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Education

Ph.D. (Chemistry), University of Liverpool, UK, 2005 (PhD advisors: Prof. Andrew I. Cooper & Prof. Mathias Brust) M.Sc. (Chemistry), Quaid-i-Azam University, Islamabad, Pakistan, 1993.

Professional Experience (Founding Chair of Chemistry department at LUMS)

- **Project Director (Feb. 2026 -)**, National Center for Nanoscience & Nanotechnology (NCNN), Govt. of Pakistan
- **Professor (Tenured, May 2020 – to date)** at Department of Chemistry & Chemical Engineering, SBA School of Science & Engineering (SSE), LUMS, Lahore, Pakistan.
- **Tang Au-Chin Chair Professor** (July 01, 2025 – to date) at Jilin University, Changchun, China. Flexible position for 3 months in a year.
- **Specially-appointed Professor at Shandong Academy of Sciences** (June 2025 – to date), Jinan, China
- **Advisory Professor** (Sep. 2024 – to date), School of Chemistry & Chemical Engineering, Huazhong University of Science & Technology (HUST), Wuhan, China.
- **Visiting Professor** (May 16-July 15, 2024), School of Chemistry & Chemical Engineering, Huazhong University of Science & Technology (HUST), Wuhan, China
- **Department Chair** (Jan. 01, 2023 – Dec. 31, 2024), Department of Chemistry & Chemical Engineering, SBA School of Science & Engineering (SSE), LUMS, Lahore, Pakistan.
- **Consultant/Advisor** (June-Aug 2021), University of Engineering & Applied Sciences, Swat, KPK, Pakistan
- **Foreign Professor** (Jun 06-July 20, 2019), School of Chemistry & Chemical Engineering, Huazhong University of Science & Technology (HUST), Wuhan, China
- **Foreign Professor** (Oct-Nov. 2017), School of Chemistry & Chemical Engineering, Huazhong University of Science & Technology (HUST), Wuhan, China
- **Professor of Renewable Energy Systems** (2017) at US-Pakistan Center for Advanced Studies in Energy, University of Engineering & Technology, Peshawar, Pakistan.
- **Consultant USAID (Jun-Aug, 2018)** at US-Pakistan Center for Advanced Studies in Energy, University of Engineering & Technology, Peshawar, Pakistan.
- **Department Head/Chair of Chemistry (2009 - Dec. 31, 2016)**, SBA School of Science & Engineering, LUMS, Pakistan.
- **Visiting Faculty/Scientist** at several prestigious institutions including UMass (Amherst, USA), EPFL (Lausanne, Switzerland), and KAUST (Saudi Arabia) during each summer since 2009.
- **Project Director**, 2006-08, Nanobiotech project, National Institute for Biotechnology & Genetic Engineering (NIBGE), Faisalabad, Pakistan.
- **Scientific Officer/Senior Scientist**, 1997-2008, NIBGE, Faisalabad, Pakistan.

Honors & Awards

- **2024:** PIFI-Distinguished Scientist by Chinese Academy of Sciences
- **2022:** [Fellow, International Engineering and Technology Institute \(IETI\)](#)
- **2021:** Fellow, Pakistan Academy of Sciences
- **2021:** Fellow, Royal Society of Chemistry (FRSC), UK
- **2021:** Honored as the first scientist interviewed at [the launch of Facebook page of Bioconjugate Chemistry](#) (ACS journal)
- **2016:** Charles Wallace Visiting Fellow at the University of Cambridge, UK
- **2014:** Gold Medal in Chemistry by Pakistan Academy of Sciences for overall achievements in Chemistry
- **2007:** Professor Atta-ur-Rehman Gold Medal, by Pakistan Academy of Sciences
- **2005-2016:** Regular recipient of Research Productivity Award each year by Pakistan Council for Science & Technology (PCST), Ministry of Science & Technology, Govt. of Pakistan
- **2001-2005:** PhD fellowship award by Ministry of Science & Technology, Govt. of Pakistan, to study in UK

Membership of Public Institutions/National Level Committees

- Chair of National Nanotech Experts Group constituted by the Planning Commission, Govt. of Pakistan (Jan 2025-to date)
- Member, Board of Governors, Queen Mary Graduate College, Lahore, Pakistan (Feb. 2025 – to date)
- Chair of National Nanotech Experts Panel at PCST to draft Technology Foresight report on Nanotechnology (2014)
- Chair of National Core Group of Nanotechnology formed by the PM Task Force on Science & Technology (2019-2022)
- Member of National Core Group of Chemistry formed by the PM Task Force on Science & Technology (2019-2022)
- Member of Think Tank of National Security Division (2021- 2023)
- Member of Advisory Committee of Pakistan Science Foundation (PSF) for STEM (2021 – 2023)
- Member of Science & Technology Advisory Council (STAC), KPK (2021 – 2023)
- Member, Board of Governors of National Centre of Excellence in Analytical Chemistry, Uni. of Jamshoro (2021–23)
- Member, Academic Council/Board of Studies of COMSATS, AIOU, University of Sahiwal & KFUEIT.

