



## CURRICULUM VITAE

### FACULTY OF LIFE AND ENVIRONMENTAL SCIENCES

#### I. PERSONAL DETAILS:

**Saima Sohni, PhD**

Lecturer

Institute of Chemical Sciences,  
University of Peshawar, Pakistan

Email: [saima.sohni@gmail.com](mailto:saima.sohni@gmail.com)

#### II. EDUCATION AND ACADEMIC QUALIFICATION:

- **Ph.D.** School of Industrial Technology, Universiti Sains Malaysia, Malaysia (2019)
- **M.Phil.** Institute of Chemical Sciences, University of Peshawar, Pakistan (2014)
- **M.Sc.** Institute of Chemical Sciences, University of Peshawar, Pakistan (2008)
- **B.Sc.** Federal Govt. Degree College, University of Peshawar, Pakistan (2005)

#### III. ACADEMIC POSITION:

- Lecturer at Institute of Chemical Sciences, University of Peshawar (Since 2009-till date)

#### IV. COURSES TAUGHT AT UNDERGRADUATE & MASTER LEVEL:

- CHEM-111: Analytical Chemistry (Statistics for analytical chemist)
- CHEM-211: Analytical Chemistry (Volumetric and gravimetric analysis)
- CHEM-412: Electrochemical Methods (Potentiometric and voltammetric techniques as electroanalytical tools for chemical analysis)
- CHEM-413: Emission Spectroscopy
- CHEM-416: Hyphenated Techniques (UV-Vis spectroscopy, ICP, Fluorescence spectroscopy)
- CHEM-418: Special Topics
- CHEM-673.5: Inorganic Chemistry (Spectroscopy and instrumental methods of analysis)

- CHEM 704: Electrochemistry, Potentiometry, Conductometry, Coulometry

## **V. SELECTED UNIVERSITY SERVICE:**

- Arrangement of weekly seminars at the Institute of Chemical Sciences, University of Peshawar
- Organizing secretary in 2<sup>nd</sup> spring research poster exhibition held in Institute of Chemical Sciences, University of Peshawar, March 2011
- Member of organizing Committee of the “Workshop on 4-year BS Chemistry” program held at Bara Gali Summer Campus University of Peshawar June 30- July 04, 2011
- Organizing secretary in 3<sup>rd</sup> spring research poster exhibition held in Institute of Chemical Sciences University of Peshawar, March 2012
- Member of organizing Committee “2<sup>nd</sup> Symposium on Recent Trends in Indigenous Chemical Research and Awareness on Data Presentation Skills” held at Bara Gali Summer Campus University of Peshawar July, 2013

### *Other responsibilities include;*

- Worked as Assistant Coordinator in BS program
- Demonstration and administration of laboratory practical for undergraduate students
- Setting up of marking scheme for the students
- Teaching, practicing and implementing chemical safety policy and procedures

## **VI. HONORS AND AWARDS:**

- Sanggar Sanjung Award recipient in "Majlis Persada Kencana 2019" for excellent achievements in Universiti Sains Malaysia.
- Sanggar Sanjung Award recipient in "Majlis Persada Kencana 2019" for excellent achievements in Universiti Sains Malaysia.
- Malaysian International Scholarship award by the Ministry of Education, Malaysia

## **VII. RESEARCH INTERESTS:**

- Solid phase extraction
- Supercritical technology
- Lignocellulosic biomass as a resource for green materials
- Graphene, graphene derivatives, hydrogels and composite materials

## VIII. CURRENT PROJECT:

- Exploring lignocellulosic biomass as a sustainable resource for green materials

## IX. PUBLICATIONS:

1. S. Sohni, R. Hashim, H. Nidaullah, O. Sulaiman, C. Leh, J. Lamaming, T. Arai, A. Kosugi, Enhancing the enzymatic digestibility of oil palm biomass using supercritical carbon dioxide-based pretreatment towards biorefinery application, *Industrial Crops & Products*, 157 (2020) 112923.
2. K. Akhtar, F. Ali, S. Sohni, T. Kamal, A. M. Asiri, E. Bakhsh, S. B. Khan, Lignocellulosic biomass supported metal nanoparticles for the catalytic reduction of organic pollutants, *Environmental Science and Pollution Research*, 27 (2020) 823-836.
3. S. Sohni, R. Hashim, H. Nidaullah, J. Lamaming, O. Sulaiman, Chitosan/nano-lignin based composite as a new sorbent for enhanced removal of dye pollution from aqueous solutions, *International Journal of Biological Macromolecules*, 132 (2019) 1304–1317.
4. N. Umbreen, S. Sohni, I. Ahmad, N.U. Khattak, K. Gul, Self-assembled three-dimensional reduced graphene oxide-based hydrogel for highly efficient and facile removal of pharmaceutical compounds from aqueous solution, *Journal of Colloid and Interface Science* 527 (2018) 356-367.
5. S. Sohni, S.A. Khan, K. Akhtar, S.B. Khan, A.M. Asiri, R. Hashim, A.K.M. Omar, Room temperature preparation of lignocellulosic biomass supported heterostructure (Cu+Co@OPF) as highly efficient multifunctional nanocatalyst using wetness co-impregnation, *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 549 (2018) 184-195.
6. S. Sohni, N.A. Nik Norulaini, Rokiah Hashim, Sher Bahadar Khan, Widad Fadhullah, A.K. Mohd Omar. (2018). Physicochemical Characterization of Malaysian Crop and Agro-industrial Biomass Residues as Renewable Energy Resources, *Industrial Crops & Products*.
7. Sohni, S., Gul, K., Ahmad, F., Ahmad, I., Khan, A., Khan, N., & Bahadar Khan, S. (2018). Highly efficient removal of acid red-17 and bromophenol blue dyes from industrial wastewater using graphene oxide functionalized magnetic chitosan composite. *Polymer Composites* 39 (3317-3328).

