

## **SUMMARY CURRICULUM VITAE (ABET)**

### **NAME & ACADEMIC RANK:**

Molina Bas, Omar I., Ph.D.  
Assistant Professor

### **EDUCATION:**

Ph.D., Construction Engineering, *Universidad Politécnica de Madrid*, Spain, 2008  
D.E.A., Construction Engineering, *Universidad Politécnica de Madrid*, Spain, 2006  
M.Eng., Construction Engineering & Management, University of Alberta, Canada, 2000  
B.S.C.E., Magna Cum Laude, University of Puerto Rico, Mayagüez Campus, 1998

### **ACADEMIC EXPERIENCE:**

Assistant Professor, University of Puerto Rico, Mayagüez Campus, 2008 – present  
Assistant Professor, Polytechnic University of Puerto Rico, 2000 – 2004

### **NON-ACADEMIC EXPERIENCE:**

*Autoridad para el Financiamiento de la Infraestructura de Puerto Rico*, Project Manager  
CMA Architects & Engineers, Project Manager and Quality Assurance Engineer  
Municipal Department of Public Works – City of Toa Alta, Director  
Caribbean Industrial Construction, Project Engineer

### **CERTIFICATIONS & PROFESSIONAL REGISTRATIONS:**

College of Engineers and Land Surveyors of Puerto Rico (CIAPR) – Certificate No. 20,483

### **CURRENT MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:**

American Society of Civil Engineers  
Construction Institute  
American Concrete Institute  
American Society of Engineering Education

### **HONORS & AWARDS:**

Tau Beta Pi, The National Engineering Honor Society, UPR – Mayagüez  
Golden Key, National Honor Society, UPR – Mayagüez  
Academic Senate (Elected Senator), UPR – Mayagüez  
Research Committee for the selection of the 9<sup>th</sup> Chancellor (Senator), UPR – Mayagüez

### **SERVICE ACTIVITIES (Within & Outside of the Institution):**

Public Private Partnerships Committee – Puerto Rico Chamber of Commerce  
Education SubCommittee, PPP Committee – Puerto Rico Chamber of Commerce  
Committee of Graduated Studies and Research – UPR, Department of Civil Engineering  
Committee of Graduated Studies and Research – UPR, College of Engineering  
Advisory Board – University of Puerto Rico's Intramural Practice Plan  
Unit Coordinator – Construction Engineering and Management  
Advisor of the Construction Engineering and Management Association

### **MOST IMPORTANT PUBLICATIONS & PRESENTATIONS:**

Guzmán Duran, D., Antón Fuentes, R., & Molina Bas, O. I. (2012). Study on the influence of mineral admixtures as a substitute of Portland cement on the mechanical properties and durability of concrete. *International Congress on Durability of Concrete*. Trondheim, Norway: Tekna.

- Molina Bas, O. I., Moragues Terrades, A., Gálvez Ruiz, J., & Guerrero Bustos, A. (2011). Influence of cement properties in the reaction rate and mechanical behavior of concrete with high fly ash content. *13th International Congress on the Chemistry of Cement*. Madrid, Spain: CSIC.
- Zapata Orduz, L. E., Molina Bas, O. I., & Portela Gautier, G. (2011). Rheological behavior between Portland cement type I and commercial silica fume. *13th International Congress on the Chemistry of Cement*. Madrid, Spain: CSIC.
- Valdés, D., Cruz, Y., González Quevedo, A. A., Ortiz, K. A., & Molina Bas, O. I. (2011). Metodologías para la evaluación de infraestructura y operación de autopistas: caso de estudio PR-22. *Dimensión*, 23-27.
- Vásquez Sánchez, Y., Cruzado Vélez, I., & Molina Bas, O. I. (2011). Evaluación de infraestructura de aeropuertos: Una mirada al Aeropuerto Internacional Luis Muñoz Marín. *Dimensión*, 7-12.
- Molina Bas, O. I., Antón Fuentes, R., Moragues Terrades, A., & Gálvez Ruiz, J. C. (2009). Influence of the Properties of Portland Cement in the Diffusion of Aggressive Agents in Concretes with Fly Ash. *Revista Internacional de Desastres Naturales, Accidentes e Infraestructura Civil*, 10(1), 33-43.
- Molina Bas, O. I., & Gómez Pérez, A. C. (2010). El problema de la financiación de las infraestructuras: las alianzas público-privadas. *Dimensión*, 7-14.
- Molina Bas, O. I., Moragues Terrades, A., & Gálvez Ruiz, J. C. (2009). Influence of Portland Cement in the Mechanical Properties, Permeability and Pore Structure of Concrete Mixed with Fly Ash. *Revista Internacional de Desastres Naturales, Accidentes e Infraestructura Civil*, 9(1), 46-55.
- Molina Bas, O. I., Moragues Terrades, A., Gálvez Ruiz, J. C., & Guerrero Bustos, A. (2008). The influence of fly ash as substitute of cement in the durability of concrete. *V ACI/CANMET International Conference on High Performance Concrete*. Manaus, Amazônia, Brazil: ACI/CANMET/IBRACON.
- Molina Bas, O. I., Moragues Terrades, A., & Gálvez Ruiz, J. C. (2008). La influencia de las cenizas volantes como sustituto parcial del cemento Pórtland en la durabilidad del hormigón: propiedades físicas, difusión del ión cloruro y del dióxido de carbono. *XXV Encuentro del Grupo Español de Fractura* (pp. 575-580). Sigüenza, Spain: Sociedad Española de Integridad Estructural.
- Molina Bas, O. I., Moragues Terrades, A., & Gálvez Ruiz, J. C. (2007). La influencia de las cenizas volantes como sustituto parcial del cemento Pórtland en la durabilidad del hormigón: estudio de las propiedades mecánicas, permeabilidad y porosimetría. *XXIV Encuentro del Grupo Español de Fractura* (pp. 673-677). Burgos, Spain: Sociedad Española de Integridad Estructural.
- Molina Bas, O. I. (2006). An Evaluation of ISO Quality Initiative in the Construction Industry. *Dimensión*, 21-29.

### **MOST RECENT PROFESSIONAL DEVELOPMENT ACTIVITIES:**

- 2012 NSF Minority Faculty Development Workshop: Engineering Enterprise and Innovation, Georgia Institute of Technology, March 15 – 18, 2012
- Seminar on Development of a Framework for the Efficiency Measurement of Road Maintenance Strategies using Data Envelopment Analysis, Dr. de la Garza, March 8, 2012
- 2<sup>da</sup> Jornadas Bi anuales: Perspectivas Globales sobre el desempeño del hormigón, University of Puerto Rico, Mayagüez Campus, February 2, 2012