



## **Dr. Shamim Akhtar**

### **Professor**

Department of Pharmaceutical Chemistry  
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<b><u>Date of Birth</u></b>	February 5, 1958
<b><u>Gender</u></b>	Female
<b><u>Marital Status</u></b>	Married with one son
<b><u>Nationality</u></b>	Pakistani
<b><u>Experience</u></b>	20 years (Teaching, Research and Professional)
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## **Academic Qualification**

<b>Ph.D. (2003)</b>	<i>“Design and Synthesis of some new Derivatives of Isonipecotamide as Potential Therapeutic Agents”.</i> Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Karachi, Karachi
<b>M.Pharm. (1990)</b>	<i>“A study on stability of Mestranol and other Oestrogens”.</i> Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Karachi, Karachi
<b>B.Pharm. (1986)</b>	Faculty of Pharmacy, University of Karachi, Karachi

<b>B.Sc. (1980)</b>	University of Karachi
<b>H.S.C. (1976)</b>	Lahore Board
<b>S.S.C. (1974)</b>	Lahore Board

## Employment Record

<b>Professor</b> May 2011 to date	Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Karachi
<b>Assistant Professor</b> Sept. 2003 to May 2011	Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Karachi
<b>Lecturer</b> Jan. 2002-Sep. 2003	Department Of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Karachi
<b>Full-time cooperative teacher</b> Jan 1999-Jan 27, 2002	Department Of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Karachi.
<b>Research fellow</b> Dec. 1998-Jan 1999	Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Karachi.
<b>Research Scholar</b> Dec 1997 to Nov. 1998	Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Karachi.
<b>Lecturer</b> Sept 1991-Sept 1997	Asim Girls College, Lahore.
<b>Research Officer</b> 1988-1990	NSRD Project, University of Karachi.
<b>Pharmacist</b> April 1987-Dec 1987	M/S Paragon Pharmaceuticals Pvt. Ltd., Karachi.
<b>Trainee Pharmacist</b> Jan. 1987-Feb 1987	M/S Parke-Davis & CO. Pvt. Ltd., Karachi.

## **Responsibilities and Activities**

*(Administrative, Teaching and Research)*

### **Administrative**

- Incharge**  
Dept. Pharm. Chem.
- 09/07/2012 – 20/07/2012
  - 12/07/2010
  - 06/04/2010 – 08/04/2010

### **Co-curricular Responsibility**

**Currently engaged in the Supervision of co-curricular activities of students as Advisor in**

- i. *Official news-letter of the faculty of Pharmacy (biannual)*
- ii. *Official magazine, **Farmacía** (Annual)*

### **Student Advisor (2008-2010)**

Being student advisor (during 2008-2010), following activities were supervised by me:

- *Students Guidance and Counseling*
- *Training programs arrangement for Pharm D students (Hospital Pharmacy)*
- *Arrangements for seminars, workshops symposia etc.*
- *Poster Exhibitions and other co-curricular activities for students*
- *Supervision of Extracurricular activities of students:*
  - i. *Sports activities*
  - ii. *Annual functions like welcome, farewell and picnic etc.*
  - iii. *Student week activities including competitions of Qirat, Naat, Quiz, Painting, Flower arrangement, cooking and other exhibitions.*

### **Special Assignment at Faculty Level**

- *Involved students in cleanliness programs in the Faculty*
- *Gardening and beautification of Pharmacy lawns competition in different classes and among the morning and evening batches of Students in the Faculty.*
- *Fund raising campaigns and camps to help flood affecties during Flood disaster situation in the country.*

### **Special Assignment at University Level**

- *Flood relief activities, planning for rehabilitation of flood affecties*
- *Achieved Flood Relief Excellence Award, 2010-2011*
- *Disaster risk management activities and trainings are planned for the volunteers in KU*

## Teaching Activities

Teaching the following courses to:

