# **CURRICULUM VITAE**

## Dr. Ateeq-ur-Rehman

Associate Professor [Tenured] Department of Physics, Faculty of Sciences,
University of Agriculture, Faisalabad 38040, Pakistan



## **PERSONAL PROFILE:**

Present Status: Associate Professor (Tenured)
Field of Specialization: Condensed Matter Physics

Permanent Address: Arazi Shanker Das P/O Sadar Gogera, District Okara, Pakistan

Date of Birth: 4<sup>th</sup> May, 1979 Mobile No: +92 300 4098421

E-mail: ateeq215@gmail.com, ateeq.rehman@uaf.edu.pk

Nationality: Pakistani

## **EDUCATION:**

## Ph.D. (Condensed Matter Physics)

**June 2013** 

Department of Physics, Zhejiang University, Hangzhou, China

Thesis: Spectro-Microscopy Characterization of Organic Semiconductors

Advisor: Prof. Dr. Bao Shining

**Courses:** Surface and Interface Electronic States, Condensed Matter Physics-Cutting-Edge Symposia, Condensed Matter Physics Theory, Modern Physics Experiments, Chinese Language, Survey of China.

### M. Phil. (Solid State Physics)

**July 2004** 

Centre of Excellence in Solid State Physics, University of the Punjab, Lahore

**Thesis:** Chaos and Tunneling in a Double Well System

**Advisor:** Prof. Dr. Tariq Abdullah

M.Sc. (Physics) University of the Punjab, Lahore

**June 2001** 

B.Sc. (Physics, Mathematics A & B, English) Govt Degree College Okara, Punjab August 1999

## FIELD OF RESEARCH- SURFACE AND INTERFACE PHYSICS

Nanomaterials, Surface and Interface Physics, Growth, Morphology, Electronic structure, Structural and Electronic properties of materials, Energy level alignment, Electronic density of states, XPS, UPS, AR-UPS, STM, DFT, SEM, UV-Visible Spectroscopy, AFM., etc.

#### **EMPLOYMENT HISTORY:**

Listed in chronological order; included position details and dates (MM/YYYY)

- 08/2024 to date Associate Professor, Department of Physics, University of Agriculture, Faisalabad (UAF), Punjab-Pakistan [Tenure Track System]. Main duties: Teaching, Research, Administration, and Associate Senior Tutor.
- 02/2015-08/2024 Assistant Professor, Department of Physics, University of Agriculture, Faisalabad (UAF), Punjab-Pakistan [Tenure Track System]. Main duties: Teaching, Research, Administration, and Associate Senior Tutor.
- 10/2014-02/2015 Assistant Professor, Department of Physics, University of Management and Technology (UMT), Lahore, Punjab-Pakistan. Main Duties: Teaching and Research
- 09/2013-09/2014 Assistant Professor, Department of Physics, University of Agriculture, Faisalabad (UAF), Punjab-Pakistan [IPFP]. Main Duties: Teaching, Research, Administration
- 09/2009-07/2013 Ph.D. Scholar at the Institute of Condensed Matter Physics, Department of Physics, Zhejiang University, Hangzhou-China Thesis title: Spectro-Microscopy Characterization of Organic Semiconductors Adviser: Prof. Bao Shining
- 11/2006-08/2009 University Lecturer in the Physics Department at Forman Christian College (Chartered University), Lahore-Pakistan. Main duties were to teach physics to undergraduate and graduate students. Additional duties: (1) lab instructor of graduate students, (2) advisor of graduate students, (3) in charge of the departmental purchase committee, (4) proctor, (5) co-president of Benade Physics Society.

