MARIO ALBERTO CHIORINO
Curriculum Vitae

EDUCATION

1962	Dr. Eng. Civil Engineering, Politecnico di Torino Graduation with the maximum of rates
1952-1957	Liceo scientifico in Biella (High school with emphasis on science) Golden medal of the Italian Ministry of Education for graduation in the top rank

ACADEMIC APPOINTMENTS

2012-present	Professor Emeritus of Structural Mechanics, Politecnico di Torino
1975-2011	Full Professor of Structural Mechanics, Politecnico di Torino
2000-2010	Member of the Faculty Board of Ph.D. Courses in Structural Mechanics and Engineering, Politecnico di Torino
2009	Visiting Professor, short term, Indian Institute of Technology Madras, India
2007	Co-founder and Member of the Faculty Board of Ph. D. Courses on Conservation of Architectural and Structural Heritage
2000-2003	Vice Dean, Faculty of Architecture, Politecnico di Torino
2002	Visiting Professor, Nagoya City University, Nagoya, Japan,
1994-2002	Vice-Rector for Education and Admission, Politecnico di Torino
1992-2000	Member of the Academic Senate, Politecnico di Torino,
1990-1993	Co-founder, School of Doctoral Studies of the Politecnico di Torino
1973-1975	Associate Professor of Structural Mechanics, IUAV University of Venice
1968-1972	Assistant Professor of Structural Mechanics, Politecnico di Torino

HONORS

2018	Foreign Member, Russian Academy of Engineering
2018	Russian Academy of Engineering, Russian Academy of Sciences, Russian Academy of Architecture and Construction Science, ACI Italy Chapter: Member of the Honor Committee for DSCS 2018 Moscow "Durability and Sustainability of Concrete Structures"
2014	Honorary Member of ACI American Concrete Institute (fifth Italian Honorary Member in the last 50 years)
2014	Invited plenary lecturer, Russian Academy of Sciences, Concrete 2014
2008	Fellow of ACI American Concrete Institute
2004	National Member, Accademia delle Scienze, Torino (Turin Academy of Sciences)
2001	Corresponding Member, Accademia delle Scienze, Torino (Turin Academy of Sciences)

MEMBERSHIPS IN INTERNATIONAL SOCIETIES AND COMMITTEES

2019	ALLEA (ALL European Academies), Member of the Scientific Committee of the Conference "The Role of Academies in Sustaining European Knowledge Societies in Times of Crisis", Accademia delle Scienze di Torino, 2019.
2018	IASS International Association for Shell and Spatial Structures, Member of the Scientific Committee of IASS 2018 Symposium, MIT, Boston, USA
2018	12th International Symposium on Ferrocement and Thin Reinforced Cement Composites, Belo Horizonte, Brazil, Member of the International Committee
2004-present	*fib* Fédération Internationale du Béton, Life Member since 2011
2015-present	*fib* Commission 1, TG 1.3 "Buildings"
2015-present	*fib* Commission 2, TG 2.1 "Serviceability models"
2012-2014	*fib* Commission 1, TG 1.6 "High-rise buildings"
2010-2014	*fib* Commission 4, "Modelling of structural behaviour and design"
2010-2014	*fib* Commission 4, Task Group 4.1 "Serviceability models"
2010-2015	ACI American Concrete Institute, Member of the International Advisory Committee (one of the two European members)
2011-present	ACI American Concrete Institute, Member of the International Conferences/ Conventions Committee

2014-present ACI American Concrete Institute, Member of ACI Committee 318-0L "International Liaison Committee"

2014-present ACI American Concrete Institute, Member of ACI Committee 318 "Structural Concrete Building Code"

2011-present ACI American Concrete Institute, Member of ACI Committee 088-S803 "Faculty Network"

2011-2016 ACI American Concrete Institute, Chairman of Committee 209 "Creep and Shrinkage in Concrete"

2009-present ACI American Concrete Institute, Honorary President of ACI Italy Chapter

2003-2009 ACI American Concrete Institute, President of ACI Italy Chapter

1993-present ACI American Concrete Institute, Committee 209, *Creep and Shrinkage of Concrete*, Voting Member

