

Dr. Aamna Balouch

Ph.D. (Analytical Chemistry)

Associate Professor

National Center of Excellence in Analytical Chemistry,
University of Sindh, Jamshoro, 76080, Pakistan.

Ph # 022-9213429

Cell # 0333-2695699

Email: aamna_balouch@yahoo.com, aamna.balouch@usindh.edu.pk

ResearchGate link: https://www.researchgate.net/profile/Aamna_Balouch/research

Linkedin: <https://www.linkedin.com/in/dr-aamna-balouch-013961a9/>

Google scholar: <https://scholar.google.com/citations?user=U9jv69gAAAAJ&hl=en>



Academic Qualification:

- **Visiting scientist** **February 2020 - April 2021**

Department of Physics Engineering, Faculty of Science and Letters, Istanbul Technical University, Turkey, Funded by TUBITAK -2221 program
Research Title: Fabrication of enzyme immobilized magnetic photochemical nanosensor for toxic ions
- **Post Doctorate, [Nanotechnology]** **September 2012 - May 2014**

Institute of Microengineering and Nanoelectronics (IMEN), University Kebangsaan Malaysia, Bangi, Malaysia.
Research Title: Surfactant-assisted, shape controlled synthesis of metal nano-wires or nano-rods and their application
- **M.S leading to Ph.D (Doctor Of Philosophy), [Analytical Chemistry] GPA 3.7, 2004- 2010**

NCEAC, University of Sindh, Jamshoro, Pakistan
Thesis title: Enhancement of the Analytical Performance of Spectral Methods for the Determination of Metal Cations, Anions, and Neutral Organics via Utilization of Organized Surfactant Media.
- **PhD short term course, [Analytical Chemistry]** **April-October 2007**

Wake Forest University, Winston-Salem, NC, USA
Supervisor: Prof. Dr. Willie. L. Hinze
- **Master of Science, Analytical chemistry (First Position)** **GPA 3.17/ 2002 - 2003**

University of Sindh, Jamshoro, Sindh, Pakistan

Job/ Professional Experience:

- **Associate Professor** February 2017 till to Date
National Center of Excellence in Analytical Chemistry,
University of Sindh Jamshoro Pakistan.

- **Assistant Professor** March 2012 -February 2017
National Center of Excellence in Analytical Chemistry,
University of Sindh Jamshoro Pakistan.

- **Lecturer** Jan 2009- March 2012
National Center of Excellence in Analytical Chemistry,
University of Sindh Jamshoro Pakistan.

- **Research Associate** Oct 2004- Dec 2009
National Center of Excellence in Analytical Chemistry,
University of Sindh Jamshoro Pakistan

- **Trainer** 2008- 2011
DELPHI PROJECT titled “Capacity Building for Urban Water Demand Management”
Funded by British Council., <http://wedc.com.pk/people.html>

Awards and Memberships

Awards:

- Award for outstanding research in field of Science from Australian Multicultural Charity and SAWF at 3rd Global CSR Excellence & leadership summits and award ceremony 4th December 2021.
- Best researcher Award year 2019, Awarded by University of Sindh, Jmashoro, **2019**
- Received Research Productivity Award (RPA) 2012, from Ministry of Science and Technology.
- Ph.D. split program Scholarship granted by Higher Education Commission Islamabad, Pakistan for research at Department of Chemistry (Salem Hall), Wake Forest University, Winston-Salem, North Carolina, USA, 2007.
- First position in M. Phil course work with 3.7 GPA (Analytical Chemistry).
- First position in M. Sc 2003 with 3.17 GPA (Analytical chemistry).
- Reviewer of 10 International and 1 National Chemistry Journals

Membership:

- American Chemical Society (ACS), United States of America
- Life Time member of Chemical Society of Pakistan (CSP), Pakistan
- IUPAC Affiliation
- Approved Supervisor for M. Phil/ Ph. D from Higher Education Commission (HEC) Pakistan
- Member of Editorial Board of Pakistan Journal of Analytical Environmental Chemistry

Research Interest

- Synthesis of Nanomaterials (Metals, Metal Oxides, Metal Chalcogenides) and their applications in catalyst and sensor technology.
- Preparation of novel Smart material and Metal ion imprinted polymers and their environmental analytical applications.
- Development of chromatographic/ Spectrophotometric/ Spectrofluorimetric methods of analysis for ionic (cations/Anions) analytes by utilizing non-toxic micellar media.

Research Projects awarded and completed:

1. Project No. PSF/Res/S-SU/Chem (465) 2.5 Million rupees, Project Entitled: “*Metal Ion Imprinted polymers (MIIPs): Novel material for pre-concentration and separation of total Arsenic in aqueous systems*”Funded by Pakistan Science foundation. Starting year 2016-2018
2. Project No: UKM-MI-OUP-2012, Post Doc fellowship funded by UKM, Malaysian.(Completed)

List supervision of M.Phil., MS, and Ph.D. Scholars Degree awarded/ on-going

Ph.D. scholars under supervision/Co-supervision (Degree awarded)

S.No.	Degree	Award year	Name of Candidate	Title of Thesis
1	Ph.D.	2024	Ali Muhammad Mahar	Fabrication of iron based bimetallic nanoparticles and their applications
2	Ph.D.	2023	Romia Memon	Medicinal Plant extract based synthesis of metal nanoparticles and their application
3	Ph.D.	2023	Kanwal Marvi	Purification and characterization of Anthocyanins from selected indigenous fruits of Sindh, Pakistan
4	Ph.D.	2022	Abdullah	Synthesis and application of Functionalized magnetic iron oxide nanoparticles
5	Ph.D.	2022	Nasira Liaqat	High Performance Schiff Based Resins: Preparation, Characterization and Applications
6	Ph.D.	2022	Zaheer Ahmed Mahar	Synthesis and Applications of Functionalized Copper and Zinc oxide nanoparticles
7	Ph.D.	2022	Abdul Rauf Shaikh	Synthesis, Characterization and Applications of iron and Tin oxide Nanoparticles

8	Ph.D.	2021	Muhammad Saqaf Jaghirani	Synthesis, characterization and application of molecular and ion imprinted polymer
9	Ph.D	2019	Muhammad Tariq Shah	Synthesis, Characterization and Applications of Magnetic Nanoparticles
10	Ph.D	2016	Farah Amin	Biosorption of toxic metals and anions from aqueous solutions by fungal biomass
11	M.Phil.	2022	Ms.Komal Shah	Green synthesis, morphological and optical studies of Copper oxide nanoparticles and their application
12	M.Phil.	2022	Mr. M. Mahboob	Green synthesis of silver based bimetallic nanoparticles using Bombax eciba flower extract and their morphological, optical and antimicrobial study and catalytic application
13	M.Phil.	2022	Ms. Komal Urs	Green synthesis, morphological and optical studies of Zinc oxide nanoparticles and their application
14	M.Phil.	2021	Mr. Aneel Kumar	“Synthesis, Characterization And Application Of Selective Molecular Imprinted Polymer”
15	M.Phil.	2021	Mr. Dadu Mal	Synthesis and characterization of Cerium Oxide Nanoparticles and their Applications
16	M.Phil.	2021	Mr. Asif Ali Gabol	Synthesis of metal chalcogenide nanocomposites and their application
17	M.Phil.	2021	Mr. Sagar Kumar	Synthesis and Characterization of ion imprinted magnetic polymer as selective adsorbent
18	M.Phil.	2021	Mr. Shankar Lal	Synthesis of selected rare metal oxide nanoparticles and their applications
19	M.Phil.	2020	Mr. Fahad Memon	Synthesis of Metal Oxide Nano Particles and its Effect on Heavy Metal Uptake in Various Plants
20	M.Phil.	2020	Mr. Abdul Hameed Pato	Growth of Titanium Oxide nanoparticles and their Characterization and Application
21	M.Phil.	2020	Ms. Sana Qasim	Synthesis of metal sulphide nanomaterials and it's applications
22	M.Phil.	2019	Mr. Ameet Kumar	Efficient Imprinted Materials for Selective Recognition of Targeted Toxic Ions in Aqueous System