### 1. INTERNATIONAL PEER REVIEWED PUBLICATIONS (TOTAL IF = 126.79):

Sr. No.	Article					
37	Ghulam M. Mustafa, Bisma Younas, Muhammad Waseem, Ateeq-ur-Rehman, N.A. Noor, Khalid M. Elhindi, and Sohail Mumtaz, "Investigation of optoelectronic and thermoelectric characteristics of Tl2Os (Cl/Br)6 double perovskites for renewable energy applications, Materials Science in Semiconductor Processing 192 (2025) 1109420  ISSN No. 1369-8001					
	https://doi.org/10.1016/j.mssp.2025.109420					
36	Kashia Rashid, Umme Omeema, Abuzar Hasnain Raza, Ansa Manzoor, Muhammad Sajid Abbas, Ghulam Mustafa, Muhammad Adnan Iqbal, Ghazala Iram, Manahil Akram, Ateeq-ur-Rehman, "Role of metal-organic frameworks (MOFs) in electrochemical energy storage devices including batteries and supercapacitors, Rev Inorg Chem (2025) 1-44 ISSN No. 0193-4929 <a href="https://doi.org/10.1515/revic-2024-0137">https://doi.org/10.1515/revic-2024-0137</a>	4.1				
35	Waqas Latif, Muhammad Hanan, Aliza Jaffar, Aresha Shafique, Sana Aziz, <b>Ateeq-ur-Rehman,</b> Kashif Kamran, Javed Iqbal, Maryam Hina, Muhammad Shabir Mahr, "SFX-based hole transport materials for advancement in perovskite and organic solar cells: DFT Computational insights and photovoltaic improvements", Materials Science & Engineering B 313 ( <b>2024</b> ) 117974-117889  ISSN No. 0921-5107	3.9				

	https://doi.org/10.1016/j.mseb.2024.117974	
34	Ghazala Iram, Ateeq-ur-Rehman, Muhammad Adnan Iqbal, Ayesha Zafar, Adnan Majeed, Sofia Hayat, Mubashra Nawaz, "Advanced synthetic routes of metal organic frameworks and their diverse applications", Rev Inorg Chem (2024) 1-22 ISSN No. 0193-4929 https://doi.org/10.1515/revic-2023-0024	4.1

