

**Dr. ZAHIDA KARIM**  
**Assistant Professor**  
**Department of Chemistry**  
**University of Karachi, Karachi, Pakistan**  
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## **EDUCATION**

Ph. D. (Chemistry) from Department of Chemistry, University of Karachi. 2010.  
Postgraduate Diploma (Statistics) from Department of Statistics, University of Karachi. 2007.  
M. Phil. (Chemistry) from Department of Chemistry, University of Karachi. 2004.  
M. Sc. (Chemistry) from Department of Chemistry, University of Karachi. 1999.  
B.Sc. (Chemistry, Botany and Zoology) from P.E.C.H.S Govt. College for Women. 1996.  
H.S.C (Chemistry, Botany and Zoology) from P.E.C.H.S Govt. College for Women. 1994.  
S.S.C. (Chemistry, Biology, Physics and Maths) from Gulshan-e-Iqbal secondary school. 1992.

## **RESEARCH EXPERIENCE**

**Postdoctoral fellow** (July 2011 to date) with Prof. Dr. Khalid Mohammed Khan, HEJ Research Institute of Chemistry, University of Karachi, International Center for Chemical and Biological Sciences, Pakistan.

**Ph. D. in Chemistry** under the supervision of Prof. Dr. Majid Mumtaz.  
Dissertation title: "Evaluation of disinfectant by-products and other organic and inorganic contaminants in drinking water of Karachi City and their associated health risk".

**M. Phil. in Chemistry** under the supervision of Prof. Dr. Syed Azhar Ali.  
Dissertation title: "Phase effect on Amperometric titration of some redox systems".

## **PROFESSIONAL EXPERIENCE**

Assistant Professor (2010 to date).  
Lecturer (2006-2010), Department of Chemistry, University of Karachi.  
Co-operative Teacher (2001-2006) Department of Chemistry, University of Karachi.  
Co-operative Lecturer (2000-2001), Govt. Degree College, Stadium Road, Majeed SRE, Karachi.

## **RESEARCH PROJECTS**

Principal Investigator: (2010-2011)  
A research project entitled "**Phytoremediation of metal-contaminated urban soil of Karachi city**", approved and funded by the Dean Faculty of Science, University of Karachi.

Co-Investigator: (2008-2009)

A research project entitled “**Evaluation of heavy metals contamination in drinking water of Karachi city**”, approved and funded by the Dean Faculty of Science, University of Karachi.

Principal Investigator: (2007-2008)

A research project entitled “**Determination of disinfection by-products in drinking water**”, approved and funded by the Dean Faculty of Science, University of Karachi.

## **RESEARCH PUBLICATIONS**

### **Risk Assessment of Dissolved Trace Metals in Drinking Water of Karachi, Pakistan,**

Zahida Karim,

*Bulletin of Environmental Contamination and Toxicology*, **2011**, 86 (6), 676-680. (Impact factor: 1.139)

### **Health risk assessment of trihalomethanes in tap water,**

Zahida Karim, Majid Mumtaz and Tuba Kamal,

*Jour. Chem. Soc. Pak*, **2011**, 33 (2), 215-219. (Impact factor: 0.194)

### **Evaluation of trihalomethanes in tap water samples of Karachi city (Pakistan)**

Zahida Karim, Majid Mumtaz and Tuba Kamal,

*Journal of Basic and Applied Sciences*, **2011**, 7 (1), 7-10.

### **Determination of lead in water by preconcentration technique using ammonium pyrrolidine dithiocarbamate and dithizone,**

Zahida Karim, Majid Mumtaz, Azhar Siddique, Sadaf Anwer and Aneela Karim,

*J. Saudi Chem. Soc.*, **2008**, 12 (4), 463-468.

### **Simultaneous determination of common inorganic anions in water samples by Ion Chromatography,**

Zahida Karim, Majid Mumtaz, Azhar Siddique, and Aneela Karim,

*Journal of Basic and Applied Sciences*, **2008**, 4 (2), 63-66.

### **Fluoride concentration in drinking water of Karachi city (Pakistan)**

Azhar Siddique, Majid Mumtaz, Sumayya Saied, Zahida Karim and Nayyer Zaigham,

*Environmental Monitoring and Assessment*, **2006**, 120: 177-185. (Impact factor: 1.436)

### **Three phase effect on redox systems using Amperometry,**

Zahida Karim and Syed Azhar Ali,

*J. Saudi Chem. Soc.*, **2006**, 10 (1), 69-76.

### **Two-phase effect on Amperometric titration of some Redox systems,**

Zahida Karim and Syed Azhar Ali,

*Journal of Basic and Applied Sciences*, **2005**, 1 (1), 15-22.