1990-2014 ACI American Concrete Institute, Ordinary Member

2011-present IASS International Association for Shells and Spatial Structures

2010-20015 IABSE International Association for Bridge and Structural Engineering

2010-2016 ICSA, International Conference on Structure and Architecture, Member of the Scientific Committee

2008-present International Exhibition: *Pier Luigi Nervi - Architecture as Challenge* and related research program, Member of the Scientific Committee;

2004-present Revista Ingenería de Construcción, Santiago, Chile, Member of the International Editorial Board

2001-2008 CONCREEP, International Conferences "Creep, Shrinkage and Durability Mechanics of Concrete and Other Quasi-Brittle Materials", International Scientific Committee

2004-2007 UNI (Italian Standard Organization), National Structural Engineering Committee,

2004-2007 UNI (Italian Standard Organization), Committee *Reinforced and Prestressed Concrete Structures*

2004 ARCH'04 International Conference on Arch Bridges, International Scientific Committee

1995-present RILEM Réunion des Laboratoires d'Essais sur les Matériaux, Technical Committee 179 CSD *Data Bank on Concrete Creep and Shrinkage*

1989-1999 RILEM Réunion des Laboratoires d'Essais sur les Matériaux, Technical Committee 107 CSP *Creep and Shrinkage Prediction Models*

1989-1999 RILEM Réunion des Laboratoires d'Essais sur les Matériaux, Technical Committees 114 CCS *Computer Programs for Creep and Shrinkage Analysis of Concrete Structures*

1994-1998 RILEM Réunion des Laboratoires d'Essais sur les Matériaux, Technical Committee 161 GMC *Modeling the Behavior of Concrete in Service*

1980-1987 RILEM Réunion des Laboratoires d'Essais sur les Matériaux, Technical Committee 69 MMC *Mathematical Modeling of Creep and Shrinkage of Concrete*

1968-1998 CEB Comité Euro-International du Béton

1979-1995 CEB Comité Euro-International du Béton, Member of the Advisory Committee

1986-1992 CEB Comité Euro-International du Béton, Committee for the Model Code 1990

1981-1995 CEB Comité Euro-International du Béton, Commission II *"Structural Analysis"*

1981-1995 CEB Comité Euro-International du Béton, General Task Group 9 *"Evaluation of Time-dependent Behaviour of Concrete"*

1970-1990 CEB Comité Euro-International du Béton, Chairman of Committee *Structural Effects of Time-dependent Behavior of Concrete*

1970-1984 CEB Comité Euro-International du Béton, Chairman of Editorial Group of the Manual *"Structural Effects of Time-dependent Behaviour of Concrete"*

1968-1978 CEB Comité Euro-International du Béton, Committee for the *Recommendations Internationales*

1972-1978 CEB Comité Euro-International du Béton, Committee *Evaluation and Limitation of Deflections in Concrete Structures*

1968-1970 CEB Comité Euro-International du Béton, Committee *Prestress Losses*

1968-1998 CEB Comité Euro-International du Béton, Member

1971-74 IABSE/AIPC International Association for Bridge and Structural Engineering - CEB Comité Euro-International du Béton - CECM European Convention for Structural Steel Work - FIP Fédération Internationale de la Précontrainte, Committee *Constructions mixtes acier et béton*.

SELECTED INVITED LECTURES AND SEMINARS

2017 Institute of Construction Science, NIIZhB Named after A. A. Gvozdev, Moscow, Keynote lecture in homage to Alexei A. Gvozdev on his 120th anniversary

2016 Cornell University, Ithaca, USA, Gergley Seminar Series, Invited lecture: *The role of structural engineering and geotechnics in the conservation of historical monuments*

2016 BME Budapest University of Technology and Economics, International Workshop "Pier Luigi Nervi: Art and Science of Building", Invited lecture: *Pier Luigi Nervi's structural art: a dialogue between engineering and architecture*

