

## Engr. AASAR AHMAD

PE (MECH/19007, [www.pec.org.pk](http://www.pec.org.pk))

E-Mail: [aasarahmad@gmail.com](mailto:aasarahmad@gmail.com)

Mobile # +92-345-5692790



### CAREER OBJECTIVE

To utilize my professional skills optimally for the betterment of society.

### AREA(S) OF INTEREST

Operation Research, Just in Time Manufacturing, Modeling and Simulation of Manufacturing Systems, Mechanical Machinery Design, Thermal & Renewable Power Systems, Renewable Energy Consultancy, Energy Audit, Control Engineering & Automation, Integer Programing, Training, Teaching & Research.

### QUALIFICATION

- ✓ **PhD** (MECHANICAL/Manufacturing Engineering) (In progress)  
University of Engineering and Technology Peshawar (3.89 CGPA)

**Major Courses:** Manufacturing Planning and Control, Application of Expert System tools in Manufacturing, Performance Analysis of Manufacturing System Using Simulation Techniques (Arena, SIMIO), Supply Chain Management in Manufacturing, Production Planning & Scheduling, Probability and Mathematical Statistics.

- ✓ **MASTER OF SCIENCE (MECHANICAL/DYNAMICS AND CONTROL)**  
University of Engineering and Technology Peshawar (3.5 CGPA)      **2008**

**Major Courses:** Advance automatic control, Advance Mechanical Vibration, MATLAB, Finite Element Analysis, Total Quality Management, Design of Mechanisms, Dynamics, Synthesis of Mechanism, Modeling of Dynamic System, and Renewable Energy Hybrid System.

**MSC research Project:** Optimization of hybrid renewable energy system to meet the power demand of a telecom site.

- ✓ **BACHELOR OF SCIENCE (MECHANICAL Engineering)**  
University of Engineering and Technology Peshawar (First Grade)      **2004**

**Major Courses:** Mechanics of Machines, Mechanics of Materials, Mechanics of Solids, Mechatronics, Thermodynamics, Power plant Engineering, Automatic Control and Instrumentation, Production Automation, Fluid Mechanics, Operation Management, Manufacturing Engineering, Refrigeration and air conditioning , Heat and mass transfer, Machine Design, Engineering Drawing and Graphics, Engineering Economics , Project Management and Energy Engineering.

BSC Final Year Project: Using Knowledge based Expert System for machine selection in a manufacturing system (One of the selection parameter was Tolerance).

**Mini Projects:** Thermal Load Calculation for university building, Stress analysis of engine cylinder block, Design of control system for controlling different equipment using micro controller.

✓ **BACHELOR OF SCIENCE (Physical Science)**

University of Peshawar (First Grade)

**2000**

**Major Courses:** Calculus and Differential equation, Math A and Math B, Modern Physics, Electricity and Magnetism etc.

✓ **HIGHER SECONDARY SCHOOL CERTIFICATE (Pre-Engineering)**

Peshawar Board School (First Grade)

**1998**

**Major Courses:** Math, Physics, Chemistry

## EXPERIENCE

❖ **International Islamic University, Islamabad ([www.iiu.edu.pk](http://www.iiu.edu.pk)),  
16th September 2013 – TO Date**

**Designation:** Assistant Professor /Lab Manager/

*Incharge Under Graduate Program (BS Mechanical Engineering), Board Of Studies Member*

**Experience Area:** Teaching, Research, Engineering Labs Development

**Job Description:** Teaching of undergraduate level courses, Mechanical Engineering labs supervision (managing the technical and financial matters of lab equipment & human resource), Lab equipment prices assessment, comparative statement preparation, Tendering the lab equipment, Course files maintenance, Conducting exam, Result preparation, Student Projects supervision, Overall supervision of under graduate program, Mechanical Engineering Curriculum revision(UG), Thesis evaluation and PEC accreditation process supervision.

❖ **Heavy Industries Taxila Education City University, Taxila Cantt  
Pakistan ([www.hitecuni.edu.pk](http://www.hitecuni.edu.pk)), 17th September 2012 – TO 15th Sep 2013**

**Designation:** Assistant Professor

**Experience Area:** Teaching, Research, Engineering Labs Development and Examination controlling.

**Job Description:** Teaching of undergraduate level course, Supervision of Invigilation Staff, Students. Course files maintenance, Conducting exam, Assignments, Result preparation, Student Projects supervision, Engineering Labs supervision, Thesis evaluation.

❖ **SARHAD UNIVERSITY OF SCIENCE AND INFORMATION TECHNOLOGY, Peshawar, PAKISTAN 10th Oct - To 28th Nov 2011**

Designation: **HOD Mechanical Engineering Department**

Experience Area: Teaching, Research and Engineering Labs Development.

