# **CURRICULUM VITAE**

#### **Personal Information**

Name Amara Dar

Fathers Name Mehmood Pervaiz Dar

Nationality Pakistani Date of Birth 31-08-1982

### **Objectives**

To excel in the field of Chemistry and Environmental research. To give new ways and directions to the research in the above mentioned fields. Explore the new ways in the field of nano research.

#### **Present Status**

Assistant Professor (Adhoc) Center for Undergraduate Studies 28.02.2018

### **Educational Qualification**

University of the Punjab **Ph.D** 

(Chemistry)

University of the Punjab M.S. Analytical Chemistry

(1<sup>st</sup> Position)

University of the Punjab B.Sc. (Hons) Chemistry

(3<sup>rd</sup> Position)

B.I.S.E. Rawalpindi F.Sc.

(Pre-Medical)

F.B.I.S.E Matriculation

(Science)

#### **Fields of Research Interest**

- Analytical Chemistry
- Spectroscopic applications
- Environmental Chemistry
- Water decontamination
- Nanoparticle synthesis and applications in waste water treatment

### **Professional Responsibilities**

Coordinator	CUGS	May 2009- Feb 2014
Member discipline committee	CUGS	Since 2010
Member examination committee	CUGS	Since 2010
Member Security Committee	CUGS	Since
Superintendent Girls hostel no. 7	PU	Nov.2010 to Oct 2011
Superintendent Girls hostel no. 3	PU	Oct 2011 to July 2012
Superintendent Girls hostel no. 6	PU	July 2013 till date
Acting Director (CUGS)	CUGS	13 <sup>th</sup> Feb.2013–15 <sup>th</sup> Feb.2013
Member security committee (Girls Hostels)	PU	July 2014
Program Team Member Self Assessment Report	QEC,PU	12-05-2016

### Working Experience (11 years)

- Worked as <u>visiting lecturer</u> From *April 2007 to November 2008* in Institute of Chemical Engineering and Chemical technology, **University of the Punjab Lahore**.
- Worked as <u>Lecturer on Contract</u> from 17-12-2007 to 18-02-2009, in Center for Undergraduate studies, **University of the Punjab Lahore.**
- Working as *permanent Lecturer* in Chemistry from 19-02-2009 to 28-02-2018 Center for Undergraduate Studies, **University of the Punjab**, **Lahore**.
- Working as <u>Assistant Professor</u> (Adhoc) of Chemistry since 1<sup>st</sup> March 2018 in Center for Undergraduate Studies, **University of the Punjab, Lahore.**

#### Awards

Incentive awards based upon the research, awarded by University of the Punjab, Lahore.

- 2009 = 12,500/-PKR
- 2011 = 16,070/-PKR
- 2012 = 20,571/- PKR

Performance Evaluation award, awarded by University of the Punjab, Lahore

• 2016 = 20,346/-

### **Research Project Completed** (funded by University of the Punjab, Lahore)

- **2010-2011** *Micro* level determination of formaldehyde in water and edible products(*PKR*=1,25000/-)
- 2012-2013 Removal of sulfide from water using indigenous adsorbents(PKR=1,25000/-)
- 2013-2014 Aspergillus niger: an adsorbent for waste water purification (*PKR=1,25000/-*)
- 2014-2015 Green synthesis of silver Nanoparticle using Lagenaria siceraria plant and their application in antibacterial and antifungal activity (*PKR*=1,25000/-)
- **2015-2016** Biogenic synthesis of silver nanoparticles using multani mitti, Tomato seeds, rice husk and evaluation of their potential antimicrobial activity (*PKR=1,25000/-*)

# Monographs/ Books

- A monograph entitled "BANANAS A Concise Account" has been written, Published by: Nova Publishers, Inc. New York, United States, (2011 First Quarter), ISBN: 978-1-61761-745-4
- "Antimicrobial potential of AgNps of Lagenaria siceraria mesocarp" has been written, Published by: Lambert Academic Publishing, ISBN: 978-620-2-06463-7 (2017)