2014 III All-Russia (International) Conference "Concrete and Reinforced Concrete - Glance at Future" (Concrete 2014), Russian Academy of Sciences (RAS), Moscow, Invited plenary lecture: *Analysis of structural effects of time-dependent behaviour of concrete: an internationally harmonized format*

2014 European Schools in the Teaching of Restoration, The 150th Anniversary of the Foundation of School of Applied Civil Architecture at the Politecnico di Milano, Invited keynote lecture: *The role of structural mechanics and engineering and geotechnical sciences in the conservation of historical monuments*

2013 Instituto Eduardo Torroja de Ciencias de la Construcción, CSIC, International Conference on Construction Research, Keynote lecture: *Worldwide harmonization of codes for structural concrete: the case study of creep analysis and guidelines for application to the design of high-rise buildings*

2013 ETH Swiss Federal Institute of Technology, Zurich, Invited lecture: *Experimentation in the Work of Pier Luigi Nervi*

2013 Accademia delle Scienze di Torino (Turin Academy of Sciences), Keynote lecture: *Structural Mechanics from Lagrange to the present: the contribution of Turin School*, Symposium "Lagrange, a European Mathematician" on the occasion of Lagrange's 200th anniversary

2012 UNAM (Universidad Nacional Autónoma de México), Seminar *Time Dependent Analysis of Concrete Structures*

2012 UNAM (Universidad Nacional Autónoma de México), Seminar *Structural Analysis and Conservation of Historical Constructions: the Case Study of the World Largest Elliptical Dome at Vicoforte*

2011 Accademia Nazionale dei Lincei (Italian National Academy of Sciences and Letters), Keynote lecture, *Quintino Sella: tra scienza e cultura politecnica* (Quintino Sella: between science and polytechnic culture), Convegno: "Quintino Sella scienziato e statista per l'Unità d'Italia (Quintino Sella scientist and statesman for the Unification of Italy)"

2011 LNEC Laboratório Nacional de Engenharia Civil, Lisbon, SHATIS'11, International Conference Structural Health Assessment of Timber Structures, Lecture: *Survey and rehabilitation of an historical timber vault*

2011 *fib* Symposium, Prague: Lecture: *"Structural design of concrete high-rise buildings".*

2011 Accademia Nazionale dei Lincei (Italian National Academy of Sciences and Letters) and Sapienza University of Rome, Invited Lecture: *Pier Luigi Nervi: Structure and Form in d the Vatican Audience Hall*

2011 CISM International Centre for Mechanical Sciences, Udine, Italy, International Course: *Analysis of Creep and Shrinkage Effects in Concrete Structures*; Coordinator with D. J. Carreira (IIT Chicago); 8 Lectures on: *Theoretical Fundaments of Aging Linear Viscoelasticity*

2011 SEWC Structural Engineers World Congress, Keynoye lecture: *Pier Luigi Nervi: Architecture as Challenge*

2010 ACI (American Concrete Institute), Spring Convention, Chicago, International Session: *Tall Buildings*, Co-chair, with H. S. Lew (NIST National Institute of Standards and Technology).

2010 Politecnico di Milano (Technical University of Milan), Milan, Italy, Dottorato di Ricerca in Ingegneria Strutturale, Sismica e Geotecnica (Ph. D. Courses on Structural, Seismic and Geotechnical Engineering), Invited seminar: *Time Dependent Analysis of Concrete Structures*

2009 Indian Institute of Technology Madras; Indian Council of Scientific and Industrial Research, Structural Engineering Research Centre (SERC), Chennai, Invited seminars:

– *Time-dependent Analysis of Concrete Structures,*

– *Modeling and Monitoring Strategies for Large Masonry Domes.*

2009 ROSE SCHOOL (European School for Advanced Studies in Reduction of Seismic Risk), The Ninth International Seminar, Post Seminar Symposium: *Strategies for the Structural Conservation of a National Monument in a Seismic Area: the Sanctuary of Vicoforte and its Large Elliptical Dome*, Vicoforte, Italy, Chairman

2007 ACI American Concrete Institute, Fall Convention, Puerto Rico, Technical Session: *Structural Implications of Shrinkage and Creep of Concrete*, Co-Chair, with J. Gardner (University of Ottawa), ACI Special Publication 246