Research Projects Awarded

- 2026-2029, Establishment of National Center for Nanoscience & Nanotechnology (NCNN). Project Director - **Rs. ~2.28 billion** funded by the Planning Commission, Govt. of Pakistan.
- **2026-2029**, Establishment of Functional Nanomaterials Lab at LUMS under National Center for Nanoscience & Nanotechnology. **Principal Investigator (PI) – Rs. 303 million** funded by the Planning Commission, Govt. of Pakistan.
- **2023-2026**, HEC (Pakistan) NRPU research grant on “Development of POM-MOF based materials for high power battery design in real time applications”. **Principal Investigator (PI) – Rs. 7.31 million**. Ref No. 20-14830/NRPU/R&D/HEC/2021 2021
- Polymeric Prodrug Nanomedicines for ROS/Aldehyde Elimination and Neural Repair in Spinal Cord Injury, 2024-25 (PI). The International Cooperative Project of Talent Cultivation "Xinghai Project" at the China-Japan Union Hospital of Jilin University. (200,000 Chinese Yuan (RMB)).
- **2023-2026**, HEC (Pakistan) NRPU research grant on “Design, synthesis, and evaluation of self-unfolding hydrogel film for oral delivery of peptides” **Co-Principal Investigator) – Rs. 5.69 million**. Ref No. 20-14867/NRPU/R&D/HEC/2021 2021
- **2021-2024**, PSF-NSFC (Pak-China collaborative) proposal recently accepted on “Organic-inorganic hybrid microporous polymeric nanocomposites for the capture and conversion of CO₂ – Applications in environment and energy technologies”. **(PI, from Pakistan side) – Rs. ~6.3 million (Pak) – 2.0 million Yuan (China)**. PSF-NSFC-IV/Chem/P-LUMS (26).
- **2017-2020**, HEC (Pakistan) NRPU research grant on “Low-cost but more effective transition metal alloy nanoclusters for electrocatalytic water oxidation”. **(PI) – Rs. 4.19 million**. 5918/Punjab/NRPU/R&D/HEC/2016
- **2016-2017**, EPSRC (UK) – Global Challenge Research Fund for “Smart nanoclusters to address multidrug resistance”. **Co-investigator - 92,000 GBP (total)**
- **2016-2017**, US-Pak Center for Advanced Studies in Energy – University of Engineering & Technology (UET), Peshawar, awarded a joint research project with Dr. Saim Saher (UET) for “Synthesis of non-noble electrocatalysts for anion exchange membrane fuel cells (AEMFC). **Co-PI - Rs. 3.0 million**
- **2014-2016**, UET (Peshawar)-LUMS-Cambridge collaborative project on “3rd generation solar cells: Construction of a proof-of concept preliminary prototype”. **Co-PI - Rs. 14 million**.
- **2013-2016**, Development of ultrasensitive, robust and affordable nanoparticle-based test strips for detecting bacteria – A Pak-US collaborative project funded by HEC and US National Academy of Sciences in collaboration with Prof. Vincent Rotello at the University of Massachusetts, Amherst, USA. **PI (Pakistan) - 600,000 USD (total)**. 5-690/Pak-US/HEC/2013/196
- **2011-2013**, Metal alloy nanoclusters for catalytic and bio-imaging applications by DAAD jointly with Prof. Wolfgang Parak, Philipps University, Marburg, Germany. **Principal Investigator (Pakistan side) - ~24,000 Euro (total)**
- **2006-2010**, Development of Nanobiotech lab at National Institute for Biotechnology & Genetic Engineering (NIBGE) by Ministry of Science & Technology, Govt. of Pakistan (PC-1). **PI/PD - ~2.5 million USD**
- **2006-2007**, Synthesis of Plasmon resonance particles for bioanalytical applications awarded by Third World Academy of Sciences (TWAS). **Principal Investigator - 6,000 USD**.

National/International Symposia/Workshops/Conferences Organized

- Co-organizer of International Conference on Membrane Separation held at LUMS, Lahore, Pakistan on Feb. 27-28, 2023.
- Co-organizer and Lead/Focal Person (from Pakistan) Symposium of Belt & Road International Cooperation on Interdisciplinary Materials Held at Hubei University, Wuhan, China, on Jan 05, 2023.
- COMSTech International Workshop on “Nanomedicine – Development & Challenges” held at COMSTech Headquarters, Islamabad, Pakistan, on March 15-17, 2021. **Focal Person (Technical)**
- 2nd International Conference on Nanoscience & Nanotechnology (ICONN-2019) at Lahore University of Management Sciences on Nov. 1-2, 2019, mainly supported by Pak-UK Education Gateway, Pakistan Academy of Sciences & Pakistan Science Foundation. **Principal Organizer**.
- The International Conference on Nanoscience & Nanotechnology (ICONN-2018) organized by National University of Science & Technology (NUST), Islamabad, and LUMS, Lahore, on Nov. 1-2, 2018. **Lead Organizer** from LUMS side.

- USPCAS-EP “*International Conference on Sustainable Energy Technologies*” organized on Sep. 12-13, 2017, at Serena Hotel, Islamabad, sponsored by USAID. **Chief Organizer.**
- USPCAS-EP “*National Conference on Green Energy Technologies*” organized on May 18, 2017, at PC Hotel, Peshawar, sponsored by USAID. **Chief Organizer.**
- Int. symposium on “*Nanomaterials-Potential Applications & Challenges*” at LUMS on Oct. 31, 2013. **Principal Organizer.**
- Chemical Trends 2013- A conference on “*Recent Trends in Chemical Research*” organized at LUMS, Lahore, Pakistan on September 27, 2013, sponsored by Fulbright. **Co-organizer.**
- An international symposium/workshop on *Nanomedicine* at Hussain Ebrahim Jamal (HEJ) Research Institute of Chemistry at University of Karachi in collaboration with HEJ and University of Illinois, Urbana Champaign (UIUC), on Dec 20-23, 2010. **Resource person and co-organizer.**
- A workshop at SBA School of Science and Engineering (SSE), LUMS, Lahore, on “*The role of nanomaterials in drug delivery and cancer treatment*” on July 28-29, 2008, sponsored by HEC and private vendors. **Principal Organizer.**
- An *International Nanomedicine Workshop* at COMSTECH, Islamabad, on March 13-20, 2008, sponsored by COMSTECH-HEC. **Resource person and technical organizer.**

Selected Research Publications: (Total publications > 185; h-index = 57; i10-index = 164; citations > 12966; Impact factor > 1374)

