

Dr. Tariq Javed

Lecturer
Department of Chemistry
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Joined University of Sahiwal

Assistant Professor under HEC **IPFP** program
on March 01, 2019

Lecturer on BPS on March 09, 2020

HEC Approved Supervisor

RESEARCH INTERESTS

- Development of environment friendly modified biosorbents
- Applications of biosorbents for the treatment of wastewaters
- Studies and analysis of various pollutants in water
- Development of cost-effective methods for the detection of metals in water samples
- Synthesis of heterocyclic compounds

ACADEMIC QUALIFICATION

PhD Chemistry

The Islamia University of Bahawalpur, 2018

Various courses for lab from Pakistan Institute of Nuclear Science and Technology, Islamabad, while working on the project

DISTINCTION

Ph.D. Scholarship (Indigenous) awarded by HEC Islamabad (2012)

RESEARCH EXPERIENCE IN Ph.D.

- Synthesis of environment-friendly biosorbents
- To study binding of pollutants under batch flow conditions
- Mathematical modeling of batch and continuous flow biosorption process

M. Sc. RESEARCH TITLE

“Synthesis of p-mercaptoacetanilide”

M. Phil. RESEARCH TITLE

“Biosorption of crystal violet on moringa oleifera saw”

Ph. D. RESEARCH TITLE

“Sorption of heavy metal ions using low rank Pakistani coal”

EXPERIENCE

- Lecturer (BPS) in Department of Chemistry, University of Sahiwal, Sahiwal, from 09-03-2020 to date.
- Assistant Professor (IPFP) in Department of Chemistry, University of Sahiwal, Sahiwal, from 01-03-2019 to 28-02-2020.
- Quality Education District Trainer in Govt. of Punjab, Education Department from 01-09-2014 to 05-05-2018
- Tutor at Allama Iqbal Open University Islamabad from 01-01-2013 to date
- Lecturer in Physical Chemistry (For M.Sc. Classes) at Govt. Post Graduate College Bahawalpur from 01-06-2010 to 15-03-2012
- Visiting Lecturer in Chemistry at Rise Group of colleges Bahawalpur from 02-06-2011 to 31-03-2012
- Subject Specialist in Chemistry at Umm-ul-Qura System of Education Bahawalpur from 02-04-2008 to 01-01-2010

HANDS-ON EXPERIENCE

- Atomic Absorption Spectrophotometer (Perkin Elmer AAnalyst 100)
- Flame Photometer (Corning 410)
- BET Surface Area Analyzer (Micromeritics ASAP 2000)
- Elemental Analyzer (Vario II Elementar)
- UV-visible spectrophotometer
- TG/DTA (Perkin Elmer Pyro TGDTA)
- FTIR (Perkin Elmer)

COMPUTER SKILLS

- EndNote 9 and X5
 - Chem BioOffice
 - IGOR Software
 - MS-Office
- and other academic related soft-wares.

RESEARCH PUBLICATIONS

In International Journals

- **Tariq Javed**, N. Khalid and M. L. Mirza “Adsorption characteristics of copper ions on low-rank Pakistani coal” *Desalination and Water Treatment* 59 181–189 (2017)
- **Tariq Javed**, N. Khalid and M. L. Mirza “Removal of lead ions from aqueous solutions by low-rank Pakistani coal” *Desalination and Water Treatment* 81 133–142 (2017)
- **Tariq Javed**, N. Khalid and M. L. Mirza “Kinetics, equilibrium and thermodynamics of cerium removal by adsorption on low-rank coal” *Desalination and Water Treatment* 89 240–249 (2017)
- **Tariq Javed**, N. Khalid and M. L. Mirza “Kinetics, isotherm and thermodynamics for thorium ions adsorption from aqueous solutions by coal” *Desalination and Water Treatment* 92 291–300 (2017)

- S. Zafar, M.I. Khan, M. Khraisheh, S. Shahida, **Tariq Javed**, N. Khalid and M. L. Mirza “Rice husk as an effective sorbent for the removal of cerium ions from aqueous solution” *Desalination and Water Treatment* 150 124-135 (2019)
- **Tariq Javed**, N. Khalid and M. L. Mirza “Sorption profile of mercury from aqueous solution on to low rank Pakistani coal” *Desalination and Water Treatment* 160 276-287 (2019)
- F. Hussain, M. Imran, R. M. Khalil, M. Sattar, N. A. Niaz, **Tariq Javed** and K. Sungjun “A first-principles study of Cu and Al doping in ZrO₂ for RRAM device applications” *vacuum* 168 108842 (2019)
- Jamil, T.H. Bokhari, **Tariq Javed**, R. Mustafa, M. Sajid, S. Noreen, M. Zuber, A. Nazir, M. Iqbal, M.I. Jilani “Photocatalytic degradation of disperse dye Violet-26 using TiO₂ and ZnO nanomaterials and process variable optimization” *Journal of Materials Research and Technology* **9** 1119–1128 (2020)
- R. Arshad, T.H. Bokhari, **Tariq Javed**, I. Ahmad, S. Rasheed, M. Iqbal “Degradation product distribution of Reactive Red-147 dye treated by UV/H₂O₂/TiO₂ advanced oxidation process” *Journal of Materials Research and Technology* 7 015070 (2020)
- H.T. Bokhari, Noshaba A., M. Idrees, M. Saeed, M. Usman, R. Rehman, M. Iqbal, **Tariq Javed** “UV/H₂O₂, UV/H₂O₂/SnO₂ and Fe/H₂O₂ based Advanced oxidation processes for the degradation of disperse violet 63 in aqueous medium” *Materials Research Express* 7 015531 (2020)
- S. Noreen, S. Yakout, **Tariq Javed**, H. Kusuma, M. Yaseen, S. Naz, “ZnO, MgO and FeO adsorption efficiencies for Direct Sky Blue dye: Equilibrium, kinetics and thermodynamics studies. *Journal of Materials Research and Technology* 9 5881–5893 (2020)
- Iqbal, Munawar; Fatima, Mehwish; **Tariq Javed**; Anam, Ateeqa; Nazir, Arif; Kanwal, Qudsia; Shehzadi, Zanib; Khan, M; Nisar, Jan; Abbas, Mazhar; Naz, Saima “Microwave assisted synthesis of zinc vanadate nanoparticles and photocatalytic application” *Materials Research Express* 7 015070 (2020)
- Parveen, Shagufta ; Bhatti , Ijaz; Ashar , Ambreen; **Tariq Javed**; Mohsin, Muhammad; Hussain, Muhammad; Khan, M; Naz , Saima; Iqbal, Munawar. Synthesis, characterization and photocatalytic performance of iron molybdate (Fe₂(MoO₄)₃) for the degradation of endosulfan pesticide. *Materials Research Express* 7 035016 (2020)

