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Chair of Structural Mechanics
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born in Bologna (Italy), on December 23, 1952

Education:

Doctoral Degree in Nuclear Engineering cum Laude, University of Bologna, Bologna-Italy, 1976.

Doctoral Degree in Mathematics cum Laude, University of Bologna, Bologna-Italy, 1981.

Academic and Scientific Achievements:

Professor and Chair of Structural Mechanics, Politecnico di Torino, Torino-Italy, 1986-.

Head of the Department of Structural Engineering, Politecnico di Torino, Torino-Italy, 1989-1995.

Founding Member and Director – Post-graduate School in Structural Engineering, Politecnico di Torino, Torino-Italy, 1990-.

Director of the “A.Castigliano” Computational Mechanics Centre & Laboratory of Fracture Mechanics, Politecnico di Torino, Torino-Italy, 1999-.

President of the International Congress on Fracture (ICF), 2009-2013.

President of the European Structural Integrity Society (ESIS), 2002-2006.

President of the International Association of Fracture Mechanics for Concrete and Concrete Structures (IA-FraMCoS), 2004-2007.

President of the Italian Group of Fracture (IGF), 1998-2005.

Deputy and Acting President of the National Research Institute of Metrology (INRIM), Torino-Italy, 2006-.

Chairman of the Organizing Committee of the 11th International Conference on Fracture (ICF11), Torino-Italy, March 20-25, 2005.

Member of the Congress Committee of the International Union of Theoretical and Applied Mechanics (IUTAM), 2004-2012.

Visiting Professor, Lehigh University, Bethlehem-Pennsylvania, USA, 1982-1983.

Visiting Professor, Tsinghua University, Beijing-China, 1996.

Visiting Professor, Tongji University, Shanghai-China, 1996.

Visiting Professor, Malaysia Institute of Technology, Johor Bahru-Malaysia, 1997.

Visiting Professor, University of Sao Paulo, Sao Paulo-Brazil, 2010.

Fellow of the European Academy of Sciences, Liege-Belgium, 2009-.

Fellow of the International Academy of Engineering, 2010-.

Foreign Member of the Russian Academy of Engineering, Moscow-Russia, 2009-.

Member of the American Academy of Mechanics, USA, 2003-

Member of the American Association for the Advancement of Science (founded in 1848 at the Academy of Natural Sciences in Philadelphia, Pennsylvania, USA), 1999-.

Member of the New York Academy of Sciences (founded in 1817), New York-USA, 1997-.

Fellow of the Turin Academy of Sciences (founded by G.L. Lagrange in 1783), Torino-Italy, 2005-; Member, 1995-2005.

Member of the Istituto Lombardo – Accademia di Scienze e Lettere (founded by A. Volta in 1804), Milano-Italy, 2006-.

Member of the Accademia Teatina per le Scienze, Chieti-Italy, 2006-.

Member of the Accademia di Santa Teodora, Capua-Italy, 1994-.

Member of the Scientific Editorial Board of the International Journals:

- “Theoretical and Applied Fracture Mechanics”, 1984-;
- “Mechanics of Cohesive-Frictional Materials”, 1995-2000;
- “Numerical and Analytical Methods in Geomechanics”, 2001-;
- “Strength, Fracture and Complexity”, 2003-;
- “Engineering Fracture Mechanics”, 2005-;
- “Physical Mesomechanics”, 2005-;
- “International Journal of Fracture”, 2006-;
- “Strength of Materials”, 2008-;
- “Strain – An International Journal for Experimental Mechanics”, 2009-;
- “The Archive of Mechanical Engineering”, 2010-;
- “Communications in Fractional Calculus”, 2010-;
- “Frattura ed Integrità Strutturale – IGF Journal”, 2010-.

Secretary - RILEM 89FMT Committee on Fracture Mechanics of Concrete, 1986-1991.

Chairman - ESIS Technical Committee 9 on Concrete Structures, 1991-1999.

European Coordinator of the ILTOF Project (Innovative Learning and Training On Fracture), in the framework of the European Union Leonardo da Vinci Programme for Education and Culture, 2006-2008.

