

Curriculum Vitae

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Profile summary

I have completed my MS in chemistry and published five research articles in peer reviewed international journals. I have 13 years of experience extends to quality control of Petroleum, Pharmaceuticals and also teaching. I worked on various analytical equipment use for the analysis of crude oil, plant intermediates (liquid side draws, gases and process waters), stack emissions monitoring, effluent water, drinking water, finished petroleum products and pharmaceuticals. I have worked on the implementation and documentation of quality management system (ISO/IEC 17025 & ISO9001), research & development, supervision of staff and inventory management. I also have expertise on crude receiving and product dispatch operations by road and pipeline, calibration of tank lorries and weighing by weighbridge. I am also a member of refinery's first line fire and emergency response team.

Experience

Shift team leader (Quality Control Laboratory) (3rd Mar. 2011-Present) Attock Refinery Limited, Rawalpindi, Pakistan

Petroleum Analysis:

- Analysis of crude oil received from different fields includes Sp. Gravities, Salts, BS&W and sulfur Analysis.
- Analysis of plant process samples of distillation units, Reformer, Isomerization, Hydrogen producer, Diesel desulfurizer, Sour water and Amine treatment unit according to standard test methods of ASTM, UOP, IP and AASHTO.
- Analysis of finished petroleum products includes Liquefied petroleum gas, Naphtha, Gasoline, Kerosene, Mineral turpentine oil, Jet aviation fuel, High speed diesel, Diesel fuel oil, Furnace fuel oil, Asphalt and Polymer modified bitumen for compliance with PSQCA, Ministry of Petroleum Pakistan and AFQRJOS Specifications.
- Analysis of non-routine sludge and scale samples collected during plant shutdowns or collected from storage tanks.
- Analysis of lube oil received from power plant, compressors and pumps.
- Provide results and technical interpretation on crude, intermediates and final products analyses to internal and external customers.
- Preparation and issuance of product quality reports to internal and external customers.
- Coordination with plants, planning and assigning the tests to get maximum output utilizing same capabilities.
- Joint testing with customers in order to build mutual confidence and resolve complaints.
- Calibration, minor maintenance and resolving the troubleshooting of testing equipment.
- Inventory management of glassware, chemicals and equipment spares.
- Direct supervision of laboratory technicians and samplers in order to resolve troubleshooting during working and managing the staff duties to run the process smoothly.

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Gas Analysis:

- Compositional analysis of different refinery process gases of Reformer, Isomerization, Hydrogen, Amine Treatment and heater fuel gases by Gas chromatography.
- Calculation of calorific value of different gases by composition.
- Detection of conc. of different gases (H₂S, HCL, SO₂, CO, CO₂ and H₂O) up to ppm level with dragger tubes.
- Analysis of Lower Explosive limit (LEL) on plant startup.

Quality Management System:

- Preparation of laboratory manual, procedures, work instructions and maintaining the technical & management record according to the requirements of ISO/IEC 17025.
- Monitor the equipment performance by running check samples and documentation the maintenance record of testing equipment.
- Conduct the customer's survey and handling the customer's complaints while to ensure compliance with ASTM proficiency testing limits.
- Root cause analysis on non-conformances and implementation of corrective/preventive actions advised by Head of Department (HOD).
- To conduct the internal audit and laboratory management review meetings.
- Provide the training to lab. Technicians, new hires and internees on testing methods, equipment handling, safety and Lab Information Management System (LIMS).

Environmental Analysis:

- Stack monitoring of different gasses (SO₂, NO₂, Oxygen and Hydrocarbons) by portable Analyzer.
- Analysis of refinery effluent according to USEPA and ASTM standard testing methods includes Chemical Oxygen Demand (COD), Biological Oxygen Demand (BOD), Oil & grease, phenol, Total Suspended Solids (TSS) and Total Dissolved Solids (TDS) etc.
- Analysis of drinking water and process water includes pH, Chloride, Sulfide, Phosphates, Iron (Fe²⁺), Calcium hardness, Magnesium hardness, Total hardness, Total dissolve solids, Total suspended solids and Alkalinity.
- Joint testing with government officials for national environment quality standard (NEQS) compliance.
- Participation in proficiency testing and inter laboratory comparison (ILC) programs like FAPAS, SGS, NPSL and Qurshi industries etc.
- Reporting the monthly monitoring data with government agencies.

