

Dr. JAVED HANEEF

Chairman, Department of Petroleum Engineering, Associate Professor/Researcher Ph.D. Petroleum Engineering, University of Leeds, UK MEngg. Petroleum Engineering, University of Alberta, Canada MCS, University of Karachi, Karachi MSc Petroleum Technology, Karachi BE (Mechanical), NED UET, Karachi

Personal Details:	Objective: An associate professor and
Work Address:	researcher in the area of Petroleum
Department of Petroleum Engineering,	Engineering with 20+ years of experience at
NED University of Engineering &	prestigious research institutions as well from
Technology, Karachi – Pakistan	the industry, who is eager to provide cutting-
Tel: +92 300 2200 298	edge research and quality teaching to
Email: javedh@neduet.edu.pk	academia and research institutions ensuring
javedhaneef@yahoo.com	high ethical standards and commitment.

Professional Interest:

My multidisciplinary academic background (i.e. Ph.D. in Petroleum Engineering, Masters in Computer Science, Masters in Petroleum Technology, Masters in Petroleum Engineering, and BE Mechanical Engineering) provided me with the necessary background, skills, and opportunities to work in different Petroleum and Mechanical Engineering related areas. I am very enthusiastic about working in a multidisciplinary organization where I can apply my skills and can use my qualifications and expertise in both research and teaching.

Education:

Sep 2011 – June 2016 Ph.D. in Petroleum Engineering University of Leeds, United Kingdom
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My Ph.D. research project was mainly based on experiments to generate high-quality data of special core analysis, which includes porosity, gas and brine permeability, relative permeability, SEM, QXRD and CT scanning of reservoir rock samples from the North Sea and outcrop samples from France and UK under the supervision of Professor Dr. Quentin Fisher and Dr. Carlos Grattoni. The main aim of the research work was to evaluate the multiphase fluid flow properties of fault rocks.

Sep 2007 – Nov 2009	
Masters in Petroleum Engineering,	University of Alberta, Edmonton – Canada
MEng, CGPA 3.2	

MEng in Petroleum Engineering with core courses: Advanced Reservoir Engineering, Flow Assurance (Especially dealing with hydrates), Multiphase Flow, Advanced Drilling Engineering etc.

My MEng Project was software designing and development with the title "**Transient Analysis of Water Injection Wells and its Application in Identification of Wellbore Phenomena**". The software also has the capability to analyze Production Data. I designed and developed software in Microsoft C # (C Sharp).

Feb 2002 – July 1999	
Master in Computer Sciences (MCS),	University of Karachi, Karachi - Pakistan
First Division	

My Masters in computer science (MCS) was a full-time two years program (20 courses) in which my majors were Data communication & Networking, Software Engineering, Programming, System

Analysis & Designing, Report writing & documentation of software, Database Designing & management.

July 1997 – June 1999Masters in Petroleum Technology, MSc,First Division

My Masters in Petroleum was full-time two years programme with 20 professional courses. The major courses were Reservoir Engineering, Gas Engineering, Production Engineering, Geology, Petrochemicals, Heat Transfer, Risk Management, Computer Applications, etc.

July 1991 – Aug 1996	
Bachelor in Mechanical Engineering (BEng	NED University of Engineering & technology
Mechanical Engineering), First Division	

The majors of this program are Solid Mechanics, Fluid Mechanics, Heat Transfer, Refrigeration & Air Conditioning, Production Engineering, Electrical Technology, Nuclear Power, Industrial Engineering, Machine Designing, Engineering Drawing, CAD / CAM (Total 40 courses).

Professional Experience:

Date:	Jan 19, 2006 – to date
Organization:	NED University of Engineering & Technology
Titlo	Department In-Charge/Associate Professor, Department of
The.	Petroleum Engineering
Location:	Karachi – Pakistan

