DR. SAHEEB AHMED KAYANI

1. PROFESSIONAL SUMMARY

I am a professional engineer with more than 18 years of experience as an academic and industry consultant. I have a bachelor's degree in mechatronics engineering, and a master's and PhD in mechanical engineering from reputed universities in Pakistan.

Being an educator and an active researcher, I am an effective communicator of technical knowledge with excellent interpersonal, analytical, communication, presentation, and problem-solving skills. I always prefer a multidisciplinary approach for solving engineering problems. During my career, I have carried out R&D, consulting, and product development for multiple types of manufacturing industries located in different parts of Pakistan. Based on this industrial engagement, I have been granted 01 patent and 05 industrial designs by the patent office, IPO, Pakistan, while 02 patent applications have been filed and are pending/waiting approval. I have the unique distinction that 02 of my IPRs were commercialized through signing of Pakistan's first-ever academia-industry IP licensing agreement in 2018. I have also published 01 book, 13 journal research papers, 01 book chapter, 12 conference research papers, 06 conference abstracts, and 16 print media articles.

I have been a recipient of various international and national honors and awards including Charles Wallace Visiting Fellowship (2014-15), Research Productivity Award (2016-17) as highest achievable category A scientist, SATHA Innovation Award (2016), SRC Chemistry Technology Award (2017), Technology Award (2017), Commandant's Medal of Excellence and Merit Certificate (2018), Special Award for Technology Licensing (2019), 7th FPCCI Achievement Award (2019) from the President of Pakistan in a ceremony held in the President House, Islamabad, and NUST College of E&ME Best Innovator Award (2020). My name has been continuously included in the directory of Productive Scientists of Pakistan since 2013.

I have been a Visiting Researcher (2011) at the Geoscience Advance Research Laboratories, Geological Survey of Pakistan, Islamabad, Guest Researcher (2011) at the Division of Meteoritics and Cosmic Mineralogy, Department of Mineralogy, The Natural History Museum, London, and Charles Wallace Visiting Fellow/Visiting Academic (2014-15) at the Center for Water and Development, Department of Development Studies, School of Oriental and African Studies, University of London, London. I am professionally registered with the Engineering Council, UK as a Chartered Engineer, Senior Fellow of the AdvanceHE (formerly Higher Education Academy), UK, and a member of the Institution of Engineers, Pakistan. I volunteer as International Professional Registration Advisor for the IET, UK and as pro bono IP consultant for development and review of patent and industrial design applications submitted to the IPO, Pakistan. I have served as a member (2013-14) of the Subject Committee for Mechanical Engineering, National Testing Service (NTS), Pakistan and also helped to establish 02 state of the art teaching laboratories at my parent institution.

2. ACADEMIC HISTORY

Certificate/Degree Year Group/Major Field Board/University		Certificate/Degree	Year	Group/Major Field	Board/University
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1.	SSC	1997	Science	FBISE, Islamabad
2.	HSSC	1999	Pre. Engineering	FBISE, Islamabad
3.	BE	2004	Mechatronics Engineering	NUST, Islamabad
4.	MS	2007	Mechanical Engineering	NUST, Islamabad
5.	PhD	2024	Mechanical Engineering	CUST, Islamabad

3. DISSERTATIONS/REPORTS

BE Design and Fabrication of Teleoperated Robot		BE	Design and Fabrication of Teleoperated Robot
	2.	2. MS Automated Design of Mechatronic Systems using Bond-Graphs and Genetic Programming	
	3.	PhD	Development of a Decision Support Framework for Sustainable and Resilient Supplier Selection and Order Allocation

4. RECENT EMPLOYMENT HISTORY

	Name of Organization	Designation	Duration
1.	Department of Mechanical Engineering, NUST College of E&ME, Rawalpindi	Lecturer	February 2011-March 2013
2.	Department of Mechanical Engineering, NUST College of E&ME, Rawalpindi	Assistant Professor	March 2013-To Date