2007 Accademia delle Scienze di Torino (Turin Academy of Sciences), Seminar: *The Stabilization of the Leaning Tower of Pisa*: *Analyses and Interventions*, Chairman of the Seminar

2006 SAHC 2006 "Structural Analysis of Historical Constructions", New Delhi, India, Lecture: *Non linear modeling of large masonry domes*

2005 ACI American Concrete Institute, Spring Convention, New York City, International Session: *Seismic engineering for concrete structures: Italian perspective*, Co-chair with A. Nanni (University of Miami)

2004 Accademia Nazionale dei Lincei (Italian National Academy of Sciences and Letters), Co-Chair of the Seminar in Homage to Franco Levi: "Stati di Coazione Elastica, Cento anni di sviluppo ed applicazioni (Structural effects of imposed strains and deformations, A century of Applications)", Keynote Lecture: *Effetti statici dei fenomeni viscosi* (Structural effects of viscous phenomena)

2004 Politecnico di Torino, International Seminar: *Modern Trends in Structural and Geotechnical Engineering*, Chairman; Keynote lecture: *Structural effects of time-dependent behavior of concrete: historical contributions and modern trends*

2004 Accademia delle Scienze di Torino (Turin Academy of Sciences), Invited lecture: *Creep effects on serviceability and stability of concrete arches*

2001 ARCH'01 - Third International Conference on Arch Bridges, École Nationale des Ponts et Chaussées, Paris, Lecture: *Mechanism and finite element failure analysis of stone arch bridges*

2000 Accademia delle Scienze di Torino (Turin Academy of Sciences), Invited Lecture: *Principles for a rational viscoelastic analysis of concrete structures*

1998 Laboratoire Central des Ponts et Chaussées, Paris, Keynote lecture: *General unified approach for creep analysis of concrete structures*

1998 *fib* Fédération Internationale du Béton, International Course *Advanced Design of Concrete Structures*, Invited Lecture: *An aging linear viscoelastic approach for the evaluation of the structural effects of time-dependent behaviour of concrete;*

1987 TNO, Delft, Invited lecture, *The new CEB Manual on Structural Effects of Time-dependent Behaviour of Concrete*

1986 Northwestern University, USA, RILEM International Symposium on Creep and Shrinkage of Concrete: Mathematical Modelling, Invited lecture: *Analysis of aging viscoelastic structures with elastic restraint*s

1979 American Concrete Institute - Comité Euro-International du Béton, Workshop on Creep of Concrete, Washington D.C., USA, Invited contribution: *A rational approach to the analysis of the effects of creep and shrinkage in concrete structures – fundaments for an internationally unified approach*

1975 Technical University of Denmark, Invited Seminar: *Fundaments of aging linear viscoelasticity applied to concrete structures*

1973 Groupe Français de Rhéologie, Paris, Invited lecture, *Rheological Fundaments for the Analysis of the Structural Effects of Time-dependent Behaviour of Concrete*

1973 Laboratorio Nacional de Engenharia Civil, Lisboa, CEB Comité Euro-International du Béton, International Course on Structural Concrete, directed by J. Ferry Borges, Invited Course on *Rheological Concepts Applied to Concrete*

1972 CEB Comité Euro-International du Béton, Plenary Session, Leningrad, U.S.S.R., Keynote Lecture: *On the bases for a unified code-type approach for time-dependent analysis of concrete structures*.

CONTRIBUTION TO INTERNATIONAL CODES AND TECHNICAL RECOMMENDATIONS

2018-present *fib* Model Code for Concrete Structures 2020, Section 26.2.2. *Modelling of structural effects of time-dependent behaviour of concrete*

2016-present ACI American Concrete Institute Building Code Requirements for Structural Concrete (ACI 318-2019)

2013-2014 *fib* Tall buildings: Structural design of concrete buildings up to 300 m tall. State-of-art report, *fib* Bulletin 73, August 2014; also The Concrete Center, London, 2014.

