# DR. SYED SALMAN SHAFQAT

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#### PERSONAL INFORMATION:

Religion: Islam Marital Status: Married Nationality: Pakistan

# **ACADEMIC QUALIFICATIONS:**

➤ Doctor of Philosophy (Malaysia)
➤ MS in Chemistry
➤ BS in Chemistry
2008-2010
➤ 2003-2007

#### **WORK EXPERIENCE:**

- Assistant Professor at Department of Chemistry, University of Education, Township Campus, Lahore Pakistan.
- Assistant Professor at Department of Chemistry, University of Management and Technology, Sialkot, Pakistan.
- Assistant Professor (IPFP) at Department of Chemistry, University of Gujrat, Pakistan.

#### THESIS SUPERVISED

- ➤ Grafting of N-Doped TiO<sub>2</sub> on Highly Porous Nanosilica for Improved Photocatalytic Activity (MS 2021).
- ➤ Comparative study of COD removal from industrial effluents over synthetic Silica and derived Silica from renewable resources. (MS. 2021).
- ➤ Chitosan-heterocyclic based hydrogels as scaffolds for tissue engineering applications. (M.S. 2021).
- ➤ Development of Phenylfurfural Grafted Chitosan for adsorptive Removal of Organosulfur Compound From Crude Oil (M.S. 2021).
- ➤ Molecular Interaction of Antihypertensive Drug Aliskiren with Ionic Surfactants (MS in Progress).
- ➤ Molecular Interaction of Non-Steroidal Anti- Inflammatory Drug Nepafenac with Ionic Surfactant (MS 2022).
- ➤ Chitosan Coated Silica Nano carriers as a promising platform for Targeted Delivery of Anticancer drug Doxorbicin (MS 2022).
- ➤ Development of Minoxidil Loaded Silica Nanoparticles for Topical Treatment of Alopecia Areata (MS 2022).
- ➤ Anti-cancer Studies of Coumarin Derivative Loaded in Silica Nanoparticles Reinforced with Folic Acid Conjugated Alginate (MS 2022).
- ➤ Electrolytic Water Splitting for Efficient Oxygen Evolution Reactions using Carbon Nanotubes and their Composites as Electrocatalysts (MS 2022).

- Encapsulation of curcumin in novel γ-cyclodextrin metal organic frameworks: Sustained release kinetics and solubility studies (MS in Progress).
- Estimation of Toxic and Heavy Metals in Conventional Pakistani Sweets and their Impact on Human Health (MS in Progress).
- > Schiff Bases Containing Sulfonamides; Synthesis, Characterization and Their Biological Activities (MS in Progress).

#### **GRANTS**

- > Start-Up Research Grant no. **SRGP#1390**, worth 0.5 Million Pkr in 2017.
- ➤ HEC Travel **Grant no. 276.59** to attend the UNIMAS SILVER JUBBLIE CONFERENCE held on 18-20 October in 2017.

