

## Antonio Nanni

<p>Specialisation</p>	<p><b>Ph.D.</b> Civil Engineering, Univ. of Miami, Coral Gables, FL, 1985  <b>M.S.</b> Civil Engineering, Univ. of Witwatersrand, South Africa, 1980  <b>B.Sc.</b> Magna cum laude in Civil Engineering, Univ. of Bologna, Italy, 1978</p>
<p>Research interests</p>	<p>Dr. Nanni is a structural engineer interested in construction materials, their structural performance, and field application. His interests are in the field of civil infrastructure sustainability and renewal. In the past 25 years, he has obtained experience in concrete and advanced composites-based systems as the principal investigator of projects sponsored by federal and state agencies, and private industry.</p>
<p>Short curriculum vitae</p>	<p>Dr. Nanni has advised over 50 graduate students pursuing MSc and PhD degrees. Dr. Nanni has maintained a balance between academic and practical experience. He is a registered PE in Italy, FL, PA, MO, and OK. He is an active member in the technical committees of ACI (Fellow), ASCE (Fellow), ASTM and TMS. In 2004, he was elected Founding Fellow of the International Institute for FRP in Construction (IIFC). He was the founding Chair of ACI Committee 440 - FRP Reinforcement and former Chair of ACI Committee 437 – Strength Evaluation. Dr. Nanni has served in the Executive Committee of ASCE Materials Division and is the Editor-in-Chief of the ASCE Journal of Materials in Civil Engineering. He was the co-author of a book and editor of a second one on the subject of FRP reinforcement for concrete and co-edited the proceedings of several International Symposia and Workshops on the same subject.</p> <p>He has authored over 150 refereed journal papers and was co-recipient of the 2001 Best Applications Paper Award, Composites Fabricators Association, and received an Honorable Mention for the Application Paper on the 1997 Issue, ASCE - Journal for Composites in Construction. Dr. Nanni was recognized with the Engineering News-Record Award of Excellence for 1997, (Top 25 Newsmakers in Construction). In 1998, he was the recipient of the Delmar L. Bloem Award from ACI. In 1998 and 2000, he was a co-recipient of the International Concrete Repair Institute Award of Excellence – Industrial Structures. In 2001, he was co-recipient of the Innovation Award from the National Association of Development Organizations (NADO). He was the recipient of the 2004 Alumni Merit Award for Outstanding Accomplishments, MSM-UMR Alumni Association. In May 2005, he received the President’s Award for Research and Creativity, University of Missouri – System.</p>
<p>Publications (2009)</p>	<p><b>Workshop/Meeting</b></p> <ul style="list-style-type: none"> <li>• De Luca, A., Matta, F., Nanni, A., Nardone, F., Lignola, G.P., and Prota, A., "Experimental Evaluation of FRP-Confined Full-Size Reinforced Concrete Columns," Asia-Pacific on FRP in Structures (APFIS 2009), December 9-11, 2009, J. Sim, Ed., Seoul, Korea, pp. 259-264.</li> <li>• De Luca, A., Matta, F., Nanni, A., Nardone, F., Lignola, G.P., and Prota, A., "Structural Evaluation of GFRP-Confined Reinforced Concrete Hollow Columns," Asia-Pacific on FRP in Structures (APFIS 2009), December 9-11, 2009, J. Sim, Ed., Seoul, Korea, pp. 285-290.</li> <li>• Napoli, A., F. Matta, E. Martinelli, A. Nanni and R. Realfonzo, "Flexural RC Members Strengthened with Mechanically Fastened FRP Laminates: Test Results and Numerical Modeling," Asia-Pacific on FRP in Structures (APFIS 2009), J. Sim, Ed., December 9-11, 2009, Seoul, Korea, pp. 551-556.</li> <li>• Matta, F., P. Ziehl, D. Ozevin, D. Inman, J. Giancaspro, B. Metrovich and A. Nanni, "Self Powered Wireless Sensor Network for Structural Bridge Health Prognosis: a 5-year Research and Development Project for Infrastructure Sustainability," 7<sup>th</sup> International Workshop on Structural Health Monitoring Stanford University, Stanford, CA, USA, September 9-11, 2009, 10 pp.</li> <li>• De Caso y Basalo, F., Matta, F., and Nanni, A., "Fiber Reinforced Cementitious Matrix Composites for Infrastructure Rehabilitation," 9<sup>th</sup> International Symposium on Fiber Reinforced Polymer Reinforcement for Concrete Structures (FRPRCS-9), D. Oehlers, M. Griffith and R. Seracino, Eds., July 13-15, 2009, Sydney, Australia,</li> </ul>

CD-ROM, 4 pp.