Key Competencies

- ✓ Expert in designing and executing laboratory experiments for evaluation of Petrophysical properties of reservoir rocks.
- ✓ Expert in the development and operation of laboratory equipment related to Petroleum Engineering (Petrophysics, Drilling and PVT).
- ✓ Member of Advisory Board at Department of Petroleum Engineering, NED University.
- ✓ Member of Board of Studies of NED University, University of Karachi and IoBM (CBM).
- Member of National Curriculum Revision Committee (NCRC) of Higher Education Commission (HEC), Pakistan
- ✓ In-depth knowledge of software development
- ✓ Visiting lecturer in different universities.
- ✓ Expert in project planning and management.
- ✓ Technical paper reviewer.
- ✓ 20+ years of experience of teaching for engineering (petroleum engineering and management) courses.
- ✓ Conducted different technical workshops.
- ✓ Delivered lectures/talks in Pakistan and UK
- ✓ Supervising 02 Ph.D. students

Job Description:

- ✓ Teaching different undergraduate and graduate courses (e.g. Reservoir Engineering, Computer programming and Applications, Enhanced Oil Recovery, Petrophysics, Project Planning and Management, Advanced Drilling Engineering, etc.)
- ✓ Supervised more than 20 MEngg Thesis/Projects on different topics of Petroleum Engineering.
- ✓ Developed Society of Petroleum Engineers Chapter at Department of Petroleum in 2007 and till date facilitating as Faculty Sponsor to provide a robust platform for the students' professional development and career growth.
- Managing department of Petroleum Engineering as In-Charge of department with following duties:

- Development and implementation of OBE teaching system in the department and manage all related activities.
- To organize teaching and research in the Department and to ensure that the syllabi are completed in time and research is carried out in accordance with the policies laid down from time to time by the authorities.
- To prepare and formulate schemes of study relating to petroleum department and forward the same to the Dean of the Faculty after getting approval from the Board of Studies.
- To frame time-table for teaching and practical's for approval of the Dean of the Faculty.
- To submit Annual Programme and Report about teaching, research, development academic programmes planned and executed by the department to the Dean of Faculty concerned before and after each academic session.
- To ensure the proper conduct of departmental tests and examinations in Petroleum department under intimation to Dean and Controller of Examinations.
- To ensure that all teachers in the department maintain a record of attendance of all students of the various classes.
- To act as Head Invigilator for all University examinations of Petroleum department conducted by the Examinations Department and to perform all such duties and exercise all such powers as are prescribed for a Head Invigilator.
- To manage the meeting for the Board of Studies (BoS).
- To ensure that all teaching and non-teaching staff in the Department attend to their duties properly and are regular in attendance.
- To prepare budget proposals and forward the same to the Dean of the Faculty.
- To sanction expenditure on account of purchase of material etc., for the laboratories.
- To write Annual Confidential Reports of the employees below Grade 20 and forward the same to the appropriate authorities.
- To manage the Departmental Board of Review (BOR) meetings.
- To follow up the decisions taken in the review meeting and to ensure their completion in the specified time frame.
- To identify training needs of employees of his department.
- To handle customer complaints including both internal and external customers.
- To take corrective actions on non-conformities identified in audit.
- To implement the corrective and preventive action related to his department within the specified timeframe.

Ph.D. and MEngg Students Supervision and Teaching

- ✓ Teaching Ph.D. and MEngg courses.
- ✓ Currently supervising 02 Ph.D. and 04 M.Engg theses.

Research Project Lead

- Developed Pulse Decay Equipment for the research project "Gas Adsorption Analysis of Nari Shale and Gawadar formations of Pakistan using BET Isotherm Equation".
- Managed research project from Jan 2018 to July 2019 with the industrial collaboration of Pakistan Petroleum Limited (PPL) for the Asphaltene detection and Mitigation for the ADHI Gas condensate field. The title of the project was "A detailed study of Asphaltene problem at Adhi field of Pakistan Petroleum Limited (PPL)". The total funding was PKR 1.12 Million.
- Research and development of Pakistan Energy outlook (PEO) 2019 with the collaboration of Pakistan Petroleum Institute (PIP) and the ministry of Petroleum Pakistan. The total funding was PKR 0.5 Million.
- Research and development of Pakistan Energy outlook (PEO) 2017 with the collaboration of Pakistan Petroleum Institute (PIP), presented at Oil and Gas Conference at Islamabad.