# **Publications** (Impact factor=31.368)

- 1. Catalytic Degradation of Polystyrene, *Progress in Rubber Plastics & Recycling Technology*, (2008) 24(1), 47-51. (IF=0.26)
- 2. Effects of different additives on burning efficiency of candles, *World Applied Science Journal*, (2009),7(3), 340-342. (IF= 0.47)
- 3. Removal of Pb(II) and Cd(II) from water by adsorption on peels of banana, *Bioresource Technology* (2010), 101, 1752-1755. (**IF=5.807**)

- 4. Estimation of sulfur by gas phase molecular adsorption spectroscopy (GPMAS) and use In pharmaceutical analysis, *Journal of Sulfur Chemistry*, (2010), 31, 13-18. (IF=1.320)
- **5.** Micro determination of iron in pharmaceutical preparations by image scanning and computational quantification, *Current medicinal Chemistry*, **(2010)**, 17 (35), 4424-4426. (**IF=3.469**)
- 6. Novel methods to determine sulfide in aqueous samples by quantification of lead sulfide, *Journal of Sulfur Chemistry*, (2011), 32(2), 151-157. (**IF=1.320**)
- 7. Removal of Chromium on polyalthia Longifolia leaves biomass, *International Journal of Phytoremediation*, (2011), 13, 410-420. (IF= 2.40)
- 8. A rapid, economical and eco-friendly method to recycle terephthalic acid from waste poly(ethylene terephathalate bottles), *International Journal of Polymeric Materials*, (2011), 60(14), 1147-1151. (**IF=1.97**)
- 9. Forced migration of soluble and suspended materials by freezing front in aqueous system, *Journal of Hydro-Environmental Research*, (2012), 6(3), 221-226. (**IF= 2.087**)
- 10. Removal of sulfide ions from water using rice husk, *Journal of Sulfur Chemistry*, (**2015**), 36(2), 187-195. (**IF=1.320**)
- 11. Microwave Chemistry: Effect of ions on dielectric heating in microwave ovens, *Arabian Journal* of Chemistry, (2015), 8(1). (IF= 2.969)
- 12.A simple spot test Quantification method to determine formaldehyde in aqueous samples, *Journal of Saudi Chemical Society*, (2016), 20, 352-356. (IF= 2.456)
- 13. Chemistry of ice: Migration of ions and gases by directional freezing of water, *Arabian Journal of Chemistry*, (2016), 9, 47-53. (**IF= 2.969**)
- 14. Biogenic synthesis of silver nanoparticles using Multani mitti(Fuller's earth), Tomato(Solanum Lycopersicum) seeds, Rice Husk(Oryza Sativa) and evaluation of their potential antimicrobial activity, *Journal of Chemical Society of Pakistan*, (2016), 38(4),665-674. (IF=0.28)
- 15. Cost effective approach for water defluoridation, *Journal of chemical society of Pakistan*, (2017) 39(1), 169-176. (**IF=0.28**)
- 16.A comparative biosorption study of sulfide (S<sup>-2</sup>) by using Lagenaria siceraria fruit based raw biosorbents, *Bangladesh Journal of Scientific and Industrial Research*, (**2017**), 52(4), 309-320. (**IF=0.27**)
- 17. Synthesis of silver nanoparticles of mesocarp of Lagenaria siceraria fruit by using oleyl amine and evaluation of its antimicrobial action against clinically used pathogens, *International*

*Journal of Modern Biological Research*, (2017), 5(3), 42-55. (IF=0.765)

- **18.** Evaluation of antioxidant potential and comparative analysis of antimicrobial activity of various extract of Cucurbita pepo L.leaves, *Journal of Agricultural science and Food Technology*, **(2017)**, 3(6), 103-109. **(IF=0.676)**
- 19. Removal of anionic dye from industrial effluents with raw and chemically modified chickpea husk, *Journal of the Chemical Society of Pakistan*, (2018), 40(3). (IF=0.28)
- 20.Removal of Cyanide from Aqueous medium: An Isothermal, Kinetics and Thermodynamics Study, (submitted)
- 21. Microwave Assisted Urea Modified Bengal Gram Husk for the Batch Wise Removal of Methylene Blue from Aqueous Medium (submitted)

