

## Curriculum Vitae



### PROF. DR.-ING. JAMEEL AHMAD KHAN

Date of Birth	February 01, 1938
Place of Birth	Aligarh, UP, British India
Nationality	Pakistani
Father's Name	Abdul Hameed Khan
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### ACADEMIC QUALIFICATIONS

- 1 Secondary School Leaving Examination from Board of Secondary Education, Karachi, FIRST CLASS FIRST POSITION(March, 1951)
- 2 Intermediate Science from University of Karachi with FIRST CLASS (April, 1953)
- 3 Bachelor of Engineering (Mech. & Elect.) from University of Karachi with FIRST CLASS (January, 1957)
- 4 Doctorate in Mechanical Engineering from the Technical University of Aachen, West Germany, with distinction "SEHR GUT", Major Field Fluid Mechanics, (June, 1960)
- 5 Special courses in Industrial Organisation and Management, Nuclear Power, ICE Design, Vibrations, Electronics and Optical Measuring Techniques in the Technical University, Aachen, West Germany (1958-1960)

### EXTRA CURRICULAR

- 1 Editor, Young Engineer, NED Government Engineering College Magazine (1954)
- 2 Best Urdu Debator, NED Government Engineering College (1955)
- 3 Member, NED Government Engineering College Hockey Eleven (1956)

### PROFESSIONAL QUALIFICATIONS

- 1 Fellow, International Association of Hydrogen Energy (IAHE)
- 2 Member, Association of German Engineers (VDI)
- 3 Member, International Solar Energy Society (ISES)
- 4 Member, Society for International development (SID)
- 5 Member, Pakistan Engineering Council (PEC)

## PROFESSIONAL AFFILIATIONS

- 1 Chairman, Japan Pakistan Environmental Research Group (JAPAN-ERG) – (1996-2000)
- 2 Chairman, Pakistan Desalination Association (Pak DA, affiliated with IDA) – (1997-2000)
- 3 Chairman, Pakistan Engineering Council (Statutory Apex body of the Engineering Profession), elected on all Pakistan basis by the engineering community:
  - First Term (1997-1999)
  - Second Term (2000-2002)
- 4 President, Pakistan Chamber of Engineers:
  - First Term (1997-1999)
  - Second Term (2000-2002)
- 5 Member, Executive Committee, Asian Fluid Mechanics Congress (AFMC, comprising 29 Asian Countries)
- 6 Chairman, Institute for Technology Assessment & Transfer (2010-todate)
- 7 **President, Pakistan Academy of Engineering. (Dec. 2013 – todate)**

## PROFESSIONAL EXPERIENCE

- 1 After graduation joined Karachi Shipyard and Engineering Works Limited (PIDC) as Asstt. Engineer, acquired training in all the production engineering trades, and was responsible for the erection of out-fittings on the Dry Dock (1957).
- 2 Trained in Maschinen Fabrik Augsburg Nurnburg (MAN), West Germany, in the field of manufacture and testing of Heavy Marine Diesel Engines, Gas Turbines and Compressors (concurrently with studies 1958).
- 3 Worked as Research Scholar in the Institute of Aerodynamics, Technical University of Aachen (RWTH), West Germany (about three years 1958-1960).
- 4 Joined Associated Consulting Engineers Limited in October, 1960, and worked till October 1966, as Senior Engineer. Responsibilities extended from leading project teams to negotiations with clients, and from detailed planning and design work to coordination and supervision of operation. Activities covered industrial project planning, pre-investment studies, preparation of engineering specifications and tender documents, technical supervision, operational analysis, management advice and mechanical engineering design.

### **Some of the important assignments included:**

Scheme for Reorganisation and Expansion of Pakistan Flotilla Company Limited, East Pakistan, Planning of Repair Facilities at Barisal for the East Pakistan Inland Water Transport Authority, Common Service and Facilities Centers for the Small Industries Corporation at Karachi. General Consultant for appraisal of Industrial Schemes on behalf of the Industrial Development Bank of Pakistan. Operational analysis and planning for Reorganization, Modernization

and Expansion of the Fauji Foundation Industries. Research Studies on Industrial Projects for the Planning Commission of Pakistan for the Second Five Year Plan. Feasibility studies for the Investment Promotion Bureau of Pakistan. Evaluation of Industrial Projects for the Planning Commission of Ghana. Feasibility studies and appraisal reports on a number of industrial projects for private clients. Planning of Industrial Estates at Jeddah, Riyadh and Dammam for the Ministry of Commerce and Industry, Saudi Arabia, and a number of feasibility studies on industrial projects for the Government of Saudi Arabia. Complete design of the Automatically Controlled Heating System for New Engine Overhaul Workshop for Pakistan International Airlines Corporation at Karachi.