Seminar/Lecture/Training Delivered

- Delivered one-week training to Pakistan Army (Inspectorate of Army Stores & Clothing (IAS&C) Army Quality Control Laboratories, COD Estate Karachi. This training is for the personnel of PAK ARMY for Fuel & Lubricant Testing.
- Delivered lecture on the topic of "Petrophysical properties of Fault Rocks: An Implication" at London Petrophysical Society (LPS), London UK in June 2013.
- Delivered seminar lecture on the topic of "Hydrocarbon Phase Behaviour and PVT Analysis" The Geological Society, with collaboration of London Petrophysical Society (LPS), London UK in December 2014.

Date:	Feb 04 2002 to Jan 15, 2006
Organization:	Future Physical & Mechanical Testings
Title:	Operation Manager & Sr. QA Engineer
Location:	Dubai, United Arab Emirates, U.A.E

Job Description:

Future Physical and Mechanical Testing, is a third party inspection company, which gives the inspection and certification services for all types of Lifting equipments and pressure vessels, especially in Oil & gas Sector, on the behalf of Dubai Municipality. FPMT is ISO/IEC 17020 Accredited with Dubai Municipality.

Main job duties:

- > Manage and plan all inspection and certification activities.
- > Prepare and implement procedures for ISO/IEC 17020 Quality System.
- > Manage Internal Audits and their follow-ups.
- > Manage Accreditation ISO audits with Dubai Municipality
- > Manage Calibrations of testing equipments
- Collaboration with external firms
- > Continuously up gradation and implementation of Quality Policy and Objectives.
- > Manage records and their statistics.

Date:	Jan 01, 2001 –Jan 15, 2002
Organization:	TROJAN Engineering & Management Services (TEAMS)
Title:	Manager Planning & Development (Mechanical)
Location:	Karachi – Pakistan

Job Description:

TEAMS is primarily dedicated toward providing complete project management services for all types of projects those related to Construction, Manufacturing, HVAC, Textiles, Automotive, and oil and gas industries.

TEAMS specialize in providing consultancy and training on computer aided project planning and scheduling with Primavera Project Planner version 3.0 and MS Project. TEAMS also provide design and drafting services for civil and mechanical engineering projects. My job responsibilities were

- Planning of projects by using Primavera P3 Planner. Supervise Installation and Erection activities of HVAC and construction projects at sites.
- > Update the activities for further review.
- Submission of reports to Director / Managing Partner by monthly/ weekly.
- > Inspection of sites and collection of data for the updating of projects
- Costing of the Projects by Using P3.
- > Review of projects to minimize the working cost.

In this firm I have worked on the following projects

- > Project of Pakistan International Container Terminal at Berth 6-9, East West Wharf, Karachi
- > Port Project Planning of Sawan Gas Field.

- Project of Japanese Consulate extension work.
- > Project Planning of Extension of RBOD Project.
- > Project Planning of Resource Optimization for Dollar Industry

Dec 03, 1998 – Dec 28, 2000
CANC Callers of Calenda and Commanda Kanaahi
CAMS College of Science and Commerce, Karachi
Lecturer
Kereshi Dekisten
Karachi – Pakistan

Job Description:

Teaching and managing assigned duties. Teaching: Gas Engineering to BE Final year students. Application of Computer Science to Second year Students. Taking labs of Drilling Simulator. Working for establishment of laboratories.

Date:	Nov 10, 1997 – Oct 31 1998
Organization:	SIEMENS ENGINEERING COMPANY
Title:	Executive Engineer
Location:	Karachi – Pakistan

Job Description:

In **SIEMENS** Engineering Company I have done the Project of "Installation & Erection of Automatic **Powder Coating Plant**" with the collaboration of WURSTER Co, Germany. My main responsibilities were

- Job Planning
- > Material procurement with external firms.
- > Parts manufacturing according to their drawings
- Give proper directions to workers for using of different manufacturing machines like Shearing Machines, Bending Machines, Nibbling machines, Notching Machines, CNC Machines, etc for the manufacturing of parts.
- > Modifications in drawings with the help of AUTOCAD 14, where required.

After completion of this project I have worked as Production and Planning Engineer Of "Low Voltage and Medium Voltage Switchgears include Vacuum Circuit Breakers" in Switchboard Department of SIEMENS. This department is ISO 9000 certified, and I got well experience in ISO Certified environment. During this period I got Audit of ISO 9000 and fulfill it completely. I got good exposure of Planning and Production and maximum utilization of workers in given time.