5. RESEARCH INTERESTS

a.	Production and Operations Research	b.	Manufacturing System Design and Analysis
c.	Modeling and Simulation of Multi-domain Dynamic Systems	d.	Robotics and Industrial Control

6. NATIONAL PATENTS

	Developer	Patent Title	Status
1.	Saheeb Ahmed Kayani	Mini Wheel for Mobile Robot	Granted / Patent No. 142065
2.	Saheeb Ahmed Kayani	A Controlled Hardness Method of Production for Leather Fleshing and Shaving Blades	In Process / Application No. 229/2019
3.	Saheeb Ahmed Kayani	A Simplified Method of Production for Leather Fleshing and Shaving Blades	In Process / Application No. 261/2019

7. NATIONAL INDUSTRIAL DESIGNS

	Developer	Design Title/Class	Status
1.	Saheeb Ahmed Kayani	Leather Shaving Blade (Class-01)	Commercialized / Registered / Design No. 18317
2.	Saheeb Ahmed Kayani	Leather Fleshing Blade (Class-01)	Commercialized / Registered / Design No. 18318
3.	Saheeb Ahmed Kayani	Induction Heating Coil for Leather Fleshing/Shaving Blade (Class-01)	Registered / Design No. 18949
4.	Saheeb Ahmed Kayani	Specialized Rig for Post-Fabrication Processing of Leather Fleshing/Shaving Blades (Class-01)	Registered / Design No. 19425
5.	Saheeb Ahmed Kayani	Two DOF Adjustable Metal Strip Feeding Device (Class-01)	Registered / Design No. 19707

8. <u>BOOK</u>

1. Saheeb Ahmed Kayani, A Brief History of Engineering Design: From Ancient Innovations to Modern Solutions (ISBN: 978-6-27-786513-9), Emel Publications, Islamabad, 2025.

9. JOURNAL PUBLICATIONS

1.	Saheeb Ahmed Kayani, "On Automated Design of Mechatronic Systems through Bond-Graphs and Genetic Programming", IEEE Multi Disciplinary Engineering Education Magazine (MEEM), Vol. 2, No. 4, pp. 15-17, December 2007.
2.	Saheeb Ahmed Kayani, "Review and Implementation of a Novel Methodology for Automated Design of Mechatronic Systems", Journal of Engineering and Applied Sciences (JEAS), Vol. 27, No. 1, pp. 69-75, January-June 2008.
3.	Muhammad Afzaal Malik, Saheeb Ahmed Kayani, "Verifying Experiment for Automated Design of Mechatronic Systems using Bond-Graph Modeling and Simulation and Genetic Programming", International Journal of Computer Applications in Technology (IJCAT), Vol. 32, No. 3, pp. 173-180, October 2008.
4.	Saheeb Ahmed Kayani, Muhammad Afzaal Malik, "A Novel Methodology for Automated Synthesis of Mechatronic Systems Designs using Bond-Graphs and Genetic Programming", NUST Journal of Engineering Sciences (NJES), Vol. 1, No. 1, pp. 18-29, December 2008.

Saheeb Ahmed Kayani, "Global Darwin: Long Kept under Wraps in Pakistan", Nature, Vol. 462, 5. No. 7276, pp. 984-984, December 24/31, 2009. Saheeb Ahmed Kayani, Salman Sagheer Warsi, Raja Awais Liaqait, "A Smart Decision Support 6. Framework for Sustainable and Resilient Supplier Selection and Order Allocation in the Pharmaceutical Industry", Sustainability, Vol. 15, No. 7, Paper No. 5962, April-1, 2023. Saheeb Ahmed Kayani, "Moon Landing: India's Home-grown Tech Cut the Costs", Nature, Vol. 7. 621, No. 7978, pp. 258-258, September 12, 2023. Saheeb Ahmed Kayani, Salman Sagheer Warsi, "Exploring the Synergy between Sustainability and 8. Resilience in Supply Chains under Stochastic Demand Conditions and Network Disruptions", Results in Engineering, Vol. 26, Paper No. 104954, June 1, 2025. Haseeb Abid Awan, Saheeb Ahmed Kayani, Muhammad Ali, Salman Sagheer Warsi "Development 9. of an Integrated Approach for Sustainable Site Selection and Operations Management of Infectious Waste Disposal Facilities", 2025, Submitted.