- Tailoring Cu Nanoparticles Motif into Atomic-Level Sites for Efficient H₂O₂ Electrosynthesis. Mengyun Hou, Jing Liu, Lirong Zheng, Wuyi Feng, Irshad Hussain, Jiatao Zhang, and Di Zhao. *Advanced Functional Materials* 2026 (in press).
- Disordered Interfacial Hydrogen–Bond Network Enhances Selective Ethylene Production under Ampere-Level CO₂ Electroreduction. Yang Xu; Yuhong Luo; Yiran Zhang; Junjun Li; Hao Wei; Zhiyi Sun; Wenxing Chen; Yuanmiao Sun; Yuchen Qin; Yaping Du; Irshad Hussain; Zhicheng Zhang. *China Science Chemistry* 2026 (in press)
- Thermally Driven Hydrogenation of CO₂ to Light Olefins Over Hollow Cubic In₂O₃-La-ZIF-8 Tandem Catalyst. Haifeng Tian, Haowei Huang, Zhiyu Chen, Fei Zha, Hongshan Chen, Ruiying Ding, Yu Zhang, Hao Wei, Yuzhong Mao, Irshad Hussain, Zhicheng Zhang. *Rare Metals* 2026, 45 (4), e70203.
- Synergistic Photo-Electro-Piezo Effects in a Polypyrrole/MnO₂-PVDF Nanofiber Membrane for Higher Energy Efficiency of Hybrid Solar Evaporation Systems. Muhammad Sultan Irshad, Wancheng Qin, Naila Arshad, Naveed Mushtaq, Muhammad Zeeshan, Xiaochao Fan, Tianxiang Zhou, Yi E, Irshad Hussain, Tao Mei, Yajun Qi, Van-Duong Dao, Nang Xuan Ho, Xianbao Wang. *Mater. Sci. Eng.: R: Rep.* 2026, 44, 688.
- Nitrogen-rich hyper-cross-linked polymers for rapid & selective bilirubin removal in hemoperfusion. Hongxiang Yin, Yueyuan Xiao, Yucheng Cai, Chang Gao, Jiarui Hu, Bien Tan, Irshad Hussain, Wei Yan. *Chemical Communications* 2026, 62, 3574.
- W-doped MoS₂/CuS heterojunction nanotubes as capacitive deionization cathode for electrochemical lithium extraction. Hao Wei, Teng Wang, Renquan Hu, Hongli Zou, Zhen Sun, Weiyi Deng, Hu Liu, Zhicheng Zhang, Irshad Hussain, Yong Yang. *Chemical Engineering Journal*, 2026, 527, 172054.
- Mineral Particles as Nucleating Agents for Controllable Polymorphic Forms of ROY. Zheng-Hao Li, Zheng Cheng, Jianglei Zhang, Xue-Yuan Guo, Yang Li, Shu-Chao Gong, Guangdong Chen, Ning-Ning, Zhang Junhu, Zhang, Chuipeng Kong, Irshad Hussain, Kun Liu*, Yang Yang*. *Crystal Growth & Design* 2025, 25(23), 10188.
- Synergistic NiO-Pt heterostructure for enhanced hydrogen evolution: Boosting charge transfer and catalytic efficiency in alkaline media. Faria Rafique, Shahzad Ameen, Muhammad Hammad Ali, Aleena Tahir, Hamayal Shahzad, Amina Bhatti, Tanveer ul Haq, Mira Tul Zubaida Butt, Ammar Ahmed Khan, Saleh A. Ahmed, Irshad Hussain, Habib Ur Rehman. *Fuel* 2025, 406, 137226.
- Recent advances in conducting polymers for hybrid solar-driven evaporation systems: Fundamentals, innovations, and applications. Bushra Shakoor, Muhammad Sultan Irshad, Uzma Ghazanfa, Humaira Razzaq, Naila Arshad, Ghazala Maqsood, Iftikhar Ahmed, Muhammad Atif Ali, Muhammad Sohail Asghar, Irshad Hussain, Tao Mei, Tran Vinh Dieu, Nang Xuan Ho, Van-Duong Dao, Xianbao Wang. *Chemical Engineering Journal* 2025, 524, 169273.
- Conjugated cobalt-tetraphenylporphyrin hypercrosslinked polymers for efficient CO₂ capture and selective photocatalytic reduction to CO. Saif Ullah, Sughra Manzoor, Jiarui Hu, Irshad Hussain, Xiaoyan Wang, Hui Gao, Bien Tan. *Green Chemistry* 2025, 27, 13023.
- Advances in flat-band structures for enhanced photothermal conversion efficiency: Design, mechanism, and complementary applications. M.A. Ali, M.S. Irshad, G. Maqsood, N. Arshad, N. Aslam, M.S. Asghar, B. Shakoor, I. Hussain, M.H. Younes, T. Mei et. al. *Nano Energy* 2025, 142, 111297.
- Advancing water collection efficiency in hybrid solar evaporators: Key factors, strategic innovations, and synergistic applications. M.S. Irshad, N. Arshad, G. Maqsood, I. Ahmed, B. Shakoor, M.S. Asghar, U. Ghazanfar, L. Lin, M.A.K.Y. Shah, I. Hussain, others, Corrigendum to *Mater. Sci. Eng.: R: Rep.* 2025, 165, 101018; *Mater. Sci. Eng. R Reports* 2025, 166, 101069.
- Sulfur Vacancies Enriched Copper Sulfide Nanotubes Boost Desalination Efficiency of Hybrid Capacitive Deionization. Hao Wei, Teng Wang, Renquan Hu, Zhen Sun, Irshad Hussain, Yong Yang. *Small* 2025, 12(6), 2411810
- Design of High-Performance Ozone Catalysts by Identifying and Modulating Anchoring Sites for Metal on γ -Al₂O₃. Tao Xu, Meihui Jiang, Wenjie Liu, Yicheng Qiu, Tianlin Ren, Kun Xin, Falak Sher, Irshad Hussain, Xu Wang, Xuhui Mao. *Applied Catalysis B: Environment & Energy* 2025, 372, 125321.
- Selective Electrochemical Conversion of CO₂ to Formate via Redox-Modulated Porous Metal Electrodes Coupled with Efficient Oxygen Evolution. Sabahat Asif, Yu Zhang, Ifra Bashir, Syed Zajif Hussain, Senem Çitoğlu, Hatice Duran Ingo Lieberwirth, Habib Ur Rehman, Bien Tan, Zhicheng Zhang, and Irshad Hussain*. Accepted in *ACS Applied Energy Materials* 2025, 8, 8, 5123.

