

Dr. Muhammad Naeem Khan

(HEC Approved Supervisor)

Assistant professor

Department of Chemistry

Bacha Khan University, Charsadda

Khyber Pakhtunkhwa, Pakistan.

Cell no.: +92-314-9073072, +92-345-9400673

E-mail: mnaeemchemist@yahoo.com

mnaeemchemist2@gmail.com



✚ **Permanent address**

Village Inzergi Post Office and Tehsil Katlang District Mardan, Khyber Pakhtunkhwa,
Pakistan

✚ **Personal dat**

Date of Birth: 15 January, 1982

Nationality: Pakistani

National ID: 16101-1164327-7

Marital status: Married

✚ **Education**

2007-2013. **Ph.D.**

Analytical Chemistry Institute of Chemical Sciences (ICS) University of Peshawar, Under the Indigenous fellowship scheme (batch-IV) of Higher Education Commission (HEC) of Pakistan

Ph.D. Thesis:

“Method Development and Validation for Antipsychotics Drugs; Application to Pharmaceutical Preparations and Biological Samples”

2006-2008. **M.Ed.** (Master of Education)

Alma Iqbal Open University (AIOU) Islamabad Pakistan. 1st Division

2003-2005. **B.Ed.** (Bachelor of Education)

AlamaIqbal Open University (AIOU) Islamabad Pakistan. 1st Division

2003-2005. **M.Sc.** (Graduate Studies)

In Chemistry; University of Peshawar, Pakistan. 1st Division

- 2001-2002. **B.Sc.** (Under graduate Studies)
Chemistry, Zoology, Geography; University of Peshawar, Pakistan. 1st Division
- 1999-2000. **F.Sc.** (Pre-Medical)
BISE Peshawar. 1st Division
- 1997-1998. **S.S.C.** (Matriculation)
BISE Peshawar. 1st Division

Professional Experience

- 25.07.2013–Till Date Assistant professor; Department of Chemistry, Bacha Khan University Charsadda, KPK, Pakistan
- 1.9.2010–30.11.2010 Subject Specialist: Govt. Higher Secondary School KohiBarmol Mardan, KPK, Pakistan
- 21.04.2007–20.4.2008 Subject Specialist: Govt. Higher Secondary School DheriLikpani Mardan, KPK, Pakistan
- 15.09.2005–20.04.2007 Science Teacher; Peshawar Model School Peshawar, Pakistan
- 15.09.2004–14.9.2005 Science Teacher; Oriental Public School Mardan, Pakistan

Additional Responsibilities:

- Member of the Admission Committee : Department of Chemistry, 2013- 2016
Time Table Incharge: Department of Chemistry, 2016- 2019
MPhil/PhD coordinator: Department of Chemistry, 2019- till date

COURSES TAUGHT

Bachelor level

- Analytical Chemistry-I
Analytical Chemistry -II
Analytical Chemistry-III
Electrochemical Methods
Spectroscopic Methods of Analysis
Advanced Analytical Chemistry
Advanced Chromatography
Hyphenated Techniques
Elementary Analytical Chemistry

MS Level

Analytical Chemistry-I
Analytical Chemistry -II
Elementary Analytical Chemistry
Spectroscopy & Advance Instrumentation
Electroanalytical Techniques
Chromatographic Techniques

PhD level

Atomic Spectroscopy
Advanced Chromatographic Techniques
Molecular Spectroscopy
Special Topics in Analytical Chemistry
Chromatographic Techniques in Organic Chemistry