Date:	Mar 01, 1997 – Oct 30, 1997
Organization:	CHARTERED CONSULTING ENGINEERS
Title:	Assistant Project Engineer
Location:	Karachi – Pakistan

Job Description:

In this firm my main duties were to assist the design and erection work of HVAC & Plumbing. Designing of HVAC ducts and load calculation was also included.

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Date:	Jan 2017 – Till Date	
University:	Karachi University Business School, (KUBS)	
Designation:	Visiting Faculty Member	

Teaching different management courses to the student of Masters in Business Administration (MBA) based on my experience and knowledge, gained while working in the industry. Till now taught as well teaching following courses:

- Quality Control Management
- Total Quality Management
- Inventory Control and Management
- Business Process and Modeling
- Reliability Management
- > Risk Management in Supply Chain Management
- > Procurement and Supply Chain Management
- Production Planning and Control
- > Advanced Production Planning and Control
- > Operations and Production Management
- Project Planning and Management

Date:	Jan 2001 – Dec 2001	
University:	University of Karachi, Petroleum Technology Department	
Designation:	Visiting Faculty Member	

Teaching as Visiting Faculty Member in University Of Karachi. Taught Course of "**Computer Applications in Petroleum Engineering**" to the students of MSc Petroleum, in Petroleum Department. In this course I have taught "Pipe Line Designing" by the help of the computer software "**KORF 1.2**" which is significantly used by Pipe Line Designing Consultants.

Date:	March 2001 – Dec 2001	
University:	University of Karachi, Chemical Engineering Department	
Designation:	Visiting Faculty Member	

Teaching in Chemical Technology Department, which is now Chemical Engineering Department. I have taught course of Computer Applications to the students of Bachelor of Chemical Technology. I this course I taught Programming Language and analysis of data.

Memberships			
	Member of:	Member since	
	Society of Petroleum Engineers	April 17, 1998	
	Pakistan Engineering Council	May 06, 1997	
	Canadian Society of Petroleum	Jan 15, 2008	
	London Petrophysical Society	June 03, 2012	

PUBLICATIONS

Journal Papers:

- 1. **Haneef, J.**, Sheraz, A. A Comparative Analysis of Well Key Performance Indicators (KPIs) with Well Complexities Using Well Complexity Calculator. Arab J Sci Eng (2022). https://doi.org/10.1007/s13369-022-07436-7
- Haneef, J., Sheraz, A. Development of well complexity calculator and its integration into standard well engineering management system/well delivery system. Journal of Petroleum Exploration and Production Technology (2021). <u>https://doi.org/10.1007/s13202-021-01428-3</u>, Impact Factor (IF) 2.077
- Ali, S.I., Lalji, S.M., Haneef, J., Khan, M.A., Yousufi, M., Yousaf, N., Saboor, A., REVIEW ARTICLE: Phenomena, Factors of Wax Deposition and its Management Strategies, Arabian Journal of Geoscience, 15, 133 (2022). <u>https://doi.org/10.1007/s12517-021-09221-6</u>, Impact Factor (IF) 1.827