8. Gul, K., Sohni, S., Waqar, M., Ahmad, F., Norulaini, N. N., & AK, M. O. (2016). Functionalization of magnetic chitosan with graphene oxide for removal of cationic and anionic dyes from aqueous solution. *Carbohydrate Polymers*, 152, 520-531.
9. Gul, K., Sohni, S., Ahmad, I., Ullah Khattak, N., Zada, R., Akhtar, N., & Bahisht, N. (2016). Synthesis and Characterization of Graphene/Fe<sub>3</sub>O<sub>4</sub> Nanocomposite as an Effective Adsorbent for Removal of Acid Red-17 and Remazol Brilliant Blue R from Aqueous Solutions. *Current Nanoscience*, 12(5), 554-563.
10. Analysis of Salmonella Contamination in Poultry Meat at Various Retailing, Different Storage Temperatures and Carcass Cuts- A Literature Survey *International Journal of Poultry Science* (2016).

#### **X. BOOK CHAPTER:**

- Nanotechnology for safe and sustainable environment- Realm of wonders, Khan, S. B., Nanomaterials for Environmental Applications and their Fascinating Attributes. 2018, 2, 37-117, Bentham.

#### **XI. CONFERENCE PAPER:**

- Evaluation of Malaysia's biodiversity biomass for biofuel potential, 5<sup>th</sup> International Conference on Environmental Research and Technology (ICERT 2017), 23<sup>rd</sup>-25<sup>th</sup> August 2017, George Town, Penang, Malaysia.
- Preparation of graphene based nanocomposites as an effective adsorbent for Acid Red 17 and Remazol Brilliant Blue R from aqueous solution, 25<sup>th</sup> National and 13<sup>th</sup> International Chemistry Conference 2014, Institute of Chemistry, University of the Punjab, Lahore, Pakistan.

#### **XII. POSTER PRESENTATION:**

- Synthesis and characterization of graphene/Fe<sub>3</sub>O<sub>4</sub> nanocomposite as an effective adsorbent for acidic and basic dyes from aqueous solutions, Department of Chemistry, University of Malakand, Conference: 27<sup>th</sup> National and 15<sup>th</sup> International Chemistry Conference, 2016.
- Molecularly imprinted polymer for solid phase extraction of fenoxaprop-p-ethyl, Institute of Chemical Sciences, University of Peshawar, Khyber Pakhtoon Khwa, Pakistan, Conference: 4<sup>th</sup> Spring Poster Presentation Symposium” organized by The Chemical Society, Institute of Chemical Sciences, University of Peshawar, 2013.

### **XIII. CONFERENCES/SEMINAR/WORKSHOP:**

- Workshop on “Occupational Safety and Health (OSH) Course” September 2018, School of Pharmaceutical Science, Universiti Sains Malaysia
- Seminar on “Basic UV Spectrophotometry and Chromatography” April 2017, School of Industrial Technology, Universiti Sains Malaysia
- Three days Training Workshop on “Data treatment by SPSS software” September, 2014 at Teachers Community Centre (TCC) organized by Peshawar University Teacher’s Association.
- Participated in workshop on BS Chemistry Program held during June 30- July 04, 2011 at Bara Gali Summer campus, University of Peshawar
- Three days Training Workshop on “Research and Proposal Writing” February, 2010 at Teachers Community Centre (TCC) organized by Peshawar University Teacher’s Association (PUTA).
- Three days Training on Basic First Aid to injure organized by Pakistan Red Crescent Society on 10th November and 12th November 2010
- Three days Symposium on “Recent Trends in Indigenous Chemical Research & Awareness on Data Presentation Skills” organized by the Institute of Chemical Sciences, University of Peshawar in July 2009 in Bara Gali Summer Campus

### **XIV. REVIEWING ACTIVITIES (Scientific journals):**

- |  |   |
|--|---|
| - BioResources                                       | - International Journal of Earth Science and Geophysics       |
| - Carbohydrate Polymers                              | - International Journal of Environmental Analytical Chemistry |
| - Chemical Engineering Communications                | - International Journal of Industrial Chemistry               |
| - Coloration Technology                              | - Journal of Chemical & Engineering Data                      |
| - Desalination and water treatment                   | - Journal of Nanostructure in Chemistry                       |
| - Environmental Engineering and Management Journal   | - Research on Chemical Intermediates                          |
| - Green Processing and Synthesis                     | - Science of the Total Environment                            |
| - Industrial & Engineering Chemistry Research        |   |
| - International Journal of Biological Macromolecules |   |