Member of the Expert Panel for the Research Evaluation of the Department of Civil Engineering at the Technical University of Denmark, Lyngby-Denmark, 2007.

Chair and Introductory Lecturer of Mini-Symposium 01 on “Cohesive Zone Models of Fracture and Failure”, at the 22nd International Congress of Theoretical and Applied Mechanics, Adelaide-Australia, August 24-30, 2008.

Invited courses and lectures at universities and research centres in: Italy, Switzerland, Austria, France, Spain, Germany, The Netherlands, United Kingdom, Hungary, Poland, Greece, Denmark, Russia, Portugal, Finland, Sweden, Serbia, Turkey, Czech Republic, USA, Mexico, South Africa, India, Japan, Australia, China, Malaysia, Canada, Brazil, Korea.

Assistant Professor, University of Bologna, Bologna-Italy, 1980-1986.

Researcher, Consiglio Nazionale delle Ricerche, Bologna-Italy, 1978-1980.

Honours and Awards:

Odone Belluzzi Award for Structural Mechanics, University of Bologna, 1976.

Robert l'Hermite Medal, RILEM, 1982.

Japan Society of Mechanical Engineers Medal, JSME, 1993.

Doctor of Physics Honoris Causa, The Constantinian University, Cranston-Rhode Island, USA, 1994.

International Cultural Diploma of Honor, American Biographical Institute, USA, 1995.

Honorary Professor, Nanjing Architectural & Civil Engineering Institute, Nanjing-China, 1996.

Honorary Professor, Albert Schweitzer University, Geneva-Switzerland, 2000.

Wessex Institute of Technology Eminent Scientist Medal, WIT, Southampton-UK, 2000.

Griffith Medal for Fracture Mechanics, ESIS, 2008.

International Congress on Fracture Honorary Fellowship Medal, ICF, 2009.

Inclusion in the list of the "Top 100 Scientists", International Biographical Centre, Cambridge-UK, 2009.

International Plato Award for Educational Achievement, International Biographical Centre, Cambridge-UK, 2009.

Da Vinci Award for Inspirational Accomplishment, International Biographical Centre, Cambridge-UK, 2009.

Man of the Year in Science, American Biographical Institute, USA, 2009.

Man of the Year in Education, American Biographical Institute, USA, 2010.

Jerold L. Swedlow Memorial Lecture, American Society for Testing and Materials (ASTM), 2011.

Organizational Membership:

International Congress on Fracture (ICF), Fellow, 2009-; Member, 1981-2009.

European Structural Integrity Society (ESIS), Fellow, 2008-; Member, 1990-2008.

International Association of Fracture Mechanics for Concrete and Concrete Structures (IA-FraMCoS), Fellow, 2010-; Member, 1992-2010.

American Society of Civil Engineers (ASCE), Fellow, 1996-; Member, 1985-1996.

Réunion Internationale des Laboratoires d'Essais et de Recherches sur les Matériaux et les Constructions (RILEM), Member, 1982-.

European Mechanics Society (EUROMECH), Member, 1994-.

International Union of Theoretical and Applied Mechanics (IUTAM), Member, 1996-.

Society for Experimental Mechanics (SEM), Member, 2009-.

American Concrete Institute (ACI), Member, 2010-.

Publications:

Author of over 600 papers (more than 250 published in Refereed International Journals) on the following topics: fracture mechanics, material fatigue, thermoelasticity, seismic structures, reinforced concrete, structural monitoring, contact mechanics, fragmentation and comminution, drilling.

Author or Editor of 41 Volumes.

Author, book, “Mechanical Damage and Crack Growth in Concrete: Plastic Collapse to Brittle Fracture”, Martinus Nijhoff Publishers, Dordrecht 1986.

Author, book, “Structural Mechanics: A Unified Approach”, Chapman & Hall, London 1997.

Editor, book, “Applications of Fracture Mechanics to Reinforced Concrete”, Elsevier Applied Science, London 1992.

Editor, book, “Size-Scale Effects in the Failure Mechanisms of Materials and Structures”, Chapman & Hall, London 1996.