33	Noor, Tanzeela; Waqas, Muhammad; Shaban, Mohamed; Hameed, Ms. Shanza; <b>Rehman, Ateeq</b> ; Ahmed, Samia; Alrafai, Halima; Al-Saeedi, Sameerah; Ibrahim, Mahmoud; Hadia, Nomery Mohamed Abass; Khera, Rasheed Ahmad; Hassan, Abeer A. "Designing thieno[3,4-c]pyrrole-4,6-dione core-based, A2-D-A1-D-A2 type acceptor molecules for promising photovoltaic parameters in organic photovoltaic cells", ACS Omega 9 (2024) 6403-6422 ISSN No. 2470-1343. https://doi.org/10.1021/acsomega.3c04970	3.51
32	Ayesha Idrees, <b>Ateeq-ur-Rehman</b> , Muhammad Waqas, Mohamed Shaban, Sameerah. Al-Saeedi, Naifa S. Alatawi, Mahmoud A. A. Ibrahim, Tamer H. A. Hasanin, N.M.A. Hadia and Rasheed Ahmad Khera, "Strategies Toward Endgroup Engineering of Chrysene Core-based Non-fullerene Acceptors for High Performance Organic Solar Cells: A DFT Study", J. Comput. Biophys. Chem. (2023) 1-26. <b>ISSN No</b> : 2737-4165 DOI: 10.1142/S2737416523420097	2.2
31	Khizar Hayat, Mahwish Shkeel, Muhammad Adnan Iqbal, Maria Khalid, Ching Kheng Quahd, Qin Ai Wong, <b>Ateeq Ur Rehman</b> , Mohd B. Khadeer Ahamed, Umer Farooq, Shahid Hameed, "Inhibition of Cell Proliferation by Silver (1)-N-Heterocyclic Carbeen Complexes, Synthesis, Spectral and X-Ray Crystallographic Characterization, Inorganica Chimica Acta 557 ( <b>2023</b> ) 121694-121702. <b>ISSN No</b> . 0020-1693. <a href="https://doi.org/10.1016/j.ica.2023.121694">https://doi.org/10.1016/j.ica.2023.121694</a>	2.8
30	Alvina Rasool, Beriham Basha, Abraham Elmushyakhi, Ismail Hossain, <b>Attiq ur Rehman</b> , Muhammad Ans, "Tuning the optoelectronic properties of acridine-triphenylamine (ACR-TPA) based novel hole transporting material for high efficiency perovskite and organic solar cell", J. Mol. Graph 123 ( <b>2023</b> ) 108526. <b>ISSN No</b> . 1093-3263 https://doi.org/10.1016/j.jmgm.2023.108526	2.94
29	Komal Bashir, Faisal Jamil, Muhammad Adnan Iqbal*, Sadia Nazir, Umar Sohail Shoukat, Anam Bashir, Kainat Nasrullah and Ateeq-Ur Rehman Detection of different chemical moieties in aqueous media by luminescent Europium as sensor", Rev Inorg Chem (2023) 0034. ISSN No. 0193-4929 <a href="https://doi.org/10.1515/revic-2022-0034">https://doi.org/10.1515/revic-2022-0034</a>	1.62
28	Aneeqa Masood, Hajra Hanif, Shahid M. Ramay, Mahmood Ul Hassan, Sultan Akhtar, <b>A.R. Rehman</b> , Asif Mahmood, Syed Mansoor Ali, Abubaker A. Siddig, Mabrook Saleh Amer, Naushad Ahmad, Aamir Razaq, "Development of Cerium and Natural Fibers Freestanding Composite Electrodes for Modern Bendable Energy Storage Applications", Journal of Materials Research and Technology 23 ( <b>2023</b> ) 2219-2230. <b>ISSN No.</b> 2238-7854 <a href="https://doi.org/10.1016/j.jmrt.2023.01.143">https://doi.org/10.1016/j.jmrt.2023.01.143</a>	6.26
27	A. Shahzad, M. Kashif, <b>Ateeq-ur-Rehman</b> , K. Kamran, S. Ghani, M. S. Shifa, M. Yaseen, "Modulating the optoelectronic and thermoelectric properties of chalcopyrite AgXTe <sub>2</sub> (X: Ga, In) via in-plane biaxial strain", Chalcogenide Letters 18 ( <b>2021</b> ) 797 <b>ISSN No.</b> 1584-8663	0.89
26	Syed Mansoor Ali, Shahid M Ramay, Asif Mahmood, <b>Ateeq ur Rehman</b> , Ghulam Ali, Syed Danish Ali, Tauriq Uzzaman, "Au/TiN nanostructure materials for energy storage applications", Journal of Materials Science: Materials in Electronics 05302 ( <b>2021</b> ) 05312. <b>ISSN No.</b> 0957-4522 <a href="https://doi.org/10.1007/s10854-021-05302-0">https://doi.org/10.1007/s10854-021-05302-0</a>	2.78
25	R. A. Rehman, H. J. Zhang, A. Razaq, S. M. Ramay, M. Hasan, M. A. Javed, S. Ateeq, "Spectro-Microscopy Characterization of CoPc-Au(111) Interface", Physica E: Low-dimensional Systems and Nanostructures 125	3.38
	( <b>2021</b> ) 114357. <b>ISSN No.</b> 1386-9477 https://doi.org/10.1016/j.physe.2020.114357	
24	Attiq-ur-Rehman, M. Waseem Ashraf, Asif Mahmood, <b>Ateeq ur Rehman</b> , S. M. Ramay, M. Saleem, "Growth of Zr-BiFeO <sub>3</sub> nanostructures on two step anodized porous alumina for estimation of optical and dielectric response", Physica E: Low-dimensional Systems and Nanostructures 127 <b>(2021)</b> 114513 <b>ISSN No.</b> 1386-9477 <a href="https://doi.org/10.1016/j.physe.2020.114513">https://doi.org/10.1016/j.physe.2020.114513</a>	3.38