23	M.Phil.	2019	Ms. Benazir Lighari	Synthesis of carbon supported TiO ₂ nanoparticles and their applications for removal of toxic anions from water
24	M.Phil.	2019	Ms. Muniba Zubair	Synthesis of Flavonoid-Tagged imprinted material for the selective extraction of anthocyanin from indigenous fruit and vegetable wastes
25	M.Phil.	2018	Mr. Faraz Ahmed	Synthesis of Molecularly Imprinted polymers and its applications
26	M.Phil.	2018	Ms. Aqsa Tunio	Synthesis of metal nanoparticles immobilized fertilizer as growth regulator for selected vegetable
27	M.Phil.	2017	Mr. Ali Muhammad Mahar	Synthesis of Platinum-Palladium bimetallic nanoparticles on solid substrate by liquid phase deposition method and its application
28	M.Phil.	2017	Mr. Abdullah	Pre-Concentration And Separation Of Selected Toxic Metal Ions From Aqueous System By Metal Ion Imprinted Polymers
29	M.Phil.	2017	Mr. Saman Sabir Ali	Metal oxide based Nano catalysis for Biodiesel production using <i>Ziziphus</i> seed oil

M.Phil. scholar under Co-supervision (Degree awarded)

S.No.	Degree	Award year	Name of Candidate	Title of Thesis
30	M.Phil.	2024	Ms. Neelam Bhutto	
31	M.Phil.	2023	Mahru-Nisa	Bioremediation of Selected persistent pesticides by fungal biomass
32	M.Phil.	2022	Kashaf	Green synthesis of Gold nanoparticles by aqueous extract of medicinal plant
33	M.Phil.	2021	Ms. Saeeda Memon	Antioxidant capacity and anthocyanin composition of <i>Rosa indica</i> L grown locally in Sindh, Pakistan
34	M.E	2021	Mr. Shahnawaz	Assisment of heavy metals in poultry feeds and chicken meat of Hyderabad city
35	M.Phil.	2019	Fareeda Shaikh	Synthesis of Flavonoid Functionalized Nanoparticles And their Application
36	M.Phil.	2019	Kaniz Fatima	Fabrication Of Manganese Ferrite Nanomaterial And Their Applications
36	M.Phil.	2021	Iqra Shahid	Schiff Based Resin Encapsulated Metal Nanoparticles, and Applications
37	M.Phil.	2021	Nasreen	Linear, Thermally, Stable, Antimicrobial Schiff Based Resins, Synthesis, Characterization and Applications

38	M.Phil.	2019	Huma	Determination Of Flouride From Various Brands Of Toothpaste By Analytical Techniques
39	M.Phil.	2019	Sidra Khan	Immobilization of Lipase into Polyvinyl Alcohol Gel for Hydrolysis of Vegetable Oil
40	M.Phil.	2019	Ms. Shagufta Qambrani	Analysis and characterization of Anthocyanins from selected vegetables
41	M.Phil.	2015	Saba Waris	Microbial production of conjugated linolenic acid using linolenic acid as substrate

S.No	On-Going projects		Degree	Name of Scholar	Research Title
	Supervisor				
1	2019		Ph.D.	Ms. Aqsa Tunio	Fabrication of enzyme immobilized metal nanoparticles and their application
2	2019		Ph.D.	Mr. Faraz Ahmed Mustafai	Molecular imprinted polymer : Synthesis and analytical application
3	2022		Ph.D.	Ramsha Larik	Fabrication of Titanium oxide based nanocomposites and their applications
4	2022		Ph.D.	Muhammad Yakoob	Fabrication of iron-based magnetic nanoalloys and teir environmental applications
5	2024		Ph.D.	Sajjad Ali Chang	Synthesis of metal oxide based hybrid materials and their applications
6	2024		Ph.D	Komal Shah	Green synthesis of Mono and Bimetallic nanoparticles and their Applications
7	2024		Ph.D.	Komal Zahra Urs	Synthesis of Functionalized Tin (Sn) nanoparticles and their applications
	Co-Supervisor				
1	2013		Ph.D.	Mr. Anwar Ali	
2	2017		Ph.D.	Ms. Sanam Dehraj	
3	2020		Ph.D.	Mr. Noorzaman	
4	2022		Ph.D.	Mr. Attaullah Soomro	
5	2022		Ph.D.	Mr. Sajjid Soomro	
6	2023		Ph.D.	Muhammad Imran Khatak	
	Supervisor				
1	2023		M.Phil.	Salman Khan	
2	2022		M.Phil.	Muhammad Faisal Shaikh	
3	2022		M.Phil.	Ms. Rabail Nisar	
4	2022		M.Phil.	Ms. Mairaj Memon	

Job/ Professional Responsibilities:

Teaching	
Title of course (s)	Class taught
(CH-707) Environmental Chemistry (1CH)	M. Phil
(CH-705) Chemometrics (2CH)	M. Phil
Environmental Analytical Chemistry (1CH)	M. Phil
(CH-902) Food Analytical Chemistry (2CH)	Ph.D.
Green Analytical Chemistry (2CH)	Ph.D.
Scientific Writing in Analytical Chemistry (1CH)	M.Phil

Conference Organized

1. **Member of organizing committee**, International Conference on sustainable development in nanotechnology, 20-21 March, 2023 NCEAC, University of Sindh, Jamshoro
2. **Member Organizing committee**, one-day International seminar on sustainable water management, 10, November, 2018.
3. **Resource person** at Three Days workshop on Role of Chromatography in the Analysis of Biological Compounds, 26-28, September 2016.
4. **Member Organizing committee**, Symposium and Workshops on "Biowaste derived carbons for waste-to-bioenergy conversion and water purification" 20-23 February 2017, NCEAC, University of Sindh, Jamshoro
5. **Member Organizing committee**, 11th International symposium on Analytical and Environmental Chemistry, 07-08-2016, NCEAC, University of Sindh, Jamshoro
6. **Member Organizing committee**, 10th International symposium on Analytical and Environmental Chemistry, Dec-2013, NCEAC, University of Sindh, Jamshoro

PUBLICATIONS

Book Chapters:

1. NajmaMemon, **Aamna Balouch**, Willie L. Hinze, Fluorescence in Organized Assemblies,” (Invited Book Chapter) Encyclopedia of Analytical Chemistry (R.A. Meyers, Ed.), John Wiley & Sons, Ltd. Chichester, England, Published in September 29, 2008, DOI: 10.1002/9780470027318.a5409. pub 2 September. 29, 2008.
2. Sarfaraz Ahmed Mahesar, Muhammad Saqaf Jagirnai, Abdul Rauf Khaskheli, **Aamna Balouch**, and Syed Tufail Hussain Sherazi, Green Synthesis of Nanoparticles from Coriander Extract TNF_27_471450_C027_docbook_new_indd.indd, Handbook of Coriander (Coriandrum sativum), (2022) DOI: 10.1201/9781003204626-29

List of publications

Total publication: 95

Impact Factor: >400

(Citation > 1700)

