

1. Profile

Google Scholar: <https://scholar.google.com/citations?user=1fZ6d4gAAAAJ&hl=en>

Web of Science: <https://www.webofscience.com/wos/author/record/S-8860-2019>

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=8070394600>

2. Education

Ph.D. Chemistry, University of Cambridge, UK (2005)

M.Sc. Chemistry, University of the Punjab, Lahore, Pakistan (1996)

3. Work Experience

- Professor (since March 2024) at the Department of Chemistry & Chemical Engineering, Syed Babar Ali School of Science & Engineering (SBASSE), LUMS, Lahore, Pakistan
- Associate Professor (2013 – 2024) at the Department of Chemistry & Chemical Engineering, Syed Babar Ali School of Science & Engineering (SBASSE), LUMS, Lahore, Pakistan
- Assistant Professor (2008 – 2013) at the Department of Chemistry & Chemical Engineering, Syed Babar Ali School of Science & Engineering (SBASSE), LUMS, Lahore, Pakistan
- Assistant Professor (2005 – 2008) at the Department of Metallurgy and Materials Engineering, Pakistan Institute of Engineering and Applied Sciences, Nilore, Islamabad, Pakistan
- Acting Department Head/Chair of Physics (2015 – 2018), Syed Babar Ali School of Science & Engineering (SBASSE), LUMS, Lahore, Pakistan
- Department Head/Chair of Chemistry and Chemical Engineering (Jan. 2020 – Dec. 2022), Syed Babar Ali School of Science & Engineering (SBASSE), LUMS, Lahore, Pakistan
- Postdoctoral research experience of 18 months at the University of Edinburgh and 6 months at the University of Cambridge, UK

4. Honors and Award

- Research Productivity Awards by PCST (Pakistan) in multiple years
- Royal Society of Edinburgh (RSE): International Exchange Program for collaborative research visit at the University of Edinburgh, UK (2008 and 2011).
- Nanotechnology fellowship for the research visit in UK by the Higher Education Commission of Pakistan (2007).
- TRIL fellowship by the ICTP for training in synchrotron radiation at the ELETTRA, Trieste, Italy (2006).
- Lundgren Research Award by the University of Cambridge, UK (2004).
- TROSS scholarship for PhD studies by the Ministry of Science and Technology, Pakistan (2001).
- Quaid-i-Azam scholarship by the (formerly) University Grants Commission (now known as Higher Education Commission of Pakistan) (1995).
- Secured 3rd position out of 300 students in M.Sc. Chemistry part-I (1995)
- Awarded merit scholarships from 5th class to PhD degree

5. Research Grants/Projects

- **2022-2025**, NRPUR Research Grant (HEC) on “Biomass-derived Chemical-assisted Hydrogen Evolution Reaction (CAHER) Using Nanoporous Metallic Foams Electrocatalysts”. **PI – Rs. 5.43 million**
- **2018-2020**, TDF Research Grant (HEC) on “Value Addition for Local Artificial Jewelry Industry Through Electroplating Process Optimization”. **Co-PI – Rs. 12.464 million**
- **2016-2018**, NRPUR Research Grant (HEC) on “A Rapid and Portable Optical Sensor Array for Detection of Salinity, Fluoride, and Arsenic in Water”. **Co-PI – Rs. 14.98 million**
- **2016-2017**, TDF Research Grant (HEC) on “Transforming biomass ash residues into commercializable products”. **Co-PI – Rs. 15.614 million**
- **2016**, HEC on “Summer Internship in Science and Engineering (RISE) for Young Community – RISE Community”. **Co-PI – Rs. 200000**
- **2014**, British Council, UK Researcher Links Program 2014. **PI – GBP 6315**
- **2012**, Erasmus Mundus Action II (EXPERTS), Exchange Program. **PI – EUR 2500**
- **2011-2015**, NRPUR Research Grant (HEC) on “Synthesis and Properties of Thermoelectric Oxides for Renewable Energy Conversion Technologies”. **PI – Rs. 13.74 million**