- Saboor, A., Yousaf, N., Haneef, J., Ali, S.I., Lalji, S.M., Performance of asphaltene stability predicting models in field environment and development of new stability predicting model (ANJIS), Journal of Petroleum Exploration and Production Technology, (2021). <u>https://doi.org/10.1007/s13202-021-01407-8</u>, **Impact Factor (IF) 2.077**
- Ali, S.I., Haneef, J., Tirmizi, S.T., Lalji, S.M., Hezam, A.N.S., Prediction of Asphaltene Precipitation Envelope (APE) Using Empirical Equations and Equation of State Model, Petroleum Chemistry. 61, 1217–1227 (2021). <u>https://doi.org/10.1134/S0965544121110219</u>. Impact Factor (IF) 1.029
- Ali, S.I., Lalji, S.M., Haneef, J. et al. "Asphaltene precipitation modeling in dead crude oils using scaling equations and non-scaling models: comparative study". Journal of Petroleum Exploration and Production Technology, 11, 3599–3614 (2021). <u>https://doi.org/10.1007/s13202-021-01233-y</u>, Impact Factor (IF) 2.077 (2020).
- Ali, S.I., Lalji, S.M., Haneef. J., Ahsan, U., Tariq, S.M., Tirmizi, S.T., Shamim, R., "Critical analysis of different techniques used to screen asphaltene stability in crude oils", Fuel, Volume 299, 1st September 2021, 120874, ISSN 0016-2361, <u>https://doi.org/10.1016/j.fuel.2021.120874</u>. Impact Factor (IF) 6.609 (2021).
- Ali, S.I., Lalji, S.M., Haneef. J., Khan, M.A., Louis, C., "Comprehensive Analysis of Asphaltene Stability Predictors under Different Conditions", Petroleum Chemistry, 61, 446–454 (2021). <u>https://doi.org/10.1134/S0965544121050091</u>, Impact Factor (IF) 1.029 (2020).
- Lalji, S.M., Khan, M.A., Haneef, J., Ali, S.I., Arain, A.H., Shah, S.S., "Nano-particles adapted drilling fluids for the swelling inhibition for the Northern region clay formation of Pakistan", Applied Nanoscience, 2021. <u>https://doi.org/10.1007/s13204-021-01825-4</u>, Impact Factor (IF) 3.674 (2020)
- Ali, S.I., Lalji, S.M., Haneef. J., Ahsan, U., Khan, M.A., Yousaf, N., "Estimation of asphaltene adsorption on MgO nanoparticles using ensemble learning", Chemometrics and Intelligent Laboratory Systems, Volume 208, 2021, 104220. ISSN 0169-7439. <u>https://doi.org/10.1016/j.chemolab.2020.104220</u>. Impact Factor (IF) 3.491 (2021).
- Khan, M.A., Haneef, J., Lalji, S.M. *et al.* "Experimental study and modeling of water-based fluid imbibition process in Middle and Lower Indus Basin Formations of Pakistan". Journal of Petroleum Exploration and Production Technology, 11, 425–438 (2021). <u>https://doi.org/10.1007/s13202-020-01022-z</u>, Impact Factor (IF) 2.077 (2020).
- Lalji, S.M., Haneef, J., Khan, M.A., Ali, S.I., "Demagnetizing the drill string magnetic interference in Far North and in Pakistan. Journal of Petroleum Exploration and Production Technology". 10, 821–828 (2020). <u>https://doi.org/10.1007/s13202-019-00801-7</u>, Impact Factor (IF) 2.077 (2020).
- Fisher, Q.J., Haneef, J., Grattoni, C.A., Allshorn, S., Lorinczi, P., "Permeability of fault rocks in siliciclastic reservoirs: Recent advances", Marine and Petroleum Geology, Volume 91, 2018, 29-42. <u>http://eprints.whiterose.ac.uk/125360/</u>, Impact Factor (IF) 4.348 (2021).

Conference Paper:

- "Asphaltene Stability Analysis for Crude Oils and their relationship with Asphaltene Precipitation Models for a Gas Condensate Field" – SPE 194706 was presented at 21st Middle East Oil and Gas Show and Conference on March 20th, 2019 in Manama, Bahrain.
- "Permeability of Fault Rocks and Shale Caprocks: Where we Stand" 3rd International Conference on Fault and Top Seals - From Characterization to Modelling At: Montpellier, France, 1 – 3 October 2012.

Certifications:

Jul 27, 1997 – July 07, 1997Pakistan Navy Engineering College, KarachiCertificate in Boiler Operation & Maintenance Course, First Class

The course involves with Boiler theory and system introduction, Boiler construction & Design, Steam system & Control, Water supply system & Control, Fuel system & Control, Draft & Flue Gas system, Boiler Operation and Emergencies, Boiler Inspection & Maintenance, Safety.

Training Received from University of Leeds, United Kingdom

- ✓ LabVIEW Intermediate hands on workshop
- ✓ Demonstrating and Teaching in laboratories.
- ✓ Starting your research degree
- ✓ MS Excel for Research
- ✓ Least Square Techniques
- ✓ A Balancing Act: Dealing with stress while doing a research degree
- ✓ Ethics and Ethical Review
- ✓ Introduction to Risk Assessment Level 1
- ✓ Introduction to Risk Assessment Level 2
- ✓ DSE training for assessors Level 2
- ✓ An introduction to Effective Research Writing
- ✓ Writing for Research Students In the field of Science

References

To be furnished on request.