1. Sajjad Ali Chang, **Aamna Balouch**, Waheed Ali Nahyoon, Aamir Ali Raja, Detection of Trace Elements Se, Cu and Zn Levels in Biological Samples of Drug Abusers: Halani Sindh, Pakistan, Biological Trace Element Research (accepted 2024), **IF = 3.738**
2. Ali Muhammad Mahar,**Aamna Balouch**, Esra Alveroglu , Farah Naz Talpur, Muhammad Saqaf Jagirani, Abdullah, Komal Shah, Fabrication of Efficient Bimetallic Magnetic/SilverNanocatalyst for the Fast Degradation of Toxic Coloring Compounds From Aqueous Samples, Chemical Papers (accepted 2024) **IF = 2.146**
3. Sajjad Ali Chang, **Aamna Balouch**, Aamir Ali Raja, Case report: A severe asthma symptom with biological medication, Archives of Clinical and medical microbiology, 3, 1, 2024, 01-04, **IF= 1.019**
4. Chandio, Anwar Ali Memon, Ayaz Ali , **Balouch, Aamna**, Memon, Shahabuddin, Memon, Roomia and Otho, Aijaz Ali, Supramolecular structural based fabrication of silver nanoparticles using diamide derivative of Calix{4}arene: An efficient antimicrobial agent, Chemical Papers (accepted 2024) **IF = 2.146**
5. Abdullah, **Balouch, A.**, Alveroglu, E. et al. Synthesis of amine-functionalized ultrasonic assisted dual metal imprinted polymer: a real magnetic sorbent for simultaneous removal of Pb²⁺ and Cd²⁺ from water samples. J Polym Res 30, 174 (2023). <https://doi.org/10.1007/s10965-023-03548-2> IF: **3.061**.
6. NL Rajput, MA Moghal, **A Balouch**, KM Khan, Simultaneous remediation of Cr and Ni from waste water using efficient Schiff-base resin bis(2-methoxy-1-naphthaldehy)-O-phenylene diimine as an adsorbent, Journal of Coordination Chemistry, 76:13-15, 1711-1725,2023 **IF: 1.896**

7. Saba Waris Arain, Farah Naz Talpur, Ahsanullah Unar, Hassan Imran Afridi, **Aamna Balouch**, Zafar Ali, Abid Ali Khaskheli, Ghulam Qadir Chanihoon, Bioproduction of conjugated linolenic acid by *L. plantarum* using linolenic acid as a substrate, Chinese Journal of Analytical Chemistry, 51, 4, 100221, (2023) **IF: 1.193**
8. S Dahraj, **A Balouch**, AA Noor, NA Brohi, RA Soomro, MA Sial, BA Mahar Current status of street foods, over consumption and human health issues in Hyderabad City. Pure and Applied Biology. Vol. 12, Issue 2, pp890-900, (2023)
9. **Aamna Balouch***, Muhammad Saqaf Jagirani, Esra Alveroğlu, Shankar Lal, Sirajuddin, Ultra-Fast Degradation of Thymol Blue Dye Under Microwave Irradiation Technique Using Alpha-orthorhombic Molybdenum Trioxide (α -MoO₃) Colloidal Nanoparticles, Journal of Cluster Science 34, 2287–2296 (2023), DOI :10.1007/s10876-022-02381-9, **IF: 3.447**
10. Chandio, Anwar Ali and Memon, Shahabuddin and Memon, Ayaz Ali and **Balouch, Aamna** and Memon, Roomia and Otho, Aijaz Ali, Eco-Friendly Conversion of p-Nitrophenol into p-Aminophenol Using Calix[4]arene Derived CuO Nanoparticles: An Excellent Catalytic Agent Polycyclic Aromatic Compounds, 43:6, 4843-4855, (2023), DOI: [10.1080/10406638.2022.2096648](https://doi.org/10.1080/10406638.2022.2096648), **IF: 2.8**
11. AY Al-She'irey, **A Balouch**, ER Mawarnis, L Roza, MYA Rahman, Effect of ZnO seed layer annealing temperature on the growth of ZnO nanorods and its catalytic application, Optical Materials 131, 112652, (2022) **IF 3.754**
12. Mahar AM, Alveroglu E, Balouch A, Talpur FN, Abdullah, Jagirani MS. Fabrication of Fe/Bi bimetallic magnetic nano-oxides (IBBMNOs) as efficient remediator for hexavalent chromium from aqueous environment. Environ Sci Pollut Res Int. Sep;29 (43):65161-65175. (2022) doi: 10.1007/s11356-022-20239-5. PMID: 35482238 **IF 5.19**
13. Muhammad S Jagirani, **Aamna BALOUCH***, Mahesar, Sarfaraz, Esra ALVEROGLU, Kumar, Ameet, Tunio, Aqsa Abdullah, Ali Muhammad MAHAR Selective and sensitive detoxification of toxic lead ions from drinking water using lead (II) ion-imprinted interpenetrating polymer linkage, , Polymer Bulletin 79 (3), 1887-1909, (2022), DOI 10.1007/s00289-021-03546-8, **IF 2.843**
14. F Shaikh, QK Panhwar, **A Balouch**, S Ali, WA Panhwar, F Sheikh, Synthesis of zinc oxide nanoparticles and their functionalisation with chrysin: Exploration of its applications, International Journal of Environmental Analytical Chemistry 102 (7), 1662-1671, (2022) **IF 2.731**
15. MS Jagirani, **A Balouch**, E Alveroğlu, SA Mahesar, B Zeytuncu Fabrication of Cobalt tagged smart ion-imprinted polymeric material applied for the elimination of Co²⁺ ions from real environmental samples, Polymer Bulletin, 79, 10135–10153 (2022). **IF 2.843**

16. ZA Mahar, GQ Shar, **A Balouch**, AH Pato, AR Shaikh, Effective and viable photocatalytic degradation of rhodamine B dye in aqueous media using CuO/PVA nanocomposites, *New Journal of Chemistry* 45 (36), 16500-16510, (2022) **IF. 3.925**
17. Dadu Mal, Esra Alveroglu, **Aamna Balouch**, Muhammad Saqaf Jagirani, Abdullah, Sagar Kumar, Highly Efficient and selective Heterogeneous Catalytic reduction of 2-Nitroaniline by Cerium Oxide Nanocatalyst under Microwave irradiation, *Environmental Technology*, 43:23, 3631-3645, (2022) <https://doi.org/10.1080/09593330.2021.1929506> **IF. 3.475**
18. ZA Mahar, GQ Shar, **A Balouch**, Fabrication and catalytic efficiency of ZnO/PVP nanocatalysts: a tremendous applicant for Methyl Orange dye degradation in aqueous medium, *Journal of Nano Research (JNanoR)* , 73:121–38, (2022).
19. Abdul Rauf Shaikh, Ghulam Qadir Shar, **Aamna Balouch**, Preparation of Silica Coated Tin Oxide Nano-Catalyst as an Efficient Applicant for Catalytic Degradation of Eosin-Y Dye, *Turkish Journal of Physiotherapy and Rehabilitation*, 32, 3, (2022)
20. Abdul Rauf Shaikh, Ghulam Qadir Shar, **Aamna Balouch**, Fabrication of silica tagged magnetic nano-catalyst for the degradation of Rhodamin-B dye, *Journal of Chemical society of Pakistan*, doi.org/10.52568/001030/JCSP/44.03, 44, 284, (2022) **IF: 0.698**
21. Abdul Hameed Pato, **Aamna Balouch**, Esra Alveroglu, Jamil Ahmed Buledi, Shankar Lal, Dadu Mal, A Practical Non-Enzymatic, Ultra-Sensitive Molybdenum Oxide (MoO₃) Electrochemical Nanosensor for Hydroquinone, *Journal of The Electrochemical Society*, 168, 056503 (2021), **IF: 4.316**
22. Syed Saman , **Aamna Balouch** , Farah Naz Talpur , Ayaz Ali Memon , Bibi Maryam Mousavi , Francis Verpoort, Green synthesis of MgO nanocatalyst by using Ziziphus mauritiana leaves and seeds for biodiesel production, *Appl Organomet Chem*, 1;35:e6199, <https://doi.org/10.1002/aoc.6199>, (2021) **IF = 3.581**
23. Sagar Kumar, Esra Alveroglu, **Aamna Balouch***, Muhammad S Jagirani, Abdullah, Moina Akhtar Mughal, Dadu Mal, Fabrication of nickel-tagged magnetic imprinted polymeric network for the selective extraction of Ni(II) from the real aqueous, *Environmental Science and Pollution Research*, 28 (29), 40022-40034, DOI: 10.1007/s11356-021-13375-x, **IF= 3.306 (2021)**
24. Roomia Memon, Ayaz Ali Memon, Aamna Balouch, Muhammad Raza Shah, Syed Tufail Hussain Sherazi, Safia Sanam Memon, Kanwal Memon, Highly selective nanomolar level colorimetric sensing of Cr³⁺ through biosynthesized gold nanoparticles in the presence of Cr⁶⁺, *Optik* , 248, 2021, 168188, IF:2.443
25. Roomia Memon, Ayaz Ali Memon, Ayman Nafady, Syed Tufail Hussain Sherazi, **Aamna Balouch**, Kanwal Memon, Nazir Ahmed Brohi, Aamna Najeeb, Electrochemical sensing of dopamine via bio-assisted synthesized silver nanoparticles, *International Nano Letters*, **11**, pages263–271 (2021).