10. <u>CONFERENCE PUBLICATIONS</u>

Saheeb Ahmed Kayani, "A Review of Issues Concerning Robot Integration and Acceptance in 1. Human Society", Proceedings of Third International Mechanical Engineering Congress (TIMEC), pp. 69-76, Karachi, March 20-21, 2006. Saheeb Ahmed Kayani, Muhammad Afzaal Malik, "Modeling and Simulation of Biped Kinematics 2. using Bond-Graphs", Proceedings of Second IEEE International Conference on Emerging Technologies (ICET), pp. 677-682, Peshawar, November 13-14, 2006. Saheeb Ahmed Kayani, "Physical and Mathematical Modeling of NUSTBOT-I through Bond-3. Graph Technique", Proceedings of Tenth IEEE International Multi Topic Conference (INMIC), pp. 456-460, Islamabad, December 23-24, 2006. Saheeb Ahmed Kayani, Muhammad Afzaal Malik, "Automated Design of Mechatronic Systems using Bond-Graph Modeling and Simulation and Genetic Programming", Proceedings of Fifth IEEE 4. International Bhurban Conference on Applied Sciences and Technology (IBCAST), Vol. 1: Control and Simulation, pp. 104-110, Islamabad, January 8-11, 2007. Saheeb Ahmed Kayani, Muhammad Afzaal Malik, "Combining Bond-Graphs with Genetic Programming for Unified/Automated Design of Mechatronic or Multi Domain Dynamic Systems" 5. Proceedings of Ninth ACM Genetic and Evolutionary Computation Conference (GECCO), pp. 2515-2518, London, July 7-11, 2007.

Saheeb Ahmed Kayani, Muhammad Afzaal Malik, "Genetic Programming for Wireless Internet 6. Access Point Configuration in a Small Pakistani Town", Proceedings of Third IEEE International Conference on Emerging Technologies (ICET), pp. 137-140, Islamabad, November 12-13, 2007. Saheeb Ahmed Kayani, "Search for Human Competitive Results in Open Ended Automated 7. Synthesis of a Primordial Mechatronic System", Proceedings of Tenth ACM Genetic and Evolutionary Computation Conference (GECCO), pp. 1827-1830, Atlanta, July 12-16, 2008. Saheeb Ahmed Kayani, Muhammad Afzaal Malik, "Bond-Graphs + Genetic Programming: Analysis of an Automatically Synthesized Rotary Mechanical System", Proceedings of Tenth ACM 8. Genetic and Evolutionary Computation Conference (GECCO), pp. 2165-2168, Atlanta, July 12-16, 2008. Saheeb Ahmed Kayani, "Theoretical Foundations of Automated Synthesis using Bond-Graphs 9. and Genetic Programming", Proceedings of Fourth IEEE International Conference on Emerging Technologies (ICET), pp. 11-16, Rawalpindi, October 18-19, 2008. Saheeb Ahmed Kayani, Waqar Haider Bhatti, Khawar Khalil Jarral, "On Design and Fabrication of 10. a Prototype Teleoperated Mobile Surveillance Robot", Proceedings of Fifth IEEE International Conference on Emerging Technologies (ICET), pp. 157-161, Islamabad, October 19-20, 2009. Saheeb Ahmed Kayani, "Using Combined XRD-XRF Analysis to Identify Meteorite Ablation Debris", Proceedings of Fifth IEEE International Conference on Emerging Technologies (ICET), 11. pp. 219-220, Islamabad, October 19-20, 2009.

