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Organization type: Politecnico di Torino
Role: Full Professor or research directors
Department name: (Politecnico di Torino) DISTR
Education: Civil Engineering Degree

Work experience in the last 5 years: Full professor of Structural Mechanics at the Faculty of Engineering of Politecnico di Torino.
Director of the Non Destructive Testing Laboratory of the DISTR. Director of the La.Di.S.S.S. (Experimental Didactic Laboratory for Structural Security) of the DISTR. He is member of Teaching Council for the PhD Program in Structural Engineering at the Politecnico di Torino. He is Vice-President of the Council on Education in Construction Engineering.
President of Istituto Superiore Alti Studi Strutture e Infrastrutture, according to the joint proposal of Ministry of Infrastructure and Politecnico di Torino.

Teaching activities at Politecnico di Torino:

Course of "Statics and Stability of Masonry and Monumental Buildings" (Degree course in Architectural Engineering)
Course of "Testing of materials, models and structures" (Degree course in Architectural and Civil Engineering)

Member of the Local Organizing Committee of the Conference: "What Future for the Infrastructure? Innovation & Sustainable Development"

Technical, organizational and social skills: He started his scientific activity in 1973 at Politecnico di Torino. Since 1985 he has been Associate Professor of Structural Engineering at the Architectural Faculty of University of Venice.

Since 1990 he has been appointed Full Professor of Structural Mechanics at Politecnico di Torino.

From 1989 to 1992 and from 2001 to 2003 he was Vice-director of the Department of Structural Engineering and Geotechnics at Politecnico di Torino.

Since 1990 he has been coordinator of the Testing Fee Committee at Politecnico di Torino.

His research activities focus on Structural Monitoring and Damage Assessment of

Concrete and Masonry Structures: non destructive tests for historical masonry structures; cyclic fatigue tests for prequalification of strengthening materials applied to historical masonry structures; strengthening techniques in historical masonry buildings; nonlinear techniques for ultrasonic micro and macro-damage diagnostic in concrete and masonry structures; cyclic and creep phenomena in masonry structures; damage and fracture phenomena in masonry and concrete structures; delamination in FRP-strengthened masonry structures.

He has published over 85 articles in the field of masonry structures and infrastructures in the most important international journals (Materials & Structures; Masonry International, Engineering Fracture Mechanics; Theoretical and Applied Fracture Mechanics; Experimental Techniques; International Journal of Solids and Structures; etc.)

Loans managed for the last 5 years: Piedmont Region Industrial Research Call 2006 "Innovative methods for eco-compatible and sustainable recycling of muck from tunnel excavation, also considering the potential content of noxious minerals" REMUK (2007 – 2010)

Research convention between the DISTR and the Regione Piemonte Cultura Division on the theme "Study of the quality of applications of innovative materials in historical building strengthening works". (2002 – 2004)

Research Programme of Relevant National Interest PRIN -"Metodi non distruttivi per l'identificazione e la diagnosi di materiali e strutture" (Ministero dell'Istruzione, dell'Università e della Ricerca).

Research Programme of Athenaeum "Valutazione in situ delle caratteristiche di deformabilità del calcestruzzo" (Ministero dell'Istruzione, dell'Università e della Ricerca). Year 2005.

Research Programme of Athenaeum "Interazione meccanica dei nuovi materiali per il consolidamento con le strutture preesistenti" (Ministero dell'Università e della Ricerca Scientifica e Tecnologica)

Publications for the last 5 years, licences or other products of research: Papers on National/International journals:

1. SCALERANDI M, GLIOZZI A. S., BRUNO C., MASERA D., BOCCA P.G. (2008). A Scaling Method to Enhance Detection of a Non-Linear Elastic Response. APPLIED PHYSICS LETTERS. Vol. 92, pp. 101912-1-101912-3, ISSN: 0003-695
2. ANTONACI P., BOCCA P.G., SELONE F. (2007). Elastic Modulus in Large Concrete Structures by a Sequential Hypothesis Testing Procedure applied to Impulse Method Data. STRUCTURAL ENGINEERING AND MECHANICS. Vol. 26, N. 5, pp. 499-516, ISSN: 1225-4568
3. ANTONACI P., BOCCA P.G., MASERA D., PUGNO N., SCALERANDI M., SELONE F. (2007). A Novel Ultrasonic Technique to Detect Damage Evolution in Quasi-Brittle Materials. KEY ENGINEERING MATERIALS. Vol. 247, pp. 633-638, ISSN: 1013-9826
4. ANTONACI P, BOCCA P., GRAZZINI A. (2006). Long mechanical interaction between strengthening materials and pre-existing structures. JOURNAL OF MATERIALS IN CIVIL ENGINEERING. vol. 18, n. 15, pp. 634-640 ISSN: 0899-1561.
5. ANTONACI P., BOCCA P., GRAZZINI A. (2006). In situ determination of toughness indices of fibre reinforced concrete. MATERIALS AND STRUCTURES. vol. 39, n. 3, pp. 283-290 ISSN: 1359-5997.

6. ANTONACI P., BOCCA P. (2005). Experimental study for the evaluation of creep in concrete through thermal measurements. CEMENT AND CONCRETE RESEARCH. vol. 35, 9, pp. 1776-1783 ISSN: 0008-8846.
 7. ANTONACI P, BOCCA P. (2005). The pull-out method for the on-site estimation of the elastic modulus of concrete. JOURNAL OF STRAIN ANALYSIS FOR ENGINEERING DESIGN. vol. 40, 6, pp. 505-511 ISSN: 0309-3247.
 8. ANTONACI P, BOCCA P. (2005). Valutazione in situ del modulo elastico del calcestruzzo con prova non distruttiva. INDUSTRIA ITALIANA DEL CEMENTO. vol. 806, pp. 138-145 ISSN: 0019-7637.
 9. ANTONACI P., BOCCA P. (2004). On site evaluation of concrete deformability characteristics: two non-destructive methods compared. SCIENTIFIC ISRAEL: TECHNOLOGICAL ADVANTAGES. vol. 6, pp. 87-95 ISSN: 1565-1533.
 10. ANTONACI P., BOCCA P., GRAZZINI A. (2004). Valutazione a fatica dei laterizi di nuova produzione. L'INDUSTRIA DEI LATERIZI. vol. 86, pp. 112-118 ISSN: 1123-8208.
- Papers on National/International Congresses:
11. BOCCA P.G., GRAZZINI A. (2008). Experimental techniques for the evaluation of the long-term behaviour of masonry strengthening materials. Proceedings of the 6th Conference on Structural Analysis of Historical Construction (SAHC08), Bath (UK), July, 2-4, 2008, Vol. 1, pp. 339-347, ISBN: 9780415481090.
 12. ANTONACI P., BOCCA P.G. (2008). Mechanical Behavior of Clay Bricks and Restoration Mortars Subject to Thermal Actions. In "Life Cycle Civil Engineering", First international Symposium on Life Cycle Civil Engineering, Varenna (Italy) 10-14 June 2008, pp. 101-106, ISBN: 978-0-415-46857-2
 13. BOCCA P.G., ANTONACI P., DI VASTO V. (2008). Valutazione del comportamento meccanico a breve e a lungo termine di graniti caratterizzati da disuniformità cromatiche. Proceedings of the XXXVII AIAS National Conference, Roma (Italy) September, 10-13, 2008, pp. 99, 2008, ISBN: 9788887965513
 14. BOCCA P.G., GRAZZINI A., LACIDOGNA G., MANUELLO A., MASERA D., CARPINTERI A (2008). Reinforced masonry with FRP and structural mortar: durability evaluation by AE technique. Proceeding of the 4th International Conference on FRP Composites in Civil Engineering (CICE2008), Zurich (Switzerland) July, 22-24, 2008, pp. 155, ISBN: 978-3-905594-50-8
 15. BOCCA P.G., GRAZZINI A., MASERA D. (2008). Shear behaviour of reinforced masonry: efficacy of FRP versus traditional technique. Proceedings of the 4th International Conference on FRP Composites in Civil Engineering (CICE2008), Zurich (Switzerland) July, 22-24, 2008, pp. 154, 2008, ISBN: 978-3-905594-50-8
 16. ANTONACI P., BOCCA P.G., BRUNO C., GLIOZZI A., MASERA D., SCALERANDI M. (2008). Nonlinear phenomena analysis in the ultrasonic wave propagation to detect damage evolution in historical structures. Proceedings of the Int. RILEM Conference SACoMaTiS 2008: On Site Assessment of Concrete, Masonry and Timber Structures, Varenna (Italy) September, 1-2, 2008, pp. 703-708, Vol. 2, ISBN: 9782351580615
 17. BOCCA P.G., GRAZZINI A., LACIDOGNA G., MANUELLO A., MASERA D., CARPINTERI A (2008). Cyclic damage analysis by acoustic emission in reinforced historical masonry, Proceeding of the Int. RILEM Conference SACoMaTiS 2008: On Site Assessment of Concrete Masonry and Timber Structures, Varenna (Italy) September, 1-2, 2008, pp. 443-452, Vol. 1, ISBN: 9782351580615
 18. ANTONACI P., BOCCA P.G., MASERA D., PUGNO N., SCALERANDI M., SELONE F. (2007), Spectral Analysis and Damage Evolution in Concrete Structures with Ultrasonic Technique. Proceedings of the 6th International Conference on Fracture Mechanics of Concrete and Concrete Structures, Catania (Italy) June, 17-22, 2007.
 19. ANTONACI P., BOCCA P.G., DI VASTO V., MASERA D. (2007). Caratterizzazione