✚ Honors Award and Scholarship

- ❖ Qualified GRE type evaluation test conducted by Higher Education Commission (HEC) of Pakistan (January 2007).
- ❖ Qualified Subject GRE type evaluation test conducted by Higher Education Commission (HEC) of Pakistan (January 2010).
- ❖ Awarded a fully funded scholarship for the entire PhD by the Higher Education Commission (HEC) of Pakistan under the Indigenous 5000 PhD Fellowship Program (Batch IV)
- ❖ Awarded a fully funded scholarship by HEC under the International Research support Initiative Program (IRSIP) for Six months Research Work at Kyungpook National University, South Korea
- ❖ **(3rd Prize winner)** 2nd Spring Research Poster Exhibition, organized by the Institute of Chemical Sciences, University of Peshawar, March 9, 2011

✚ Research Interest

Analytical and Pharmaceutical Chemistry-----Method development for determination of pharmaceutical drugs in pharmaceutical preparations and biological samples

✚ Instruments Handling Skills

- o UV Visible Spectrophotometer- Shimadzu, 3000
- o RF-5301 Spectrofluorimeter- Shimadzu.
- o High Performance Liquid Chromatography (HPLC)
- o Atomic Absorption Spectrophotometer (AAS)

- o Column Chromatography (CC)

Experimental Skills

- Development of Analytical Methods i.e. Spectrophotometric, Spectrofluorimetric and Chemiluminescence for Drug Determination in Pharmaceuticals Preparations and Biological Fluids
- Analytical Methods Validation
- Preparations, Characterizations and Applications of Silver and Gold Nanoparticles for Quantifications of Drugs in Pharmaceuticals and Biological Samples

Research Supervision

M.Phil Students Supervised

1. Mr. Abid Jan

Thesis Title: “Development of Spectrophotometric Methods for Quantification of Cephalosporins in Bulk, Pharmaceutical Preparations and Biological Samples” **2016**

2. Mr. Waqar Ali

Thesis Title: “Development of Spectrofluorimetric Method for the Quantification of Moxifloacin in Bulk, Pharmaceutical Preparations and Biological Fluids” **2019**

3. Ms. NusratBibi

Thesis Title:“Development of a Validated Spectrophotometric Method for the Determination of Norfloxacin in Bulk, Pharmaceutical Preparations and Biological Samples” **2019**

4. Mr. ZainUAbideen

Thesis Title:“Spectrophotometric Determination of Moxifloxacin Antibiotic in Pharmaceutical Preparations and Biological Fluids” **2019**

5. Ms. Saira Rahman

Thesis Title: “Development of a Simple Spectrophotometric Method for Quantification of Levofloxacin in Pharmaceutical Preparations and Biological Fluids” **2020**

6. Ms. Irum

Thesis Title: “Determination of Cefixime in Pharmaceutical Preparations and Biological Samples Through Fluorescence Quenching of Eosin Y” **2020**

7. Noor Zaman “Quantification and Validation of Moxifloxacin in Pharmaceutical Formulations and Biological Fluids Trough Fluorescence Quenching of Eosin Y” **2020**

M.Phil Students Co-Supervised

1. Rafida Bibi
2. Shazi Rafique
3. Faiza Gul

PhD STUDENTS UNDER SUPERVISION

1. Gohar Ali

MPhil STUDENTS UNDER SUPERVISION

1. Asim Jan
2. Muhammad Noman Jan (Fall 2019)
3. Nazma Begum (Fall 2020)
4. Msahal (Fall 2019)
5. Kainat (Fall 2019)
6. Irfan Shah (Spring 2020)
7. Muneeba Arif (Spring 2020)
8. Rizwan (Spring 2020)
9. Shakir Khan (Fall 2020)
10. Muhammad Nafees (Fall 2020)

M.Sc. Students Supervised

1. Mr. Abdul Qayuum

2. Mr. Ubaid Ur Rehman

Thesis Title: “Development of Indirect Spectrophotometric Method for Quantitative Determination of Cefixime in Bulk and Pharmaceutical Preparations (2013-2014).”

3. Miss. SundusKalsoom

4. Miss. RehanaHussain

Thesis Title: “Quantitative Determination of Cephalexin in Bulk and Pharmaceutical Preperation Using Complexation Reaction (2013-2014).”