2010-2013 *fib* Model Code for Concrete Structures 2010, Section 7.2.4 *Analysis of structural effects of time dependent behaviour of concrete*, Ernst & Sohn, 2013.

2010 *fib* Textbook Structural Concrete, Section 4.1.6 *Further considerations and updates on time dependent analysis of concrete structures*, *fib* Bulletin 52.

2008-present ACI American Concrete Institute Committee 209, Document ACI 209.3R, *Analysis of Creep and Shrinkage Effects in Concrete Structures*, Chairman of the Editorial Team,

2000-2007 ACI American Concrete Institute Committee 209, Document ACI 209.3R, *Analysis of Creep and Shrinkage Effects in Concrete Structures*, Member of the Editorial Team,

2000-2004 EUROCODE 2 Design of Concrete structures-Part 2: Concrete Bridges EN 1992-2 Cooperation in the drafting of Annex K *Structural Effects of Time-Dependent Behaviour of Concrete*

1996-2007 ACI American Concrete Institute Committee 209, Document ACI 209.2R *Modelling and calculation of shrinkage and creep in hardened concrete*, Cooperation in the drafting

1994-2006 ACI American Concrete Institute Committee 209, Document ACI 209.1R *Guide to Factors Affecting Shrinkage and Creep of Hardened Concrete*, Cooperation in the drafting

1988-1991 EUROCODE 2 Design of Concrete structures – Part 1: General rules for buildings, Draft pre-standard ENV 206, Cooperation in the drafting of Section 2.5.5 *Determination of the effects of the time-dependent properties of concrete* and of Appendix 1, *Supplementary information for the determination of the effects of the time-dependent properties of concrete*

1986-1990 CEB-FIP Model Code 1990, Member of the Editorial Committee, CEB Comité Euro-International du Béton - FIP Fédération Internationale de la Précontrainte ;

1986-1990 CEB-FIP Model Code 1990, Full drafting of Section 5.8 *Structural Effects of Time-dependent Properties of Concrete*; Cooperation in the drafting of Section 2.1 *Concrete Classification and Constitutive Relations*

1970-1984 CEB Comité Euro-International du Béton, Manual *"Structural Effects of Time-Dependent Behaviour of Concrete"*, Chairman of the Editorial Group and drafting of the prevailing part of the Manual

1982-83 Cooperation in the drafting of CICIND *Model Code for the Design of Tall Chimneys*, CICIND International Committee for Industrial Chimneys

1974-1978 Cooperation in the drafting of CEB-FIP Model Code for Concrete Structures 1978 as Member of the Editorial Committee; co-editor of Appendix e *Time Dependent Behaviour of Concrete*, Full drafting of inherent Section e.2 *Structural Effects*

1964-1970 Cooperation in the drafting of CEB-FIP *International recommendations for the Design and Construction of Concrete Structures* as Member of the Editorial Committee.

REVIEWER FOR INTERNATIONAL JOURNALS

Journal of the International Association for Shell and Spatial Structures IASS
Structural Concrete, *fib* International Federation for Structural Concrete
Structural Journal, American Concrete Institute
Material Journal, American Concrete Institute
Journal of Bridge Engineering, American Society of Civil Engineers
Engineering Structures
Revista Ingeniería de Construcción
Indian Concrete Journal
International Journal of Architectural Heritage
Memorie della Accademia delle Scienze di Torino

SELECTED SCIENTIFIC CONTRIBUTIONS

Fundamentals of the theory of hereditary aging linear viscoelasticity

Mathematical fundaments of the theory of hereditary aging linear viscoelasticity

Statement and proof of the principle of superposition in hereditary aging linear viscoelasticity for sustained geometrical actions applied at different times

Statement and proof of the 3rd theorem of hereditary aging linear viscoelasticity concerning the effects of a delayed change in the static system and definition of the stress redistribution function ξ

Statement and proof of the of the 4th theorem of hereditary aging linear viscoelasticity concerning the effects of successive multiple delayed changes in the static system

Analysis of homogenous aging linear viscoelastic bodies with elastic restraints and application to structures

Viscoelastic analysis of complex heterogeneous concrete and steel and concrete composite structures and sections