6. Peer Review/Evaluation Activities

- Reviewed research manuscripts for the International Journals like Inorganic Chemistry, ACS Applied Materials & Interfaces, Sustainable Energy & Fuels, Journal of Colloid and Interface Science, Energy Technology, Chemical Engineering Journal, Journal of Alloys and Compounds, Materials Science and Engineering: R: Reports, Physica Status Solidi (B), Journal of Hazardous Materials, International Journal of Hydrogen Energy, Ceramics International, Journal of Materials Chemistry C, Physica B – Condensed Matter, Journal of Electroanalytical Chemistry, Solid State Sciences, ChemistrySelect
- Reviewed research grant proposals and annual progress reports for the Higher Education Commission (HEC) of Pakistan
- Reviewed and revised national undergraduate chemistry curriculum (twice) as a member of the team formed by the Higher Education Commission (HEC) of Pakistan

7. Teaching Experience

Teaching experience of around 20 years with the following course offerings (most recent):

- CHEM 101: Principles of Chemistry (offered multiple times), freshman chemistry course
- CHEM 100: Experimental Chemistry (offered multiple times), freshman chemistry laboratory
- CHE 210: Physical Chemistry (offered multiple times), sophomore level course for chemical engineering students
- CHEM 311: Chemical Thermodynamics (offered multiple times), junior level chemistry course
- CHEM 342: Analytical Chemistry (offered multiple times), junior level chemistry course
- CHEM 314: Quantum Chemistry (offered multiple times), junior level chemistry course
- CHEM 511: Advanced Physical Chemistry (offered multiple times), graduate level course for MS/PhD chemistry students
- Electronic, magnetic and optical materials
- Powder X-ray diffraction
- Solid state chemistry

8. Talks/Lectures at National/International Conferences/Workshops

Delivered talks/lectures at the following conferences/workshops during the last 6 years:

- American Physical Society (APS) Global Physics Summit, Satellite Event, National Centre for Physics (NCP), Islamabad, Pakistan March 20, 2025.
- International Workshop on 2D Materials and Quantum Effect Devices organized by the Pakistan Institute of Engineering and Applied Sciences (PIEAS), 19-21 July 2022.
- JOINT INTERNATIONAL SCHOOL Basics and Applications of the Rietveld Method & Pair Distribution Function Analysis in Material Science organized by the National Centre for Physics (NCP) Islamabad, 21-22 July 2022.
- International Workshop on 2D Materials and Quantum Effect Devices organized by the Pakistan Institute of Engineering and Applied Sciences (PIEAS), 03-05 March 2020.
- Workshop on Advanced Characterization Techniques organized by the National Centre for Physics (NCP) Islamabad, 16-17 August 2018.
- Workshop on Advanced Materials Characterization Techniques in Nathiagali organized by the National Center of Excellence in Physical Chemistry, University of Peshawar, 16-17 August 2018

