

Prof. Dr. Shuaib Ahmad – Summary Bio-Data

Qualifications:

Ph.D, University of Illinois, 1980, USA, M.S, Kansas State University, 1974, USA, B.Eng., NED University of Engineering, 1973, PAKISTAN

FIELD OF EXPERTISE/INTEREST

Technical

- Design, Analysis of Civil Infrastructure Structures, utilizing reinforced concrete, prestressed concrete, steel, masonry, wood composites, Fiber Reinforced Polymers (FRP) and other construction materials.
- Condition Assessment, Repair, Retrofit, Strengthening of civil systems (including Bridges, Buildings) utilizing reinforced concrete, prestressed concrete, steel, masonry, wood composites, Fiber Reinforced Polymers (FRP) and other construction materials.
- Transportation Structures.
- High Rise Construction.
- Specialty Structures.
- Sustainable development, low cost housing Advanced composite materials (FRP) for repair in infrastructure applications
- Numerical modelling and finite element analysis of structural systems.
- Specialized testing and instrumentation for forensic engineering.
- Polymer concrete and fiber reinforced concrete.
- High strength and high performance cement based materials.
- Durability issues of materials and their effects on structural performance.
- Use of waste products and recycled materials for civil infrastructure applications.

Administrative

- Project Management.
- Development and administrating the framework to provide support for Codes and Standards in US and elsewhere.
- Development and administrating the framework for International Harmonization in technical exchange to facilitate trade and commerce.

Honors and Awards: Honors and Awards include:

- Recognized as outstanding Distinguished Alumnus, University of Illinois, 2002.
- Member - International Advisory Board of National University of Science and Technology (NUST), Pakistan
- Member - International Advisory Board of Centre of Excellence for Concrete Research and Testing (CoE-CRT), KSU, Riyadh, Saudi Arabia.
- Fellow of American Concrete Institute, 1996 –
- Fellow of ASCE, 1998 -
- Walter L. Huber Civil Engineering Research Award, 1992
- Alcoa Foundation Engineering Research Achievement Award, 1992.
- Professor, Universade Federal, Brazil, July-August 1992.
- Fulbright Fellowship to Lisbon Technical University, Lisbon, Portugal, January-April 1989.
- Most Meritorious Research Paper, NCSU, Raleigh, 1982-1983.

- Fellowship Award from "Concrete Construction Group", Chicago, 1978-1979.

Publications/Presentations:

- Author and co-author of over 150 publications (including 70 journal publications and proceeding papers) on research in the field of structural engineering and advanced materials for infrastructure applications. In particular behaviour of reinforced and prestressed concrete members, high performance concretes, Use of Advanced Composites (FRP) for infrastructure, durability of concrete under extreme environments, constitutive modelling, repair and rehabilitation of structural systems.
- Co-Editor of a book *"High Performance Concretes With Applications"*, Edward Arnold Publishers and McGraw Hill Inc., February 1994. ISBN 0-340-58922-1, 1994.
- Co-Editor of number of proceeding including – Proceedings of International Workshop *"Cement Based Materials & Civil Infrastructure"*, Karachi, Pakistan, December 10-11, 2007.
- Over 50 technical papers presented at national and international conferences and meetings.

Invited Lectures:

- Over 30 invited lectures in various countries including Australia, Austria, Brazil, China, Denmark, England, Finland, Germany, Italy, Japan, Korea, Norway, Pakistan, Portugal, Saudi Arabia, Switzerland, USA.

Affiliations:

- Fellow of American Society of Civil Engineers (ASCE), USA, Fellow of American Concrete Institute (ACI), USA, Member of Prestressed Concrete Institute (PCI), USA, Member of Transportation Research Board (TRB), USA, Secretary of International Standards Organization - ISO/TC71 (ISO). Switzerland, Member Institute of Engineers (IEP), Karachi, PAKISTAN, Member Pakistan Engineering Council (PEC), Islamabad, PAKISTAN, Member of NACE, USA, Member of ASCE/EMD Committee on "Properties of Materials", USA, Member of ASTM Committees on "Concrete Materials (C-109) and Building Components (E-106)", USA, Chair of PCI Committee on "High Performance Concrete", (1994 - 1997), PCI, USA, Secretary of TRB Committee A2E03 on "Properties of Materials", (1994 - 1996), TRB, USA, Past Member of ACI Committee 227 on "Radioactive and Hazardous Waste Management", ACI, USA, Founding Member of ACI Committee 440 "FRP Bar and Tendon Reinforcement.", ACI, USA, Past Member of ACI Committee 544 "Fiber Reinforced Concrete", ACI, USA, Past Member of ACI Committee 549 "Ferrocement", ACI, USA, Co-chair of number of International Conferences for over 25 years, various countries of the world, Member of steering committees of number of International Conferences for over 25 years, various countries of the world, Member of international scientific/technical committees for number of International Conferences in various countries for over 25 years, Member of number of Expert Panels for National Science Foundation, USA, Reviewers for number of International Journals, various countries of the world