Editor, book, “Nonlinear Crack Models for Nonmetallic Materials”, Kluwer Academic Publishers, Dordrecht 1999.

Editor, book, “Minimum Reinforcement in Concrete Members”, Elsevier Science, Oxford 1999.

Editor, book, “11th International Conference on Fracture, Turin (Italy) – March 20-25, 2005, Abstract Book”, Trading, Torino 2005, ISBN 978-88-903188-2-5.

Editor, website, ISBN 978-88-903188-0-1, www.ICF11.com, “11th International Conference on Fracture, Turin (Italy) – March 20-25, 2005, Proceedings CD-ROM”, Trading, Torino 2005, ISBN 978-88-903188-1-8.

Editor, book, “11th International Conference on Fracture, Turin (Italy) – March 20-25, 2005, Final Report”, Trading, Torino 2008, ISBN 978-88-903188-3-2.

Co-editor, book, “Fracture Mechanics of Concrete: Material Characterization and Testing”, Martinus Nijhoff Publishers, The Hague 1984.

Co-editor, book, “Fracture Mechanics Test Methods for Concrete”, Chapman & Hall, London 1991.

Co-editor, book, “Localized Damage: Computer-Aided Assessment and Control”, Computational Mechanics Publications, Southampton and Boston 1994.

Co-editor, book, “Advanced Technology for Design and Fabrication of Composite Materials and Structures”, Kluwer Academic Publications, Dordrecht 1995.

Co-editor, book, “Fractals and Fractional Calculus in Continuum Mechanics”, Springer-Verlag, Vienna and New York 1997.

Co-editor, book, “Damage and Fracture Mechanics”, Computational Mechanics Publications, Southampton and Boston 1998.

Co-editor, book, “Computational Fracture Mechanics in Concrete Technology”, WIT Press, Southampton and Boston 1999.

Co-editor, book, “Advances in Fracture Research”, Springer-Verlag, Dordrecht 2006.

Co-editor, book, “Earthquakes and Acoustic Emission”, Taylor & Francis, London 2007.

Co-editor, book, “New Trends in Fracture Mechanics of Concrete”, Taylor & Francis, London 2007.

Co-editor, book, “Design, Assessment and Retrofitting of RC Structures”, Taylor & Francis, London 2007.

Co-editor, book, “High-Performance Concrete, Brick-Masonry and Environmental Aspects”, Taylor & Francis, London 2007.

Co-editor, book, “Acoustic Emission and Critical Phenomena: From Structural Mechanics to Geophysics”, CRC Press, Boca Raton 2008.

Guest Editor, Special Issue on “Complexity, Scaling and Non-linearity in the Mechanics of Advanced Materials”, Strength, Fracture and Complexity, IOS Press, Vol. 3, N. 2-4, 2005.

Guest Co-editor, Special Issue on “Size-Scale Effects”, Engineering Fracture Mechanics, Pergamon Press, Vol. 70, N. 16, 2003.

Guest Co-editor, Special Issue on “High Temperature and Creep – Part I”, Strength, Fracture and Complexity, IOS Press, Vol. 4, N. 1, 2006.

Guest Co-editor, Special Issue on “High Temperature and Creep – Part II”, Strength, Fracture and Complexity, IOS Press, Vol. 4, N. 2, 2006.

Guest Co-editor, Special Issue on “Honour and Plenary Lectures presented at the 11th International Conference on Fracture (ICF11), held in Turin, Italy, on March 20-25, 2005”, International Journal of Fracture, Springer, Vol. 138, N.1-4, 2006.

Author or Editor of fourteen books in Italian language.

Publication of the Curriculum Vitae:

Who's Who in the World, from the 12th Edition.

Who's Who in Science and Engineering, from the 3rd Edition.

Who's Who in Finance and Industry, from the 30th Edition.

Who's Who in Italy, from the 1994 Edition.

Dictionary of the International Biographical Centre, Cambridge-UK, from the 24th Edition.

Five Thousand Personalities of the World, American Biographical Institute, from the 5th Edition.

Dated on November 30, 2010.