## **RESEARCH SUPERVISED**

### **(M. Sc students)**

Anum Asad (2011)

Topic of research: "Validation of analytical methods for the determination of ossein-hydroxyapatite complex in pharmaceutical formulations".

Nighat Nizam (2009)

Topic of research: "Isolation and characterization of fulvic acid and humic acid using alkali extraction and XAD-resin method".

Kausar Fatima (2009)

Topic of research: "Deposition of trace metals in plants: Bioindicators of environmental pollution".

Sidra Sultana (2009)

Topic of research: "Spectrophotometric determination of Levofloxacin in different tablet formulations".

Fouzia Yasmeen (2008)

Topic of research: "Lead concentration in plant and soil at different roadside locations of Karachi city, Pakistan".

Mehreen Siraj (2008)

Topic of research: "Spectroscopic studies of Soxhlet extracted humic acid from soil".

Bushra Faiz (2008)

Topic of research: "Spectroscopic characterization of humic acid fractions isolated from soil using alkali extraction method".

Sadaf Sultan (2008)

Topic of research: "Heavy metal and OCPs in soil and vegetation irrigated with Malir river water".

Uroosa Zafar (2007)

Topic of research: "Determination of Lead by FAAS after preconcentration with ammonium pyrrolidine dithiocarbamate".

Sadaf Anwer (2007)

Topic of research: "Determination of Zn, Cu and Cr by FAAS and spectrophotometric analysis of Pb in drinking water by Dithizone method".

Hina Zainub (2006)

Topic of research: "Simultaneous determination of some common inorganic anions in ground water by Ion Chromatography".

Sumera Fida Hussain (2006)

Topic of research: "Study of health hazardous anions in environmental samples".

### **(M.S/Ph. D. students)**

Bilal Aslam Qureshi (2011)

Topic of research: "Spatial pattern for phytoextraction response of *Conocarpus erectus* for heavy metals in distinct urban land uses of Karachi".

Ishtiaq Ghauri (2011)

Topic of research: "Biomonitoring of heavy metals using *Conocarpus erectus* and *Guaiacum officinale* in urban neighborhoods of Karachi.

## **PARTICIPATION AND CONTRIBUTION IN CONFERENCES, SEMINARS AND WORKSHOPS**

1. ***9<sup>th</sup> International and 21<sup>st</sup> National Chemistry Conference***, 14-16 March, 2011, Department of Chemistry and International Center for Chemical and Biological Sciences, University of Karachi, Pakistan.
2. ***National workshop on Chemical Laboratory Safety and Security in Universities of Pakistan***, February 22-23, 2011, Higher Education Commission of Pakistan, and H. E. J. Research Institute of Chemistry, International Center for Chemical and Biological Sciences, University of Karachi, Pakistan.
3. ***10-Day International Workshop on Systemic Approach to Teaching and Learning Chemistry (PS-SATLC)***, 19-29 November, 2008, National Core Group in Chemistry and Higher Education Commission of Pakistan.
4. ***College Teacher's Workshop on Chemistry Education and Challenges***, April 24-29, 2006, Department of Chemistry, University of Karachi, Pakistan.
5. ***International Conference on Environmental Horizons***, December 19-21, 2005, Department of Chemistry and International Center for Chemical Sciences, University of Karachi, Pakistan.
6. ***2<sup>nd</sup> National Chemistry Talent Contest (NCTC-2)***, July 3-9, 2005, H. E. J. Research Institute of Chemistry, International Center for Chemical Sciences, University of Karachi, Pakistan.
7. ***Workshop on Application of Modern Spectroscopic Techniques in Chemical Sciences***, December 6-23, 2004, International Center for Chemical Sciences, H. E. J. Research Institute of Chemistry, University of Karachi, Pakistan.
8. ***Workshop on Environmental Chemistry***, January 8-9, 2004, Department of Chemistry, University of Karachi, Pakistan.
9. ***3<sup>rd</sup> International and 13<sup>th</sup> National Chemistry Conference***, December 28-31, 2004, Department of Chemistry and H. E. J. Research Institute of Chemistry, University of Karachi, Pakistan.
10. ***Computer Orientation for Chemists***, 5-12 July, 1999, University of Karachi, Karachi, Pakistan.

## **AWARDS AND HONOURS**

1. Convenor of Departmental Exams, Department of Chemistry, University of Karachi, 2006- to date.
2. Member of Board of Studies, Department of Chemistry, University of Karachi, 2009-2010.
3. Member of Editorial Board, CHEMZINE, 1999.

## **MEMBERSHIP**

1. Chemical Society of Pakistan.
2. Chemistry Alumni Welfare Association, Karachi University (CAWA-KU).
3. YOUNG CHEMISTS COUNCIL.