Research and Development:

- Formulation of cost-effective and sustainable solutions to operational problem.
- Dosage recommendation of additives such as Pour Point Depressants (PPD) and octane booster etc.
- Selection and dosage recommendation of demulsifier used in slope oil processing.
- Selection and dosage recommendation of dye in gasoline.

Oil Movement:

- Supervision of daily activities regarding documentation, receiving, handling, distribution of crude oil to different storage tanks received by road from northern fields of Pakistan.
- Supervision of daily activities regarding documentation, receiving, handling, distribution of crude oil to different storage tanks received by pipeline from different oil fields.
- Supervision and managing all dispatch operations associated with refined product by pipelines to different oil marketing companies (OMCs) through control room monitoring using Syber Troll meters, also invoice preparation and record keeping.

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- Supervision and documentation of product dispatched operations associated with refined products by road via tank lorries includes filling, sealing, volume verification, weight verification, issuance of in/out gate-pass.
- Calibration of tank lorries using water filling technique of known volume.

Tutor (Part Time) (Dec. 2014-Aug. 2018) Allama Iqbal Open University Islamabad, Pakistan

- Planning & delivering well-structured lecture which engage & motivate students.
- Maintain the attendance record.
- Reach the class in time for teaching.
- Link the topic with the previous knowledge of the students.
- Complete assigned university curriculum as per schedule.
- Conduct assigned classes at scheduled time.
- Checking the assignments and dispatch the results to students.
- Submission of results to the university well in time.
- Guide the students by telephone whenever required.

Quality Control officer (Nov. 2010 - Feb. 2011) Davis Pharmaceuticals Islamabad, Pakistan

- Perform the complete analysis of the raw materials, intermediates and finished products within the specified time, to follow proper documentation.
- To keep Proper Documentation against the requirements of Ministry of Health, Pakistan.
- To keep a record of stock of chemicals and glassware.
- Daily environment monitoring of laboratory rooms, store room and production area.
- Effectively Performed assay of tablets, syrups and oral rehydration salts (ORS) includes wet chemistry analysis using Spectrophotometer (HITACHI), Viscometer (Hangping), Melting Point apparatus (Electrotherm), Polarimeter, Refractometer, PH meter(Corning), LOD (Sartorius) Dissolution Tester (TINGIN GUOMING Medical equipment Co. Ltd.), Hardness tester (Galvano Scientific) Friability tester (TINGIN GUOMING Medical equipment Co. Ltd.) Disintegration analyzer (TINGIN GUOMING Medical equipment Co. Ltd.) etc.

Quality Control officer (Oct. 2007- Sept. 2008) Paramount Pharmaceuticals Islamabad, Pakistan

- Perform the complete analysis of the raw materials, intermediates and finished products within the specified time, to follow proper documentation.
- To keep Proper Documentation against the requirements of Ministry of Health, Pakistan.
- To keep a record of stock of chemicals and glassware.
- Daily environment monitoring of laboratory rooms, store room and production area.
- Effectively Performed assay of tablets and syrups.
- Quality assurance testing of tablets includes but not limited to dissolution time, friability, disintegration time, hardness, loss on heating etc.

Science Teacher (Apr. 2004- Aug. 2005) Foundation High School, Chaklala-I, Rawalpindi, Pakistan

- Planning & delivering well-structured lessons which engage & motivate students.
- Maintain the Teacher Diary regularly with the lesson plan.
- Maintain the housekeeping and reach the class in time for teaching.
- Link the topic with the previous knowledge of the students
- Maintain accurate, complete, and appropriate record.

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Analytical equipment used

- Gas chromatography
- Column chromatography
- Co-operative fuel research engine
- Nitrogen sulfur analyzer
- Atomic absorption spectrometer
- Energy dispersive X-Ray fluorescence (Sulfur Detection)
- UV/Visible spectrometer
- Other petroleum testing equipment like automatic flash point testers, automatic distillation apparatus, viscometer, penetrometer, cloud filter plugging point, moisture analyzer and density meter, Chemical oxygen demand by colorimeter, Biological oxygen demand tracker, Jet fuel thermal oxidation tester, Water separator etc.