26. Sagar Kumar, Esra Alveroğlu, **Aamna Balouch***, Farah N Talpur, Muhammad S Jagirani, Abdullah, Ali M Mahar, Abdul H Pato, Dadu Mal, Fabrication of chromium imprinted polymer: A real magneto selective sorbent for chromium Cr (VI) removal in a real water sample *New J. Chem.*, 2020, **44**, 18668-18678 **IF= 3.288**
27. Abdullah, Esra ALVEROGLU, **Aamna BALOUCH***, Ali Muhammad MAHAR, Evaluation of the Performance of a Selective Magnetite Molecularly Imprinted Polymer for Extraction of Quercetin from Onion Samples, *Microchemical Journal* 162(7):105849, DOI: [10.1016/j.microc.2020.105849](https://doi.org/10.1016/j.microc.2020.105849), **IF = 3.594**
28. Abdullah, Esra ALVEROGLU, **Aamna BALOUCH***, Ali Muhammad MAHAR, Fabrication of silane-modified magnetic nano sorbent for enhanced ultrasonic wave driven removal of methylene blue from aqueous media: Isotherms, kinetics, and Thermodynamic mechanistic studies Manuscript, *Turkish Journal of Chemistry* 45 (1), 181-191) **IF = 1.135**
29. Abdul Hameed Pato, **Aamna Balouch***, Farah N Talpur, Abdullah, Pirah Panah, Ali M Mahar, Muhammad S Jagirani, Sagar Kumar, SafiaSanam. "Fabrication of TiO₂@ITO grown Nanocatalyst as Efficient Applicant for Catalytic Reduction of Eosin Y from Aqueous Media." *Environmental Science and Pollution Research* 28(1):947-959, DOI: 10.1007/s11356-020-10548-y. **IF= 3.306**
30. Jagirani, Muhammad Saqaf, **Aamna Balouch***, Sarfaraz Ahmed Mahesar, Ameet Kumar, Abdul Rehman Baloch, and Muhammad Iqbal Bhangar. "Fabrication of cadmium tagged novel ion imprinted polymer for detoxification of the toxic Cd²⁺ ion from aqueous environment." *Microchemical Journal* (2020): 105247. **IF = 3.594**
31. Abdullah, Alveroglu, Esra, **Aamna Balouch***, Farah Naz Talpur, Muhammad Tariq Shah, Ameet Kumar, Ali Muhammad Mahar, and Muhammad Saqaf Jagirani. "Ultrasonic mediated synthesis of arsenic imprinted polymer and their analytical practicality as a selective sorbent for removal of toxic As³⁺ ion from real samples." *Journal of Polymer Research* 27, no. 9 (2020): 1-11. **IF= 2.426**
32. Mal, Dadu, **Aamna Balouch***, Ali Muhammad Mahar, Abdul Hameed Pato, Sagar Kumar, Shanker Lal, and Aneel Kumar. "Synthesis and catalytic practicality of CeO₂ nanoparticle: an excellent heterogenous candidate for 4-nitrophenol reduction." *Applied Nanoscience* (2020): 1-13. **IF = 3.807**
33. Fahad, **Aamna Balouch***, Muhammad Hassan Agheem, Sohail Ahmed Memon, Abdul Rehman Baloch, Aqsa Tunio, Abdullah et al. "Efficient mitigation of cadmium and lead toxicity in coriander plant utilizing magnetite (Fe₃O₄) nanofertilizer as growth regulator and antimicrobial agent." *International Journal of Environmental Analytical Chemistry* (2020): 1-12. **IF = 1.431**
34. Mahar, Ali Muhammad, **Aamna Balouch***, Farah Naz Talpur, Pirah Panah, Raj Kumar, Ameet Kumar, Abdul Hameed Pato, Dadu Mal, Sagar Kumar, and Akrajas Ali Umar. "Fabrication of Pt-Pd@ ITO

- grown heterogeneous nanocatalyst as efficient remediator for toxic methyl parathion in aqueous media." **Environmental Science and Pollution Research** (2020): 1-9. **IF= 3.306**
35. Abdul Hameed Pato, **Aamna Balouch***, Farah Naztalpur, Abdullah, Ameet Kumar Ali Muhammad Mahar, Muhammad SaqafJagirani, Asif Ali Gabool, Sana Qasim, FahadMemon, "Synthesis and Catalytic Practically of [Titania@ITO](#) Grown Nanoflakes: An Excellent Candidate for Isopropanol Conversion into Acetone, **Applied Nanoscience**, 10 (3), 739-749 (2020) **IF = 3.807**
 36. Roomia Memon, Ayaz Ali Memon, Syed Tufail Hussain Sherazi, Siraj Uddin, **Aamna Balouch**, Muhammad Raza S, Sarfaraz A Mahesar, Kauser Rajar, Muhammad Hassan Agheem, Application of synthesized copper nanoparticles using aqueous extract of *Ziziphus mauritiana* L. leaves as a colorimetric sensor for the detection of Ag⁺, DOI: 10.3906/kim-2003-10, **Turkish Journal of Chemistry** (accepted 2020) **IF = 1.135**
 37. R Kumar, G Qadir, K Rajar, **A Balouch**, ZH Ibupoto, Voltammetric detection of caffeine content in different tea stuffs by using Co₃O₄/GCE-Nafion electrode- **Journal of the Iranian Chemical Society**, (accepted 2020), DOI: [10.1007/s13738-020-02059-1](https://doi.org/10.1007/s13738-020-02059-1) **IF = 1.552**
 38. Shaikh, Farida, Qadeer Khan Panhwar, **Aamna Balouch**, Shaista Ali, Wazir Ali Panhwar, and Farzeen Sheikh. "Synthesis of zinc oxide nanoparticles and their functionalisation with chrysin: exploration of its applications." **International Journal of Environmental Analytical Chemistry** (2020): 1-10. **IF =1.431**
 39. Rajput, NasiraLiaquat, Moina Akhtar Mughal, **Aamna Balouch**, Khalid Mohammed Khan, Sarfraz Ali Tunio, Kanwal, and SaminaSohu. "Effective photocatalytic methylene orange dye degradation ability in coloured textile contaminated water by highly efficient catalyst Schiff-based resin-encapsulated supported on TiO₂@ SiO₂ metal oxide nanoparticles." **International Journal of Environmental Analytical Chemistry** (2020): 1-15. **IF =1.431**
 40. Qadeer Khan Panhwar, **Aamna Balouch***, Ali Nawaz Siyal, Farida Shaikh, Aqsa Ahmed, 5, 7-Dihydroxy-2-(4-hydroxyphenyl) chroman-4-one Functionalized CuO Nanoparticles: Synthesis, Characterization and Antioxidant activity, **Pakistan Journal of Analytical & Environmental Chemistry**, **1, 21, (2020) 107-114**
 41. Arain, Iqra Shahid, Moina Akhtar Mughal, **Aamna Balouch**, NasiraLiaquat Rajput, NasreenChanna, SamraQaimkhani, Sobia Arain, Saddam Hussain Bughio, and NusratNaeemMemon. "Preparation of MgO@ SiO₂ encapsulated polymethylenebis (pyrrole-2-carboxaldehyde) o-phenylenediimine: applied as efficient adsorbent for Cu (II) ions from aqueous system." **International Journal of Environmental Analytical Chemistry** (2020): 1-15. **IF =1.431**
 42. Roomia Memon, Ayaz Ali Memon, Sirajuddin, **Aamna Balouch**, Kanwal Memon, Syed Tufail Hussain Sherazi, Anwar Ali Chandio & Raj Kumar (2020) Ultrasensitive colorimetric detection of