- Layered Arrangement of Polyoxometalate on Metal-Organic Framework as a High-Capacity Anode Material for Sodium-ion Batteries. Irfan Ullah, Tahani Rahil Aldhafeeri, Ali Haider, Xianyong Wu, Songyang Chang, Abid Innayat, Nosheen Baigam, Michael A. Pope, Falak Sher, Habib ur Rehman, Irshad Hussain*. *ACS Applied Energy Materials* 2025, 8, 3, 1743.
- Morphological Features Influence the Drug Loading and Delivery Efficacy of Photoactivatable Gold Nanocarriers for Antitumor Photo/Chemotherapy. Maryam Iftikhar, Qianting Zhang, Rashda Abbasi, Shumaila Sarwar, Syeda Zunaira Bukhari, Mubashar Rehman, Irshad Hussain, Fatih Mehmet Emen, Irfanullah Khan, Ruibing An, Jian Dongl Ayesha Ihsan, Muhammad Rizwan Younis. *ACS Applied Materials & Interfaces* 2024, 17 (1), 547.
- Driving Sustainable Energy: The Role of Polyoxometalates (POMs) in Photoelectrochemical Hydrogen Production. Shahzad Ameen, Ph.D.; Aleena Tahir; Tanveer ul Haq; Ammar Ahmed Khan; Irshad Hussain, Habib ur Rehman. *Coordination Chemistry Reviews* 2024, 523, 216265.
- Unprecedented Photocatalytic Hydrogen Peroxide Production via Covalent Triazine Frameworks Constructed from Fused Building Blocks. Ruixue Sun, Xiaojun Yang, Xunliang Hu, Yatong Guo, Yaqing Zhang, Chang Shu, Xuan Yang, Hui Gao, Xiaoyan Wang, Irshad Hussain, Bien Tan. *Angewandte Chemie International Edition* 2025, 137 (4), e202416350
- Benchmarking stable electrocatalysts for green hydrogen production: A chemist perspective. Akhtar Munir, Jamal Abdul Nasir, Tanveer ul Haq, Javed Iqbal, Irshad Hussain, Ahsanulhaq Qurashi. *Coordination Chemistry Reviews* 2024, 521, 216112.
- Sulfone-functionalized stable molecular single crystals for photocatalytic hydrogen evolution. Xunliang Hu, Xiaojun Yang, Bingyi Song, Zhen Zhan, Ruixue Sun, Yantong Guo, Li-Ming Yang, Xuan Yang, Chun Zhang, Irshad Hussain, Xiaoyan Wang, Bien Tan. *SusMat* 2024, 4 (3), e220.
- Advances in selective electrochemical methanol upgrading and energy-saving hydrogen production: Mechanism, progress, and prospects. Farhan Arshad, Aleena Tahir, Tanveer ul Haq, Sana Qayyum, Irshad Hussain, Falak Sher. *International Journal of Hydrogen Energy* 2024, 63, 359.
- Polymeric coating doped with nanomaterials for functional impact on different substrates. Phool Shahzadi, Muhammad Amjad Majeed, Saba Ibrahim, Sabahat Asif, Razia Kalsoom, Irshad Hussain. *Scientific Reports* 2024, 14, 578.
- Surfactin Conjugated Silver Nanoparticles as an Antibacterial and Antibiofilm Agent against Pseudomonas aeruginosa. Lutfur Rahman, Yasra Sarwar, Shazia Khaliq, Inayat Ullah, Wasim Abbas, Ameena Mobeen, Ata Ullah, Syed Zajif Hussain, Waheed S. Khan, Maria-Eleni Kyriazi, Irshad Hussain, Antonios Kanaras, Asma Rehman. *ACS Applied Materials & Interfaces* 2023, 15(37), 43321.
- Electronic and Structural Modification of Three-Dimensional Porous NiCo@NF as a Robust Electrocatalyst for CO₂ Emission-Free Methanol Upgradation to Boost Hydrogen Co-production. Farhan Arshad, Aleena Tahir, Tanveer ul Haq, Hatice Duran, Irshad Hussain, and Falak Sher. *Energy & Fuels* 2023, 37(18), 14161.
- Emulsion-derived porous carbon-based materials for energy and environmental applications. Muhammad A. Mudassir*, Shazia Kousar, Muhammad Ehsan, Muhammad Usama, Umer Sattar, Muhammad Aleem, Irum Naheed, Osama B. Saeed, Mehmood Ahmad, Hafiz F. Akbar, Muhammad A. Din, Tariq M. Ansari, Haifei Zhang, Irshad Hussain*. *Renewable and Sustainable Energy Reviews* 2023, 184, 113594.
- Isostructural Nanocluster Manipulation Reveals Pivotal Role of One Surface Atom in Click Chemistry. Chunwei Dong, Ren-Wu Huang, Arunachalam Sagadevan, Peng Yuan, Luis Gutiérrez Arzaluz, Atanu Ghosh, Saidkhodzha Nematulloev, Badriah Alamer, Omar F. Mohammed, Irshad Hussain, Magnus Rueping*, and Osman M. Bakr*. *Angewandte Chemie - International Edition* 2023, 62, e202307140.
- Electronic and Surface Modifications of Ni–Co–Fe Oxides: A Catalyst with Maximum Exposure of Fe Active Sites for Water Electrolysis. Aleena Tahir, Tanveer ul Haq, Faria Rafique Basra, Hatice Duran, Joe Briscoe, Mengnan Wang, Maria-Magdalena Titirici, Irshad Hussain, and Habib Ur Rehman*. *ACS Applied Engineering Materials* 2023, 1, 1698.
- Continuous conducting architecture developed by supporting Prussian blue analogue on metal-organic framework derived carbon-doped manganese-oxide nanorods for high-performance sodium-ion batteries. Irfan Ullah, Roheen Saeed, Abid Innayat, Muhammad Zubair, Xianyong Wu, Hatice Duran, Ali Haider, Michael A. Pope, Irshad Hussain*. *Journal of Alloys & Compounds* 2023, 964, 171223.
- Conjugated cross-linked phosphine as broadband light or sunlight-driven photocatalyst for large-scale atom transfer radical polymerization. Wei-Wei Fang, Guiyu Yang, Zi-Hu Fa, Zichao Chen, Xunliang Hu, Zhen Zhan, Irshad Hussain, Yang Lu, Tao He, Tan Bien*. *Nature Communications* 2023, 14, 2891.
- Nanoscale Surface Functionalization Based on Heterogeneous Self-Assembled Monolayers for Molecular-Scale Electronics. Hira Khalid, Lixian Tian*, Xi Yu*, Irshad Hussain*, Wenping Hu*. *ChemPlusChem* 2023, 88(5), e202300131.
- Amine-impregnated porous organic polymers with chemisorption sites for highly efficient CO₂ chemical conversion under ambient conditions. Huang Ouyang, Kunpeng Song, Irshad Hussain, Bien Tan. *ACS Applied Polymer Materials* 2023, 5, 3574.
- Au/TiO₂ thin film with ultra-low content of gold: an efficient self-supported bifunctional electrocatalyst for oxygen and hydrogen evolution reaction. Aleena Tahir, Usman Zubair, Faria Rafique, Akhtar Munir, Yousef Haik, Irshad Hussain, Habib ur Rehman. *Catalysis Today*, 2023, 418, 114078.
- DNA Nanogel for Cancer Therapy. Xiaonong Zhang, Wei Yan*, Zhengwei Song, Sabahat Asif, Irshad Hussain*, Chunsheng Xiao*, Xuesi Chen. *Advanced Therapeutics*, 2023, 5 (4), 2200287.
- A pH responsive and superporous biocomposite hydrogel of Salvia spinosa polysaccharide-co-methacrylic acid for intelligent drug delivery. Arshad Ali, Muhammad Tahir Haseeb, Muhammad Ajaz Hussain, Ume Ruqia Tulain, Gulzar Muhammad, Irfan Azhar, Syed Zajif Hussain, Irshad Hussain, Naveed Ahmad. *RSC Advances*, 2023, 13, 4932
- Succinylated Salvia spinosa hydrogel: Modification, characterization, cadmium-uptake from spiked high-hardness groundwater and statistical analysis of sorption data. Arshad Ali, Muhammad Ajaz Hussain, Azhar Abbas, Muhammad Tahir Haseeb, Irfan Azhar, Gulzar Muhammad, Syed Zajif Hussain, Irshad Hussain, Nasser F. Alotaibi. *Journal of Molecular Liquids*, 2023, 376,

121438.