Concurrently worked as visiting faculty, at the NED Government Engineering College (Since 1962). Lectured for two years (1961 - 62) on Production Methods at the Pakistan Institute of Industrial Accountants, Karachi. Conducted a training course in 1963 on the Modern Techniques of Project Appraisal for the officers of the Industrial Development Bank of Pakistan. Also lectured at the National Institute of Public Administration, Karachi.

- 5 Joined Consultants Alliance Limited as Director in October, 1966, and worked upto March, 1968. Responsibilities included management of the Industrial Wing engaged in Industrial Planning, Preparation of Feasibility Studies and Mechanical Engineering Design.
- 6 Joined NED Government Engineering College in March, 1968 as Professor of Mechanical Engineering and Head of the Mechanical Engineering Department. Also worked as Director Research Team, High Level Engineering Manpower Study sponsored by the National Manpower Council, Government of Pakistan.
- 7 Worked as Chairman, Department of Mechanical Engineering since the creation of NED University of Engineering and Technology, Karachi in March 1977, responsible for the physical planning of undergraduate and post graduate laboratories and other teaching facilities for the department catering for a student population of about 1500. Developed a fairly close linkage of the department with the local industry and other research organisations. Initiated and established several new programmes, particularly in the field of Renewable Energy Sources, Energy Conservation, Water Desalination, Robotics and Pollution Control. The Department is actively engaged in the Research and Development activities pertaining to Solar Energy Systems, Sea Wave Activated Power Systems, Wind Energy Systems and Water Desalination.

**Worked for the University management as:**

Member, Syndicate, NED University of Engineering and Technology  
(1977 - 1984)

Member, Senate, NED University of Engineering and Technology  
(1977 - 2010)

- Member, National Academic Council, University Grants Commission (1977 - 1987)
- 8 Appointed as **Vice Chancellor of the NED University of Engineering and Technology** with effect from March 01, 1987 and worked till November 19, 1991.
- As Chief Executive of the University, was responsible for the Academic, Administrative and Financial Management of the entire system. The University catered for a student population of around 6000 and offered undergraduate programmes in 16 and post-graduate programmes in 7 disciplines of engineering and technology, which were internationally recognized. Three premier institutions of the Armed Forces were affiliated with university viz:
- Military College of Engineering, Pakistan Air Force College of Aeronautical Engineering and Pakistan Naval College of Engineering (PNS Jauhar). In addition two public sector institutions viz: Dawood College of Engineering & Technology and Government College of Technology were also affiliated with the University.
- Developed systems and procedures and the code of the University, initiated introduction of MIS, prepared university development plans under the Pakistan Seventh Five Year Plan and Eighth Five Year Plan and got them approved.
- Established University - Industry Council in collaboration with the Chamber of Commerce & Industry, Karachi.
- Developed extensive computerization facilities in the University and a sizeable Research Fund of its own.
- Initiated programmes aimed at linkages with a number of foreign universities
- Worked as Chairman of several Vice - Chancellors Committees on all Pakistan basis such as one constituted for preparing a Model Act for all the Public sector Universities in Pakistan.
- 9 Worked as Professor of Mechanical Engineering in BPS-22 (Maximum Grade in the Civil Services of Pakistan) Nov, 1991- Feb. 1998) and as the Senior most Professor in the University, looking after research degree programmes in the field of Energy Conservation, Solar Energy, Water Desalination, Flow Induced Vibrations, Computational Fluid Dynamics, Heat Pipes, Metal Hydride, Heat Pumps and Modal Analysis.
- 10 Appointed as **Professor Emeritus** of the NEDUET (1999-2010)
- 11 Appointed as **Founder President**, Pakistan Academy of Engineering (Dec. 2013-Dec. 2016)
- 12 Elected as **President**, Pakistan Academy of Engineering (Dec. 2016 - Dec.2019)

## **CORPORATE MANAGEMENT**

- 1 Appointed Director by the Ministry of Production, Government of Pakistan, on the Board of Directors of Metropolitan Steel Corporation Karachi (1986 - 1992).
- 2 Appointed Member of the Board of Trustees of the Pakistan Science Foundation by the Ministry of Science and Technology, Government of Pakistan (1988 - 1991).
- 3 Appointed Director by the Ministry of Water and Power, Government of Pakistan, on the Board of Directors of National Engineering Services of Pakistan (Pvt.) Ltd. (NESPAK) – (1998-2010).

