

ADNAN ASLAM NOON



PRESENT ADDRESS

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PERMANENT ADDRESS

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OBJECTIVE

To continue the academic career in a university having congenial environment for teaching and research where I can practically apply and improve upon the skills acquired from my previous education.

EDUCATION

- Sep 2008 – Jun 2010 **M.S. in Mechanical Engineering**
G.I.K. Institute of Engineering Sciences & Technology, Topi, Pakistan
CGPA: 3.00/4.00
- Aug 2000 – May 2004 **B.S. in Mechanical Engineering**
G.I.K. Institute of Engineering Sciences & Technology, Topi, Pakistan
CGPA: 2.72/4.00 **Rank: 06/35**
- Sep 1997 - Nov 1999 **A-Levels**
Sadiq Public School, Bahawalpur, Pakistan.
Result: 66.3%
- Sep 1995 - Jun 1997 **O-Levels**
Sadiq Public School, Bahawalpur, Pakistan.
Result: 76.6%

WORK EXPERIENCE

- Jan 2013 - **Assistant Professor at Islamic International University (IIU), Islamabad**
 - Teaching Thermodynamics-I and Heat Transfer courses
 - Incharge Undergraduate Programme, Department of Mechanical Engineering, FET
- Oct 2011 – Jan 2013 **Lecturer at COMSATS Institute of Information Technology (CIIT), Sahiwal**
 - Taught Thermodynamics-I and Engineering Materials courses
 - Part of a team for the Establishment of labs. at the department
- Aug 2010 - Sep 2011 **Lecturer at HITEC University, Taxila**
 - Taught Fluid Mechanics-II and Thermodynamics-I courses
 - Supervised the two final year projects for undergraduate students
- Aug 2008 - Jun 2010 **Graduate Assistant at GIK Institute, Topi**
Worked on a Pak-US project titled "Computational Mechanics"
- Jan 2008 - Aug 2008 **Assistant Manager in Air Weapons Complex (AWC)**
Worked on projects related to Cryogenics and Vacuum Systems Design in IISS Department
- Oct 2004 - Jan 2008 **Lab Engineer/Teaching Assistant at GIK Institute**
Extended the work on final year project and remained instructor in labs
- Aug 2003 - Sep 2003 **Pak-Arab Refinery Complex (PARCO)**

Done a project on automation of leak detection systems in oil/gas pipeline

July 2003 - Aug 2003

Atlas Honda Limited, Sheikhpura

Successfully completed a design project (in paint shop) during internship

INTERESTS

Thermo-Fluid Sciences and Transient Heat Transfer

SKILLS

Microsoft Office, Matlab, Pro-Engineer, ANSYS CFX, CNC Coding

UNDERGRADUATE LEVEL COURSE PROJECTS

- **IC Engines** Analyzing the ignition, lubrication and starting system of the engine.
- **Heat Transfer** Design and fabrication of solar water heater.
- **Manufacturing Technology** Analysis of biocompatible heart valves.
- **Theory of Machines** Design and fabrication of Geneva indexing mechanism.
- **CFD and FEM** Flow and structural analysis of solid and fluid flow and heat transfer problems.

FINAL YEAR PROJECT

Design, Fabrication and Installation of Micro Hydel Power Plant

Project is in operation at the site near Mardan city. It has been installed on a small size canal, as Pakistan has many of them, with small head and large flow rate. It is generating around 50 KW of power.

GRADUATE LEVEL COURSE PROJECTS

Leak Rate Measurement and Analysis through different profiles

The uniform cross-section channels are analyzed for different shapes i.e. square, rectangular, triangular, circular and elliptic for two different fluid flows i.e. air and water.

Heat Conduction analysis in a Composite Cylinder

The numerical results of the conduction heat transfer problem are analyzed in a composite cylinder using finite difference and finite element methods.

MASTERS THESIS PROJECT

Study of the effect of sediment flows in Tarbela Dam Tunnels

Tarbela dam is one of the largest earth filled dam in the world and it is the backbone for water storage and electric power generation in Pakistan. The sediments inflows in the Tarbela reservoir has resulted in reduction in water storage capacity and are damaging the tunnels carrying water to the power generating units and is a severe threat to the plant equipment. To the authors knowledge, to-date no comprehensive simulation studies are performed for this dam reservoir and tunnels, especially at present when sediment delta and presence of sediment particles in the tunnels is observed to a reasonable extent. In Tunnels 1, 2 and 3 studies are performed for one-way and two-way coupling phenomena, considering summer, winter and average seasons. Results obtained highlighted the critical areas for damage and ultimately the life prediction of the tunnels. The high head period i.e; July, August and September is found to be most critical for damage. Damage to the tunnels due to erosion is investigated and results are compared with the experimental erosion results carried out for such geometries and are observed in good agreement.