Applications of the theory of hereditary aging linear viscoelasticity to the analysis of complex heterogeneous concrete and steel and concrete composite structures and sections

General unified approach for the viscoelastic analysis of concrete structures

Guidelines for technical recommendations and criteria for a code type formulation of creep analysis problems

Theoretical principles and practical approaches for the viscoelastic analyses of complex and sequential concrete structures

Viscoelastic analysis of large span prestressed concrete structures with additional delayed restraints Creep effects on the serviceability of concrete arches

Viscoelastic analysis of large span cable-stayed bridges with concrete deck

Analysis of creep and shrinkage effects in high-rise and super-tall concrete, or composite steel-and-concrete, buildings

Analysis and assessment of masonry structures

Finite-element and limit analysis of masonry arches and large domes

Application of a continuum anisotropic non-linear damage constitutive model to the analysis of masonry domes (with S. Lagomarsino and C. Calderini)

Modeling strategies, analysis, non-destructive testing, strengthening and monitoring of the Dome of Vicoforte (5th largest dome and 1st largest elliptical dome in the world)

Dynamic identification, dynamic and seismic analysis of large masonry structures and monumental buildings (with R. Ceravolo et al.)

Physical and numerical models for structural analysis

Physical and numerical models for the analysis of complex structures: historical notes and new frontiers

History of structural mechanics

The contribution of the Turin school to theoretical mechanics and mechanics of solids and structures: from Lagrange to modern times.

SELECTED PUBLICATIONS

Formulazione teorica di un duale del principio di Mc Henry per il conglomerato cementizio (Theoretical formulation of a dual of Mc Henry's principle), Accademia Nazionale dei Lincei, fasc. 5, serie VIII, vol. XXXVIII, Maggio 1965, pp. 655-59.

The effect of the elastic modulus of the aggregate on the elastic modulus, creep and creep recovery of concrete, Magazine of Concrete Research, Vol. 17, N. 52, Settembre 1965.

Sul comportamento viscoelastico delle strutture in conglomerato cementizio dotate di vincoli elastici sovrabbondanti - Teoria del fluage con elasticità differita (On the viscoelastic behavior of concrete structures with additional elastic restraints - Theory of creep with delayed elasticity), Giornale del Genio Civile, Aprile 1967.

Influence de l'élasticité différée sur le régime des contraintes des constructions en béton (Influence of delayed elasticity on the state of stress of concrete constructions), Cahiers de la Recherche, N° 24, Eyrolles, Parigi, 1967, 40 pp.

L'évaluation des effets à long terme du béton dans les structures en béton armé, (Evaluation of long term effects of concrete behavior in concrete structures), Colloque sur la Rhéologie du Béton, Paris, Décembre 1973, Industrie Minerale, Tome III, N° 5, Avril 1975.

Analysis of Linear Visco-Elastic Structures Subjected to Delayed Restraints, in: F.H. Wittman ed., Fundamental Research. on Creep and Shrinkage of Concrete, Mart. Nijhoff Publ., The Hague, 1982, pp. 485-496 (with F. Mola).

CEB Design Manual on Structural Effects of Time-dependent Behaviour of Concrete, CEB Bulletin d'Information N° 142-142 Bis, Georgi Publishing Co., Saint-Saphorin, Switzerland, March 1984, 391 pp. (Chairm. of Editorial Team with P. Napoli, F. Mola, M. Koprna).

Analysis of Aging Viscoelastic Structures with n-Redundant Elastic Restraints, Fourth RILEM International Symposium on Creep and Shrinkage of Concrete: Mathematical Modelling, Z.P. Bazant ed., Northwestern University, Evanston, 1986, pp. 623-644 (with G. Creazza, F. Mola F. and P. Napoli).

Guidelines for the Creep Analysis of Concrete Structures: Criteria for a Code Type Formulation, in *Baustofftechnische Einflüsse auf Konstruktionen*, Verlag Ernst & Sohn, Berlin, 1990, pp. 267-94.