## **ADVISORY ATTACHMENTS**

- 1 Honorary Advisor to the Standing Committee of Industry, Federation of Pakistan, Chamber of Commerce and Industry (1988-1989)
- 2 Member, Export Promotion Committee, on Engineering Goods, Export Promotion Bureau, Government of Pakistan. (1968 - 74)
- 3 Advisor to the Department of Insurance, Government of Pakistan (1968-76)
- 4 Advisor to the Education Section, Planning Commission, Government of Pakistan (1972-73)
- 5 Member, Committee for the Establishment of Pakistan Bureau of Engineering Design, Ministry of Science and Technology, Government of Pakistan (1973-74)
- 6 Member, Committee for the Establishment of National Engineering Laboratory, Ministry of Science and Technology, Government of Pakistan (1973-1974)
- 7 Member, Advisory Committee, National Development Volunteer programme (1973-1976)
- 8 Member, Panel for Transfer of Technology, Ministry of Science and Technology, Government of Pakistan (1974)
- 9 Member, Advisory Committee, Hydro - Carbon Institute, Ministry of Fuel, Power and Natural Resources, Government of Pakistan (1977-1978)
- 10 Member, Panel of Experts, National Institute of Oceanography (1982-83)
- 11 Member, National Committee on Clean Energy, Ministry of Science and Technology, Government of Pakistan (1983)
- 12 Member, Panel of Experts, Kalabagh Dam Consultants(1983-1984)
- 13 Member, Advisory Committee on Power and Engineering, Pakistan Atomic Energy Commission (1987-1998)
- 14 Advisor, Centre for Environmental Health Activities (CEHA), Eastern Mediterranean Regional Organisation, WHO, Amman, Jordan (1987-1995)
- 15 Member, Screening Committee, Asian Productivity Organisation (APO), Tokyo, Japan (1987-1994)
- 16 Member, General Council of the Society for the Promotion of Engineering and Technology in Pakistan (SOPREST), Parent Body of the Ghulam Ishaq Khan Institute of Engineering Sciences & Technology (1992-2002)
- 17 Member, Board of Governors, National University of Science & technology, Rawalpindi (1996-2002)

- 18 Member, Board of Governors, Pakistan Institute of Engineering & Applied Sciences, Pakistan Atomic Energy Commission, Nilore, Islamabad (2000)
- 19 Member, National Commission for Science & Technology, Government of Pakistan (1996-2002)
- 20 Member, Advisory Board, Ministry of Housing & Works, Government of Pakistan (2002)

### **PUBLICATIONS, PAPERS, REPORTS AND STUDIES**

- 1 Unsteady Flow through Ducts of Injection Systems (Published by the West German Government (1962)
- 2 Modern Techniques of Project Appraisal, IDBP (1963)
- 3 Industrial Estates in Saudi Arabia, Ministry of Commerce and Industries, kingdom of Saudi Arabia (1966)
- 4 Noise Control at the Airport, PAEME Seminar (1967)
- 5 Orientation of Policy towards Technology in Pakistan (1967)
- 6 A number of feasibility studies on Industrial Projects in the Private and Public Sector in Pakistan and Foreign Countries.
- 7 Study on High Level Engineering Manpower in Pakistan, National Manpower Council, Government of Pakistan, sponsored by the US AID (1970)
- 8 Spare Parts Problems in Pakistan, UNIDO Seminar (1972)
- 9 Study on the Progressive Manufacture of NISSHAN JEEP ENGINE for Pakistan Automobile Corporation (1974)
- 10 Feasibility Study on the Manufacture of Commercial / Military Vehicles in Pakistan, for Pakistan Automobile Corporation (1975)
- 11 Study on the Capacity Utilization in Large Engineering Industries in Pakistan, Planning Commission, Government of Pakistan, (1987)
- 12 Study on the Restructuring of Heavy Engineering Complex and Heavy Forge and Foundry, State Engineering Corporation of Pakistan, sponsored by the World Bank, (1986)
- 13 Contributed Articles on Public Policy in respect of Energy, Planning, and Cyber Security published in Dawn and Business Recorder.

### **CURRENT SUBJECT INTERESTS**

- 1 Technology Assessment and Transfer
- 2 Hydrogen Energy Economics
- 3 Exergoeconomics

### **TRAVELS**

USA, Germany, UK, France, Switzerland, Italy, Greece, Sweden, Turkey, Jordan, Egypt, Lebanon, Saudi Arabia, Dubai, Abu Dhabi, Iran, India, Bangladesh, South Korea, Malaysia, Singapore, Thailand, Philippines, China, Japan, Vietnam and Spain.