9. Research Publications (names of MS/PhD students in publications are underlined; *indicates corresponding author)

1. F. Zulfiqar, F. Arshad, T. ul Haq, **F. Sher***, “Highly selective and corrosion resistant interconnected pNiCo@ NF electrocatalysts for methanol-assisted seawater electrolysis” *International Journal of Hydrogen Energy* 105, 1123-1132 (2025).
2. T. Xu, M. Jiang, X. Mao, **F. Sher**, T. Ren, K. Xina, I. Hussain, H. Hua, X. Wang, “Design of High-Performance Ozone Catalysts by Identifying and Modulating Anchoring Sites for Metal on γ -Al₂O₃ Spheres” *Applied Catalysis B: Environment and Energy* 372, 125321 (2025).
3. U. Ali, Q. Abbas, S.M.T. Kazmi, M.H. Bhatti, **F. Sher**, M.A. Rafiq, “Charge conduction in chalcopyrite CuFeS₂ nanoflakes” *Ceramics International* (in press).
4. A. K. Bhutta, U. Hira, M. Zulqarnain, S.S. Ali, A. Kabir, **F. Sher**, “Interlinked structural and optical tuning, magnetic, electrical and dielectric properties of Sr_{2-x}Bi_xCoNbO₆ (0 ≤ x ≤ 1.0) double perovskite oxides” *Ceramics International* 51(10), 13443-13458 (2025).
5. I. Ullah, T. R. Aldhafeeri, A. Haider, X. Wu, Z. Ullah, S. Chang, A. Innayat, N. Begum, M. A. Pope, **F. Sher**, H. U. Rehman, I. Hussain, “Layered Arrangement of Polyoxometalate on a Metal–Organic Framework as a High-Capacity Anode Material for Sodium-Ion Batteries” *ACS Applied Energy Materials* 8(3), 1743–1751 (2025).
6. U. Hira, M. Husnain, A. K. Bhutta, M. Zulqarnain, S.S. Ali, **F. Sher**, “Structural, magnetic, optical and dielectric characteristics of Ba_{2-z}Y_zMnTeO₆ (Y = La, Bi & Sr; z = 0 & 0.1) double perovskite oxides” *Journal of Magnetism and Magnetic Materials* 614, 172736 (2025).
7. F. Masood, Q. Abbas, S. M. T. Kazmi, **F. Sher**, M. A. Rafiq, “Dielectric Relaxation, Electrical Conductivity, Dielectric Permittivity, and Correlated Barrier Hopping Conduction Mechanism Analysis in Ag Doped Bi₂S₃ at Low Temperatures” *ChemistrySelect* 9(39), e202403641 (2024).
8. F. Zulfiqar, F. Arshad, T.U. Haq, **F. Sher***, “Electro-synthesis of valuable products by coupling energy-saving anodic alcohol oxidation reaction with cathodic CO₂ reduction reaction” *International Journal of Hydrogen Energy* 80, 1317-1327 (2024).
9. U. Hira, J.-W.G. Bos, S.S. Ali, **F. Sher***, “Substantially low thermal conductivity and high thermoelectric figure-of-merit in Bi-doped Sr₂CoRuO₆ double perovskites” *Journal of Alloys and Compounds* 984, 173981 (2024).
10. F. Arshad, A. Tahir, T. ul Haq, S. Qayyum, I. Hussain, **F. Sher***, “Advances in selective electrochemical methanol upgrading and energy-saving hydrogen production: Mechanism, progress, and prospects” *International Journal of Hydrogen Energy* 63, 359-381 (2024).