- Iqbal, Munawar; Asrar ahmad, **Tariq Javed**; Iron vanadate (FeVO_4) nanoparticles synthesis, characterization and photocatalytic activity evaluation for the degradation of 2-chlorophenol. *Desalination and Water Treatment* 187 399-409 (2020)
- Saima Noreen, Ghulam Mustafaa, Sobhy M. Ibrahim, Saima Nazd, Munawar Iqbal, Muhammad Yaseenf, **Tariq Javed**, Jan Nisar. Iron oxide (Fe_2O_3) prepared via green route and adsorption efficiency evaluation for an anionic dye: kinetics, isotherms and thermodynamics studies. *Journal of Materials Research and Technology* 9 4206–4217 (2020).
- Majid Muneer, Imran Kanjal, Muhammad Saeed, **Tariq Javed**, Atta UIHaq, Nighat Zia Ud Den. High energy radiation induced degradation of reactive yellow 145 dye: A mechanistic study *Radiation Physics and Chemistry* (2020).
In press
- **T. Javed**, N. Khalid and M. L. Mirza “Second order kinetic studies of lanthanum onto coal: A comparison of linear and non-linear methods”.
- **T. Javed**, N. Khalid and M. L. Mirza “Influence of electrolytes on decontamination of silver ions by surface of coal”.

INTERNATIONAL BOOK AUTHORED

“Biosorption of Crystal Violet from aqueous solution on *Moringa Oleifera* Saw”

Published from Germany

RESEARCH PROJECT

Research project entitled “Removal of textile dyes using low cost adsorbents”

2019-2020 at department of Chemistry, University of Sahiwal, awarded by

Higher Education Commission of Pakistan

PRESENTATIONS/POSTERS IN CONFERENCES

- **T. Javed**, N. Khalid and M. L. Mirza “Investigation of the removal of silver by sorption onto low-rank Pakistani coal from aqueous solution” 25th National and 13th international chemistry conference, Institute of chemistry, University of the Punjab, Lahore, Pakistan, October 20-22 (2014).
- **T. Javed**, N. Khalid and M. L. Mirza “Removal potential of low-rank Pakistani coal for cadmium ions from aqueous media” 2nd International conference on global environmental

changes, Department of environmental sciences, Government college university Faisalabad, Pakistan, February 25-26 (2014).

- **T. Javed**, N. Khalid and M. L. Mirza “Removal of lead ions from aqueous solutions by low-rank Pakistani coal” 1st International conference on applied chemical, biological and aquatic sciences, Faculty of science and Technology, Government college university Faisalabad, Pakistan, February 18-20 (2014).
- **T. Javed**, N. Khalid and M. L. Mirza “Mercury removal from aqueous solutions using low-rank Pakistani coal” 12th international and 24th national chemistry conference, Department of chemistry, Bahauddin Zakariya university, Multan, Pakistan, October 28-30 (2013).
- **T. Javed**, N. Khalid and M. L. Mirza “Adsorption characteristics of copper ions on low-rank Pakistani coal” 11th international and 23rd national chemistry conference, National centre of excellence in physical chemistry conference, University of Peshawar, October 15-17 (2012).
- **T. Javed**, N. Khalid and M. L. Mirza “Biosorption of Crystal Violet from aqueous solution on *Moringa Oleifera* Saw” 3rd Chemistry Conference at PINSTECH, Islamabad, November (2011).

Membership of Society

Life time member of the Chemical Society of Pakistan

Research Thesis Supervised

M.Sc.

Iram Javed, 2020, Studies on sorption of crystal violet dye over *Zea mays l.* (sweet corn) cobs

BS

- Maryam Batool, 2020, Exploring the useability of *Cedrus deodara* sawdust for decontamination of wastewater containing crystal violet dye
- Farkhanda Yasin, 2020, Adsorption of toxic crystal violet dye using rice husk equilibrium, kinetic and thermodynamic study
- Amna Haq, 2020, Exclusion of crystal violet dye from synthetic textile effluents by utilizing wheat bran (*triticum sativum*)

- Ilyas Muneer,2020, A brief study of adsorption of congo red dye over saw dust of cedrus deodara
- Sohail Abbas, 2020, Adsorption study on the removal of crystal violet dye from waste water by using low cost adsorbent peanut hull