- Role of Metal Oxide Nanostructure-Based Substrates in Sustainable Electrochemical Water Splitting: Recent Development and Future Perspective. Aleena Tahir, Farhan Arshad, Tanveer ul Haq, Irshad Hussain, Syed Zajif Hussain, and Habib ur Rehman. *ACS Applied Nanomaterials*, 2023, 6(3), 1631.
- Engineering nanocomposite membranes of sodium alginate-graphene oxide for efficient separation of oil-water and antifouling performance. Mehwish Ehsan, Humaira Razzaq, Shumaila Razzaque, Memoona Kanwal, Irshad Hussain. *Journal of Environmental Chemical Engineering*, 2023, 11(1), 109185.
- Synthesis, characterization, and safety evaluation of pH-responsive *Salvia spinosa* mucilage-co-acrylic acid hydrogel: A smart excipient for drug release applications. Arshad Ali, Muhammad Ajaz Hussain, Muhammad Tahir Haseeb, Ume Ruqia Tulain, Muhammad Farid-ul-Haq, Tahira Tabassum, Gulzar Muhammad, Syed Zajif Hussain, Irshad Hussain, Alia Erum. *Reactive and Functional Polymers*, 2023, 182, 105466.
- Microwave-assisted growth of spherical core-shell NiFe LDH@Cu₂O nanostructures for electrocatalytic water oxidation reaction. Farhan Arshad, Akhtar Munir, Aleena Tahira, Syed Zajif Hussain, Asim Jilani, Aamir Hussain, Najeeb Ullah, Falak Sher, Irshad Hussain*. *International Journal of Hydrogen Energy*, 2023, 48(12), 4719.
- Bubbles Templated Interconnected Porous Metallic Materials: Synthesis, Surface Modification, and their Electrocatalytic Applications for Water Splitting and Alcohols Oxidation. Farhan Arshad, Aleena Tahir, Tanveer Ul Haq, Akhtar Munir, Irshad Hussain*, Falak Sher.* *ChemistrySelect* 2022, 7, e202202774.
- Sodium decavanadate encapsulated Mn-BTC POM@MOF as high-capacity cathode material for aqueous sodium-ion batteries. Irfan Ullah, Tanveer ul Haq, Aqeel Aslam Khan, Abid Inayat, Muhammad Shoaib*, Ali Haider, Murtaza Saleem, Syed Mustansar Abbas, Michael A. Pope, Irshad Hussain.* *Journal of Alloys & Compounds* 2022, 932, 167647.
- Fabrication of NiCu interconnected porous nanostructures for highly selective methanol oxidation coupled with hydrogen evolution reaction. Farhan Arshad, Aleena Tahir, Tanveer ul Haq, Hatice Duran, Irshad Hussain, Falak Sher. *International Journal of Hydrogen Energy*, 2022, 85, 36118.
- Nanogold morphologies with the same surface chemistry provoke a different innate immune response: An in-vitro and in-vivo study. Muhammad Usman, Yasra Sarwar, Rashda Abbasi, Hafiz Muhammad Ishaq, Maryam Iftikhar, Irshad Hussain, Ruken Esra Demirdogen, Ayesha Ihsan. *Nanoimpact*, 2022, 28, 100419.
- Multifunctional porous NiCo bimetallic foams toward water splitting and methanol oxidation-assisted hydrogen production. Farhan Arshad, Tanveer ul Haq, Adnan Khan, Yousef Haik, Irshad Hussain, Falak Sher. *Energy Conversion and Management* 2022, 254, 115262.
- Electrochemical sensing of limonene using thiol capped gold nanoparticles and its detection in the real breath sample of a cirrhotic patient. N.U. Nazir, S.R. Abbas, H. Nasir, I. Hussain. *Journal of Electroanalytical Chemistry* 2022, 905, 115977
- Immobilized covalent triazine frameworks films as effective photocatalysts for hydrogen evolution reaction. Xunliang Hu, Zhen Zhan, Jianqiao Zhang, Irshad Hussain, Bien Tan. *Nature Communications*, 2021, 12, 1-9.
- Fundamentals and design-led synthesis of emulsion-templated porous materials for environmental applications. Muhammad Ahmad Mudassir, Tariq Mahmood Ansari, Haifei Zhang and Irshad Hussain*. *Advanced Science* 2021, 8, 2102540.
- Recent advances in the electrocatalysts towards alcohols assisted energy-saving hydrogen production. Farhan Arshad, Tanveer ul Haq, Irshad Hussain*, Falak Sher*. *ACS Applied Energy Materials* 2021, 4, 8685–8701.
- Facile preparation of silver nanocluster self-assemblies with aggregation-induced emission by equilibrium shifting. Lianyu Li, Weiyao Xi, Irshad Hussain, Meiling Chen, Bien Tan. *Nanoscale* 2021, 13, 14207
- Hyperbranched polyethylenimine-tethered multiple emulsion-templated hierarchically microporous poly(acrylic acid)-Al₂O₃ nanocomposite beads for water purification. Muhammad Ahmad Mudassir, Syed Zajif Hussain, Shazia Kousar, Haifei Zhang, Tariq Mahmood Ansari and Irshad Hussain*. *ACS Applied Materials and Interfaces* 2021, 13 (23), 27400.
- A new eco-friendly phosphorus and nitrogen rich inorganic-organic hybrid hypercrosslinked porous polymers via low cost strategy. Muhammad Amin Abid, Shumaila Razzaque, Irshad Hussain, Bien Tan. *Macromolecules* 2021, 54 (12), 5848.
- Mechanistic insight of dye Degradation using TiO₂ anchored α -MnO₂ nanorods as promising sunlight driven photocatalyst. Ata Ullah, Lutfur Rahman, Syed Zajif Hussain, Muhammad Waseem Abbas, Abdul Tawab, Asim Jilani, Sadia Zafar Bajwaa, Waheed S. Khana, Rabia Riaz, Irshad Hussain, Asma Rehman. *Materials Science & Engineering B* 2021, 271, 115257.
- Topical delivery of curcumin-loaded transfersomes gel ameliorated rheumatoid arthritis by inhibiting NF- κ B pathway. Eleesha Sana, Mahira Zeeshan, Qurat Ul Ain, Ashraf Ullah Khan, Irshad Hussain, Salman Khan, Elise Lepeltier, Hussain Ali. *Nanomedicine* 2021, 16, 819.
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- Multifunctional flexible composite photothermal film, its preparation method and device. Muhammad Sultan Irshad, Wang Xianbao, Naila Arshad, E Yi, Irshad Hussain, Van-Duong Dao, Mei Tao, Zhou Tianxiang. Approved Chinese Patent application number: 2025113194484.