5. Mr. Jala Ahmad

6. Mr. Muhammad Noman Jan

Thesis Title: “Development of Indirect Spectrophotometric Method for Quantitative Determination of Cephalexin in Bulk and Pharmaceutical Preparations (2014-2015).”

7. Miss. RafidBibi

8. Miss. Darakhshan

Thesis Title: “Development of Indirect Spectrophotometric Method for the Quantitative Determination of Diclofenac Potassium in Bulk and Pharmaceutical Formulations Using Complexation Reaction (2015-2016).

9. Miss.NusratBibi

Thesis Title: “Spectrophotometric Method for the Determination of Norfloxacin in Pure Form and Pharmaceutical Formulations by Complexation Reaction Using 1-10 Phenanthroline (2015-2016).

10. NiazBibi

11. Irum

Thesis Title: “A Selective and Validated Spectrofluorimetric Method for Determination of Ciprofloxacin in Pure Form and Pharmaceutical Formulations Using Micellar Medium (2016-2017).

12. Saba Gul

13. Muslima

Thesis Title: “A Selective and Validated Spectrofluorimetric Method for Determination of Diclofenac Potassium in Pure Form and Pharmaceutical Formulations Using Micellar Medium (2016-2017).

14. Adnan muhammad

15. Rehan khan

Thesis Title: “Spectrophotometric quantification of ascorbic acid (vitamin C) in pure form and pharmaceutical preparations” (2017-18)

16. Masuad Khan

17. Rehan Nawaz

18. Neelam

19. Muneeba Arif

Thesis Title: “A simple Spectrophotometric method for the quantification of Levofloxacin in bulk and pharmaceutical preparations

BS Students Supervised

1. Mr. Shahid Aziz

2. Mr. Adnan

Thesis Title: “A selective and validated spectrophotometric method for determination of cephalexin in pure form and pharmaceutical formulations through Schiff’s base system (2015-16).

3. Owais Ahmad

4. Ashraf Ali

Thesis Title: “Indirect Spectrofluorimetric Method for the Quantitative Determination of Cephalexin in Bulk and Pharmaceutical Formulations Using Cerium (IV)(2016-2017).

5. Muhammad Mursaleen

6. AbdurRehman

Thesis Title: A Simple Spectrophotometric Method for the Quantification of Ascorbic Acid (Vitamin C) in Bulk and Pharmaceutical Preparations(2017-2018).

7. Irfan Shah

8. Muhammad Sulaiman

Thesis Title: An Economic Spectrophotometric Method for the Determination of Diclofenac Potassium in Pure Form and Pharmaceutical Formulation (2017-2018).

9. Shazad Hameed

Thesis Title: Determination of Heavy Metals in different parts of Fishes (2019-2020)

 **Publications**

1. **Muhammad Naeem Khan**, Waqar Ali, Zarbad Shah, Muhammad Idrees, Hussain Gulab, Adnan “A Validated Spectrofluorimetric Method for the Determination of Moxifloxacin in its Pure Form, Pharmaceutical Preparations and Biological Samples” *Analytical Sciences* 2020, 36, 361-366. **(Impact Factor: 2.049)**

2. Kausar Shaheen, Hongli Suo, Tofail Arshad, Zarbad Shah, Shahid Ali Khan, Sher Bahadar Khan, **Muhammad Naeem Khan**, Min Liu, Lin Ma, Jin Cui, Yao Tang Ji, Yi Wang “Metal oxides nanomaterials for the photocatalytic mineralization of toxic water wastes under solar light illumination” *Journal of Water Process Engineering* ,34 (2020) 101138, 1-12. **(Impact Factor: 3.173)**

3. Muhammad Idrees, Muhamamd Ayaz. Rafida Bibi, **Muhammad Naeem Khan**, “Fluorescence quenching of the probe L-Tryptophan and Indole by anions in aqueous system” *Analytical Sciences*, 2020, 36, 183-185. **(Impact Factor: 2.049)**