Hg²⁺ in aqueous media via green synthesis by *Ziziphus mauritiana* Leaf extract-based silver nanoparticles, International Journal of Environmental Analytical Chemistry, DOI: [10.1080/03067319.2020.1822353](https://doi.org/10.1080/03067319.2020.1822353) IF =1.431

43. S Panhwar, JA Buledi, D Mal, AR Solangi, **A Balouch**, A Hyder, Importance and analytical perspective of green synthetic strategies of copper, zinc, and titanium oxide nanoparticles and their applications in pathogens and environmental, Curr Anal Chem 17, 1-13(Accepted) 2021.
44. Masood Hussain, Ayman Nafady *, Siraj Uddin *, AhmetAvcı, ErolPehlivan, Jan Nisar, S TufailSherazi, **Aamna Balouch**, Muhammad Raza Shah, Omar A. Almaghrabi, Anwar Ulhaq, Biogenic Silver Nanoparticles for Trace Colorimetric Sensing of Enzyme Disrupter Fungicide Vinclozolin, Nanomaterials,9, 11, pp 1604 (2019)IF =4.034
45. Ameet Kumar, **Aamna Balouch**, Abdullah, Remediation of toxic fluoride from aqueous media by various techniques, International Journal of Environmental Analytical Chemistry, <https://doi.org/10.1080/03067319.2019.1669580>, 101, 4, 482-505, 2020, IF = 1.267 (Review Article)
46. M. SaqafJagirani, **Aamna Balouch**, Sarfraz Ahmed Mahesar, Ameet Kumar,Abdullah, Faraz Ahmed Mustafai, M. Iqbal Bhangar, Preparation of novel arsenic-imprinted polymer for the selective extraction and enhanced adsorption of highly As³⁺ toxic ions from the aqueous environment, **Polymer Bulletin**, DOI : 10.1007/s00289-019-03008-2IF =1.858
47. Ali M Mahar, **A Balouch**, FN Talpur, A Kumar, P Panah, MT Shah Synthesis and Catalytic Applicability of Pt–Pd ITO Grown Nano Catalyst: An Excellent Candidate for Reduction of Toxic Hexavalent Chromium, Catalysis Letters,Volume 149, [Issue 9](#), pp 2415–2424 (2019) (IF=3)
48. Ameet Kumar, **Aamna Balouch** , Ashfaque Ahmed Pathan, Abdullah, Synthesis, adsorption and analytical applicability of Ni-imprinted polymer for selective adsorption of Ni²⁺ ions from the aqueous environment, Polymer Testing, [77](#), 2019, 105871 (2019). IF = 2.628
49. Abdullah , **Aamna Balouch** ,Ameet Kumar · Amina, Synthesis of ultrasonic-assisted lead ion imprinted polymer as a selective sorbent for the removal of Pb²⁺ in a real water sample, Feb 2019 · Microchemical Journal, [146](#), 2019, Pages 1160-1168, IF 2.87.
50. Ameet Kumar, **Aamna Balouch** , Ashfaque Ahmed Pathan, Abdullah, Ali Muhammad Mahar, Muhammad SaqafJagirani, Novel Chromium Imprinted polymer: Synthesis, Characterization and analytical applicability for the selective remediation of Cr(VI) from an aqueous system, International Journal of Environmental Analytical Chemistry, 99(5), 454-473,2019, IF = 1.267
51. Khan, Humaira; **Balouch, Aamna**; Soomro, Kaniz Fatima; Shaikh, Huma; Naz, Saba; Kandhro, Aftab Ahmed; Samejo, Muhammad Qasim; Memon, NusratNaeem, Effective Heterogeneous

- Photocatalytic Degradation of Crystal Violet Dye Using Manganese Ferrite Nanoparticles, Pakistan Journal of Analytical & Environmental Chemistry 20, 1, 2019, 32-38.
52. Ameet Kumar , **Aamna Balouch** , Ashfaque Ahmed Pathan, Abdullah , Muhammad SaqafJagirani , Ali Muhammad Mahar , MuneebaZubair , Benazir Laghari, Remediation of Nickel ion from wastewater by applying various techniques: a review, ActaChemica Malaysia (ACMY),3, (2019) DOI : 10.2478/acmy-2019-0001(**Review Article**) pp1-15
53. N. L. Rajput , M. A. Moghal, K. M. Khan, A. H. Moghal, **A. Balouch**, Kanwal, Synthesis, Crystallographic, monoclinic, inflexible, Antifungal Assessment of Schiff based resin, Sindh University Research Journal (Science Series), 51(2), 2019 (DOI. 10.26692SURJ).
54. Athar Ali Shah, Akrajas Ali Umar, **Aamna Balouch**, Syed Faiz Ahmed, Muhammad Mujtaba Ali, Geant4 Step towards the Durability and Smooth Response of Silicon Based Neutron Dosimeter, and Protection from Thermal Neutrons, IEEE 5th International Conference on Engineering Technologies and Applied Sciences (ICETAS), (2019)
55. Muhammad Tariq Shah, **Aamna Balouch**, EsraAlveroglu Pyranine Functionalized Fe₃O₄ Nanoparticles for the Sensitive Fluorescence Detection of Cu²⁺ Ions Journal of Alloys and Compounds. 767, 2018, Pages 151-162, **IF 4.64**.
56. Mawarnis, E. R., Ali Umar, A., Tomitori, M., **Balouch, A.**, Nurdin, M., Muzakkar, M. Z., & Oyama, M. Hierarchical Bimetallic AgPt Nanoferns as High-Performance Catalysts for Selective Acetone Hydrogenation to Isopropanol. ACS Omega, 3(9) (2018). 11526-11536 (**IF=2.87**)
57. Faraz Ahmed Mustafai, **Aamna Balouch**, Abdullah, Nusrat Jalbani, Muhammad Iqbal Bhangar, Muhammad Saqaf Jagiran, AmeetKumar, Microwave-assisted synthesis of Imprinted polymer for selective removal of arsenic from drinking water by applying Taguchi statistical method, European Polymer Journal, 109, 2018, Pages 133-142 <https://doi.org/10.1016/j.eurpolymj.2018.09.041>, (**IF. 3.862**)
58. Faraz Ahmed Mustafai, **Aamna Balouch**, Muhammad Iqbal Bhangar, Abdullah Abdullah KausarRajar PirahPanah, Bilal Ahmed, Tariq Shah, Ameet Kumar, Synthesis of Molecularly Imprinted Polymer for the Selective Removal of Mercury, Eurasian J Anal Chem 2018;13(5):em61,
59. Amin, F., Talpur, F. N., **Balouch, A.**, Samoon, M. K., Afridi, H. I., & Surhio, M. A. Utilization of Pleurotuseryngiibiosorbent as an environmental bioremedy for the decontamination of trace cadmium (II) ions from water system. Water Science and Technology. 78 (5), 1148-1158, (**IF. 1.35**)
60. F Amin, FN Talpur, **A Balouch**, HI Afridi, AA Khaskheli, Efficient entrapping of toxic Pb (II) ions from aqueous system on a fixed-bed column of fungal biosorbent, Geology, Ecology, and Landscapes, 2 (1), 39-44, 2018