RESEARCH PAPERS (Journal)

- Muhammad Abid, **Adnan Aslam Noon** (2010), "Turbulent flow simulations through Tarbela Dam Tunnel 2", Journal of Engineering (JE) by Scientific Research. Vol. 2, pp 507-515.
- Muhammad Abid, **Adnan Aslam Noon** (2010), " Simulation of Turbulent flow through Tarbela Dam Tunnel 3", IIUM Engineering Journal, Vol. 11, No. 2, pp- 201-224.

RESEARCH PAPERS (Conference)

- Muhammad Abid, **Adnan Aslam Noon**, "Study of the effect of Sediment flows through Tarbela Dam Tunnels", Proceedings of the 1st Annual International Symposium on Frontiers of Computational Sciences (ISFCS), (2010), Islamabad.
- Muhammad Abid, **Adnan Aslam Noon**, "Turbulent flow simulations through Tarbela Dam Tunnels considering the effect of sediment particles", Proceedings of the 10th Biennial ASME Conference on Engineering Systems Design and Analysis ESDA, (2010), Yeditepe University, Istanbul.
- **Adnan Aslam Noon**, Shoaib, Waqas, "Sediment erosion in Francis Turbine at Tarbela Dam Hydel Project", Proceedings of the 1st National Conference on Advancements in Science and Technology (ASTech) February, 2012 held at COMSATS-Vehari, Pakistan.

- **Adnan Aslam Noon**, Hammad ul Hassan, Faraz Aziz, " Turbine selection for a particular site for the installation of a Micro Hydel Power Plant" Proceedings of the Power Engineering and Automation Conference (PEAM 2012) to be held in Wuhan. China.

BOOKS

Muhammad Abid, **Adnan Aslam Noon**, Maftooh u Rehman Siddique, "Water and Sediment Flow Simulations for Tarbela Reservoir and Tunnels (A preliminary study).", published by Verlag Dr. Muller (VDM), 2010. ISBN # 978-3-639-34183-6.

SHORT COURSES

Attended and completed the advanced short courses titled:

Advanced Heat Transfer and Computational Fluid Dynamics

Analytical and Numerical methods for Conduction and Convection problems

Design Optimization and Analysis Techniques

Complete process optimization by using the computational tools

Under the Asia-Link FASTAHEAD Project held in GIKI in November, 2008

EXTRA CURRICULAR ACTIVITIES

- Member Pakistan Engineering Council (**PEC**)
- Member of American Society for Mechanical Engineering (**ASME**)

AWARDS AND ACHIEVEMENTS

- Awarded session best paper in Engineering System Design and Analysis (ESDA) conference organized by ASME in Istanbul, Turkey held on 12-14 July, 2010.
- Presented a research paper titled "Study of the effect of sediment flows through Tarbela Dam Tunnels" in first International Symposium on Frontiers of Computational Sciences (ISFCS) 2010 held at Islamabad.
- Awarded participation certificate in all Pakistan Digital Innovation Competition and Exhibition (DICE) held at CIIT Lahore in December, 2009.
- Awarded certificate in the workshop on MATLAB and Simulink (A tool for engineering applications) held in GIKI in October, 2008.
- Awarded certificate of participation in the 5 days Vacuum Technology workshop organized by Pakistan Vacuum society (PVS) in April, 2008.
- Awarded appreciation certificate in all Pakistan technical papers presentation by IEE.
- Winner of the PTC (Pakistan Tobacco Company) final year project competition 2004.
- Launched the flood light cricket tournament first time in the home town.

REFERENCES

- **Prof. Dr. Javed Ahmad Chattha** Faculty of Mechanical Engineering, GIK Institute. Topi. E-mail: chattha@giki.edu.pk
- **Prof. Dr. Muhammad Abid** Dean and Professor Faculty of Mechanical Engineering, GIK Institute. Topi. E-mail: abid@giki.edu.pk
- **Prof. Dr. Muhammad Pervaiz Mughal** Professor Department of Mechatronics Engineering, University of Engineering and Technology (UET), Lahore. E-mail: mp_mughal@hotmail.com