#### **PUBLICATIONS:**

- 1. Shafqat, S. S., Rizwan, M., Batool, M., Shafqat, S. R., Mustafa, G., Rasheed, T., & Zafar, M. N. (2023). Metal organic frameworks as promising sensing tools for electrochemical detection of persistent heavy metal ions from water matrices: A concise review. Chemosphere, 137920. (IF=8.06)
- 2. Zafar, B., Shafqat, S. S., Zafar, M. N., Haider, S., Sumrra, S. H., Zubair, M., & Akhtar, M. S. (2022). NaHCO3 assisted multifunctional Co3O4, CuO and Mn2O3 nanoparticles for tartrazine removal from synthetic wastewater and biological activities. **Materials Today Communications**, 33, 104946. (**IF= 3.383**)
- 3. Khalid, Z., Alnuwaiser, M. A., Ahmad, H. A., Shafqat, S. S., Munawar, M. A., Kamran, K., & Ewida, M. A. (2022). Experimental and Computational Analysis of Newly Synthesized Benzotriazinone Sulfonamides as Alpha-Glucosidase Inhibitors. *Molecules*, 27(20), 6783. (**IF= 4.927**)
- 4. Enhanced Antifungal and Wound Healing Efficacy of Statistically Optimized, Physicochemically Evaluated Econazole-Triamcinolone Loaded Silica NanoparticlesSafirah Maheen, Hina Younis, Hafeez Ullah Khan, Syed Salman shafqat\*, Sajed Ali, Atta Ur Rehman, Saliha Ilyas, Muhammad Nadeem Zafar, Syed Rizwan Shafqat, Abul Kalam and Ahmed A. Al-Ghamdi. 5/2022 Frontiers in Chemistry Volume 10(IF=6.6)
- 5. Antibacterial and Wound-Healing Activities of Statistically Optimized Nitrofurazone-and Lidocaine-Loaded Silica Microspheres by the Box–Behnken Design Hafeez Ullah Khan, Fahmeed Nasir, Safirah Maheen, **Syed Salman Shafqat**, Shahid Shah, Ahmed Khames , Mohammed M. Ghoneim , Ghulam Abbas, Saleha Shabbir, Mohamed A. Abdelgawad, Mohammad A. S. Abourehab, Amna Irfan and Amani M. El Sisi, **Molecules.** Volume7, issue 8 **2022.** (**IF= 4.927**)
- Synthesis of 1,2,3-Benzotriazin-4(3H)-one derivatives as α-glucosidase inhibitor and their in-silico study Zunera Khalid, <u>Syed S. Shafqat</u>, Hafiz A. Ahmad, Hafiz Muzzamil, Munawar A. Munawar, Matloob Ahmad, Abdullah M. A. Asiri, Muhammad Ashraf. Medicinal Chemistry Research (MCRE). (IF= 1.980)
- 7. Metal Based Bioactive Nitrogen and Oxygen Donor Mono and Bis Schiff Bases: Design, Synthesis, Spectral Characterization, Computational Analysis and Antibacterial Screening, Sajjad Hussain Sumrra, Wardha Zafar, Sabaahatul Ain Malik, Khalid