Sperimentale del Danneggiamento nei Materiali Granulari mediante Analisi Spettrale di Segnali Ultrasonici. Proceedings of the XXXVI AIAS National Conference, Ischia - Napoli (Italy) September, 4-8, 2007

20. BOCCA P., CARPINTERI A, GRAZZINI A, LACIDOGNA G, MASERA D. (2006). Damage evaluation by acoustic emission in brickwork materials under variable amplitude loading. Proceedings of the 7th International Masonry Conference, London (UK), 30 October - 1 November, 2006.

21. ANTONACI P., BOCCA P. (2005). On site estimation of the deformability characteristics of historical masonry structures and new restoration materials through impulse tests. ISBN/ISSN: 88-89758-01-5. Proceedings of the 8th International Conference on Non- Destructive Investigations and Microanalysis for the Diagnostics and Conservation of the Cultural and Environmental Heritage. Lecce (Italy), May, 15 - 19, 2005.

22. ANTONACI P., BOCCA P. (2005). On site evaluation of the elastic modulus of concrete. Proceedings of the 11th International Conference on Fracture. Turin (Italy), March, 20 - 25, 2005.

23. ANTONACI P., BOCCA P. (2005). Temperature variations in concrete subjected to cyclic compressive loading: consequences for diagnostic applications. Proceedings of the 6th International CTU Congress "Global Construction. Ultimate Concrete Opportunities". Dundee (Scotland), July, 5 - 7, 2005. ISBN/ISSN: 0-7277-3405-9.

24. ANTONACI P, BOCCA P. (2005). On site experimental evaluation of the elastic characteristics of large concrete structures. Proceedings of the First International Conference on Safety and Security Engineering. Roma (Italy), June, 13 - 15, 2005. ISBN/ISSN: 1-84564-019-5

25. ANTONACI P, BOCCA P. (2005). Stima sperimentale delle caratteristiche elastiche dei materiali dell'ingegneria civile. Proceedings of the XXXIV Convegno Nazionale AIAS. Milano (Italy), September, 14 - 17, 2005. ISBN/ISSN: 88-901916-1-9.

Books:

26. BOCCA P.G. (2008). What Future for the Infrastructure? Innovation & Sustainable Development, Patron (ITA), ISBN: 97888555-2962-4

Chapters on books

27. BOCCA P., A. GRAZZINI. (2005). Tecniche di intervento e compatibilità strutturale nel consolidamento delle murature storiche. Quaderni del Progetto Mestieri Reali, vol. 2, pp. 173-180.

Type of the role in the search: Researcher