11. PRESENTATIONS

	1.	Saheeb Ahmed Kayani	"Combined XRD-XRF Analysis of a Meteorite Specimen", Second Symposium on Building Effective Coordination between R&D and Industries for Enhancing Innovations, Competitiveness, and Productivity of Indigenous Technologies, January 4, 2011, Rawalpindi	Poster
=	2.	Saheeb Ahmed Kayani	"Thermal and Mineralogical Characterization of a Pottery Specimen from Harappa", Sixth Vacuum and Surface Sciences Conference of Asia and Australia (VASSCAA), October 9-13, 2012, Islamabad	Poster
	3.	Saheeb Ahmed Kayani	"Indigenous Development of Fleshing and Shaving Blades used in Leather Industry", Second Invention to Innovation Summit, November 16-17, 2016, Peshawar	Oral

4.	Saheeb Ahmed Kayani	"Process of Technology Transfer to Industry: The Case of NUST-SRC Collaboration", Third Invention to Innovation Summit, November 29-30, 2017, Peshawar	Oral (Invited)
5.	5. Saheeb Ahmed Kayani "Leather Fleshing and Shaving Blades Manufacturing in Kasur, Pakistan: A Brief Case Study", Fourth Invention to Innovation Summit, November 22-23, 2018, Peshawar		Oral
6.	Saheeb Ahmed Kayani	"Technology Transfer and Commercialization through Intellectual Property Licensing: A Case Study and a Perspective", National Centre of Robotics and Automation, December 02, 2019, Rawalpindi	Oral (Invited)
7.	Saheeb Ahmed Kayani	"An Insight into the Structure and Functioning of Surgical Goods Manufacturing Industry in Sialkot, Pakistan and a Way Forward", Annual Online Innovation Summit, September 18-19, 2020	Oral (Keynote Speaker)
8.	8. Saheeb Ahmed Kayani "Surgical Goods Manufacturing Industry in Sialkot, Pakistan: Key Factors for Future Growth", Annual Online Innovation Summit Sialkot, March 24-25, 2021		Oral (Keynote Speaker)
9.	Saheeb Ahmed Kayani	"Technology Transfer through Intellectual Property Licensing: A New Model for Academia-Industry Linkage in Pakistan", International Conference on Applications of Nuclear Techniques for Sustainable Socio-economic Development, October 24-26, 2022, Islamabad	Oral
10.	Saheeb Ahmed Kayani	"Intellectual Property and Academia-Industry Collaboration: A Perspective", Capital University of Science and Technology, December 24, 2024, Islamabad	Oral

12. <u>SEMINARS/TRAININGS CONDUCTED</u>

1.	Saheeb Ahmed Kayani	"Technology Transfer through Intellectual Property Licensing", August 11, 2021, NUST College of E&ME, Rawalpindi	CPD Seminar
2.	Saheeb Ahmed Kayani	"How to Invent? Tips and Tools for Engineers", August 25, 2021, NUST College of E&ME, Rawalpindi	CPD Seminar
3.	Saheeb Ahmed Kayani	"Intellectual Property and Tech-transfer: Basic Concepts and Applications", October 10, 2022, NUST College of E&ME, Rawalpindi	CPD Seminar

4.	Saheeb Ahmed Kayani, Hassan Mehmood	"One Day Training Workshop on Process Control Simulator", June 2, 2023, NUST College of E&ME, Rawalpindi	Training Workshop
5.	Saheeb Ahmed Kayani, Hassan Mehmood	"One Day Training Workshop on Journal Bearing with Hydrodynamic Lubrication", June 6, 2023, NUST College of E&ME, Rawalpindi	Training Workshop
6.	Saheeb Ahmed Kayani	"Laboratory Safety Measures", December 06, 2023, NUST College of E&ME, Rawalpindi	Training Workshop
7.	Saheeb Ahmed Kayani	"Engineering + Archeology: An Educator's Search for Mechanical Context to Material Culture", June 05, 2024, NUST College of E&ME, Rawalpindi	CPD Seminar