- Mahmood, **Syed Salman Shafqat** and Saira Arif 15/3/2022 Volume 69, Issue 1<u>Acta</u> Chimica Slovenica. (IF=1.735)
- 8. Enhanced Electrochemical Activity of Co<sub>3</sub>O<sub>4</sub>/Co<sub>9</sub>S<sub>8</sub> Heterostructure Catalyst for Water Splitting, Nadeem Asghar Khan, Iqbal Ahmad, Naghmana Rashid, Farooq Khurum Shehzad, Zahid Ullah, Anwar Ul-Hamid, Muhammad Faizan Nazar, Muhammad Junaid, Muhammad Faheem, <u>Syed Salman Shafqat</u>, Uzma Jabeen, Alaa Dahshan <u>International</u> *Journal of Hydrogen Energy* (IF= 5.816)
- Chitosan-based smart polymeric hydrogels and their prospective applications in biomedicine Atta Rasool, Muhammad Rizwan, Atif Islam, Huda Abdullah, <u>Syed Salman</u> <u>Shafqat</u>, Muhammad Khalid Azeem, Tahir Rasheed, and Muhammad Bilal (2021) <u>Starch</u> 2100150 (IF=2.741)
- 10. Metal incorporated sulfonamides as promising multidrug targets: Combined enzyme inhibitory, antimicrobial, anti-oxidant and theoretical exploration. Sajjad Hussain Sumrra, Abrar Ul Hassan, Muhammad Nadeem Zafar, Syed Salman Shafqat, Ghulam Mustafa, Muhammad Naveed Zafar Muhamma, Zubair, Muhamma Imran (2021) Journal of Molecular Structure Volume 1250, Issue 2. (IF=2.001)
- 11. In vitro/in vivo evaluation of statistically engineered alginate scaffold reinforced with dual drugs loaded silica nanoparticles for enhanced fungal therapeutics. Syeda AmnaMasood, SafirahMaheen, Hafeez Ullah Khan, Muhammad Nadeem Zafar, **Syed Salman Shafqat**, M.A.Mujtaba, Attaur Rehman, Ghulam Abbas, Mian H.R.Mahmood, ShahidBashir, T.M.Yunus Khan, Amany Salah Khalifa, 01/05/2022, Volume61,Issue5, Pages 4041-4056, *Alexandria Engineering Journal*. (**IF**= **6.626**)
- 12. Formulation, Characterization, and Pharmacokinetic Evaluation of Ivabradine-Nebivolol Co-Encapsulated Lipospheres, Muhammad Hanif, Hafeez Ullah Khan, Safirah Maheen, **Syed Salman Shafqat**, Shahid Shah, Ghulam Abbas, Muhammad Rizwan, Tahir Rasheed, Muhammad Bilalh, (2021), *Journal of Molecular Liquids* (**IF=6.165**)
- 13. Development in Biomaterials Based Scaffolds for Tissue Engineering Applications, <u>Syed Salman Shafqat</u>, Syed Rizwan Shfqat and Syeda Amna Masood Recent (2021) <u>Acta Scientific Pharmaceutical Sciences</u> Volume 5 Issue 10. (**IF=1.020**)
- 14. Modeling of phenol sepration from water by NiFe2O4 nanocomposite using response surface methodology and artificial neural network techniques Leili Mohammadi, Muhammad Nadeem Zafar, Maqzia Bashir, Sajjad Hussain Sumrra, <u>Syed Salman Shafqat</u>, Amin Allah Zarei, Hamid Dahmardeh, Iqbal Ahmed, Mohammed Ibrahim Halawa, , 1/8/2021, Volume 9, Issue 4, Pages 105576. <u>Journal of Environmental Chemical Engineering</u> (IF=5.909)
- 15. Pharmaco-technical evaluation of statistically formulated and optimized dual drugs loaded silica nanoparticles for improved antifungal efficacy and wound healing" (2021) Maheen, Safirah; Masood, Amna; Khan, Hafeez Ullah; Shafqat, <u>Syed Salman</u>; Irshad, Misbah; Aslam, Iqra; Rasul, Akhtar; Bashir, Shahid; Zafar, Muhammad Nadeem. <u>ACS OMEGA</u> Volume 6 Issue 12 Pages 8210-822\_(IF=3.512).
- 16. In Silico Approach Towards the Prediction of Drug-Likeness; Synthesis and In Vitro Evaluation of Biphenyl Derivatives M Irshad, SB Jamal, M Faheem, M Aslam, <u>SS Shafqat</u>, A Kanwal (2021) <u>Russian Journal of General Chemistry</u> Volume 91 Issue 6 Pages 1084-1092 (IF=0.81).

