# DEPARTMENT OF CIVIL ENGINEERING, NEDUET, KARACHI

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# DR. ASAD-UR-REHMAN KHAN

### **EDUCATION**

**Ph.D.** (2001): Structural Engineering, KFUPM, Dhahran, K.S.A.

Ph.D. Dissertation: Elasto-damage fatigue modeling of RC beams strengthened with CFRP

➤ M.S. (1995): Structural Engineering, KFUPM, Dhahran, K.S.A.

M.S Thesis: Three Dimensional Finite Element Analysis of Brittle Materials using CDM Model.

➤ **B.E.** (1990): Civil Engineering, N.E.D. University of Engineering and Technology, Karachi, Pakistan.

**Senior Project:** Analysis and Design of Group of Silos.

### PROFESSIONAL EXPERIENCE

- ➤ Professor, Civil Engineering Department, NED University of Engineering & Technology, Karachi (April 2007 to date)
- Associate Professor, Civil Engineering Department, NED University of Engineering & Technology, Karachi (February 2005 – April 2007)
- Consultant/Associate Professor, Hamdard institute of Information Technology, Faculty of Engineering Sciences and Technology, Hamdard University, Karachi (October 2001 – January 2005)
- Senior Structural Engineer, Engineering Associates, Karachi (August 2001 September 2001).
- ➤ Lecturer-B, Department of Civil Engineering, KFUPM, Dhahran, K.S.A (Feb 1995 March 2001).
- Research and Teaching Assistant, Department of Civil Engineering, KFUPM, Dhahran, K.S.A (Jan 1992 Jan 1995).
- > Structural Design Engineer, AKBAR and ASSOCIATES, Consulting Engineers, Karachi (May1991-Oct 1991).

## RECENT PUBLICATIONS

### 1. In International Refereed Journals

- Damage Model for Monotonic and Fatigue Response of High Strength Concrete, *International Journal of Damage Mechanics*, Vol. 9, Jan. 2000, pp. 57-78.
- Fatigue Performance of Concrete Beams Strengthened with CFRP Plates, (Discussion), ASCE Journal of Composites for Construction, Vol. 4 No. 4, November 2000, pp. 215
- CDM Model for Residual Strength of Concrete under Cyclic Compression, Cement & Concrete Composites, Vol. 25, May July 2003, pp. 503-512.
- Elasto-damage Model for High Strength Concrete Subjected to Multiaxial Loading, *International Journal of Damage Mechanics*, Vol. 16, Jul. 2007, pp. 361-398.
- Experimental and Computational Modeling of Low Cycle Fatigue Damage of CFRP Strengthened Reinforced Concrete Beam, International Journal of Damage Mechanics, Vol. 20, March

2011, pp. 211-243.

## 2. In Refereed International Conference Publications

- Damage Model for Normal & High Strength Concrete accepted for publication in the Proceedings of Concrete Modelling (CONMOD '08), 26-28 May, 2008, Delft, The Netherlands.
- Role of U-shaped anchorages on behaviour of RC beams strengthened by CFRP plates in the Proceedings of 4th International Conference on FRP Composites in Civil Engineering (CICE2008), 22-24 July, 2008, Zurich, Switzerland.
- Performance of RC Beams Strengthened in Shear by Externally Bonded U-shaped Wraps in the Proceedings of 1<sup>st</sup> International Conference on Sustainable Built Environment Infrastructure in Developing Countries (1<sup>st</sup> SBEIDCO), 12-14 October, 2009, Oran, Algeria.
- Performance of Different Types of Pakistani Cements Exposed to Aggressive Environments in the Proceedings of 1<sup>st</sup> International Conference on Sustainable Built Environment Infrastructure in Developing Countries (1<sup>st</sup> SBEIDCO), 12-14 October, 2009, Oran, Algeria.
- Role of U-shaped anchorages on performance of RC beams strengthened by CFRP plates in the Proceedings of Asia-Pacific Conference on FRP in Structures (APFIS 2009), 9 - 11 December 2009, Seoul, Korea.
- Effectiveness of U-shaped CFRP Wraps as End Anchorages in Predominant Flexure and Shear Region in the Proceedings of The 5th International Conference on FRP Composites in Civil Engineering (CICE 2010), September 27-29, 2010 Beijing, China.
- Compressive Strength of Concrete Cylinders Confined with CFRP Wraps in the Proceedings of The 5th International Conference on FRP Composites in Civil Engineering (CICE 2010), September 27-29, 2010 Beijing, China.
- Performance of Blended and Modified Cements Exposed to Aggressive Environments in the Proceedings of the 12th International Conference on Durability of Building Materials and Components, April 12-15, 2011, Porto, Portugal.

#### **CERTIFICATE COURSES:**

- □ Soils and Foundations Problems in the Kingdom of Saudi Arabia and Methods of Treatment.
- Protection of Reinforced Concrete Structures.

### PROFESSIONAL MEMBERSHIPS

- ❖ Life time member of P.E.C (Pakistan Engineering Council).
- ❖ International Member of ASCE (American Society of Civil Engineers)
- ❖ Member of ACI (American Concrete Institute) International
- ❖ Member of IIFC (International Institute of FRP in Construction)

#### AREAS OF INTERESTS

Repair and Retrofitting of Reinforced Concrete Structures by Externally bonded CFRP Laminates, Analysis and Design of Reinforced Concrete and Steel Structures, Concrete Durability, Computational Modeling, Numerical Methods (Finite Element Method, Finite Difference Method, etc.) in Engineering, Computer programming, Software Development and Computer Applications in Structural Engineering, Material Modeling using CDM.