



1. Name and Academic Rank:

Oussama BAALBAKI
Professor at Civil and Environmental Engineering Department
Beirut Arab University

2. Education: Degrees, Discipline, Institution and Date:

- Ph.D.,1993, Civil Engineering, University of Sciences and Technologies, LILLE, FRANCE
- M.Sc., 1989,University of Sciences and Technologies, LILE, FRANCE
- B.Sc. 1987, Beirut Arab University, BEIRUT, LEBANON

3. Work experience

- Beirut Arab University
 - Professor of undergraduate and graduate courses such as Materials Construction, Mechanics of Materials, Structural Mechanics, Advanced Materials, Concrete Technologies, Concrete Repairs.
 - Supervision of Master and PhD Student's theses.
 - Supervisor of Materials testing faculty Laboratory up to 2010.

- **With Dar Al Handasah (Shair & Partners), Saudi Arabia**

Concrete Technical Advisor / Senior Structural-Materials Specialist Concrete Quality Control, Monitoring/testing of raw material, Supervision of Ready Mix Plants, Approving Submittals for all construction and repair materials, Evaluation of Prequalification documents of materials suppliers, Solving site concrete technical problems for various **Mega projects as follows:**

The Kingdom Tower, Jeddah, Saudi Arabia. Review of geotechnical, structural designs and supervision of construction for a 1,001 m high iconic tower on a 95,000 m² site. The tower rests on a podium consisting of a concourse level and 3 below grade basement levels. The tower programme includes offices, hotel, serviced apartments, restaurants and other amenities. The tower is composed of a triangular core from which 3 wings extend, and is supported by a piled raft of varying thickness (4.5 m to 5 m). Gross floor area: 265,000 m².

Shamiyah Expansion Project, Makkah, Saudi Arabia. Detailed design and tender documents for an extension to the Makkah Holy Haram to accommodate additional 800,000 worshipers, comprising a new building of 4 praying levels with a capacity of 300,000 worshipers, connected at its ground, first and roof floors to the First Saudi Extension of Makkah Haram, and includes a basement level for electromechanical services; state-of-the-art technology in natural and artificial climate and lighting controls; security, crowd management, and sound distribution and control systems; structural health monitoring sensors; cleaning equipment; interactive signage; and high end interior finishing works.

- **With Engineering Systems and Development Centre, Saudi Arabia**

Managing Director (1995-1997): Specialization: Laboratory Equipment for Civil Engineering purposes. Transportation, Traffic Control Systems, Industrial Controls an Instrumentation, Engineering Research Management, Consultation and Pavement Performance Evaluation.

Technical Manager: Geotechnical investigation, Quality Assurance and Quality Control Services for Contractors. Materials Testing Services (Soil, Concrete Asphalt)



- **With BOCAHUT Est. (1994, FRANCE)**

Research Scientist: Formulation of a new cementations binder for road foundations. A patent concerning the stabilization of soil was registered.

- **With Dar Al Meamar, 1988, Lebanon**

Responsibilities: Design and Execution of shop drawings for integrated commercial centres and residential centres.

4. Honors and Awards:

- Certificate of Expert in handling Radioactive Materials from King Abdul Aziz City for Sciences and Technologies (1996)
- Award from Regional Council of North France (1989 - 1993)
- Certificate of Expert in handling Radioactive Materials from King Abdul Aziz City for Sciences and Technologies (1996)

5. Research Interests

- Strengthening and Repair of structural elements
- Composite Materials and Composite sections
- Concrete Mixes and Durability of Concrete
- Quality Control In Concrete Constructions
- High Performance and Massive ConcreteC

6. International Scientific Activities and Research Cooperation

- ACI Concrete Technical Committee member 237

7. National Research Cooperation

Funded Project from CNRS: Utilization of Incinerated Municipal Solid Fly Ash

8. Principal publications and presentations:

9.1 Journal Publications

- M. Khatib, Z. A. Saleh, O. Baalbaki, and Y. Temsah, Numerical Punching Shear Analysis of Un-bonded Post-Tensioned Slabs with Inverted-U Shaped, KSCE Journal of Civil Engineering; ISSN:1226-7988, <http://link.springer.com/journal/12205/onlineFirst/page/1>
- Behavior of T-Shaped Reinforced Concrete Beams Partially Confined by Structural Steel, Journal of Construction and Building Materials, Elsevier, pages 1037-1043, January 2011
- A New Demountable Built-up Steel Structural System: Optimization of Cross Sectional Properties, European Journal of Scientific Research, ISSN 1450-216X Vol.52 No.4 (2011), pp.470-475

9.2 Papers Book Section

- Waste and Supplementary Cementitious Materials in Concrete. Book: Siddique-1631239, 2017, Chapter: 015, <https://doi.org/10.1016/B978-0-08-102156-9.00015-8>, Copyright 2017.

9.3 Conference Proceedings

- M. Khatib, Z. Abou Saleh, O. Baalbaki, 2016, Punching Shear Analysis of Bonded PT Slabs with Inverted U-Shaped Reinforcement The Ninth Alexandria International Conference Structural and Geotechnical Engineering, AICSGE9