13. ACADEMIC/PROFESSIONAL/COMMITTEE SERVICES

	Academic/Professional Service	Organization	
1.	1. OIC Dynamics & Controls Laboratory (2009-To Date) Department of Mechanical Engineer NUST College of E&ME		
2.	Invited Content Developer and Reviewer (2010-2013, 2015, 2021, 2024-2025) National Testing Service (NTS), Pakis		
3.	Visiting Researcher (2011)	Geoscience Advance Research Laboratories, Geological Survey of Pakistan	
4.	4. Guest Researcher (2011) Division of Meteoritics and Cosmic Miner Department of Mineralogy, The Natural F Museum (London, UK)		
5.	5. Quality Project Officer (ISO Coordinator) (2013-To Date) Department of Mechanical Engineering NUST College of E&ME		
6.	Subject Committee for Mechanical Engineer National Testing Service (NTS), Pakista		
7.	7. Coordinator, DQEC (Department Quality Enhancement Cell) (2014-To Date) Department of Mechanical Engineeri NUST College of E&ME		
8.	Visiting Academic/Charles Wallace Visiting Fellow (2014-2015)	Center for Water and Development, Department of Development Studies, School of Oriental and African Studies, University of London (London, UK)	

9.	College Quality Auditor (Quality Management System Institutional Auditor) (2015-2016) NUST College of E&ME	
10.	0. Technical Member (2015-2016) Local Purchase Committee, Acade Studies Group, NUST College of E	
11.	11. Member (2019, 2021) Standing Discipline Committee, Acade Studies Group, NUST College of E&N	
12.	OIC Vibrations & Instrumentation Laboratory (2020-2021)	Department of Mechanical Engineering, NUST College of E&ME
13.	Member (2020)	Expert Committee for Evaluation of Laboratory Equipment for PC-1, MNS University of Engineering and Technology, Multan
14.	CPD/Seminars Coordinator (2023-To Date)	Department of Mechanical Engineering, NUST College of E&ME

14. <u>INTERNATIONAL APPOINTMENTS</u>

	Appointment	Details
1.	International Professional Registration Advisor (IPRA), IET, UK (2023-To Date)	Advice and guidance for engineering professionals preparing and applying for registration to the Engineering Council, UK.

15. **CONSULTING SERVICES**

		Consulting Service	Organization
1	١.	Technical Consultant (Joint Appointment for Academia-Industry Collaboration) (2018-To Date)	SRC (Pvt.) Ltd. (Formerly Shafi Reso-Chem), Lahore

16. <u>REVIEW/EDITORIAL RESPONSIBILITIES</u>

	Journal/Conference	
1.	Invited Reviewer (2008) for Mechatronics published by Elsevier/International Federation of Automatic Control (IFAC)	
2.	Invited Reviewer (2008) for Studies in Computational Intelligence published by Springer	
3.	Invited Reviewer (2008) for IEEE Intelligent Systems published by IEEE Computer Society	