23	Murtaza Saleem, Shahid Atiq, Shahid M Ramay, Asif Mahmood, <b>Ateeq-ur-Rehman</b> , Saadat A Siddiqi, "Investigations on electronic and optical properties of Ag:MoS2 co-sputtered thin films", Chem. Phys. Lett. 760 ( <b>2020</b> ) 138032. <b>ISSN No.</b> 0009-2614 <a href="https://doi.org/10.1016/j.cplett.2020.138032">https://doi.org/10.1016/j.cplett.2020.138032</a>	2.72						
22	ur-Rehman, Muhammad Adnan Iqbal, "Organogtellurium Compounds: An Overview of Synthetic Methodologies", Rev Inorg Chem (2020) ISSN No. 0193-4929 <a href="https://doi.org/10.1515/revic-2020-0006">https://doi.org/10.1515/revic-2020-0006</a>							
21	Muhammad Kashif, Muhammad A Hanif, <b>Ateeq ur Rehman</b> , Muhammad Irfan Majeed, "Surface Enhanced Raman Spectroscopy of the serum samples for characterization of Hepatitis C and prediction of the viral loads", Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy 242 ( <b>2020</b> ) 118729. <b>ISSN No.</b> 1386-1425 <a href="https://doi.org/10.1016/j.saa.2020.118729">https://doi.org/10.1016/j.saa.2020.118729</a>							
20	Hafiz M Asif Javed, Muhammad Sarfaraz, M. Salman Musafa, Wenxiu Que, Ateeq ur Rehman, Muhammad Awais, Shahid Hussain, Akbar Ali Qureshi, Muhmmad Zahir Iqbal, "Efficient Cu/rGO/TiO2 Nanocomposite Based Photoanode for Highly-Optimized Plasmonic Dye-Sensitized Solar Cells", Applied Nanoscience 10 (2020) 2419. ISSN No. 2190-5517 https://doi.org/10.1007/s13204-020-01430-x							
19	Rao Aqal Shahzad, Javed Iqbal, Muhammad Usman, Riaz Hussain, Asif Javed, <b>Attiq ur Rehman</b> , Muhammad Usman Alvi, Muhammad Khalid, "Designing of Benzothiole based Non-fullerene Accepter (NFA) Molecules for Highly Efficient Organic Solar Cells", Computational and Theoretical Chemistry 1181( <b>2020</b> ) 112833. <b>ISSN No</b> . 2210-271X <a href="https://doi.org/10.1016/j.comptc.2020.112833">https://doi.org/10.1016/j.comptc.2020.112833</a>							
18	Aneeqa Masood, Zahid Shoukat, A. R. Rehman, Zohaib Shahid, Ayesha Chaudhry, Asif Mahmood, Shahid Ramay, Aamir Razaq, "Nickel Hydroxide and Lignocelluloses Fibers Based Flexible Paper Electrodes for Energy Storage Applications", Journal of Materials Science: Materials in Electronics 30 (2019) 14772.  ISSN No. 0957-4522  https://doi.org/10.1007/s10854-019-01850-8							
17	Zahid Shaukat, Aneeqa Masood, Zunaira Yousaf, Maham Sana, M Faisal Iqbal, A. R. Rehman, I. Sultana, Aamir Razaq "High Capacity Natural Fiber Coated Conductive and Electroactive Composite Papers Electrode for Energy Storage Applications", Journal of Applied Polymer Science 136 (2018) 47282. ISSN No. 0021-8995 https://doi.org/10.1002/app.47282	3.12						
16	<b>Ateeq-ur-Rehman</b> , Zhang H.J, Peng Wang, Amir Razaq, Kurash Ibrahim, Bao Shining, "Charge Transfer at Hybrid Organic-inorganic Interfaces", Acta Physica Polynica A 134 ( <b>2018</b> ) 434. <b>ISSN No.</b> 1898-794X https://doi.org/10.12693/APhysPolA.134.434	0.64						
15	Peng Wang, <b>Ateq-ur-Rehman</b> , Liang Meng, Wen-Jie Li, Hong-Nian Li, Wen-Hua Zhang, Junfa Zhu, The photoemission study of Sr-intercalated C60, Results in Physics 7 ( <b>2017</b> ) 3472.  ISSN No. 2211-3797  https://doi.org/10.1016/j.rinp.2017.09.022	4.48						
14	Cai, Yiliang; Zhang, Hanjie; Song, Junjie; Zhang, Yuxi; <b>Ateeq-ur-Rehman</b> ; He, Pei; "Bottom-up fabrication of graphene on Ru(0001) via molecular self-assembly", Nanotechnology 26 ( <b>2015</b> ) 295601. <b>ISSN No.</b> 0957-4484 https://doi.org/10.1088/0957-4484/26/29/295601							
13	Ateeq-ur-Rehman, Cai Yi Liang, H.J. Zhang, Wu Ke, W.D. Dou, H.Y. Li, P. He, S.N.Bao, "Differences in the adsorption of FePc on coinage metal surfaces", Chin. Phys. B 22 (2013) 063101. ISSN No. 1674-1056 https://doi.org/10.1088/1674-1056/22/6/063101							
12	Ateeq-ur-Rehman, Cai Yi Liang, Hanjie Zhang, Wu Ke, Weidong Dou, Haiyang Li, Pimo He, Shining Bao, "A shortcut for determining growth mode", Chin. Phys. B 22 (2013) 107202.  ISSN No. 1674-1056  https://doi.org/10.1088/1674-1056/22/10/107202	1.49						