Viscoelastic Structures with Variable Structural System, Proceedings of the Fifth International RILEM Symposium on Creep and Shrinkage of Concrete, Z. P. Bazant and I. Carol ed., E & FN Spon, London, 1993, pp. 579-584 (with L. Dezi and A. M. Tarantino).

General Unified Approach for Creep Analysis of Concrete Structures, ACI-RILEM Workshop *Creep and Shrinkage of Concrete*, Paris March 1998, Revue française de génie civil, vol. 3, N° 3- 4, 1999, pp. 173-217 (with G. Lacidogna).

Evaluation of Creep Influence on the Modification of the Restraint Conditions in Concrete Structures, Proceedings of *fib* Symposium 1999, Structural Concrete – The Bridge between People, Prague, October 1999, Vol. 2, pp.481-486 (with L. Dezi and G. Lacidogna).

Principles for a Rational Viscoelastic Analysis of Concrete Structures, Memorie della Accademia delle Scienze di Torino, Classe Scienze Fisiche, Matematiche e Naturali, Serie V, Vol. 24 (2000), pp. 59-82.

Creep Analysis of Structures with Variable Statical Scheme: a Unified Approach, in: A. Al-Manaseer ed., *A. Neville Symposium: Creep and Shrinkage – Structural Design Effects*, ACI Fall Convention, 1997, ACI SP-194, 2000, pp. 187-213 (with L. Dezi L. and A. M. Tarantino).

Structural Models: Historical Notes and New Frontiers, in Proceedings International Seminar *Eduardo Torroja: from the philosophy of structures to the art and science of building*, F. Levi , M. A. Chiorino M.A. and C. Bertolini Cestari, Editors, Politecnico di Torino, November 2000, FrancoAngeli, Milano, 2003, pp.120-157 (with D. Sabia and L. Bruno).

Creep Analysis of Large Span Prestressed Concrete Structures with Additional Delayed Restraints, in: F.J. Ulm, Z.P. Bazant and F.H. Wittmann, Editors, *Shrinkage and Durability Mechanics of Concrete and Other Quasi-Brittle Materials*, Proceedings of the Sixth International Conference CONCREEP 6, M.I.T., Elsevier, 2001, pp. 779-84 (with G. Lacidogna).

Mechanism and Finite Element Failure Analysis of Mosca's Bridge over the Dora in Turin, in: C. Abdunur, Editor, *ARCH'01, Third International Arch Bridges Conference*, Paris, 19-21 Sept. 2001, Presses de l'Ecole Nationale des Ponts et Chaussées, Paris, 2001, pp. 365-72 (with A. Icardi, S.V. Rolando and M. F. Testa).

Eduardo Torroja: From the philosophy of structures to the art and science of building, International Seminar, Politecnico di Torino, November 2000, FrancoAngeli, Milano, 2003, ISBN 10: 8846444930 ISBN 13: 9788846444936 ,232 pp. (Editor, with F. Levi and C. Bertolini Cestari).

.

Creep Effects in Cantilever Built Bridges after Final Connections, Proceedings of fib Symposium on Segmental Construction in Concrete, Nov. 26-29, 2004, New Dehli, Theme 6 Materials, Research and Analysis, 25 pp. CD, Institution of Engineers, New Dehli, India (with G. Lacidogna).

A Rational Approach to the Analysis of Creep Structural Effects, in: J. Gardner and J. Weiss Editors, *Shrinkage and Creep of Concrete,* ACI American Concrete Institute SP-227, 2005, Library of Congress catalog card number: 2005922742, ISBN 0-87031-178-6, pp. 107-141.

Design Aids for the Evaluation of Creep Induced Structural Effects, in: J. Gardner and J. Weiss Editors, *Shrinkage and Creep of Concrete,* ACI American Concrete Institute SP-227, 2005, 2005, Library of Congress catalog card number: 2005922742, ISBN 0-87031-178-6, pp. 239-259 (with M. Sassone).