61. Muhammad Tariq Shah, **Aamna Balouch**, Pirah Panah, Kausar Rajar, Ali Muhammad Mahar, Abdullah Khan, Muhammad Saqaf Jagirani, Humaira Khan, Synthesis of Magnetite Nanoparticles and Its Application As Electrode Material for the Electrochemical Oxidation of Methanol, *Journal of Electronic Materials*, 47,9,(2018) p5321-5333. **IF 1.774**
62. Muhammad Tariq Shah, **Aamna Balouch**, Esra Alveroglu, Fluorine detection of Ni⁺² ions using fluorine functionalized Fe₃O₄ nanoparticles, *Journal of Materials Chemistry C*, 6, 1105-1115 2018, **IF 5.258**
63. Kausar Rajar · Sirajuddin · **Aamna Balouch**, M.I Bhangar Tayyaba Shaikh "Degradation of 4-chlorophenol under sunlight using ZnO nanoparticles as catalysts", *Journal of Electronic Materials*. 2018, 47, pp 2177–2183 (**IF 1.566**)
64. Marvi Kanwal Talpur, Farah Naz Talpur, **Aamna Balouch**, Shafi M Nizamani, Muhammad Ali Surhio, Muhammad Raza Shah, Muhammad Iqbal Bhangar, Hassan Imran Afridi, Analysis and characterization of anthocyanin from phalsa (*grewia asiatica*), *MOJ Food Process Technol.* 2017, 5(3), 299–305.
65. Kausar Rajar · Sirajuddin, **Aamna Balouch**, M.I Bhangar, Muhammad Tariq Shah, Tayyaba Shaikh, Samia Siddiqui, Succinic acid functionalized silver nanoparticles (Suc-Ag NPs) for colorimetric sensing of melamine, 2017, *Applied Surface Science* 435, 2018, Pages 1080-1086, **IF 5.1**
66. Kausar Rajar · Sirajuddin, **Aamna Balouch**, M.I Bhangar, Tayyaba Shaikh, Suberic Acid functionalized CuO NFs for enhanced Electrochemical Oxidation of Formoterol Fumarate, *Sensors and Actuators B Chemical*, 246, 2017, p1030-1038, **IF 5.668**
67. Muhammad Tariq Shah, **Aamna Balouch**, Sirajuddin, Ashfaque Ahmed Pathan, Abdullah, Ali Muhammad Mahar, Saman Sabir, Rozina Khattak, Akrajas Ali Umar "SiO₂ capped Fe₃O₄ nanostructures as an active heterogeneous catalyst for 4-nitrophenol reduction", *Microsystem Technologies*, 23, 12, 2017 p 5745-5758. (**IF. 1.513**)
68. Dewani, Vinod Kumar; Khan, Humaira; **Balouch, Aamna**; Baloach, Qurrat-ul-Ain; Hulo, Ahmed Ali; Samejo, Muhammad Qasim; Naz, Saba; Mughal, Moina Akhtar; Sharif, Munazza; Ibupoto, Zafar Hussain, Synthesis of ZnO Nanostructures, Their Characterization and Sensitive Sensing of Dopamine, *Sensor Letters*, 15, 5, 2017, p419-423(5), **IF = 0.31**
69. Farah Amin, Farah Naz Talpur, **Aamna Balouch** and Hassan Imran Afridi, Statistical methodology for biosorption of nitrate (NO₃⁻) Ions from aqueous solution by *Pleurotus eryngii* fungal biomass, *Modeling Earth Systems and Environment*, 3, 2017, p1101–1112 **IF = 1**
70. Farah Amin, Farah Naz Talpur, **Aamna Balouch** and Hassan Imran Afridi, Eco-efficient fungal biomass for the removal of Pb(II) ions from water system: A sorption process and mechanism, *International Journal of Environmental Research*, 11,3(2017), p315-325 (**IF=1.488**)

71. Muhammad SaqafJagirani, **Aamna Balouch**, Ameet Kumar Ali Muhammad Mahar, Abdullah, Faraz Ahmed Mustafai, Arsenic Remediation by Synthetic and Natural Adsorbents, Pak. J. Anal. Environ. Chem. Vol. 18, No. 1 (2017) p18-36.
72. Xiaomei Chen, **Aamna Balouch**, Akrajas Ali Umar, Muhamad Mat Salleh, MunetakaOyama, Fibrous platinum nanocubes modified indium tin oxide electrodes for effective electrooxidation of alcohols and sensitive detection of hydrazine, Journal of Electroanalytical Chemistry,779,(2017),p156-160(**IF. 2.822**)
73. Ameet Kumar, **Aamna Balouch**, Ashfaque Ahmed Pathan, Ali Muhammad Mahar, Abdullah, Muhammad SaqafJagirani, Faraz Ahmed Mustafai, MuneebaZubair, Benazir Laghari, PirahPanah,“Remediation Techniques applied for aqueous system contaminated by toxic Chromium and Nickel ion”, Journal: Geology, Ecology, and Landscapes (TGEL), 1, 2, 2017.(**Review Article**)
74. KausarRajar, Razium Ali Soomro, ZaffarHussainIbupoto, Sirajuddin, **Aamna Balouch**,Tannic acid assisted copper oxide nanoglobules for sensitive electrochemical detection of bisphenol A, International Journal of Food Properties, 20, 6, 2017, p1359-1367.(**IF. 1.845**)
75. **Aamna Balouch***, Muhammad Tariq Shah, Ashfaque Ahmed Pathan, Ali Muhammad Mahar, Abdullah, SamanSabir, Akrajas Ali Umar, Heterogeneous Catalytic degradation of Nitro-aromatic compound using highly Defect spongy surface Palladium Nanocatalyst, The Nucleus, 53 (1) 2016
76. Farah Amin, Farah NazTalpur, **Aamna Balouch** , Zaheer A. Chandio,Muhammad Ali Surhio, Hassan Imran Afridi,Biosorption of Mercury(II) from Aqueous solution by Fungal Biomass *Pleurotuseryngii*: Isotherm, kinetic, and thermodynamic studies, Environmental Progress and Sustainable Energy, March,35, 5 2016, p1274-1282 (**I.F 1.672**)
77. Aisha Abdul SattarMemon, Ashfaque Ahmed Pathan, Imdad Ali kandhar, RasoolBuxMahar, Rafi-uz-ZamanBrohi and **Aamna Balouch**, MicrosporaFloccosa; A Potential Biofuel Producer, Pak. Pakistan Journal of Analytical & Environmental Chemistry,17, 01, 2016, 106 – 110.
78. **Aamna Balouch**,Akrajas Ali Umar ElvyRahmiMawarnis, SitiKhatijaMdSaad, Muhamad Mat Salleh, MohdYusriAbd Rahman , IwanKityk, MunetakaOyama,Synthesis of Amorphous Platinum Nanofibers Directly on an ITO Substrate and Its Heterogeneous Catalytic Hydrogenation Characterization, *ACS Appl. Mater. Interfaces*, **2015**, 7 (14), pp 7776–7785, (**IF: 8**)
79. Muhammad Tariq Shah, **Aamna Balouch***,KausarRajar, Sirajuddin, Imdad Ali Brohi, Akrajas Ali Umar , Selective heterogeneous catalytic hydrogenation of Ketone (C=O) to alcohol (OH) by Magnetite nanoparticles following Langmuir-Hinshelwood Kinetic approach, *ACS Appl. Mater. Interfaces*7 (12), pp6480 -6489, **2015**, (**IF:8**)

