Soc. Pak*. **2015**, 37, 144-149.
14. Abbas Khan, Muhammad Asim, Amir Zada, **Khair Zaman**, Muhammad Usman, Zahoor Hussain Farooqi, Abdur Rauf, The Interactions of Co-Solvent, Co-Solute and an Amphiphilic Anionic Dye with the Aqueous Solutions of Sodium Dodecyl Sulfate. *Walailak Journal of Science and Technology*. **2015**, 12, 1107-1119.
15. Mumtaz Ali, Abdul Latif, **Khair Zaman**, Mohammad Arfan, Derek Maitland, Habib Ahmad, Manzoor Ahmad. Anti-ulcer Xanthenes from the roots of *Hypericum oblongifolium* Wall. *Fitoterapia*, **2014**, 95, 258–265
16. Zahid Hussain, Pir Mohammad, **Khair Zaman**, Khalid Mohammed Khan, Shahnaz Perveen, Sadaf Niaz. Gas Chromatographic Mass Spectrometric analysis of n-hexane fraction of the leaves of sugar beets (*Beta vulgaris*). *J. Chem. Soc. Pak*. **2013**. 35, 1208.
17. Mohammad Arfan · Mumtaz Ali, **Khair Zaman**, Habib Ahmad, Itrat Raza and Raza Shah, Antiproliferative activity and chemical constituents of *Hypericum dyeri*. *J. Chem. Soc. Pak*. **2013**, 35, 391-395.
18. Zahid Hussain, Pir Mohammad, Sajid Khan Sadozai, **Khair Zaman**, Khalid Mohammed Khan, Sultan Alam, Investigation of the antimicrobial activity of the extract of the leaves of sugar cane (*Sacharaum officinarum*) *Journal of Pharmacy Research*, **2011**, 4, 4292-4293.
19. **Khair Zaman**, M. Rafiullah Khan, Mumtaz Ali, Derek J. Maitland, New anthraquinone dimer from the roots of *Cassia artemisioides*. *Journal of Asian Natural Products Research*, 13, 2011, 62–67

20. Mohammad Arfan, Mumtaz Ali, Habib Ahmad, **Khair Zaman**, Farhatullah and Ryszard Amarowicz. Comparative antioxidant and antimicrobial activities of phenolic compounds extracted from five *Hypericum* species. *Food Technology and Biotechnology*, **2011**, 49, 205–213.
21. Mohammad Arfan, Mumtaz Ali, **Khair Zaman**, Habib Ahmad, Itrat Raza and Raza Shah Antiproliferative activity and chemical constituents of *Hypericum oblongifolium*. *J. Chem. Soc. Pak.* **2011**, 33, 772-777.

CONFERENCE /SEMINARS ATTENDED

1. Participating in the refresher course “Bioinorganic Medicinal Chemistry” May, 2006 at Institute of Chemical Sciences, University of Peshawar.
2. Presentation of paper in symposium on Recent Trends in Indigenous Chemical Research and Awareness on Data Presentation organized by Institute of Chemical Sciences University of Peshawar July 23-27, 2009
3. Poster presentation organized by Institute of Chemical Sciences, University of Peshawar on March 20th, 2010.
4. Presenting a seminar on “Structure elucidation of the organic compounds using advance spectroscopic techniques” at Institute of Chemical Sciences, University of Peshawar on April 22, 2010.
5. Attended a series of Lectures on 1D and 2D NMR techniques in the University of Bradford, UK.
6. Oral Presentation of paper in 15th International and 27th National Chemistry Conference Organised by Department of Chemistry, University of Malakand Dir (Lower) Khyber Pakhtunkhwa. August 22-25, 2016, Pakistan.
7. Oral Presentation of paper in 16th International & 28th National Chemistry Conference, Global Challenges and Chemistry, Department of Chemistry, Fedral Urdu University of Arts, Sciences and Technology, Karachi, Pakistan. November 20-22, 2017
8. Oral Presentation of paper in 1st International Conference on Advances in Drug Discovery and Development Organised by Department Biochemistry, Abdul Wali Khan University Mardan, Khyber Pakhtunkhwa, Pakistan. January, 3–5, 2018

REFERENCES

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