Book Chapter:

- Nanosilver at the interface of biomedical applications, toxicology, and synthetic strategies. Guotao Peng, Zil-e-Huma, Muhammad Umair, Irshad Hussain, Ibrahim Javed. A chapter published in “Metal Nanoparticles for Drug Delivery and Diagnostics”, a book published by Elsevier in 2020, chapter 8, 119-139.

Reviewer & Editor of ISI-indexed Journals:

Regular reviewer of highly prestigious ISI-indexed journals including Chemical Society Reviews, Advanced Materials, Advanced Functional Materials, ACS Nano, Small, Advanced Healthcare Materials, ACS Applied Materials & Interfaces, ACS Applied Energy Materials, ACS Applied Electronic Materials, ACS Applied Nano Materials, ACS Omega, Bioconjugate Chemistry, Langmuir, Chemical Communications, Journal of Porous Materials, Electrochimica Acta, Journal of Physical Chemistry, Analyst, Chemical Engineering Journal, Cellulose, Dalton Transactions, International J. of Hydrogen Energy, Journal of Colloid and Interface Science, RSC Advances, and Journal of Applied Polymer Science etc.

Executive Editor of [Materials Innovation](#) Journal (ISSN No 2790-1963)

Guest Editor of [Engineering](#) Journal (Impact factor = 9.59)

Editorial Board Member of [SmartMat](#) (Impact factor 15.3) and [The Innovation Materials](#) (expected impact factor 2025 is ~20)

Plenary/Keynote/Invited Lectures (needs to be updated):

I have delivered several invited, keynote and plenary lectures to promote/popularize science, chemistry and nanoscience & technology. Most of these lectures are focused on nanomaterials applications in biomedical sciences, catalysis, environment, industry, and energy technologies.

1. Invited lecture (as *Tang Au-Chin Chair Professor*) at Jilin University, Changchun, China, on August 22, 2025
2. Invited lecture at Nankai University, Tianjin, China, on August 25, 2025
3. Invited lecture at Tsinghua University, Beijing, China, on August 22, 2025
4. Invited lecture at the Institute of Chemistry (Chinese Academy of Sciences), Beijing, China, on August 21, 2025
5. Invited lecture at International Symposium on Electroanalytical Academy of Sciences at Changchun Institute of Applied Chemistry (CIAC), Chinese Academy of Sciences, Changchun on August 13-15, 2025
6. Invited lecture at Nanjing Normal University, Nanjing, China, on July 31, 2025
7. Invited lecture at Hubei University, Wuhan, China, on July 29, 2025
8. Invited lecture at Dalian University of Technology, Dalian, China, on July 16, 2025
9. Invited lecture at Shandong Academy of Sciences, Jinan, Shandong, China, on June 18, 2025

10. Invited lecture at Jilin University Hospital, Changchun, China, on June 28, 2024
11. **PIFI-Distinguished Scientist** lecture at Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, on June 26, 2024.
12. Invited lecture at Jilin University, Changchun, China, on June 24, 2024
13. **PIFI-Distinguished Scientist** at The Innovation Academy for Precision Measurement Science and Technology (APM) of the Chinese Academy of Sciences (CAS) on June 19, 2024.
14. Plenary Lecture at 2024 International Conference on Cooperation and Integration of Industry, Education, Research and Applications at Hubei University, Wuhan, China, on June 08, 2024
15. Invited lecture at Northwestern Polytechnic University (Materials Science & Engineering Department), Xi'an, China, on June 03, 2024.
16. Invited lecture at Northwestern Polytechnic University (Life Sciences Department), Xi'an, China, on June 05, 2024.
17. Invited lecture at Wuhan University, Wuhan, China, on May 30, 2024.
18. Invited lecture at Huazhong University of Agriculture, Wuhan, China, on May 29, 2024.
19. **Distinguished lecture series** of SmartMat (Wiley Interscience) at Tianjin University, China, on March 26, 2024.
20. Keynote lecture at International Conference on Modern Technologies in Mechanical and Materials Engineering (MTME' 24), GIK Institute of Engineering Sciences & Technology, Swabi, Pakistan, on April 20, 2024.
21. Plenary lecture at International Symposium on Nanobiology at GCU, Faisalabad, Pakistan, on Feb. 28-29, 2024.
22. Invited lecture at Symposium on "Recent Trends in Industrial Chemistry and Optics" School of Physical Sciences, University of the Punjab, Lahore, Pakistan, on March 08, 2024.
23. Invited lecture at International Conference on 3D Printed and Energy Conversion Materials Department of Physics, University of the Punjab, Lahore, Pakistan, on January 25-26, 2024
24. Keynote lecture at an International Conference of Scientific Outlook of Sustainable Goals (SOSDG-2024) organized by the Women University, Mardan, and COMSTECH, Islamabad, on January 15, 2024.
25. Invited lectures at the University of Sargodha, University of Agriculture, Faisalabad, Bahauddin University, Multan, Women University Multan and Women University Bahawalpur during Jan – April 2024.
26. Invited lectures at the University of Isfahan (Departments of Chemistry & Pharmaceutical Sciences) at the celebration of Mustafa Science & Technology Award on October 01, 2023.
27. International Conference on Sustainable Development in Nanotech, University of Sindh/Mehran University, Mar 21-22, 2023
28. Pakistan Engineering Congress Seminar on Artificial Intelligence & Nanotechnology, March 18, 2023
29. 24th Islamic World Academy of Sciences (IAS) Conference on Challenges to Promote S & T for Socio-Economic Development in OIC Countries, at ICCBS, University of Karachi, on March 7-8, 2023.
30. International Conference on Advances in Functional Materials (ICAFM-2023), University of Punjab, Feb. 20-22, 2023
31. Symposium of Belt & Road International Cooperation on Interdisciplinary Materials, Jan 05, 2023.
32. 1st National Conference on Emerging Horizons in Science & Technology at the University of Central Punjab, Dec. 26-27, 2022.
33. Techno-Science - 3rd International Conference on Technology & Science at Akdeniz University, Turkey. Dec. 18-20, 2022.
34. Techno Science 2022, Akdeniz University, Antalya, TURKEY on Dec. 15, 2022
35. International Conference on Materials Science & Engineering (ICMATSE) 2022 at Ankara, Turkey, on Oct. 27-29, 2022
36. Webinar on Frontiers in Advanced Nanopharmaceutics at NIBGE (Jun 30, 2022).
37. University of Cologne Forum on Nanocarriers on Dec. 06, 2021
38. COMSTECH Lecture Series Nov. 18, 2021
39. International Conference on Technology & Science at Akdeniz University, Turkey, on Nov. 18-19, 2021
40. 4th Pak-Turk International Conference on Emerging Technologies in the field of Sciences and Engineering. Organized jointly by GIK Institute & University of Wah on Nov. 3-4, 2021
41. Recent Trends in Material Science and Nanotechnology at FC College, Lahore, on Sep. 15-16, 2021
42. Delivering a sustainable energy transition for Pakistan. LUMS-University of Glasgow workshop sponsored by British Council (June 8-10, 2021).
43. First International Workshop on Biomaterials & Tissue Engineering, IST, Islamabad (May 26-27, 2021)
44. COMSTECH International Workshop on Nanomedicine – Development & Challenges (March 15-17, 2021)
45. Distinguished lecture series of SmartMat (A Wiley InterScience journal) on Dec. 18, 2020.
46. Techno-Science - 3rd International Conference on Technology & Science at Akdeniz University, Turkey on Dec. 18-20, 2020.
47. 4th International Pharmacy Conference at Department of Pharmacy, QAU, on Oct. 10, 2020.
48. SPIE PHOTONICS West 2020 Conference in San Francisco, USA, during Feb 1-6, 2020.
49. USA-Pakistan bilateral conference on Energy Nanomaterials at School of Natural Sciences (SNS), NUST, Islamabad, on Jan. 16, 2020.
50. 18th International and 30th National Chemistry Conference on Nov. 27-29, 2019, at UMT, Lahore.
51. International Conference of Punjab University (ICPU) on Recent Advances in Molecular Sciences on Nov. 6-8, 2019 Jiangsu University, Zhenjiang, China, on July 17, 2019
52. The School of Life Sciences, Huazhong University of Science & Technology (HUST, Wuhan, China, on July 10, 2019.
53. An International Conference on Nanomaterials – New Trends in Development & Applications. FC College, University, Lahore, on Jan 29-31, 2019
54. An International Conference on "Strongly Correlated Electron Systems & Nanotechnology" at Women University, Multan, on January 15-17, 2019.
55. International Conference on Biochemistry, Biotechnology & Biomaterials (ICBBB-2018) organized by the University of Agriculture Faisalabad on Dec. 9-11, 2018.