- 17. Synthesis, characterization, biological screening and determination of stability constants of N, N'-Bis [1-(4-chlorophenyl) ethylidene] ethane-1, 2-diamine Muhammad Aslam, Asad Gulzar, Rashad Mehmood, Zahra Noreen, Ghania Asad, **Syed Salman Shafqat**, Muhammad Faizan, Misbah Irshad (2021) **SN Applied Sciences** Volume 3 Issue 1 Pages 1-7
- 18. Sugar-Catalyzed Synthesis of Triarylimidazoles—An Exemplary Model of Sweet Chemistry, F. Ijaz, <u>S. S. Shafqat</u>, R. Babar, M. Rizwan, M. N. Zafar, M. A. Khana, and M. A. Munawar, *Russian Journal of Organic Chemistry*, 2020, Vol. 56, No. 3, pp. 509–513. (ISI Indexed) (I.F.= 0.751)
- 19. Imobilization of Pseudomonas aeruginosa static biomass on eggshells powder for on-line preconcentration and determination of carcinogenic Cr(VI)", *Open Chemistry* Aamir Rasheed, Tahseen Ghous, Sumaira Mumtaz, Muhammad Nadeem Zafar\*, Kalsoom Akhter, Rabia Shabir, Zain-ul-Abdin, Syed Salman Shafqat, 2020; 18: 303–313. (**ISI Indexed**) (**I.F. = 1.512**)
- 20. Comparative Studies of Lead and Heavy Metals Concentrations in Pakistan Soil and Its Toxic Effect, Asrar Ahmad, Shabbir Hussain, Sajid Mahmood Rao, Amina Asghar, Misbah Irshad, Muhammad Aslam, **Syed Salman Shafqat**, Mohsin Javed, Muhammad Shahzad Bashir, Hafiza Samreen Kausar **Polish Journal of Environmental Studies** Vol. 29, No. 4 (2020), 1-10. (**ISI Indexed**) (**I.F. = 1.186**).
- 21. Synthesis and characterization of MgO supported Fe–Co–Mn nanoparticles with exceptionally high adsorption capacity for Rhodamine B dye, Somayeh Rahdar, Abbas Rahdar, Muhammad Nadeem Zafar, **Syed Salman Shafqat**, Shahin Ahmadi. **Journal of Material Research & Technology**, 8(5):3800–3810 3801 (2019). (ISI Indexed) (I.F.= 5.289)
- 22. Chemical pretreatments of Trapa bispinosa's peel (TBP) biosorbent to enhance adsorption capacity for Pb(II) Muhammad Nadeem Zafar, Muzna Saeed, Raziya Nadeem\*, Sajjad Hussain Sumra **Syed Salman Shafqat**, Muhammad Abdul Qayyum **Open Chem.**, (2) 122–135 (**2019**). (**ISI Idexed**) (**I.F.= 1.512**)
- 23. Developments of amino functionalized silica nanoparticles for efficient and rapid removal of COD from pretreated palm oil effluents, **Syed Salman Shafqat**, Haji Al Hji, Amir Azam Khan, Syed Rizwan Shafqat, Shahzad Murtaza, Muhammad Nadeem Zafar *Journal of Material Research and Technology*;8(1):385–395 (2019) (I.F.= 5.289)
- 24. *Vic*-Tricarbonyl compounds of Quinolines: Analogues of Ninhydrin A Short Review In Review Fatima Ijaz\*, **Syed Salman Shafqat**, H. Adnan Ahmed, Munawar Ali Munawar, Misbahul Ain Khan, *Journal of Heterocyclic Chemistry* 56, 1231-1238 (2019).(I.F.= 1.241)
- 25. Sulfonamide hybrid schiff bases of antharnilic acid: synthesis, characterization and their biological potential. NaghmanaKausar, Shahzad Muratza, Muhammad Asam Raza, Hummera Rafique, Muhammad Nadeem Arshad, Ataf Ali Altaf, Abdullah M.Asirib, <a href="Syed Salman Shafqat">Syed RizwanShafqat</a>, <a href="Journal of Molecular Structure">Journal of Molecular Structure</a> 1185 (5) <a href="2019">2019</a>). (ISI Indexed) (I.F.= 2.12)
- 26. Removal of Congo red dye from aqueous solution using branches of *Ficus Religiosa* Best paper award in USJC. <u>Syed Salman Shafqat</u>\*, Maria Nosheen, Amir Azam Khan, Syed Rizwan Shafqat, Shahzad Murtaza, Muhammad Nadeem Zafar, Muhammad Zubair <u>Malaysian Applied Biology</u> 47(1), 130-108 (2018). (Scopus indexed, Category= Y)

- 27. Green route for Synthesis and characterization of 3-Carboxycoumarin and Ethylcoumarin-3-carboxylate via Knoevenagel Condensation. **Syed Salman Shafqat**, *Asian Journal of Chemistry*, 8(12) 261-266, (**2016**). (**I.F.= 0.14**)
- 28. Environmentally Benign of Synthesis and Characterization of 4-aryl-3,4-dihydropyrimidin-2(*1H*)-ones; **Syed Salman Shafqat**, Amir Azam Khan, Misbahul Ain Khan, Nicholas Kuan Hoo Tien, Mohd Syahmi Jamaludin, Pang Suh Cem. *MaTEC Web of Conference* 87, 02025 (**2017**) (**Scopus indexed**)
- 29. An efficient Eco-friendly Synthesis of Pyrazole acryloyl Analogues by Amino Acid Catalysis, Faryal Chaudhry, (2016) **Syed Salman Shafqat**, Amir Azam Khan, Munawar Ali Munawar, Misbahul Ain Khan. **Synthetic Communications** 46(8), 701-709 (**I.F.**= 1.377)
- 30. Synthesis of Arylidene Propanedioic Acids by Knoevenagel Condensation for use in Ceramic Sols. (2014), **Syed Salman Shafqat**, Misbahul Ain Khan, Azham Zulkharnain, Sinin Hamdan, Andrew Ragai Henry Rigit, Amir Azam Khan. **Asian Journal of Chemistry**; 26(24), 8463-8466. (**I.F.= 0.14**).