- **Under graduate (Pharm D)**
  1. Pharmaceutical Chemistry (Theory)
  2. Physical Chemistry (Theory)
  3. Organic Pharmaceutical Chemistry (Lab).
  4. Organic Pharmaceutical Preparations (Lab)
  5. Instrumental methods of Analysis (Theory)
  6. Chemical methods of Analysis (Lab)
- **Graduate and Post graduate (M.Pharm, M.Phil, MS and PhD)**
  1. Advance Physical Chemistry and Pharmacy
  2. Analytical Chemistry
  3. Physico organic Chemistry
  4. Instrumental Methods of Analysis

## Teaching Methodology

- Students are made to be involved in study through **assignments, presentations** in the form of charts, posters and **class discussions** to enhance their understanding, communication skills and to develop their critical and analytical thinking.
- Mentoring the students through large class management techniques.
- Emphasizing the grooming of students ethically and morally and preparing them to accept the challenges in the practical and professional life for future prospects.

## Course Designing

- Theory courses for MS and PhD. Related to **Physicochemical and Physico-organic parameters** in drug development; **Polymer chemistry** and **Solubility problems** in drug development.

- Introduction to new lab course for Pharm D under graduates on Synthetic Chemistry and Quality Control

- Designed Manual for new lab (Synthesis and Quality Control)

## Lab Manuals (designed and modified)

- Modified and elaborated the material for lab on Chemical methods of Analysis comprising the compilation of different Pharmacopeial assay methods for drugs and drug related substances.

<b>Visiting Faculty</b>	Teaching of Lab and theory courses for Pharm D students of JMDC, College of Pharmacy, Karachi (2006-2010)
<b>External Examiner</b>	Theory and Lab Examiner for Pharm D students of JMDC College of Pharmacy and Dow University of Health Sciences, Karachi.
<b><u>Research Activities</u></b>	<ul style="list-style-type: none"> <li>• Gained experience in synthesis of biologically active compounds and evaluation of their pharmacological properties as the part of drug designing</li> <li>• Supervision and guidance of M.Pharm, M.Phil, MS and Ph.D. research students</li> <li>• Produced two Ph.D degrees and several M.Phil and M.Pharm students got degrees while many M.Pharm, M.Phil, MS and PhD students are pursuing their research work under my supervision.</li> </ul>
<b>Supervision/ Guidance</b>	
<b>External Examiner for Thesis evaluation and viva-voce</b>	Involved in the evaluation of thesis and taking of viva-voce of students from different universities in Pakistan.
<b>Research article reviewer</b>	Involved in reviewing of research articles for various research journals
<b><u>Projects</u></b>	<ol style="list-style-type: none"> <li>1. <b>Personal Research Project (2013-2014)</b> Computational studies of some indole and piperidine derivatives for their effects on Biogenic amines</li> <li>2. <b>Personal Research Project (2012-2013)</b> Determination of pKa values of novel piperidine derivatives by different methods”</li> <li>3. <b>Personal Research Project (2011-2012)</b> Synthesis and in-silico determination of ionization constant of some novel derivatives of benzimidazole as Pharmacological agents</li> <li>4. <b>Personal Research Project (2009-2011)</b> Synthesis and Pharmacological Studies of Benzimidazole Derivatives</li> <li>5. <b>Personal Research Project (2007-2009)</b> Design and Synthesis of some new Derivatives of Nitrogen containing heterocyclic compounds</li> <li>6. <b>Personal Research Project (2004-2006)</b> Synthesis And SAR Studies Of Piperidin-4-Carboxamide Derivatives Having Analgesic, Anti-inflammatory And Anti-microbial Activities</li> </ol>

7. **Project in collaboration with HEC (2003-2004)**  
Synthesis and Biological studies of Anti-narcotic drugs
8. **NSRD Project, University of Karachi (1987-1990)**  
A study on stability of Mestranol and other Oestrogens

## **Publications**

More than 30 research papers presented/published/accepted for publication in National and International Journals.  
(**detail of research publications can be furnished upon request**)