11	Cai Yi Liang, <b>Ateeq-ur-Rehman</b> , H.J. Zhang, Wu Ke, H.Y. Li, P. He, S.N.Bao "The Transition behavior of FePc on Ag(110)", Chem. Phys. Lett. 582 ( <b>2013</b> )	2.72
	90. <b>ISSN No.</b> 0009-2614	
	http://dx.doi.org/10.1016/j.cplett.2013.07.023	
10	Ateeq-ur-Rehman, H.J. Zhang, H. Q. Qian, J. Dan, W. D. Dou, H. Y. Li, P. M. He, S. N. Bao, "A systematic spectroscopic study of the FePc-Si interfaces", Physica E: Low-dimensional Systems and Nanostructures 44	3.38
	(2012) 1572. ISSN No. 1386-9477 http://dx.doi.org/10.1016/j.physe.2012.03.030	
9	<b>Ateeq-ur-Rehman</b> , Weidong Dou, Huiqin Qian, Hongying Mao, Frederik Floether, Hanjie Zhang, Haiyang Li, Pimo He, Shining Bao, "Adsorption behavior of iron phthalocyanine at the initial stage on Cu(100) surface", Surf. Sci. 606 (2012) 1749.	1.94
	ISSN No. 0039-6028	
	http://dx.doi.org/10.1016/j.susc.2012.07.021	
8	Huiqin Qian, Lizhen Jiang, Ateeq-ur-Rehman, Hanjie Zhang, Haiyang Li	2.72
	Pimo He, Shining Bao, "The electronic properties at the iron-	
	phthalocyanine/Ag(110) interface", Chem. Phys. Lett. 537 (2012) 53.	
	ISSN No. 0009-2614	
	http://dx.doi.org/10.1016/j.cplett.2012.04.011	
7	Zhiyong Yang, Dong Zhang, Ateeq-ur-Rehman and Linxi Zhang,	3.14
	"Aggregation behavior of two separate polymers confined between two membranes", Soft Matter 8 (2012) 1901.	
	ISSN No. 1744-683X (print) 1744-6848 (web)	
	https://doi.org/10.1039/c1sm06712e	
	Hanjie Zhang, Qian Huiqin, Jin Dan, <b>Ateeq-ur-Rehman</b> , Weidong Dou,	2.72
6	Haiyang Li, Pimo He and Shining Bao, "The structure of FePc on Cu(100)",	2.72
	Chem. Phys. Lett. 537 ( <b>2011</b> ) 553.	
	ISSN No. 0009-2614 https://doi.org/10.1016/j.cplett.2010.12.066	
5	Dan Jin, Wei Wang, Ateeq-ur-Rehman, Jiang Lizhen, Hanjie Zhang,	6.70
3	Haiyang Li, Pimo He and Shining Bao, "Study on the interface between the	0.70
	organic and inorganic semiconductors", Appl. Surf. Sci. 257 (2011) 4994.	
	ISSN No. 0169-4332	
	https://doi.org/10.1016/j.apsusc.2011.01.009	
4	Dan Jin, Ateeq-ur-Rehman, Qian Hui-Qin, Jiang Lizhen, Zhang Han-Jie, Li	1.48
'	Haiyang, P. He, Bao Shi-Ning, "Geometric and electronic structures at the	2.10
	interface between iron phthalocyanine and Si (110)", Chin. Phys. Lett. 28	
	( <b>2011</b> ) 116804.	
	ISSN No. 0256-307X (print) 1741-3540 (web)	
	https://doi.org/10.1088/0256-307X/28/11/116804	
3	Zhiyong Yang, Dong Zhang, Linxi Zhang, Chen Hongping, Ateeq-ur-	3.14
	<b>Rehman</b> and Haojun Liang, "Local coil-helix transition of semi flexible polymers confined in spheres", Soft Matter <b>7</b> (2011) 6836. <b>ISSN No.</b> 1744-	
	683X (print) 1744-6848 (web)	
	https://doi.org/10.1039/c1sm05523b	
	Hongying Mao, Weidong Dou, <b>Ateeq-ur-Rehman</b> , Qing Liao, Hanjie Zhang,	6.70
2	Haiyang Li, Pimo He and Shining Bao, "Molecular assembly of tetracene on	6.70
	the $(2 \times 1)$ O reconstructed Cu(110) surface, Appl. Surf. Sci. 256 (2010) 3598.	
	ISSN No. 0169-4332	
	https://doi.org/10.1016/j.apsusc.2009.12.161	
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1	Zhiyong Yang, Shiben Li, Linxi Zhang, Ateeq-ur-Rehman, and Haojun	2.99
	Liang, "Translocation of α-helix chains through a nanopore", The J. Chem.	
	Phys. 133 ( <b>2010</b> ) 54903.	
	ISSN No. 0021-9606	
	https://doi.org/10.1063/1.3493332	