# Conferences/ Workshops/Seminar

#### 2008

- Participated in a workshop on "Conflict Management Training" Organized by Center for Clinical Psychology, University of the Punjab, Lahore in collaboration with HEC, 26<sup>th</sup> June 2008
- Participated in 18<sup>th</sup> National Chemistry Conference, Organized by; Institute of Chemistry,
  University of the Punjab, Lahore in collaboration with Chemical Society of Pakistan, 25-27<sup>th</sup>
  Feb. 2008

### 2012

- Participated in Workshop on "Research ethics, Endnote and Turnitin" Organized by, DLIS, University of the Punjab, Lahore, 2-3<sup>rd</sup> Oct. 2012
- Participated in one day Workshop/Hands on training on, "Qualitative Research using NVIVO software, Organized by; ORIC, University of the Punjab, Lahore, 7<sup>th</sup> July 2012
- Participated in International Workshop on Recent trends in Analytical Chemistry, Organized by;
  COMSTECH and University of Malakand KPK, in Islamabad, 3-5<sup>th</sup> April, 2012
- Participated in International Conference on Engineering Sciences, Organized by ICEET, University of the Punjab, Lahore 28-29<sup>th</sup> Feb. 2012

### <u>2013</u>

- Participated in International Conference on Physical and Environmental Chemistry (ICPEC-2013), Organized by; NCEPC, University of Peshawar-Pakistan, 9-11 Sept. 2013
- Attended one day Workshop on "Fourier Transform Infrared Spectroscopy" Organized by, Interdisciplinary Research Center in Biomedical Materials, Comsats institute of information Technology-Lahore, 1<sup>st</sup> July, 2013
- Participated in one day Workshop on, "High Performance Liquid Chromatography (HPLC),
  Organized by; School of Physical Sciences in collaboration with ORIC, University of the Punjab Lahore, 30<sup>th</sup> March, 2013

• Participated in 2<sup>nd</sup> In-Service Faculty Training Program for the Core Modules; Professional Ethics, Management & Grooming: Assessment and Evaluation, Organized by; Department of microbiology and molecular Genetics in collaboration with LID-HEC, 4-8<sup>th</sup> Feb. **2013** 

### 2014

- Participated in 2 days Workshop on, "CHNS-O Elemental Analyzer, Model; Vario Micro Cube; Organized by; School of Physical Sciences, University of the Punjab, Lahore. 31<sup>st</sup> March- 2<sup>nd</sup> April, 2014
- Participated in 1<sup>st</sup> International Seminar on "Soil Health Reclamation Approaches, Organized by; College of Earth and Environmental Sciences, University of the Punjab, Lahore, 11<sup>th</sup> June 2014
- Participated in Seminar on "Quality Science Education: Securing a Sustainable Future for all" awarded Best Poster Award in the category of Computational and Nano Sciences, Organized by; UNESCO, COMSATS and Science Foundation Economic Cooperation Organization, Islamabad, Pakistan, 12th Nov. 2014
- Attended 3<sup>rd</sup> In-Service Faculty Training Program for the core module: *The Learner's Psychology, Academic Writing: Process and skills*, Organized by Department of Microbiology and Molecular Genetics in Collaboration with LID-HEC, 17<sup>th</sup> 21<sup>st</sup> Nov. **2014**

### 2015

- Participated in Conference and training workshop for "Biodiversity Assessment and Aerobiological Monitoring for Ecosystem Health", sponsored by University of the Punjab, Lahore, 6-7<sup>th</sup> February **2015**
- Workshop on Nano Science and Nano technology; organized by Nano-Chemistry Lab., GCU, Lahore, 27<sup>th</sup> August **2015**
- 26<sup>th</sup> National and 14<sup>th</sup> International Chemistry Conference, "Exploring Solutions in the Changing World", organized by Chemical Society of Pakistan and Islamia University Bahawalpur, 5-8 October **2015** (2-POSTER PRESENTATION)
- Participated in 2<sup>nd</sup> International Conference on Engineering Sciences, held in Institute of Chemical Engineering and Chemical Technology, University of the Punjab, Lahore, 2-3<sup>rd</sup> December, **2015**