Effetti statici dei fenomeni differiti del calcestruzzo: radici storiche e nuovi orientamenti (Structural effects of delayed deformations of concrete: historical fundaments and modern trends), in Atti del Seminario Internazionale *Moderni orientamenti di ingegneria strutturale e geotecnic*a (Proceedings International Seminar: Modern Trends of Structural and Geotechnical Engineering), Omaggio a Franco Levi nel 90° compleanno, M. A. Chiorino, Editor, FrancoAngeli, Milano, 2006, pp. 81-152.

Seismic Engineering for Concrete Structures, Italian Perspective, ACI Spring Covention, New York City, April 2005, CUES, Università di Salerno, Fisciano, Italy, ISBN-0 88-87030-99-5, ISBN-13: 9788887 030990, 189 pp. (Editor, with A. Nanni).

Stress Redistributions in Concrete Structures after Changes in the Statical Scheme: A Comparison Between Theoretical and Approximate Solutions, Proceedings 2nd International *fib* Congress, June 5-8, 2006, Naples, ISBN-10: 88-89972-05-X, ISBN: 13:978-88-89972-05-02 pp. 286-87, CD 10 pp. (with M. Sassone).

Monitoring and modeling strategies for the world's largest elliptical dome at Vicoforte, Proceedings of the 5th Int. Conf. on Structural Analysis of Historical Constructions, New Delhi, Vol. 2, Macmillan, ISBN 10: 1403-93156-9 ISBN 13: 978-1403-93156-9, pp. 1167-1176 (with R. Roccati, T. Aoki, C. Calderini, A. Spadafora).

Effects of creep and shrinkage on serviceability limit state, in J. Radic (Ed), "*Concrete structures - Stimulators of Development", fib* Symposium Dubrovnik 2007, ISBN 978-953-95428-3-0, pp. 623-632 (with M. Sassone, D. Bigaran, C. Casalegno).

Structural Implications of Shrinkage and Creep of Concrete, ACI American Concrete Institute, SP-246, Library of Congress catalog card number: 2007934415; ISBN: 0-87031-250-2; ISBN-13: 978-0-87031-250-2, 304 pp. (Editor, with J. Gardner).

Modeling strategies for the world's largest elliptical dome at Vicoforte. International Journal of Architectural Heritage: Conservation, Analysis, and Restoration, Vol. 2 N°. 3, July-September 2008, ISSN 1558-3058, DOI: 1.10080/15583050802066496, pp.274-303 (with A. Spadafora, C.Calderini, S. Lagomarsino).

An Internationally Harmonized Format for Time Dependent Analysis of Concrete Structures, in Proceedings on Codes in Structural Engineering, Developments and Needs for International Practice, Joint IABSE-*fib* Conference Dubrovnik, 2010, M. A. Hirt et al. Editors., Volume 1, SECON-CSSE, ISBN 978-953-7621-06-3, pp. 473-480.

Further considerations and updates on time dependent analysis of concrete structures, in *Structural Concrete, Textbook on behaviour, design and performance*, 2nd edition, Vol. 2, Section 4.1.6, *fib* Bulletin 52, International Federation for Structural Concrete, Lausanne 2010, ISSN 1562-3610, ISBN 978-2-88394-092-5, pp. 43-69 (with M. Sassone).

The morphogenesis of shell structures: a conceptual, computational and constructional challenge, in P. J. S. Cruz (Editor), *Structures & Architecture*, Taylor and Francis 2010, Proceedings, 1st International Conference on Structures & Architecture, Guimarães, Portugal 21-23 July 2010, ISBN 978-0-415-49249-2 (Hbk), pp. 31-32,e CD 11 pp. (with M. Sassone).

Numerical Analysis of Creep and Shrinkage Effects in High-Rise Concrete or Steel-Concrete Buildings, Proceedings, *fib* Symposium Prague, 2011, ISBN 978-80-87158-29, pp. 835-838 (with C. Casalegno, C. Fea, M. Sassone).

Dynamic Characterization of Complex Masonry Structures: The Sanctuary of Vicoforte, International Journal of Architectural Heritage: Conservation, Analysis, and Restoration, Vol. 5 N°. 3, DOI: 10.1080/15583050903582516, pp. 296-314 (with R. Ceravolo, A. spadafora, L. Zanotti, L. Abbiati).

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