56. The International Conference on Nanoscience & Nanotechnology (ICONN-2018) organized by National University of Science & Technology (NUST), Islamabad, and LUMS at NUST on Nov. 1-2, 2018.
57. 1st International Conference on Nanoscience & Technology organized by the University of Haripur, KPK, Pakistan, on Oct. 30, 2018.
58. International workshop on “Energy Materials and Nanotechnology” organized by COMSATS, Abbottabad, on Aug. 15-16, 2018.
59. Department of Chemistry, University of Massachusetts at Amherst, USA, on June 12, 2018.
60. International Conference on Innovation & Commercialization in Biotechnology organized by Pakistan Council for Scientific & Industrial Research, Lahore, on April 20, 2018.
61. International symposium on Modern Trends in Physics organized by GC University, Faisalabad, on April 18, 2018.
62. International Conference on Nanotechnology at COMSATS, Lahore, on April 12, 2018
63. 4th International Conference on Frontiers of Advanced Engineering Materials (FAEM-2018) organized by Pakistan Council for Scientific & Industrial Research, Lahore, on Feb 19-20, 2018.
64. A series of 03 lectures on Frontiers in Nanoparticles Research at the School of Chemistry & Chemical Engineering, Huazhong University of Science & Technology (HUST), Wuhan, China.
65. School of Materials Science & Engineering, Hubei University, Wuhan, China, on Nov. 21, 2017.
66. School of Chemistry & Chemical Engineering, Wuhan Institute of Technology, Wuhan, China, on Nov. 10, 2017.
67. School of Chemistry & Chemical Engineering, Heife University of Technology, Anhui, China, on Nov. 07, 2017.
68. International Conference on Trends and Prospects in Molecular Biosciences at the Institute of Biochemistry and Biotechnology, Punjab University, Lahore, October 23-24, 2017.
69. COMSTECH International Workshop on Nanosciences: Education and Industrial Applications, Islamabad, on Dec. 15-16, 2016
70. International conference on Science & Technology, Sheraton Hotel, Ankara, Turkey, on Oct. 3-6, 2016.
71. Wuhan University, Wuhan, China, on April 14, 2016.
72. Center for Molecular Imaging & Nuclear Medicine, Soochow University, China, on April 11, 2016.
73. National Center for Nanoscience & Technology (NCNST) – Chinese Academy of Sciences, Beijing, China, on April 6, 2016.
74. International Scientific Spring at National Centre for Physics, Islamabad, on March 7-11, 2016.
75. International Conference on Biotechnology at the University of South Asia, Lahore, on Feb 24-25, 2016.
76. International Conference on Biochemistry, Biotechnology and Biomaterials (ICCB-2016) at the University of Agriculture, Faisalabad, on Feb 22-24, 2016.
77. King Abdul Aziz University, Jeddah, on July 01, 2015.
78. University of West Scotland, Glasgow, on Jun 15, 2015.
79. 2nd International conference on Drug Development” organized by COMSATS Institute of Information Technology, Abbottabad, on August 23-25, 2015.
80. 1st International conference on “Recent Innovations in Pharmaceutical Sciences” organized by the Riphah University, Islamabad, on March 03-5, 2015.
81. A conference on “Nanotechnology for Development of Advanced Energy Harvest and Storage Devices” at Masdar Institute, UAE, organized by UIUC-MIST on Feb. 17-18, 2015.
82. International Conference on Nanomaterials and Nanotechnology (ICNN-2014) from April 07-09, 2014, at Federal Urdu University, Karachi.
83. Nanotechnology for energy – An invited lecture delivered at UET (Peshawar) – Cambridge University “Energy Workshop” at Serena Hotel, Islamabad, on March 20-22, 2014. It was sponsored by British Council and I was one of the 02 focal persons from Pakistan.
84. International Conference of Biochemical and Chemical Sciences (ICBCS-2014) on Feb. 24-26, 2014, at University of Agriculture, Faisalabad.
85. 11th International Bhurban Conference on Applied Sciences & Technology (IBCAST) at National Center for Physics on Jan 15-19, 2014.
86. Nanostructured materials - Synthesis and applications in renewable energy technologies. An invited lecture delivered at International Symposium on design of dye-sensitized solar cells for cost-effective energy harvesting at GIK Institute of Engineering Sciences & Technology on December 13-14, 2013.
87. 2nd Conference on Nanotechnology for Biological and Biomedical Applications (Nano-Bio-Med 2013) held at ICTP, Trieste, Italy, on October 14-18, 2013.
88. 10th International Bhurban Conference on Applied Sciences and Technology (IBCAST) at National Centre for Physics, Islamabad, on Jan 15-19, 2013.
89. 11th International and 23rd National Chemistry Conference at National Center of Excellence in Physical Chemistry, University of Peshawar, Peshawar, on Oct. 15-17, 2012.
90. Pakistan Academy of Sciences, Islamabad, on March 06, 2012.
91. 10th International and 22nd National Chemistry Conference at University of Agriculture, Faisalabad, on Nov 21-23, 2011.