80. Muhammad Safdar , Yasmeen Junejo, **Aamna Balouch**, Efficient degradation of organic Dyes by heterogeneous cefdinir derived silver nanocatalyst, *Journal of Industrial and Engineering Chemistry* 31, **2015**, 216–222 (IF = 4.421)
81. Farah Amin, Farah NazTalpur, **Aamna Balouch** , Muhammad Ali Surhio, Muhammad Aqeel Bhutto, Biosorption of fluoride from aqueous solution by white - rot fungus *Pleurotuseryngii*, *Environmental Nanotechnology, Monitoring & Management*, Volume 3, May **2015**, Pages 30–37 (IF: 0.326) doi:10.1016/j.enmm.2014.11.003, (IF 1.79)
82. **Aamna Balouch**, Akrajas Ali Umar, Athar Ali Shah, and Muhamad Mat Salleh, Highly efficient heterogeneous catalytic hydrogenation of acetone to isopropanol by semi-hollow porous palladium nanocatalyst, *ACS Appl. Mater. Interfaces*, 2014, 5 (19), pp 9843–9849 DOI: 10.1021/am403087m. (IF: 7.504)
83. Akrajas Ali Umar, ElvyRahmiMawarnis, **Aamna Balouch**, Muhamad Mat Salleh, MohdYusriAbd Rahman and MunetakaOyama, Highly-reactive AgPt nanoflakes composed of {001}-faceted nanopyramidal spikes for enhanced-heterogeneous photocatalysis application, *J. Mater. Chem. A*, 2014, 2, 17655-17665 (IF: 8.867)
84. Sin Tee Tan, Akrajas Ali Umar, **Aamna Bolouch**, Muhammad Yahaya, SuratunNafisah, Chi Chin Yap, Muhamad Mat Salleh , I. V. Kityk and MunetakaOyama, Ag-ZnO Nanoreactor Grown on FTO Substrate Exhibiting High Heterogeneous Photocatalytic Efficiency, *ACS Comb. Sci.*, 2014, 16 (7), pp 314–320 (IF: 3.168)
85. Sin Tee Tan, Akrajas Ali Umar, **Aamna Balouch**, Muhammad Yahaya, Muhammad Mat Salleh and MunetakaOyama, (101)- Plane Bounded-ZnO nanocubes films photocatalyst prepared via a low frequency Ultrasonic Assisted hydrolysis process, *Ultrasonics Sonochemistry* Mar; 21(2), 754-60. **2014**, (IF: 4.556)
86. Y. Junejo, Sirajuddin, A. Baykal, M. Safdar, **A. Balouch**, A novel green synthesis and characterization of Ag NPs with its ultra-rapid catalytic reduction of methyl green dye, *Applied Surface Science*, 01 / **2014** ; 290 (1) : 499–503 (IF: 3.387).
87. Akrajas Ali umra SuratunNafisah, SitiKhatijahMdSaad, **Aamna Balouch**, Sin Tee Tan, Muhamad Mat Salleh, MunetakaOyama, Poriferous microtablet of anatase TiO₂ growth on an ITO surface for high-efficiency dye-sensitized solar cells, *Solar Energy Materials and Solar Cells* 01/ **2014**; 122:174–182. (IF: 4.784).
88. **Aamna Balouch**, Akrajas Ali Umar, Sin Tee Tan, SuratunNafisah, SitiKhatijahMdSaad and Muhamad Mat Salleh, Fibrous, Ultra-small Nanorod Constructed-Platinum Nanocube Directly Grown on the ITO Substrate and their Heterogeneous Catalysis Application, *RSC Adv.*, (Communication), **2013**, 3, 19789-19792, (IF: 3.108)
89. SuratunNafisah, Akrajas Ali Umar, Sin Tee Tan, **Aamna Balouch**, Muhamad Mat Salleh Deposition of Au/TiO₂ Nanocomposite on ITO Surface by Seed-Mediated Liquid Phase Deposition Method, *J. Phys.: Conf. Ser.* Volume 431, **2013**, 012011.
90. **Aamna Balouch**, MazharKolachi, Farah NazTalpur, Humaira Khan, M. I. Bhangar, Sorption Kinetics, Isotherm and Thermodynamic modeling of Defluoridation of Ground water using Natural Adsorbents, *American Journal of Analytical Chemistry*, 4, No. 5, **2013**, 221-228. (IF: 1.15).

91. H. Khan, F. N. Talpur, A. Shah, **Aamna Balouch**, Ultra Trace Spectrophotometric Determination of Chromium In Presence of Cationic Micellar Solution, **Sindh Univ. Res. Jour. (Sci. Ser.)** Volum 45, No. 1, **2013**, 141-148.
92. **Aamna Balouch**, Muhammad Iqbal Bhangar, Farah NazTalpur, Willie L Hinze, Determination of nickel (II) with picolinaldehyde-4-phenyl-3-thiosemicarbazone used as chromogenic reagent in non-ionic micellar system, **Turkish Journal of Chemistry**, volum35, 1-13, **2011**,(IF: 1.292)
93. Nusrat N. Memon, Farah. N. Talpur, , **Aamna Balouch**, M. I. Bhangar Changes in Fatty Acid Composition in Muscle of Three Farmed Carp Fish Species (*LabeoRohita*, *CirrhinusMrigala*, *CatlaCatla*) Raised Under the Same Conditions, **Food Chemistry**, 126, Issue 2, **2011**, 405-410. (IF: 4.052).
94. **Aamna Balouch**, NajmaMemon, Muhammad I. Bhangar, M.Y Khuhawar, Utilization of Picolinaldehyde-4-phenyl-3-thiosemicarbazone in Sodium dodecylsulfate Micelles for the Spectrophotometric Determination of Iron, Vanadium, and Cobalt following Partial Least Squares Regression Analysis”.**Journal of AOAC International**92: No.1, 248-256, **2009**.(IF. 1.12)
95. N. Jalbani, T. G. Kazi, M. K. Jamali, B. M. Arain, H. I. Afridi, **A. Balouch**, Evaluation Of Aluminum Contents In Different Bakery Foods Electrothermal Atomic Absorption Spectrometer” **Journal of Food Composition and Analysis**, 20, 226.231, **2007**. (IF. 1.985)

CONFERENCES, WORKSHOPS, TRAININGS

International Lectures & workshops

- Meeting to enhance research collaboration and Laboratory Training Course on Micro- Nano- Material Characterization Techniques, Department of Physics Engineering Istanbul Technical University, Istanbul, **Turkey** from 22th August – 23rd Sept 2022
- WEBINAR Organized By Riau University, **Indonesia** WEDNESDAY, 16 DECEMBER 2020 (08.50 AM)
- 4th Pak-Turk conference, October 26-28, 2017 in Konya, **Turkey**.
- The 3rd ISESCO International Workshop and Conference on Nanotechnology, 05-07 December, 2012, **Kuala Lumpur, Malaysia**
- 3rd Pak-Turk conference, 13-15 September 2012, **Bursa, Turkey**.
- 1st International Chemical and Environmental Engineering Conference, 26th -28th November 2010, **Kuala Lumpur, Malaysia**.
- International Pharmaceuticals and Technologies conference and exhibition, 15-17 March, 2010, Convention Center, **Dubai**
- 17th International Symposium on Surfactant in Solution, , 17-22, August, 2008, **Berlin, Germany**.
- Chem.05, International Conference on Chemistry, Chem, Cairo University 05, 03-06, March, 2008, **Cairo, Egypt**