11. S. Ali, S. M. T. Kazmi, **F. Sher**, A. Nigah, M. Bilal, M.A. Rafiq, "Fast, Sensitive, and Selective Hydrogen Sensing of Silver-Doped Bismuth Sulfide Nanobelts" *Journal of Electronic Materials* 53, 2753–2762 (2024).
12. S. M. T. Kazmi, Z. Zahoor, N. T. Yusra, M. H. Bhatti, M.F. Afsar, **F. Sher**, H. Rashid, M.A. Rafiq, "Diode parameters extraction and study of space charge limited current in (Ag, Au)/CoS₂ Schottky diodes" *Physica B: Condensed Matter* 670, 415400 (2023).
13. F. Arshad, A. Tahir, T. Haq, H. Duran, I. Hussain, **F. Sher***, "Electronic and Structural Modification of 3D Porous NiCo@NF as a Robust Electrocatalyst for CO₂-emission-free Methanol Upgradation to Boost Hydrogen Co-production" *Energy & Fuels* 37 (18), 14161-14170 (2023).
14. U. Ullah, D. Ghauri, **F. Sher** and M. I. Cheema, "Arsenic detection in drinking water using evanescent fiber cavity ring down spectroscopy" *Optical Fibers and Sensors for Medical Diagnostics, Treatment and Environmental Applications XXIII* 12372, 126-130 (2023).
15. F. Arshad, A. Munir, A. Tahir, S. Z. Hussain, A. Jilani, A. Hussain, N. Ullah, **F. Sher** and I. Hussain, "Microwave-assisted growth of spherical core-shell NiFe LDH@Cu_xO nanostructures for electrocatalytic water oxidation reaction" *International Journal of Hydrogen Energy* 48 (12), 4719-4727 (2023).
16. F. Arshad, A. Tahir, T.U. Haq, A. Munir, I. Hussain and **F. Sher***, "Bubbles Templated Interconnected Porous Metallic Materials: Synthesis, Surface Modification, and their Electrocatalytic Applications for Water Splitting and Alcohols Oxidation" *Chemistry Select* 7 (41), e202202774 (2022).
17. F. Arshad, A. Tahir, T. ul Haq, H. Duran, I. Hussain and **F. Sher***, "Fabrication of NiCu interconnected porous nanostructures for highly selective methanol oxidation coupled with hydrogen evolution reaction" *International Journal of Hydrogen Energy* 47 (85), 36118-36128 (2022).
18. U. Hira, S.S. Ali, S. Latif, N. Pryds, and **F. Sher***, "Improved High-Temperature Thermoelectric Properties of Dual-Doped Ca₃Co₄O₉" *ACS Omega* 7 (8), 6579-6590 (2022).
19. F. Arshad, T. ul Haq, A. Khan, Y. Haik, I. Hussain and **F. Sher***, "Multifunctional porous NiCo bimetallic foams toward water splitting and methanol oxidation-assisted hydrogen production" *Energy Conversion and Management* 254, 115262 (2022).
20. U. Hira, J.W.G. Bos, A. Missyul, F. Fauth, N. Pryds and **F. Sher***, "Ba_{2-x}Bi_xCoRuO₆ (0.0 ≤ x ≤ 0.6) Hexagonal Double-Perovskite-Type Oxides as Promising p-Type Thermoelectric Materials" *Inorganic Chemistry* 60 (23), 17824-17836 (2021).
21. W. A. Siddiqui, M. Khalid, A. Ashraf, I. Shafiq, M. Parvez, M. Imran, A. Irfan, M. Hanif, M. U. Khan, **F. Sher** and A. Ali, "Antibacterial metal complexes of o-sulfamoylbenzoic acid: Synthesis, characterization, and DFT study" *Applied Organometallic Chemistry*, 36(1), e6464 (2021).
22. F. Arshad, T. Haq, I. Hussain and **F. Sher***, "Recent advances in electrocatalysts toward alcohol-assisted, energy-saving hydrogen production" *ACS Applied Energy Materials* 4 (9), 8685-8701 (2021).
23. F. Siddique, S. Fareed, A. Jamil, M.F. Afsar, M.A. Rafiq and **F. Sher**, "Synthesis of randomly oriented self-assembled WO₃ and WO₃-WS₂ nanoplates for selective oxygen sensing" *Journal of the Australian Ceramic Society* 57, 1231-1240 (2021).
24. Dylan Tawse, Asma Gilane, Sacha Fop, Alfonso Martinez-Felipe, **Falak Sher**, Ronald Smith and Abbie McLaughlin, "Investigation of the Crystal Structure and Ionic Pathways of the Hexagonal Perovskite Derivative Ba_{3-x}VMoO_{8.5-x}" *Inorganic Chemistry* 60 (17), 13550–13556 (2021).
25. U. Ullah, M.H. Syed, D. Ghauri, **F. Sher**, M.I. Cheema, "Fluoride detection in drinking water using evanescent fiber cavity ring down spectroscopy" *Optical Fibers and Sensors for Medical Diagnostics, Treatment and Environmental Applications XXI* 11635, 100-104 (2021)