#### **CONFERENCE PROCEEDINGS**

- 1. Synthesis and characterization of Heterocyclic-ORMOCERS composites through Sol-gel process: A Review; Syed Salman Shafqat, Sinin Hamdan, Andrew Ragai Henry Rigit, Nicholas Kuan Hoo Tien, Shanti Faridah Saleh, Amir Azam Khan. (2014). <u>Proceedings of 5th International Conference on Science & Technology Applications in Industry & Education (ICSTIE)</u>; e-ISBN: 978-967-11647-4-7
- 2. Comparative study of adsorptive removal of oxyanion (Cr<sub>2</sub>O<sub>4</sub>-<sup>2</sup>) from aqueous media over unmodified and magnetically modified Melia azedarach, M Nosheen, AA Khan, M Salman, SS Shafqat, M Sajid, M Rizwan, M Aslam, F Ijaz *IOP Conference Series: Materials Science and Engineering IOP Publishing* (2021) Volume 1101 Issue 1 Pages 012031.

#### **BOOK CHAPTERS**

- Metallopolymers-A Value-added approach to the modern days needs, *Areej Fatima*, *Wardah Zafar*, *Sajjad Hussan*, *Sumrra*, *Muhammad Zubair*, <u>Syed Salman Shafqat</u>, *Muhammad Nadeem Zafar*, Book Title, Advances in Material Research in Technology, Volume: Advanced Polymers, Published by Springer
- ➤ Graphene Based Nanocomposites: Synthesis, Characterization and Energy Harvesting Applications Summan Aman, Maqzia Bashir, Muqaddas Baigum, Muhammad Faizan Nazar, Sajjad Hussain Sumrra, Syed Salman Shafqat, and Muhammad Nadeem Zafa
- ➤ MOF Based Electrochemical Sensors for Transition Metals, <u>Syed Salman Shafqat</u>, Muhammad Rizwan, Syed Rizwan Shfqat Muhammad Asalm, Book Title: Metal-Organic Frameworks-based Hybrid Materials for Environmental Sensing and Monitoring Submitted, Cat No. 461325
- ➤ Organic –Inorganic Nanohybrids based sensor for volatile organic compounds Syed Rizwan Shfqat, <u>Syed Salman Shafqat</u>, Muhammad Rizwan Book Title: Hybrid Nanomaterials Book SubtitleBiomedical, Environmental and Energy Applications ISBN 978-981-19-4537-3

# **CONFERENCES/WORKSOPS ATTENDED Invited Speaker**

➤ Invited Speaker at International Online Conference on Nano Materials (ICN-2022) held at Mahatma Gandhi University, Kottayam, Kerala, India on 12-14 August 2022.

- ➤ Invited Speaker at International Conference on Chemical Sciences (ICCS-2022) held at Shah Abdul Latif University, Khairpur Mir's, Sindh, Pakistan on 29-31 March 2022
- ➤ Invited Speaker at International Virtual Conference on Chemistry and Applied Science
- ➤ Organized by Sci Erudition Group on April 21-22, 2022
- ➤ Invited Speaker at International Conference on Chemical and Materials Sciences (ICMS) held at The University of Lahore on 21-MAY, 2022.