### 2016

- Participated in 5<sup>th</sup> Invention to Innovation Summit 2016, Organized by University of the Punjab, 2-3 March **2016**
- 11<sup>th</sup> International Symposium on Analytical and Environmental Chemistry, Organized by University of Sindh Jamshoro, 7-8<sup>th</sup> March, **2016** (*POSTER PRESENTATION*)
- 27<sup>th</sup> National and 15<sup>th</sup> International Chemistry Conference on, "*Innovation and sustainability*" Jointly organized by; Department of University of Malakand, HEC & Chemical Society of Pakistan, 22-25<sup>th</sup> August **2016** (*ORAL PRESENTATION*)

### 2017

- Participated in *World Quality Day*, Organized by; Quality Enhancement cell, University of the Punjab, Lahore. Held on, 8<sup>th</sup> Feb. **2017**
- Participated in "Workshop on Science, Technology and Enterpreneurship" Organized by National Center of Excellence in Analytical Chemistry, University of Sindh, Jamshoro, Pakistan, 23<sup>rd</sup> February **2017**
- Two Days 1<sup>st</sup> International Chemistry Conference on *Recent Advances in Chemistry*, organized by University of Lahore, 13-14 May, **2017** (POSTER PRESENTATION)
- 28<sup>th</sup> National and 16<sup>th</sup> International Chemistry conference, "*Global Challenges and Chemistry*", Jointly organized by; Federal Urdu University and Chemical Society of Pakistan, 20-22 November, **2017** (ORAL PRESENTATION)
- Participated in 3<sup>rd</sup> International Conference on *Engineering Sciences*, Organized by; Institute of Chemical Engineering and Technology, University of the Punjab, Lahore, 21-22<sup>nd</sup> December, **2017**
- 28<sup>th</sup> National & 16<sup>th</sup> International Chemistry Conference, "*Global Challenges and Chemistry*" Organized by Federal Urdu University for Arts, Science and Technology, Karachi-Pakistan 6-8<sup>th</sup> November, **2017**

### **2018**

- Awareness seminar on "Drug Addiction among Youth" Organized by, Institute of Applied Psychology, University of the Punjab Lahore, 12<sup>th</sup> April 2018
- Teacher Empowerment program "Making Thinking Visible" Organized by; QASF, Lahore, 17<sup>th</sup> August 2018.
- 29<sup>th</sup> National & 17<sup>th</sup> International Chemistry Conference, CHEMCON-2018, "Chemical Sciences for Sustainable Development" Jointly organized by "University of Peshawar & Chemical Society of Pakistan" 6- 8<sup>th</sup> September, 2018

# Participation as Jewry

- Participated in Punjab Science Fair 2014 as Judge, Organized by; Shaukat Khanum Memorial Hospital in collaboration with Intel Education and Federal Ministry of Science & Technology, 27- 29<sup>th</sup> Oct. 2014
- Participated in Punjab Science Fair 2014 as Judge, Organized by; Shaukat Khanum Memorial Hospital in collaboration with Intel Education, 3-5<sup>th</sup> Nov. **2015**

# Thesis Supervised

- BS (Hons) = 9
- MS = 2 (In Progress)

#### **Conference Publication**

- Catalytic depolymerization of polystyrene, 24-26<sup>th</sup> July, **2006**
- Assay of sulfa drugs by gas phase molecular absorption spectroscopy, 25-27<sup>th</sup> Feb. **2008**
- Elimination of sulfide from tannery effluents by bio-adsorption using rice husk, 9-11 Sept. 2013
- Biogenic synthesis of silver nanoparticles using clays, tomato (Solanum lycopersicum) seeds, rice husk (Oryza sativa) and evaluation of their antimicrobial potential (P-66), 5-8 Oct. **2015**
- Comparative study for the removal of phenol by adsorbents of different origins for waste water treatment, (P-50), 5-8 Oct. **2015**
- Microwave assisted zinc chloride modification of Cicer arientum husk for the removal of Alizarin red S from water, (PE/I-17) 22-25 Aug. 2016
- Water Purification by Adsorptive Removal of Phenol Using Polymeric Adsorbents, (PP) 13-14 May, 2017
- Cyanide Removal from Aqueous Medium by Solid Phase Extraction, 20-22<sup>nd</sup> Nov. 2017

### **Membership of Societies**

- Life time Member of Chemical Society of Pakistan (P0430)
- Regular Member American Chemical Society (31681035)
- Member NAYs Academy of Young Scientists
- Member Gull's Association

#### References

Will be provided on request