4. Kausar Shaheen, Zarbad Shah, Tofail Arshad, Sher Bahadar Khan, Guo Jiang cheng, **Muhammad Naeem Khan**, Hongli Suo “Electrical conductance, dielectric properties and photodegradation ability of aluminum based Heterogeneous nanoparticles” *Materials Chemistry and Physics* 254 (2020) 123546

5. Muhammad N. Khan, Irum and Muhammad Mursaleen, “Determination of Cefixime in pure form, in pharmaceutical products and biological samples through fluorescence quenching of Eosin Y” *Luminescence (The Journal of Biological and Chemical Luminescence)* DOI: 10.1002/bio.3971 **1-10 (2020) (Impact Factor: 1.855)**
6. **Muhammad Naeem Khan**, Niaz Bibi, Irum and Muhamamd Idrees, “A Micellar-Enhanced Spectrofluorimetric Method for the Determination of Ciprofloxacin in Pure form, Pharmaceutical Preparations and Biological Samples” *Tenside Surfactants Detergents*, 56 (2019) 6, 510-515 **(Impact Factor: 0. 820)**
7. **Muhammad Naeem Khan**, Rainaz Begum, Zarbad Shah and Sang Hak Lee. “Development and validation of an ecofriendly chemiluminescence method for the determination of citalopram in pharmaceutical preparations using Cu²⁺-grafted oxidized multiwall carbon nanotubes” *South African Journal of Chemistry*, 2018, 71, 118-126. **(Impact Factor: 1.280)**
8. Muhammad Idrees, RafidaBibi, **Muhammad Naeem Khan**, “Phenanthrene Fluorescence Quenching in Aqueous Sodium DodecylSulphate (SDS) and Determination of Important Metal Ions” *Journal of Fluorescence*, 28: 1251–1254, 2018. **(Impact Factor: 1.850)**
9. Muhammad Idrees, ShaziaRafique, Sami Ullah, F. Akbar Jan, **Muhammad Naeem Khan**, FazalMabood, “Heavy metals level of medicinal plants collected from selected district in khyber- pakthtunkhwa, Pakistan” *FARMACIA*, (2018), 66(5):861-865. **(Impact Factor: 1.410)**
10. HussainGulab, Zarbad Shah, MazharMahmood, Syed Raza Shah, Sajid Ali, Muhammad Iqbal, **Muhammad Naeem Khan**, Ulrich Florke, Shahid Ali Khan , “Synthesis, characterization and antibacterial activity of a new calcium complex using sodium 2-mercaptobenzothiazole and 1, 10-phenanthroline as ligands” *Journal of Molecular Structure*. 1154 (2018) 140-144. **(Impact Factor: 2.190)**
11. **Muhammad Naeem Khan**, Jalal Ahmad, Muhammad Noman Jan, HussainGulab, and Muhammad Idrees “Development and Validation of a New Spectrophotometric Method for the Determination of Cephalexin Monohydrate in Pure Form and Pharmaceutical Formulations” *Journal of the Brazilian Chemical Society* (2016), Vol. 27, No. 5, 912-918. **(Impact Factor: 1.399)**
12. **Muhammad Naeem Khan**, Abdul Qayum, Ubaid Ur Rehman, HussainGulab and Muhammad Idrees “Development of Indirect Spectrophotometric Method for Quantitative Determination of Cefixime in Bulk and Pharmaceutical Preparations using Ferroin Complex” *JOURNAL OF APPLIED SPECTROSCOPY*, 82 (4)705–711 (2015). **(Impact Factor: 0.710)**