26. T. Rashid, D. Iqbal, A. Hazafa, S. Hussain, **F. Sher** and F. Sher, "Formulation of zeolite supported nano-metallic catalyst and applications in textile effluent treatment" *Journal of Environmental Chemical Engineering* 8 (4), 104023 (2020).
27. F. Arshad, A. Munir, Q.Q. Kashif, T. ul Haq, J. Iqbal, **F. Sher** and I. Hussain, "Controlled development of higher-dimensional nanostructured copper oxide thin films as binder free electrocatalysts for oxygen evolution reaction" *International Journal of Hydrogen Energy* 45 (33), 16583-16590 (2020).
28. A. Gilane, S. Fop, **F. Sher**, R. Smith and A. McLaughlin, "The Relationship between Oxide-Ion Conductivity and Cation Vacancy Order in the Hybrid Hexagonal Perovskite $\text{Ba}_3\text{VWO}_{8.5}$ " *Journal of Materials Chemistry A* 8, 16506-16514 (2020).
29. A. Munir, T.U. Haq, M. Saleem, A. Qurashi, S.Z. Hussain, **F. Sher**, A.U. Hamid, A. Jilani and I. Hussain, "Controlled engineering of nickel carbide induced N-enriched carbon nanotubes for hydrogen and oxygen evolution reactions in wide pH range" *Electrochimica Acta* 341, 136032 (2020).
30. Uzma Hira, Jean-Claude Grivel, Dennis Valbjørn Christensen, Nini Pryds and **Falak Sher***, "Electrical, magnetic and magnetotransport properties of Na and Mo doped $\text{Ca}_3\text{Co}_4\text{O}_9$ materials" *RSC Advances* 9 (54), 31274-31283 (2019).
31. Arifa Jamil¹, S. Fareed, F. Afsar, F. Siddique, **F. Sher** and M. A. Rafiq, "Development of high performance $\text{Bi}_5\text{Ti}_3\text{FeO}_{15}$ layered perovskite oxygen gas sensor and its dielectric behavior" *Mater. Res. Express* 6 115028 (2019).
32. S. Fareed, Az. Jamil, F. Afsar, **F. Sher**, C. Li, X. Xu and M.A. Rafiq, "Selective oxygen sensor prepared using Ni-doped zinc ferrite nanoparticles" *Journal of Electronic Materials* 48, 5677-5685 (2019).
33. U. Hira, N. Pryds and **F. Sher***, "Thermoelectric Properties of Dual Doped $\text{Bi}_2\text{Sr}_2\text{Co}_2\text{O}_y$ -Based Ceramics" *Journal of Electronic Materials*, 1-9 (2019).
34. Y. Farooq, S. Fareed, M.A. Rafiq and **F. Sher**, "Nickel Manganese Oxide Nanoparticles Based Humidity Sensors" *Journal of Electronic Materials*, 1-5 (2019).
35. S. Fareed, A. Jamil, M.A. Rafiq and **F. Sher**, "Zinc modified cadmium titanite nanoparticles: Electrical and room temperature methanol sensing properties" *Ceramics International* 44 (5), 4751-4757 (2018).
36. U. Hira and **F. Sher***, "Structural, magnetic and high-temperature thermoelectric properties of $\text{La}_{0.4}\text{Bi}_{0.4}\text{Ca}_{0.2}\text{Mn}_{1-x}\text{Co}_x\text{O}_3$ ($0 \leq x \leq 0.3$) perovskites" *Journal of Magnetism and Magnetic Materials* 452, 64-72 (2018).
37. U. Hira, L. Han, K. Norrman, D.V. Christensen, N. Pryds and **F. Sher***, "High-temperature thermoelectric properties of Na- and W-Doped $\text{Ca}_3\text{Co}_4\text{O}_9$ system" *RSC Advances* 8, 12211-12221 (2018).
38. H.A. Hopper, E.J. Wildman, D.E. Macphee, **F. Sher**, C. Ritter, M. Lledos, G. Stenning and A. C. McLaughlin, "An Investigation of the Electronic, Structural and Magnetic Properties of the Ruddlesden-Popper Phase $\text{Sr}_3\text{RuCoO}_7$ " *Journal of Solid State Chemistry* 253, 313-317 (2017).
39. M. Hassan, S. Younas, **F. Sher**, S.S. Husain, S. Riaz and S. Naseem, "Room temperature ferromagnetism in single-phase $\text{Zn}_{1-x}\text{Mn}_x\text{S}$ diluted magnetic semiconductors fabricated by co-precipitation technique" *Applied Physics A*, DOI 10.1007/s00339-017-0975-5 (2017).
40. A.A. Khan, U. Hira and **F. Sher***, "Large relative cooling power of Bi-doped $\text{La}_{0.8-x}\text{Bi}_x\text{Sr}_{0.08}(\text{Ca}_{0.55}\text{Ba}_{0.45})_{0.12}\text{MnO}_3$ ($x = 0.0, 0.1$ and 0.3) perovskites: Magnetic and magnetocaloric properties" *Ceramics International* 43 (9), 7351-7357 (2017).