Job Description: Supervision of Faculty Members, Laboratories, Students, Meetings with Dean, Vice chancellor, Registrar, Exam controller, etc.

❖ **Turno Tech Solution Services. PWC consulting 25th JUN - To 5<sup>th</sup> Sep 2012**

Designation: **Principal Consultant Power**

Experience Area: Auditing the physical installation, checking the electrical load vs. cables size, Diesel Generator condition, all of the equipment (ODU fans, Indoor Unit fans, filters, Temperature and humidity control, pipes and ducts layout) related to HVAC, Checking the fire extinguishers status, checking the Cooling and Lubrication systems of D/G Genset etc.

Job Description: Worked as an external auditor of all Machines including HVAC, Diesel Generators, Power equipment, ATS Panel, Grounding/Earthing and Fire Fighting equipment in telecom industry.

❖ **SARHAD UNIVERSITY OF SCIENCE AND INFORMATION TECHNOLOGY, Peshawar, PAKISTAN Dec 2009 to Sept 2012**

Designation: **Assistant Professor/Vice HOD**

Board Of Studies Member (Board of Studies is the highest academic forum of the university with powers to lay down proper standards of instructions, research, publication, examinations, and to regulate and promote the academic life at the university)

Experience Area: Teaching, Research and Engineering Labs Development.

Job Description: Helping HOD in administrative tasks, Research Activities, Teaching undergraduate Engineering students.(courses taught: Engineering Drawing and Design, Applied Thermodynamics, Mechanics of Machine, Refrigeration and Air-conditioning, Engineering Mechanics, Industrial Engineering, Strength of Material, Fluid Mechanics, TQM etc.) Course files maintenance, Conducting exam, Assignments, Result preparation, Student Projects supervision, Engineering Labs supervision, Thesis evaluation, Quality Assurance of Engineering field, monthly meeting with Dean Faculty of Engineering and Vice Chancellor.

❖ **ZULARISTAN PVT LTD. Kabul, AGHANISTAN (USAID Project PK103) April-2008 - To 31st December 2010.**

Designation: **Chief Consultant Engineer**

Experience Area: Renewable Energy Hybrid Power System Designing, Electrification of Remote Areas and Training.

Job Description: Energy Survey Data analysis, Electrical Load calculation, Techno economic analysis in advance HOMER software, Renewable Energy Equipment Selection, Technical feasibility Report Writing, Cost estimation, Presentation of Reports, Training, Implementation, Convincing Donor Agency for Grants and Bidding.

❖ **Mobiserve Pakistan Pvt Ltd. PAKISTAN** *Sep-2006 - Dec-2009*

Designation: **Power Engineer/Senior Mechanical Engineer**

**Experience Area:** Operation and Maintenance of Power Equipment in Telecom Sites, Installation and Commissioning of Power and HVAC equipment.

**Job Description:** Team leader/Technical support of North Region MSCs, Facilitating the engineers and technicians. Checking and auditing of Sub- contractors, vendors; Responsible for regular operations and maintenance of Mobilink Power infrastructure network, coordinating with vendors for fault identification and rectification. Fuel management; lube oil sampling, implementation of Total Preventive Maintenance, Preparing BOM reports. Checking and rectification, installation and overhauling of D/Generators, ATS (Automatic Transfer Switching) Panel, DB( Distribution Board), Fire System (Safety), Precision Air conditioning (Stulz AC) alarms, Cabling and Earthing. Power issues handling of 800 BTS and BSC Telecom Sites, Technical Report Writing, weekly/monthly progress report presentation.

❖ **Omer Glass Industries Ltd. Peshawar, PAKISTAN** *Jan-2005 - Sep-2006*

Designation: **Assistant Manager Technical**

**Experience Area:** Manufacturing, Operation and Maintenance, Energy Conservation, Plumbing, HVAC

**Job Description:** Design and Fabrication of Recuperater (recycling the flue gases) and annealing Lehr, Production Planning and quality controlling execution of production lines and furnaces. Maintenance and operation in-charge of all equipment (Compressors, Diesel Generators, Motors, Pumps, Annealing Lehr, Blowers, Press Machines, Plumbing works, Welding works, Central Air conditioning plant), Preparing BOM and estimation reports. Co-in charge of all workshops including i.e.

- a. Mold Making workshop (Machining work shop)
- b. Mold Repairing work shop
- c. Foundry workshop
- d. Welding and metal sheet workshop i.e. Electric appliances repairing work
- e. In charge of Production Line
- f. Operation and Maintenance and Quality Controlling Department
- g. Manufacturing planning and control activities

❖ **Khyber Teaching Hospital Peshawar, PAKISTAN**  
*January-2004 – Dec-2004*

Designation: **Trainee Engineer**

**Experience Area:** HVAC, Building Services

**Job Description:** Operation and maintenance of Central Air conditioning Plant (1300 Ton of Refrigeration). Trouble shooting of pumps, condensers, boilers, Chillers and cooling Towers, Fire Fighting Systems, Hot and Cold water Supply etc.