13. **Muhammad Naeem Khan**, Muhammad Rasul Jan, Jasmin Shah and Sang Hak Lee, “A Validated Silver Nanoparticle Enhanced Chemiluminescence Method for the Determination of Citalopram in Pharmaceutical Preparations and Human Plasma,” *Luminescence (The Journal of Biological and Chemical Luminescence)*, **2014**; 29: 266–274. **(Impact Factor: 1.855)**
14. **Muhammad Naeem Khan**, Muhammad Rasul Jan, Jasmin Shah, Sang Hak Lee and Young Ho Kim, “Determination of Sulpiride in Pharmaceutical Preparations and Biological Fluids Using a Cr (III) Enhanced Chemiluminescence Method,” *Luminescence (The Journal of Biological and Chemical Luminescence)*, **2013**; 28: 915–921. **(Impact Factor: 1.855)**
15. **Muhammad Naeem Khan**, Jasmin Shah, Muhammad Rasul Jan, Sang Hak Lee, “A Validated Spectrofluorimetric Method for the Determination of Citalopram in Bulk and Pharmaceutical Preparations Based on the Measurement of the Silver Nanoparticles-Enhanced Fluorescence of Citalopram/Terbium Complexes,” *Journal of Fluorescence*, **(2013)** 23, 161–169. **(Impact Factor: 1.850)**
16. Jasmin Shah, M. Rasul Jan, **M. Naeem Khan** and Sultan Shah, “Spectrofluorimetric Method for the Determination of Sulpiride in Pharmaceutical Preparations and Human Plasma through Derivatization with 2-Cyanoacetamide,” *Luminescence (The Journal of Biological and Chemical Luminescence)*, **(2013)** 28: 719-725. **(Impact Factor: 1.855)**
17. Jasmin Shah, M. Rasul Jan, **M. Naeem Khan** and Inayatullah, “Spectrofluorimetric Method for Quantification of Citalopram in Pharmaceutical Preparations and Biological Fluids through Oxidation with Ce (IV),” *JOURNAL OF APPLIED SPECTROSCOPY*, 79 (6), 922–928 **(2013)**. **(Impact Factor: 0.710)**
18. Jasmin Shah, Muhammad Rasul Jan, **Muhammad Naeem Khan** and Sultan Shah, “Validated Spectrofluorimetric Method for Determination of Sulpiride in Commercial Formulations using Hantzsch Condensation Reaction,” *Pakistan Journal of Pharmaceutical Sciences* 26 (5), **(2013)** 921-928. **(Impact Factor: 0.596)**
19. Jasmin Shah, Muhammad Rasul Jan, **Muhammad Naeem Khan** and Inayatullah, “Development and Validation of Micellar-Enhanced Spectrofluorimetric Method for Determination of Sulpiride in Pharmaceutical Formulations and Biological Samples,” *Tenside Surfactants Detergents*, 49 **(2012)** 6, 451–457. **(Impact Factor: 0.820)**
20. Jasmin Shah, Muhammad Rasul Jan, Inayatullah, and **Muhammad Naeem Khan**, “Quantification of Sparfloxacin in Pharmaceutical Dosages and Biological Samples,” *Pakistan Journal of Pharmaceutical Sciences*, 25 (4), **(2012)** 823–829. **(Impact Factor: 0.596)**
21. Jasmin Shah, M. Rasul Jan, Sultan Shah, **M. Naeem Khan**, “Spectrofluorimetric Protocol for Ceftriaxone in Commercial Formulation and Human Plasma after Condensation

with Formaldehyde and Ethyl Acetoacetate” *Journal of Fluorescence*, (2011) 21, 2155–2163. (Impact Factor: 1.850)

22. Jasmin Shah, M. Rasul Jan, Inayatullah, and M. Naeem Khan, “Micellar-enhanced Spectrofluorometric Quantification of Moxifloxacin in Pharmaceutical Formulations, Human Urine and Plasma Samples,” *African Journal of Pharmacy and Pharmacology*, 5(5), 616–624, (2011).