- 234th American Chemical Society National Meeting & Exposition Boston, **MA USA**, 2007
- 81st ACS Colloid and Surface Science Symposium (University of Delaware, Newark, Delaware, **USA**, 2007
- Twenty-Fourth Triangle Chromatography Symposium and Instrument Exhibit (North Carolina State University, **Raleigh, NC, USA**), 2007
- North Carolina Central ACS Annual Vendor Conference (**Greensboro, NC, USA**), 2007

Plenary/ Invited Talks

1. 3rd International conference of Chemistry and its role in Sciences (ICCRS -III) under the theme “*Sustainability: Basic to Advance Sciences*” to be held on 3rd – 5th January, 2023 in University of Karachi, Pakistan
2. Invited Speaker in 1st National Conference on Emerging Horizons in Science & Technology, December 26-27, 2022”, at the University of Central Punjab, Lahore, Pakistan.
3. Invited Speaker for 20th International and 32nd National Chemistry Conference (CSP-2022) November 2-4, **2022** in Rahim Yar Khan, Pakistan
Title of talk: Magnetic Molecularly Imprinted Polymers: Synthesis and Applications in the Selective removal of toxic metal ions
4. Invited Speaker for Webinar "Graphene And Molecularly Imprinted Polymers" (Wednesday, 6th January **2021**) Organized By Riau University, Indonesia"
Title of talk: "Fabrication of Smart Imprinted Polymers for Selective Recognition & Removal of Toxic Ions from Aqueous System"
5. International Symposium on “Advances in Chemistry, Polymer Science and Biomedical Materials, September 24-26, **2019**, Department of Chemistry, Pakistan institute of Engineering and applied sciences (PIEAS), Nilore, Islamabad, Pakistan
6. 2nd International conference of Chemistry and its role in Science under the theme “Chemistry Today” to be held on August 2nd – 4th, 2019 *IYPT 2019.*, University of Karachi, Entitled: Synthesis of Nanocatalysts as State-of-Art material for efficient production of different fuels

7. 1st International Conference on Sustainable Mineral Resource Development & Utilization (SMRDU'19), February 12-13, 2019 at PCSIR Labs Complex Karachi, Entitled Smart Imprinted Polymer for Selective Recognition and Removal of Toxic Ions from Aqueous System
8. ISSB **2018** at IRCBM, COMSATS University Islamabad, Lahore Campus, dated 11 September 2018, Entitled: Growth of High Surface Defected Bi-Metallic Nanostructures and their applications
9. 15TH International Symposium on Advanced Materials (ISAM-2017) 16-20 October **2017**, National Centre for Physics, Islamabad, Pakistan. Entitled:: Synthesis of Smart Imprinted Materials for Selective Recognition and Removal of Toxic Ions from Aqueous System
10. 14th Euroasia conference on Chemical Science, 15-18 December **2016**, H.E.J. Research Institute of Chemistry, KU, Karachi
11. 2nd Conference on Frontiers of Nanoscience and Nanotechnology, PINSTECH, dated 8-10/09/**2015**. Entitled:: Bi-Metallic/Heterometallic nanostructures (NSs) and their catalytic activities

National (oral Talk):

- “29th National and 17th International Chemistry Conference at Institute of Chemical Sciences University of Peshawar, Khyber Pakhtunkhwa, Pakistan Conference Venue: Baragali Summer Campus dated 06-08 September, 2018.
- 2nd International Conference on Chemical Engineering (ICCE2018), January, 22-23, 2018 to be Organized by the Department of Chemical Engineering, Mehran University of Engineering & Technology Jamshoro, Pakistan at Mövenpick Hotel Karachi.
- Symposium and Workshops on "Biowaste derived carbons for waste-to-bioenergy conversion and water purification" 20-23 February 2017, NCEAC, University of Sindh, Jamshoro
- International Scientific Spring ISS-2016, at 07-11, March 2016, National Centre of Physics, Quaid-e-Azam University, Islamabad.
- 27th National and 15th International Chemistry Conference, 22 -25, August 2016, University Of Malakand, Pakistan
- 14th International and 26th National Chemistry Conference 5-8, October 2015, The Islamia University Of Bahawalpur, Pakistan
- APCoMS - 325-27- November 2014, NUST, Islamabad
- National Symposium on Kinetics & Catalysis (KC-2011), (University of Peshawar Summer Campus, Baragali, on 26th -28th September 2011, Pakistan.
- 1st International Conference of Chemistry and its Role in Science (ICCRS-1), Department of Chemistry, Jinnah University for Women, Karachi, Pakistan. January 3-5-2011.
- Ist Junior National Chemistry Symposium Under the age of 35 Muzaffarabad, Azad Kashmir Pakistan, October 19-22, 2008.

- 7th International and 17th National Chemistry Conference (Gomal University, D.I. Khan, NWFP), 2007
- 9th International Symposium on Analytical and Environmental Chemistry (Baragali, Abbottabad), 2006
- 6th International and 16th National Chemistry Conference (B.Z. University; Multan).[2006]
3rd International Conference on Energy, Environment and Sustainable Development (EESD) Oct 22-24, 2014, MUET, Jamshoro
- International Conference on Current Technologies in Oils and Fats
University of Sindh, Hyderabad, Sindh, Pakistan, March 21 - 23, 2011
- International Conference on Sustainable Water Management. Mehran University of Engineering & Technology, Jamshoro , Pakistan . September 15-17, 2010.
- 8th International Symposium on Anal and Env'l Chemistry (NCEAC, Univ. of Sindh, Jamshoro), 2005
- International Seminar on Analytical Sciences (NCEAC, University of Sindh, Jamshoro), 2005
- 5th International and 15th National Chemistry Conference (Qaid-e-Azam University, Islamabad), 2004

Workshops and Training Courses Attended:

- 2nd Annual National Harmony Workshop - 2017(Manzal- e- murad)22 -26 may 2017 National defence university, Islamabad.
- One-day workshop on “ Biomass Energy”, Dted 04, November, 2016 at Mehran University of Engineering and Technology, Jamshoro, Sindh, Jamshoro
- Seminar cum Workshop Program: New Trends in Electrochemistry, Dated12-05-2015 at HEJ Institute, Karachi University
- Recent Advances and New Horizons in Chemistry” from 6-7 April, 2015 to be held in National Centre of Excellence in Physical Chemistry, University of Peshawar, Pakistan
- International Scientific Spring” March 05-09, 2012 and “Workshop on Nano Technology” March 10, 2012 scheduled to be held at National Centre for Physics (NCP).
- Personal Development Workshop. NCEAC, University of Sindh Jamshoro, Pakistan. October 18, 2010.
- First NCP Scientific Spring - 2009 (FNSS-2009), QAU, Islamabad, 06- 09 April, 2009
- Workshop on Environmental Electrochemistry. NCEAC, University of Sindh Jamshoro , Pakistan . January 19 – 21, 2009.
- Two Day Workshop on Nano Science and Catalysis (NSC-2008), Quaid-I-Azam University, Islamabad, 2008

- Urban Water Demand Management (UWDM), 27th -28th August 2008. IndusHotel Hyderabad, Pakistan
- International Training Workshop on Patent System (NCEAC, University Of Sindh, Jamshoro), 2005.
- Desalination of Water, (Dept. Of Chemical Engineering, U.E.T, Peshawar) 2005.
- Prospects and Potential of Oleo Chemicals in Pakistan, 5th May 2006, National Center of Excellence in Analytical Chemistry, University of Sindh, Jamshoro
- University-Industry interaction Seminar on Prospectus of University Research in Industry, 17th, March 2005, National Center of Excellence in Analytical Chemistry, University of Sindh, Jamshoro
- Chromatography and Statistics in Chemistry, 27th Dec 2004- January 8th 2005, National Center of Excellence in Analytical Chemistry, University of Sindh, Jamshoro
- Two Month Internship in the CLARIANT PAKISTAN LTD JAMSHORO, 2003