## **Oral Presentations**

- ➤ Oral Presentation at "International Dicle Scientific Studies and Innovation Congress organized by Diyarbakir Turkey on 28-29 MAY 2022.
- ➤ Oral presentation at International Palandoken Scientific Studies Congress (ISARC) Hel on 28-29 APRIL 2022.
- ➤ Oral Presenter at "9th International Istanbul Scientific Research Congress" organized by BZT Academy & Yıldız Technical University held on MAY 14-15, 2022.
- ➤ Oral presentation at International Conference 5<sup>th</sup> Intenational Newyork Academic Research Congess organized by BZT AKADEMİ YAYINEVİ on April 23-24, 2022
- ➤ Oral presentation at International Conference "Second International Conference on Advances in Materials Science (AIMS)" 5-6 October 2021 organized by University of Education.
- ➤ Oral presentation at International Conference "2<sup>nd</sup> international conference on nanotechnology and its applications at" 7-8 July 2021organized by university in Erbil Iraq.
- ➤ Oral presentation at International Conference "1st international industrial chemistry ICSE 2021 conference" 26-27 February 2021organized by NED Karachi.
- ➤ Oral presentation at International Conference "AIMS 2020" on 27-28 October, 2020 organized by University of Education, Lahore.
- ➤ Oral presentation (Best Presenter Award) at "2020 Research Symposium" held at University of Sahiwal on 29 February 2020.
- ➤ Oral presentation at "Three-day international conference on: Medicinal & Pharmaceutical Chemistry" held at Forman Christian College (A chartered University) on 29-31 January 2020.
- ➤ Poster presentation at International Conference Punjab University (ICPU 2019) on "Recent Innovations in Molecular Sciences" on November 06-08, 2019.
- ➤ Oral presentation at "International Conference on Science and Technology (ICSTIE)" held in Penang (Malaysia) on 1-18 September 2014.
- ➤ Poster presentation at "International Conference on Advanced Materials (ISAM)" held at Institute of Space Technology on September 2013.

## **WORKSOPS ATTENDED**

- ➤ Participated in Workshop on "Effective Teaching Learning Process" held at Rachna College of Engineering & Technology, Gujranwala on 11October 2019.
- Attended a "Short Course on Porous Carbons: Preparation, Characterization and some applications for water treatment" held at PIEAS on 12-13 June 2019.

- ➤ Participated in Workshop on "Discover HEC resources using Sumoon search and take your research to the next level using Refworks references management tool" organized Higher Education Commission on October, 12 2021.
- Participated in Workshop on "Step by step guide how to prepare a successful paper-Pakistan" September 28, 2021.
- ➤ Participated in Workshop on "How to easily navigate through Springer nature platform" Organized by Higher Education Commission October 12, 2021.

#### SEMINAR/WEBINAR ORGANIZED

- ➤ Organized One Day Webinar at Department of Chemistry, Division of Science & Technology, University of Education on "COVID-19 and Public Health: Lets Flatten the Curve together" on May, 11, 2021 delivered by Dr. Abdul Qayyum
- ➤ Organized One Day Webinar at Department of Chemistry, Division of Science & Technology, University of Education on "Emerging contaminants and their transformation products a new challenge to chemists" on January 28, 2021, Delivered by Dr. Muhammad Ashfaq University of Gujrat.
- ➤ Organized One Day Seminar at Department of Chemistry, Division of Science & Technology, University of Education on "Electrical Wiring of Redox Enzymes with Electrodes: Routes to develop biosensors and energy producing devices" on March 12,2020 Delivered by Dr. Muhamad Nadeem Zafar, University of Gujrat.
- ➤ Organized one day seminar on "Sintered Ni-Cr composites with solid lubricants: Study of friction coefficient and friction force as a function of composition and content of solid lubricants". At University of Education, Lahore on October 30, 2019.
- ➤ Organized One Day Webinar at Department of Chemistry, Division of Science & Technology, University of Education on "Process and machine learning to deliver industry 4.0 to the food and drink manufacture sector" on August 21, 2020 Delivered by Dr. Nicholas Watson Nottingham University UK

### **MAJOR ACHIEVEMENTS:**

- ➤ Best Paper award in Research Symposium 2020 held at University of Sahiwal on February 2020.
- Advisor of "Alchemist Society at Department of Chemistry, University of Education."
- Organized industrial visits for students to Bestway Cement Ltd, Ittehad Chemicals Industries, KSK, Liner Pak Gelatin, Mitchel's Food industry and Tandlianwala Sugar Mills/distillery Faisal Abad.
- ➤ HEC talent farming Scholarship BS.
- > Student Co-coordinator of sports festivals, Seminars at Institute of Chemistry, University of the Punjab (PUIC), Lahore.