- De Luca, A., Matta, F., and Nanni, A., "Structural Response of Full-Scale Reinforced Concrete Columns with Internal FRP Reinforcement under Compressive Load," 9<sup>th</sup> International Symposium on Fiber Reinforced Polymer Reinforcement for Concrete Structures (FRPRCS-9), D. Oehlers, M. Griffith and R. Seracino, Eds., July 13-15, 2009, Sydney, Australia, CD-ROM, 4 pp.
- Ferraro, R. M., Giancaspro, J., and Nanni, A., "Novel Peel-and-Stick FRP System for Confinement of Concrete," 9<sup>th</sup> International Symposium on Fiber Reinforced Polymer Reinforcement for Concrete Structures (FRPRCS-9), D. Oehlers, M. Griffith and R. Seracino, Eds., July 13-15, 2009, Sydney, Australia, CD-ROM, 4 pp.
- Napoli, A., F. Matta, A. Nanni and R. Realfonzo, "Strengthening of Reinforced Concrete One-Way Slabs with Mechanically Fastened FRP Laminates," 9<sup>th</sup> International Symposium on Fiber Reinforced Polymer Reinforcement for Concrete Structures (FRPRCS-9), D. Oehlers, M. Griffith and R. Seracino, Eds., July 13-15, 2009, Sydney, Australia, CD-ROM, 4 pp.
- Rocca, S., N. Galati, and A. Nanni, "Experimental Evaluation of Non-Circular Reinforced Concrete Columns Strengthened With CFRP," ACI-SP, Seismic Strengthening of Concrete Buildings using FRP Composites, Editors T. Alkhrdaji and P. Silva, SP 258-3, American Concrete Institute, Farmington Hills, MI, pp. 37-56, CD-ROM
- Napoli, A., F. Matta, A. Nanni and R. Realfonzo, "Rinforzo a Flessione di Solette in C.A. con Lamine Composite Fibrorinforzate Installate con Ancoraggi Meccanici," Atti delle "Giornate AICAP 2009", Pisa, 14-16 May, 2009.
- Matta, F., A. Nanni, Napoli, A., L. Ascione, and R. Realfonzo, "Rinforzo di Murature con Lamine in FRP Collegate con Ancoraggi Meccanici," Proceedings of MuRiCO3 "Mechanics of Masonry Structures strengthened with Composite Materials", AICO, Venice, April 22-24, 2009.
- De Caso y Basalo, F., Matta, F., and Nanni, A., "Fiber Reinforced Cementitious Matrix Composites for Rehabilitation of Reinforced Concrete Columns," American Composites Manufacturers Association - Composites & Polycon 2009, January 15-17, 2009, Tampa, FL.
- De Luca, A., Matta, F., and Nanni, A., "Behavior of Full-Scale Concrete Columns Internally Reinforced with Glass FRP Bars under Pure Axial Load," American Composites Manufacturers Association - Composites & Polycon 2009, January 15-17, 2009, Tampa, FL.
- Ferraro, R. M., Giancaspro, J., and Nanni, A., "Peel-and-Stick FRP System for Concrete Confinement," American Composites Manufacturers Association - Composites & Polycon 2009, January 15-17, 2009, Tampa, FL

#### **Books**

- ACI Committee 440, "Specification for Construction with FRP Reinforcing Bars," ACI 440.5-08, Manual of Concrete Practice, American Concrete Institute, Farmington Hills, MI, 2009, pp. 5. (Sub-Committee Chair and Lead Author)
- ACI Committee 440, "Specification for Carbon and Glass FRP Bar Materials for Concrete Reinforcement," ACI 440.6-08, Manual of Concrete Practice, American Concrete Institute, Farmington Hills, MI, 2009, pp. 6. (Sub-Committee Chair and Lead Author)

#### **Scientific papers**

- Rocca, S., N. Galati, and A. Nanni, "Interaction Diagram Methodology for Design of FRP-Confined Reinforced Concrete Columns," Construction and Building Materials, Vol. 23, No. 4, April 2009, pp. 1508-1520 (special issue: FRP Composites in Construction, J.F. Chen, Editor).
- Matta, F., A. Nanni, A. Abdelrazaq, D. Gremel, and R. Koch, "Externally Post-Tensioned Carbon FRP Bar System for Deflection Control," Construction and Building Materials, Vol. 23, No. 4, April 2009, pp. 1628-1639 (special issue: FRP Composites in Construction, J.F. Chen, Editor).
- Matta, F., and Nanni, A., "Connection of Concrete Railing Post and Bridge Deck with Internal FRP Reinforcement," Journal of Bridge Engineering, Vol. 14, No. 1, Jan./Feb. 2009, pp. 66-76.