23. Muhammad Naeem Khan, Sundus Kalsoom, Rahana Hussain, Zarbad Shah and Muhamamd Saadiq, “Development of Indirect Spectrophotometric Method for Quantification of Cephalexin in Pure Form and Commercial Formulation Using Complexation Reaction” *Pak. J. Anal. Environ. Chem.* Vol. 17, No. 2 (2016) 118-123.

24. Jasmin Shah, Muhammad Rasul Jan, Sultan Shah, Muhammad Naeem Khan, “Development and Validation of HPLC Method for Simultaneous Determination of Ceftriaxone and Cefaclor,” *Journal of Mexican Chemical Society* (2013), 57(4), 314-320.

25. Jasmin Shah, Muhammad Rasul Jan, Muhammad Naeem Khan and Sadaf Durrani, “Quantitative Determination of Fluoxetine in Pharmaceuticals and Plasma Samples Using Bromatometric Method,” *American Journal of Analytical Chemistry*, (2012) 3, 828–835.

26. Muhammad Naeem Khan*, Irum, Saba Gul, Muslima and Muhammad Mursaleen, Quantification of diclofenac potassium in pure form, in pharmaceutical preparations and human plasma by micellar-enhanced spectrofluorimetric method” *Tenside Surfactants Detergents* (Under Review)

Conference/Symposia Attended

1. 1st International Conference on Applied Chemistry, November 18-20, 2013, Government College University Faisalabad, Pakistan
2. 4th Spring Research Poster Exhibition of Chemistry, April 11, 2013, Institute of chemical Sciences University of Peshawar, Pakistan.
3. NAYA Science Forum 2013 held at University of Peshawar on 9th April 2013, Organized by National Academy of Young Scientists’ Pakistan.
4. 11th International & 23rd National Chemistry Conference, October 15–17, 2012, National Centre of Excellence in Physical Chemistry, University of Peshawar, Pakistan.

5. 22–23rd August, 2012 Korean Chemical Society yongnam (kyungbuk, South kyongsang province, and Pusan, Ulsan) Joint Conference (South Korea).
6. 3rd Spring Research Poster Exhibition of Chemistry, March 8, 2012, Institute of chemical Sciences University of Peshawar, Pakistan.
7. One Day Research Poster Symposium 22nd December, 2011 in National Center of Excellence in Physical Chemistry University of Peshawar, Pakistan.
8. 10th International & 22nd National Chemistry Conference, 21–23rd November 2011, Department of Chemistry and Biochemistry, University of Agricultural Faisalabad, Pakistan.
9. 9th International & 21st National Chemistry Conference, March 14–16, 2011, Department of Chemistry & International Center for Chemical & Biological Sciences (H.E.J) University of Karachi, Karachi, Pakistan.
10. 2nd Spring Research Poster Symposium, March 9, 2011, Institute of Chemical Sciences, University of Peshawar.
11. 2nd National Conference on Fuel and the Environment, July 23–27, 2010, Bara Gali Summer Camp University of Peshawar, Organized by Institute of Chemical Sciences, University of Peshawar, Pakistan.
12. 1st Spring Research poster Symposium-2010, March 20, 2010, Institute of Chemical Sciences, University of Peshawar, Pakistan.
13. 8th International & 20th National Chemistry Conference, 15–17 Feb 2010, Department of Chemistry, Quaid-e-Azam University, Islamabad, Pakistan.
14. 2nd Pak-Turk Seminar on Chemical Sciences, 11–13 Feb 2010, National Center of Excellence in Analytical Chemistry, University of Sindh, Jamshoro, Pakistan.
15. Recent Trends in Indigenous Chemical Research and Awareness on Data Presentation Skills” July 23–27, 2009, Bara Gali Summer Campus, University of Peshawar Organized by ICS, UOP.

REFEREE (Journals)

- 1) Journal of Polymers and the Environment
- 2) Luminescence the Journal of Biological and Chemical Luminescence
- 3) South African Journal of Chemistry

4) International Journal of Energy Research