41. Aroosha A. Khana, Uzma Hira, Zafar Iqbal, Muhammad Usman and **F. Sher***, “Structural, magnetic and magnetocaloric properties of $\text{CoFe}_{2-x}\text{Mo}_x\text{O}_4$ ($0.0 \leq x \leq 0.3$) ferrites” *Ceramics International* 43 (9), 7088-7093 (2017).
42. A. Jamil, M.F. Afsar, **F. Sher** and M.A. Rafiq, “Temperature and composition dependent density of states extracted using overlapping large polaron tunnelling model in $\text{Mn}_x\text{Co}_{1-x}\text{Fe}_2\text{O}_4$ ($x = 0.25, 0.5, 0.75$) nanoparticles” *Physica B: Condensed Matter* 509 (15 March 2017), 76–83 (2017).
43. A. Jamil, S.S. Batool, **F. Sher** and M.A. Rafiq, “Determination of density of states, conduction mechanisms and dielectric properties of nickel disulfide nanoparticles” *AIP Advances* 6 (5), 055120 (2016).
44. A. Ashraf, W. A. Siddiqui, J. Akbar, G. Mustafa, H. Krautscheid, N. Ullah, B. Mirza, **F. Sher**, M. Hanif, C. G. Hartinger, “Metal complexes of benzimidazole derived sulfonamide: Synthesis, molecular structures and antimicrobial activity” *Inorganica Chimica Acta* 443, 179-185 (2016).
45. E.J. Wildman, **F. Sher** and A.C. Mclaughlin, “Absence of Colossal Magnetoresistance in the Oxypnictide $\text{PrMnAsO}_{0.95}\text{F}_{0.05}$ ” *Inorganic Chemistry* 54 (6), 2536–2542 (2015).
46. S. Ashraf, **F. Sher**, Z.M. Khalid, M. Mehmood and I. Hussain, “Synthesis of cellulose–metal nanoparticle composites: development and comparison of different protocols” *Cellulose* 21, 395-405 (2014).
47. A.R. Makhdoom, M.J. Akhtar, R.T.A. Khan, M.A. Rafiq, M.M. Hasan, **F. Sher** and A.N. Fitch, “Association of microstructure and electric heterogeneity in BiFeO_3 ” *Materials Chemistry and Physics* 143 (1), 256-262 (2013).
48. Angel M. A.-López, **Falak Sher**, James Farnham, Adam J Watson and J Paul Attfield, “Cation, Vacancy, and Spin Ordered 15R-Superstructures in $\text{Sr}(\text{Cr}_{1-x}\text{Fe}_x)\text{O}_{3-y}$ ($0.4 \leq x \leq 0.6$) Perovskites” *Chemistry of Materials* 25(11), 2346-2351 (2013).
49. Angel M. A.-López, Jennifer A. Rodgers, Mark S. Senn, **Falak Sher**, James Farnham, William Gibbs and J Paul Attfield, ““Hard–Soft” Synthesis of $\text{SrCrO}_{3-\delta}$ Superstructure Phases” *Angew. Chem. Int. Ed.* 124 (43), 10949-10952 (2012).
50. W. T. Chen, **F. Sher**, N. D. Mathur, C. M. Kavanagh, F. D. Morrison and J. P. Attfield, “Structural, Magnetic, and Electrical Properties of $\text{Bi}_{1-x}\text{La}_x\text{MnO}_3$ ($x = 0.0, 0.1, \text{ and } 0.2$) Solid Solutions” *Chemistry of Materials* 24 (1), 199-208 (2012).
51. A. C. Mclaughlin, **F. Sher**, S. A. J. Kimber, et al., “Induced antiferromagnetism and large magnetoresistance in $\text{RuSr}_2(\text{Nd,Y,Ce})_2\text{Cu}_2\text{O}_{10-\delta}$ ruthenocuprates”, *Physical Review B*, 76(9), art. no. 094514 (2007).
52. W. Eerenstein, F.D. Morrison, **F. Sher**, J.L. Prieto, J.P. Attfield, J.F. Scott and N.D. Mathur, “Experimental difficulties and artefacts in multiferroic and magnetoelectric thin films of BiFeO_3 , $\text{Bi}_{0.6}\text{Tb}_{0.3}\text{La}_{0.1}\text{FeO}_3$ and BiMnO_3 ” *Philosophical Magazine letters* 87 (3) 249-257 (2007).
53. A. C. Mclaughlin, Laura Begg, Catriona Harrow, Simon A. J. Kimber, **Falak Sher** and J. Paul Attfield, “Chemical Tuning of Positive and Negative Magnetoresistances, and Superconductivity in 1222-type Ruthenocuprates”, *J. American Chemical Society* 128 (38), 12364-12365 (2006).
54. **Falak Sher** and J. Paul Attfield, “Synthesis, structure and magnetic properties of $\text{Ba}_2\text{CrMoO}_6$ ” *Solid State Sciences* 8, 277-279 (2006).
55. A. Venimadhav, **Falak Sher**, J. P. Attfield and M. G. Blamire, “High Curie temperature in B-site ordered Sr_2CrWO_6 thin films”, *Solid State Communications* 138, 314-317 (2006).
56. A. C. Mclaughlin, **F. Sher**, and J. P. Attfield, “Negative lattice expansion from superconductivity-antiferromagnetism crossover in ruthenocuprates” *Nature* 436, 829-832 (2005).
57. **Falak Sher**, A. Venimadhav, Mark G. Blamire, K. Kamenev and J. Paul Attfield, “Cation Size Variance Effects in Magnetoresistive $\text{Sr}_2\text{FeMoO}_6$ Double Perovskites”, *Chemistry of Materials* 17, 176–180 (2005).