## **Achievements**

### **Trainings obtained**

- Basic Certificate in **Principles of Thermal Process Control**. Organized by KU-ASM Bio-Resource Centre-Department of Microbiology, University of Karachi in collaboration with USDA, Washington State University. **June 3-4 and July 28, 2012**
- **Disaster Risk Management**. Organized by AHK NCRD & MA, Ministry of Professional and Technical Training Government of Pakistan, Islamabad. **Jan. 16-20, 2012**
- Overseas **“Training of Trainers” 7-25 March 2011** Organized by Learning Innovation Department of Higher Education Commission, Islamabad in collaboration with AIT, Thailand.
- **Advance Specified Course for Master Trainer**, Faculty Professional Development Program Alumni on Advance Communication Skills organized by Learning Innovation Department, Higher Education Commission. November, 20-25, 2009
- Faculty development Course Organized by Learning Innovation 19th July-15th Oct. 2004 Department of Higher Education Commission, Islamabad

### **Trainings organized**

- **2nd. Staff Development Program** for teachers in Higher Education. May 29-June 24, 2006.
- **1st. Staff Development Program** for teachers in Higher Education. Dec. 12- January 7, 2006
- One Day Seminar on **Examination Standards** arranged by Quality Enhancement Cell and Department of Physiology, University of Karachi, Karachi, Pakistan-August 6, 2005.

- One day Seminar on "**Written Assessment and Tools**" arranged by HEC at the HEC Regional Centre, Karachi. 19th Jan. 2005

### **Seminars organized**

As the coordinator of the Seminar Committee, Faculty of Pharmacy, following Seminars were arranged during September, 2007-November, 2008

1. "**Work Flow of Manufacturing and Analysis in Pharmaceutical Industry**" by Mr. Muhammad Mushahid Riaz from Pfizer Laboratory Pak. Ltd. Sept.8, 2007
2. "**Role of Pharmacist and Natural Medicines**" by Prof. Dr. Aftab Saeed, Faculty of Eastern Medicine, Hamdard University. Feb.9, 2008
3. "**Colorectal Cancer**" by Dr. Nehal Masood, Medical Oncologist, Ahga Khan University Hospital. March 15, 2008
4. "**A World of Opportunities-Exploring the Best**" by GlaxoSmithKline Pak. April 3, 2008
5. "**Dimagh Ki BattiJallao**" by Mr. Muhammad Muneeb Qidwai, Corporate Training Manager, Pfizer Lab. Pak. Ltd. April 12, 2008
6. "**Breast Cancer**" by Dr. Azmina Taj Valimohammad, Medical Oncologist, Ahga Khan University Hospital. August 09, 2008
7. "**Pharmaco-vigilance**" by Dr. M. Aslam, Technical Director, Otsuka Pak. Ltd. August 30, 2008
8. "**Lymphoma Cancer and Related Issues**" by Dr. Salman Naseem Adil Associate Professor, Consultant Hematologist, Ahga Khan University Hospital. November 1, 2008
9. "**Pharmaceutical Operations and Social Responsibilities of Pharmacists**" by Mr. Mohd. Abdullah Feroz, MD. Efroz Chemical Industries Ltd. November 5, 2008
10. "**Zinc and its Efficacy in the Treatment of Diarrhea**" by Mr. Omar Taha, Public Health Consultant, Nutriset-France. November 15, 2008

### **Conferences/Seminars/Symposia/Workshops**

### **Posters Presentation**

A number of posters are presented in National and International Conferences

**Attended**

More than forty International and National conferences, seminars, symposia and workshops attended (**detail can be furnished upon request**).

**Professional membership**

- Pakistan Pharmacy Council of Sind (Registration # 970)
- Pakistan Pharmacist Association (PPA)
- Departmental research Committee (DRC)
- Board of studies, Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Karachi
- Board of Faculty, Faculty of Pharmacy, University of Karachi
- Faculty Student Advisor Committee
- Board of Studies, Faculty of Pharmacy, FUUSAT
- Ex-member, Human Resource Centre (HRC), University of Karachi.