4.	Invited Reviewer (2010) for International Journal of Computer Engineering Research published by Academic Journals
5.	Editor (2011-2017) of International Journal of Water Resources and Environmental Engineering published by Academic Journals
6.	Invited Reviewer (2012) for WSEAS Transactions on Systems published by WSEAS
7.	Member of Editorial Board/Appointed Reviewer (2012) of International Journal of Advanced Robotic Systems published by InTech
8.	Invited Reviewer (2015) for Simulation Modeling Practice and Theory published by Elsevier
9.	Invited Reviewer (2015) for WSEAS Transactions on Systems and Control published by WSEAS
10.	Invited Reviewer (2015) for Science, Technology and Development published by Pakistan Council for Science and Technology
11.	Invited Reviewer (2021) for Journal of Engineering and Applied Sciences published by University of Engineering and Technology, Peshawar, Pakistan
12.	Invited Reviewer (2024) for Results in Engineering published by Elsevier
13.	Member of Program Committee of International Conference on Advanced Modeling and Simulation (ICAMS) held on November 28-30, 2011 in Rawalpindi, Pakistan
14.	Invited Reviewer for Twelfth WSEAS International Conference on Robotics, Control and Manufacturing Technology (ROCOM) held on April 18-20, 2012 in Rovaniemi, Finland
15.	Invited Reviewer for Eleventh WSEAS International Conference on Dynamical Systems and Control (CONTROL) held on July 1-3, 2012 in Porto, Portugal
16.	Invited Reviewer for First International Conference on Automatic Control, Soft Computing and Human-Machine Interaction (ASME) held on July 1-3, 2012 in Porto, Portugal
17.	Invited Reviewer for Fifth WSEAS International Conference on Materials Science (MATERIALS) held on September 7-9, 2012 in Malta
18.	Invited Reviewer for Fifth WSEAS International Conference on Manufacturing Engineering, Quality and Production Systems (MEQAPS) held on November 10-12, 2012 in Vienna, Austria
19.	Invited Reviewer for Third International Conference on Mathematical Models for Engineering Science (MMES) held on December 2-4, 2012 in Paris, France
20.	Invited Reviewer for Third European Conference of Mechanical Engineering (ECME) held on December 2-4, 2012 in Paris, France
21.	Invited Reviewer for First WSEAS International Conference on Aeronautical and Mechanical Engineering (AEME) held on May 14-16, 2013 in Vouliagmeni, Athens, Greece

22.	Invited Reviewer for First WSEAS International Conference on Industrial and Manufacturing Technologies (INMAT) held on May 14-16, 2013 in Vouliagmeni, Athens, Greece
23.	Invited Reviewer for First WSEAS International Conference on Mechanical and Robotics Engineering (MREN) held on May 14-16, 2013 in Vouliagmeni, Athens, Greece

17. PROFESSIONAL AFFILIATIONS

	Affiliation/Professional Organization
1.	Professional Engineer (PE), Pakistan Engineering Council
2.	Chartered Engineer (CEng), Engineering Council, UK
3.	Member (Life), Institution of Engineers, Pakistan
4.	Senior Fellow (SFHEA), AdvanceHE (formerly Higher Education Academy), UK
5.	Member (MIET), Institution of Engineering and Technology, UK
6.	Member (Life), Pakistan Vacuum Society
7.	Member, International Association of Engineers
8.	Member (Life), Pakistan Nuclear Society
9.	Member (Life), Pakistan Materials Society

18. RESEARCH SUPERVISION

Undergraduate Level	Postgraduate Level	
Final Year Projects = 32 (As Supervisor/Cosupervisor)	MS Dissertations = 01 (As GEC Member)	

19. <u>UNDER-GRADUATE COURSES TAUGHT</u>

	Course Code/Title/Semester
1.	ME-442 Industrial Management (Fall 2007)
2.	ME-131 Materials Science and Engineering (Spring: 2008-2011; Summer: 2008-2009)
3.	ME-338/ME-216 Mechanics of Materials Laboratory (Spring: 2008, 2011-2013, 2020)

4.	ME-439/ME-410 Dynamics and Controls Laboratory (Fall: 2008, 2011-2012, 2014; Summer 2015)
5.	ME-293/EM-323/ME-102 Thermodynamics (Fall: 2008-2012, 2021; Spring 2010)
6.	ME-141/ME-105 Engineering Practice (Spring: 2009, 2024; Fall 2009)
7.	ME-100 Engineering Mechanics (Spring: 2012-2013, 2015, 2018, 2020-2021; Summer 2023)
8.	ME-481/ME-312/ME-327 Instrumentation and Measurement (Fall: 2012-2017, 2020; Summer: 2014, 2020; Spring 2019)
9.	ME-222 Mechanics and Manufacturing Laboratory-I (Spring 2014)
10.	ME-314/ME-339/ME-301 Control Systems (Spring: 2014-2017, 2025; Fall: 2018-2019, 2023)
11.	ME-323 Manufacturing Processes and Instrumentation Laboratory (Fall: 2017, 2019)
12.	ME-115 Engineering Mechanics Laboratory (Spring 2019; Fall: 2020, 2023)
13.	ME-420 Project Management (Spring: 2024-2025)
14.	ME-332 Heat Transfer and HVAC Laboratory (Spring 2024)
15.	ME-431 IC Engines and Power Plants Laboratory (Spring 2025)
16.	CSL-401 Community Service Learning (Fall: 2013-2016; Spring 2021)