Academics

Degree	Year	Major Subjects	Board/University
MS (18 years)	2021	Chemistry	International Islamic University Islamabad
M.Sc. (16 years)	2010	Chemistry	Minhaj University Lahore
B.Sc. (14 years)	2007	Chemistry, Biology, Zoology	University of the Punjab
H.S.S.C.	2003	Chemistry, Biology, Physics	F.B.I.S.E. Islamabad
S.S.C.	2001	Chemistry, Biology, Physics, Mathematics	F.B.I.S.E. Islamabad

Publications

- Study the effect of different Nano-additives on efficiency and exhaust greenhouse gases of spark ignition engine using gasoline as a fuel. (MS Thesis)
- Monitoring the key components and elimination of Asphaltenes precipitation in crude by new alternative route (Petroleum Science and Technology, Taylor and Francis, USA. 33(15-16), 1449-1453, 2015
<http://www.tandfonline.com/doi/abs/10.1080/10916466.2015.1072560>
- Salicylaldehydesalicyloylhydrazone. Science international (Lahore),25(1), 85-89, 2013
<http://www.sci-int.com/Search?catid=17>
- Comparative study of macro-elements (P, Na and K) in the edible part of vegetables irrigated with sewage, canal and tube well water Asian Journal of Chemistry. 25(2), 835-837, 2013.
www.asianjournalofchemistry.co.in/User/ViewFreeArticle.aspx?ArticleID=25_2_52
- Accumulation of heavy metals near the agricultural area irrigated by industrial waste water. Asian journal of chemistry, 23(2), 913-916, 2012 www.asianjournalofchemistry.co.in
- Quality of groundwater and its comparison with WASA supply lines: a case study, Lahore Science international (Lahore), 22(1), 69-75, 2010 <http://www.sci-int.com/Search?catid=17>

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Courses

- Understanding of ISO/IEC 17025 (Quality Management System), Attock Refinery Limited, Management Development Centre. 2015
 - Testing requirements during Carbon Burn process of Reformer Regeneration, Attock Refinery Limited, Management Development Centre. 2015
 - Conflict Management, Attock Refinery Limited, Management Development Centre. 2013
 - Good Laboratory Practices, Attock Refinery Limited, Management Development Centre. 2012
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Computer skills

- Microsoft Office
 - Laboratory Information Management System (LIMS)
 - Chem Draw (Chemistry software)
 - Smart Draw (Engineering software)
 - Maximo (inventory management software)
 - Permit to work system (PTW)
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Safety skills

- Job Safety analysis & Process hazards analysis (JSA) & (PHA)
 - Lockout & Tag out (LOTO) & Permit to work procedures (PTW)
 - Member of refinery first line fire and emergency response team
 - Life mask training (SCABA)
 - Conducting mock drill and safety talks
 - Firefighting prevention & control
 - Hazards operability (HAZOP)
 - Rescue & first aid
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Interpersonal skills

- To stay calm and effective in stressful or difficult situations and to remain fair and honest with organization.
- To work and communicate effectively and respectfully with others who are different (i.e. different gender, race, culture, sexual orientation, or religion); to recognize and respect differences.
- Able to accept change in the workplace and to accept work assignments while also persistence in completion to a high standard.
- Able to demonstrate knowledge and skills gained from previous experience.
- Able to prioritize and order tasks effectively to maximize efficiency.
- Leading the staff with cooperative and supportive manner
- Inspection of details, root cause analysis and implementation of corrective/ preventive actions
- Accurate Reporting of test results and other analytical data
- Effective planning, organizing and problem solving skills
- Result orientation, work prioritization and decisiveness skills
- Theoretical and practical knowledge of petroleum testing
- Proficient to conduct trainings

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Personal information

Father Name	Khalid Pervez
Gender	Male
Nationality	Pakistani
Date of Birth	24.08.1984
Passport Number	AF6317312
Driving License No.	105669
Religion	Islam
Skype ID.	live:9f59d9159167a570