58. **Falak Sher**, A. J. Williams, A. Venimadhav, Mark G. Blamire, and J. Paul Attfield, "Synthesis, Structure, and Properties of Two New Ruddlesden-Popper Phase Analogues of SFMO ($\text{Sr}_2\text{FeMoO}_6$)", *Chemistry of Materials* 17, 1792-1796 (2005).
59. **Falak Sher**, A. Venimadhav, M.G. Blamire, B. Dabrowski, S. Kolesnik and J. Paul Attfield, "Structural, magnetic and transport properties of $\text{Sr}_2\text{Fe}_{1-x}\text{Mg}_x\text{MoO}_6$ ($0 \leq x \leq 1$) double perovskites", *Solid State Sciences* 7, 912-919, (2005).
60. A. C. McLaughlin, David Morrice and **Falak Sher**, "Doping studies of the magnetic cobaltocuprate $\text{CoSr}_2\text{Y}_{2-x}\text{Ce}_x\text{Cu}_2\text{O}_{9\pm\delta}$ ", *J. Solid State Chemistry* 178, 2274–2281 (2005).
61. A. Venimadhav, **Falak Sher**, J. P. Attfield and M. G. Blamire, "Oxygen assisted deposition of $\text{Sr}_2\text{FeMoO}_6$ thin films on SrTiO_3 (1 0 0)", *J. Magnetism and Magnetic Materials* 269, 101–105 (2004).