## ❖ TRAINING, CERTIFICATION & Computer LITERACY

- Master Trainer of workshop on TOLERANCE ANALYSIS AND ITS APPLICATION IN ENGINEERING DESIGN POFIT Pakistan.
- Two Days Workshop on Outcome Based Education System by PEC.
- Five days Continuing Professional Development CPD workshop on Faculty Skills Development by HEC Pakistan.
- Decision –making & Problem Solving (HITEC University)
- Inter-Personal Relations (HITEC University)
- Principles of Teaching & Learning (HITEC University)
- International Symposium on Renewable Energy, paper Presentation, Guest Speaker certificate (HITEC University, REAP )
- SIMIO / ARENA manufacturing simulation software
- HOMER, Renewable energy system Design software by NREL USA
- HYBRID 2 Renewable Energy Software by NREL USA
- WASP (renewable energy software) from UNDP Pakistan
- Preventive and corrective maintenance of D/Generator from Mobiserve Pakistan Pvt Ltd.
- Auto CAD, Pro Engineer, MATLAB, Visual Basic, C++, GW Basic, MS Office, Visio
- Linear Programing Software TORA, AMPL, Cplex
- GRE Graduate Record Examination, IELTS, TOEFL Certificates.

## PUBLICATIONS

1. Co-Generation of Power through Waste Heat Recovery, 2012 International Conference on Future Electrical Power and Energy Systems, Lecture Notes in Information Technology, Vol.9
2. Optimized Renewable Hybrid Power System to meet the Load of Telecom Site in Remote Areas in Pakistan.
3. Framework design of Push Pull Manufacturing control system.

## Reviewer of Research Publications

Technical reviewer of ICMSEM2011 (2011 International Conference on Mechanics, Solid State and Engineering Materials) China.

Peer reviewer of Horizon Research Publishing, USA <http://www.hrpub.org> .

## ADDITIONAL INFORMATION

### ➤ **Honors & Awards**

- Best Project Award,
- Best Report Writing Award
- Higher Education Commission Pakistan PhD scholarship Award
- Common wealth split PhD Award
- Hakim Saeed Award (Best Student of the Year)

### ➤ **Skills & Abilities**

- Strong negotiable and analytical skills
- Interpersonal and Presentation skills
- Coaching skills, Innovative Skills and Teaching skills

### ➤ **Interests & Hobbies**

- Books Reading
- Calligraphy

### ➤ **Languages**

- ENGLISH (Communication skills both verbal and written)
- URDU (Communication skills both verbal and written)
- ARABIC (Communication skills low in written & verbal)
- PASHTO (Communication skills both verbal and written)

## Conferences and Seminar Participation

- International Conference on Power Generation Systems and Renewable Energy Technologies (IIUI)
- International Symposium on Renewable Energy, NWFP University of Engineering Technology, Directorate of Science and Technology
- Supply Chain management in process (paper Industry), CECOSE University
- Human interaction in practical life, NWFP UET, Fort Ceramics Industry

## REFEREES

Academic Job Referees		
Title and name	Position held	Official email address
Prof. Dr. Mohammad Amir	Dean Faculty of Engineering and Technology, International Islamic University Islamabad	<a href="mailto:m.amir@iiu.edu.pk">m.amir@iiu.edu.pk</a> , <a href="mailto:dean.fet@iiu.edu.pk">dean.fet@iiu.edu.pk</a>
Dr. Syed Athar Masood	Associate Professor/ Chainman DME, FET, International Islamic University Islamabad	<a href="mailto:Chairman.dme@iiu.edu.pk">Chairman.dme@iiu.edu.pk</a> , <a href="mailto:athar.masood@iiu.edu.pk">athar.masood@iiu.edu.pk</a>
Dr. Saeed Badshah	Associate Professor in DME, FET, International Islamic University Islamabad	<a href="mailto:saeed.badshah@iiu.edu.pk">saeed.badshah@iiu.edu.pk</a>

## PERSONAL INFORMATION

Nationality	PAKISTANI
Religion	Islam
D.O.B	17 <sup>th</sup> March 1981
Marital Status	Married
Dependent	07
Place of Birth	Peshawar, PAKISTAN
Gender	Male
Mobile Number	+92-345-5692790
Email Address	<a href="mailto:aasarahmad@gmail.com">aasarahmad@gmail.com</a> <a href="mailto:aasar.ahmad@iiu.edu.pk">aasar.ahmad@iiu.edu.pk</a>
Skype Name:	aasar.ahmad