92. Department of Materials Science & Engineering, EPFL, Lausanne, Switzerland, on August 03, 2011.
93. 8th International Bhurban Conference on Applied Sciences and Technology (IBCAST) at National Centre for Physics, Islamabad, on Jan 10-13, 2011.
94. A series of 03 lectures delivered at international nanomedicine symposium/workshop at HEJ research institute for Chemistry, University of Karachi, on Dec 20-23, 2010.
95. Micro and Nanotechnology Lab, University of Illinois at Urbana-Champaign, USA, June 08, 2010.
96. Department of Materials Science & Engineering, MIT, Boston, on June 01, 2010.
97. Department of Chemistry & Chemical Engineering, Huazhong University of Science & Technology, Wuhan, China, on April 27, 2010.
98. National Center for NanoScience & Technology (NCNST), Beijing, China, on April 20, 2010.
99. International Scientific Spring at National Centre for Physics (NCP), at Quaid-i-Azam University, Islamabad, Pakistan on March 01-06, 2010.
100. 8th international chemistry conference at Quaid-i-Azam University, Islamabad, Pakistan on Feb 15-17, 2010.
101. 7th International Bhurban Conference on Applied Sciences and Technology (IBCAST) at National Centre for Physics, Islamabad, on Jan 11-14, 2010.
102. Micro and Nanotechnology Lab, University of Illinois at Urbana-Champaign, USA, July 30, 2009.
103. A series of three lectures delivered at an International Nanomedicine workshop at COMSTECH (March 13-20, 2008), Islamabad.

Graduate Students Supervision

S. No.	Name	University	My role	Year of graduation	Current status
1	Sumaira Ashraf	NIBGE, QAU, Islamabad	Supervisor	PhD/2012	Associate Prof. GCU, Lahore
2	Asma Rehman	NIBGE, QAU, Islamabad	Supervisor	PhD/2013	Principal Scientist, NIBGE
3	Ayesha Ihsan	NIBGE, QAU, Islamabad	Supervisor	PhD/2014	Principal Scientist, NIBGE
4	Shazia Mumtaz	LUMS	Supervisor	PhD/2017	Assistant Professor, Govt. Punjab Degree Colleges, Lahore; and University of Sargodha
5	Akhtar Munir	LUMS	Supervisor	PhD/2020	Assistant Professor, QAU, Islamabad
6	Zile Huma	LUMS	Supervisor	PhD/2021	Moved to Australia
7	Muhammad Ahmed Mudassir	BZU, Multan	Supervisor	PhD/2020	Assistant Professor, University of Management & Technology, Sialkot campus.
	Irfan Ullah	LUMS	Supervisor	PhD/2025	University of Puerto Rico, USA
8	Samia Saleemi	QAU, Islamabad	Co-supervisor	PhD/2012	In England/no further update
9	Muhammad Farhan Sohail	QAU, Islamabad	Co-supervisor	PhD/2017	Professor, University of South Asia
10	Muhammad Asif Tahir	UAF, Faisalabad	Co-supervisor	PhD/2019	Assistant Prof. in Govt. Punjab Colleges
11	Asim Jilani	UAF	Co-supervisor	MPhil/2006	Assistant Prof. at King Abdul Aziz University, Jeddah, Saudi Arabia
12	Wajid Ali	BZU, Multan	Supervisor	MPhil/2008	No update
13	Sofia Akbar	GC University, Faisalabad	Co-supervisor	MPhil/2010	Assistant Prof., GC University, Faisalabad
14	Bareera Mehmood	Kinnaird College, Lahore	Supervisor	MPhil/2012	Beaconhouse School, Lahore
15	Mariyam Chattha	Kinnaird College, Lahore	Supervisor	MPhil/2013	Housewife
16	Syed Zajif Hussain	FC College, Lahore	Co-supervisor	MPhil/2013	Principal Scientist, LUMS
17	Ibrahim Javed	BZU, Multan	Co-supervisor	MPhil/2013	Senior lecturer, La Trobe University, Melbourne, Australia.
18	Ali Khadim	Sargodha University	Co-supervisor	MPhil/2015	PhD student in Germany
19	Muhammad Abdullah	LUMS	Supervisor	MS/2016	PhD: UMass Amherst, 3D Advanced Packaging R&D Integration at GlobalFoundries Albany, New York
20	Muhammad Abbas	LUMS	Supervisor	MS/2017	PhD from UT Dallas, Sr Engineer Tech Development, Advanced Packaging, Central R&D, Albany, New York
21	Tanveer Ul Haq	LUMS	Supervisor	MS/2018	PhD: Texas A & M Assistant Professor, University of Sharjah
22	Iqtidar Hussain	LUMS	Supervisor	MS/2018	PhD: Iowa State University, Ames

					National Laboratory Ames
23	Sumiya Iqbal	LUMS	Supervisor	MS/2019	PhD student at the Cologne University, Germany
24	Hiba Manzoor	LUMS	Supervisor	MS/2019	Early Childhood Teacher, Victoria, Australia
25	Qasim Qayyum Kashif	LUMS	Supervisor	MS/2020	PhD student at Arizona State University, USA
26	Farhan Arshad	LUMS	Supervisor	MS/2020	Postdoc at KFUPM, Saudi Arabia
27	Hafiz Zohaib Aslam	LUMS	Supervisor	MS/2021	PhD student at Rutgers University, USA
28	Roheen Saeed	LUMS	Supervisor	MS/2021	Lecturer, Govt. of Punjab Colleges
29	Aqeel Aslam Khan	LUMS	Supervisor	MS/2022	PhD student at UMass Amherst, USA
30	Irum Naheed	LUMS	Supervisor	MS/2022	PhD student at University of Puerto Rico
31	Asim Abbas	LUMS	Supervisor	MS/2023	Binghamton University, New York
32	Musfira Khalid	LUMS	Supervisor	MS/2023	PhD student at Binghamton University, New York
33	Arooba Rahat	LUMS	Supervisor	MS/2025	Lab instructor at LUMS, also got admission at Minnesota University, USA
34	Amhad Raza	LUMS	Supervisor	MS/2025	RA at LUMS