## RESEARCH AND DEVELOPMENT:

## **Research Projects:**

Sr. No	Title of Project	Year	Grant in PKR (in millions)	Funding Agency	Role	Status
1	Synthesis, characterization, and theoretical study of transition-metal dichalcogenides heterostructures for	2020	Pak-Turk Researchers Mobility Grant Program2019	Pak-Turk Govts	PI	Cancelled by the Turk Govt due to Covid19
2	thermoelectrical applications  Establishing Computational Research Laboratory (CRL)	2016	0.5	HEC	PI	Completed
3	Establishing Punjab-China Bio-energy Institute (PCBI)	2015	950.47	Govt of the Punjab	Team Member	Completed

## (a) MOU AND LOI EASTABLISHED BY DR. ATEEQ-UR-REHMAN

1- I have developed a MoU between University of Agriculture, Faisalabad (Pakistan) and Gebze Technical University, Turkey on 07/01/2020 for a period of two years.

# (b) **Students Supervision**:

Role	Completed			On-going		
	M.Sc.	M.Phil.	Ph. D.	M.Sc.	M.Phil.	Ph. D.
Main Supervisor		19	NIL	NIL	15	NIL
Member	NIL	20	1	NIL	20	NIL

## 2. EDITORSHIP/REVIEWER OF INTERNATIONAL JOURNALS:

- 1. Reviewed paper entitled "Band Bending induced resonant tunneling in ferroelectric tunnel. junctions" submitted for publication in the Journal of Applied Physics Letters (APL, IF-3.87) in July 2022.
- 2. Reviewed paper entitled "A brief review of reconstructions and electronic structures of MoS<sub>2</sub> zigzag edges" for publication in the Journal of Applied Physics published by AIP (JAP, IF-2.877) in June 2022.
- 3. Section Editor of the Vice Chancellor (UAF) approved Editorial Board of PARS Newsletter, UAF Community College, PARS (10-12-2021.)
- 4. Member of the Asian Council of Science Editors (ACSE) from March 2021 to December 2021.
- 5. Member of the Scientific and Technical Committee and Editorial Review Board on Engineering and Physical Science, World Academy of Science, Engineering and Technology (WASET).
- 6. Member International Scientific Committee of Physical and Mathematical Sciences, WASET <a href="https://waset.org/committees/physical-and-mathematical-sciences?page=2">https://waset.org/committees/physical-and-mathematical-sciences?page=2</a>
- 7. Reviewed papers for the Journal of Physical Chemistry Chemical Physics published by the Royal Society of Chemistry (PCCP, IF-4.45), 2019.

- 8. Reviewed papers for the Journal of Surface and Interface Analysis published by John Wiley and Sons (SIA, IF-1.3), 2019.
- 9. Open Access Journal of Mathematical and Theoretical Physics (OAJMTP, IF-1. 97), 2018.
- 10. Journal of Physics International published by Science Publications.
- 11. International Journal of Structural Glass and Advanced Materials Research (IJSGAMR).
- 12. Reviewed two papers submitted to the 2020 2<sup>nd</sup> International Conference on Computer Modeling, Simulation and Algorithm (CMSA2020) held from June 21-22, 2020, Beijing, China
- 13. Reviewed a paper submitted to the 2020 3rd International Conference on Applied Mathematics, Modeling and Simulation (AMMS2020) held from Sep 20-21, 2020, Shanghai, China