20. RESEARCH/TRAVEL GRANTS

Value of Grant	Conference/Training/Fellowship/Project	Funding Agency
USD 1975 + Air Fare + Visa Fee	Research Paper Presentation in Ninth ACM Genetic and Evolutionary Computation Conference (GECCO), July 7-11, 2007 in London, UK	NUST
USD 825	Registration Fee for Research Paper Presentation in Tenth ACM Genetic and Evolutionary Computation Conference (GECCO), July 12-16, 2008 in Atlanta, USA	NUST
NZD 420	Registration Fee for Research Paper Presentation in Geological Society of New Zealand and New Zealand Geophysical Society Joint Annual Conference (GEOSCIENCES), November 23-27, 2009 in Oamaru, New Zealand	NUST
EUR 75	Registration Fee for Research Paper Presentation in International Symposium on Geology of Natural Systems (GeoIasi), September 1-4, 2010 in Iasi, Romania	NUST

PKR 127,733 (Approx. GBP 922)	of a Meteorite Specimen December 5-16 7011 in		
USD 2000 + Air Fare + Visa Fee	Geoscience Meeting (SGM) November 16-1/		
GBP 2565	Charles Wallace Visiting Fellowship, December 1, 2014-January 9, 2015 in School of Oriental and African Studies, University of London, London, UK	Charles Wallace Pakistan Trust & British Council	
Air Fare + Visa Fee (Approx. AED 2000)	Participation in Annual Meeting of Asian Council of Science Editors, August 13-14, 2015 in Dubai, UAE	Asian Council of Science Editors	
Air Fare + Local Accommodation (Approx. CNY 14000)	Participation in Foundation Ceremony of Western China Overseas Postdoc Innovation Demonstration Center, Signing Ceremony of Strategic Cooperation, and Silk Road Postdoctoral Symposium, April 1-3, 2019 in Xian, China	University Alliance of the Silk Road & Xian Jiaotong University	

21. HONORS/AWARDS

1.	Winner of Technical Paper Competition in All Pakistan Engineering Conference (APEC) organized by IEE and Ghulam Ishaq Khan Institute of Engineering Sciences and Technology in 2005.
2.	Finalist in Fifth Annual HUMIES Awards for Human Competitive Results produced by Genetic and Evolutionary Computation at Tenth ACM Genetic and Evolutionary Computation Conference (GECCO) in 2008.
3.	Selected for Special American Business Internship Training Program (SABIT) of US Department of Commerce (on surgical instruments) by NUST in 2010.
4.	Name included in the directory of Productive Scientists of Pakistan (2013) published by Pakistan Council for Science and Technology in 2014. (Ranked 13 th most productive scientist in the discipline of engineering sciences.)
5.	Awarded the prestigious Charles Wallace Visiting Fellowship (2014/15) by the Charles Wallace Pakistan Trust, UK in collaboration with British Council, Pakistan in 2014.
6.	Received SATHA Innovation Award from South Asia Triple Helix Association in Second Invention to Innovation Summit organized by Office of Research, Innovation, and Commercialization of University of Engineering and Technology, Peshawar in 2016.
7.	Received Research Productivity Award (2016) from Pakistan Council for Science and Technology in 2017. (Ranked as category A scientist and 24 th most productive scientist in Pakistan in 2016.)

8.	Letter of Appreciation from Dean NUST College of E&ME for achieving high student feedback index during Fall-2016 academic semester in 2017.
9.	Name included in the directory of Productive Scientists of Pakistan (2016) published by Pakistan Council for Science and Technology in 2017. (Ranked 26 th most productive scientist in the discipline of engineering sciences and 14 th most productive scientist in the same discipline under the age of 40 years.)
10.	Received Technology Award in Third Invention to Innovation Summit organized by Office of Research, Innovation, and Commercialization of University of Engineering and Technology, Peshawar in 2017.
11.	Received SRC Chemistry Technology Award (sponsored by SRC (Pvt.) Ltd., Lahore) in Third Invention to Innovation Summit organized by Office of Research, Innovation, and Commercialization of University of Engineering and Technology, Peshawar in 2017.
12.	Letter of Appreciation from Dean NUST College of E&ME for achieving high student feedback index during Fall-2017 academic semester in 2018.
13.	Received Commandant Medal of Excellence and Merit Certificate from Commandant NUST College of E&ME for commercialization of industrial designs and signing of Pakistan's first-ever national academia-industry IP licensing agreement in 2018.
14.	Name included in the directory of Productive Scientists of Pakistan (2017) published by Pakistan Council for Science and Technology in 2018. (Ranked 64 th most productive scientist in the discipline of engineering sciences and 36 th most productive scientist in the same discipline under the age of 40 years.)
15.	Received Special Award for Technology Licensing from National University of Sciences and Technology for IPR licensing to national industry in 2019.
16.	Received 7 th FPCCI Achievement Award from Federation of Pakistan Chambers of Commerce and Industry in 2019. (Award presented by the President of Pakistan in a ceremony held in the President House, Islamabad.)
17.	Commendation Letter from Rector NUST on receiving 7 th FPCCI Achievement Award in 2019.
18.	Received NUST College of E&ME Best Innovator Award (2019) from National University of Sciences and Technology in 2020.

22. <u>VOLUNTEER SERVICES</u>

	Role	Details		
1.	IP Consultant (2015-To Date)	Pro bono techno-legal advice and guidance for professionals developing and filing IP applications to the patent office, IPO, Pakistan.		

23. COMPUTER/SOFTWARE SKILLS

1.	Matlab	9.	Rigel Reads51	17.	Primavera	
2.	PSPICE	10.	Working Model	18.	C/C++ Programming Language	
3.	AutoCAD	11.	Ansys	19.	FICO Xpress	
4.	ProE	12.	Visual Basic	20.	Python Programming Language	
5.	WorkSpace	13.	20-Sim	21.	Serial & Parallel Port Interfacing	
6.	Nastran	14.	Genetic Programming Studio	22.	LATEX	
7.	Mill Master Pro	15.	Fortran	23.	MS Office	
8.	ORCAD	16.	Mathematica			

24. REFERENCES

	Name	Designation/Contact Details			
a.	Prof. Dr. Nassar Ikram	Vice Chancellor, Iqra University, Main Campus, Shaheed-e-Millat Road, Phase 2, Defence View Housing Society, Karachi-74000, Pakistan Phone No. (Office): +92-21-111264264			
b.	Prof. Dr. Abdul Ghafoor	Pro Rector/Director, Foundation University (Rawalpindi Campus), New Lalazar, Rawalpindi-46000, Pakistan Phone No. (Office): +92-51-5151431			
c.	Mr. Abrar Ahmed	CEO, SRC (Pvt.) Ltd. (Formerly Shafi Reso-Chem), 3-km Bulhar Road, Off 22-km Ferozepur Road, Lahore-54000, Pakistan Phone No. (Office): +92-42-35260401			

25. LANGUAGE PROFICIENCY

Language	English	Urdu/Hindi	Punjabi	Farsi	Arabic
Proficiency Level	Fluent	Fluent	Native	Basic	Basic