EUROPEAN CURRICULUM VITAE FORMAT



PERSONAL INFORMATION

Name ROYER CARFAGNI, Gianni

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Telephone

Fax

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Nationality

Date of birth

WORK EXPERIENCE

• Dates (from – to) 2004-to date

Name and address of employer
 Università degli Studi di Parma, Italy

• Type of business or sector Higher education

Occupation or position held
 Full professor of structural mechanics

• Main activities and responsibilities Research activity. Teaching courses of materials and structures in the schools of

Architecture and Mechanical Engineering.

• Dates (from – to) 2002-2004

• Name and address of employer Università degli Studi di Parma, Italy

• Type of business or sector Higher education

Occupation or position held
 Associate professor of structural mechanics

• Main activities and responsibilities Research activity. Teaching courses of materials and structures in the school of

Architecture.

• Dates (from – to) 1997-2002

• Name and address of employer Università degli Studi di Parma, Italy

• Type of business or sector Higher education

• Occupation or position held Assistant professor of structural mechanics

• Main activities and responsibilities Research activity. Teaching courses of materials and structures in the schools of Civil

Engineering and Architecture.

• Dates (from – to) Jan 2000- May 2000

Name and address of employer
 University of Minnesota, USA

• Type of business or sector Higher education

• Occupation or position held Visiting Assistant professor in the Department of Aerospace Engineering and Mechanics.

• Main activities and responsibilities Research activity. Teaching courses of dynamics and Advanced Dynamics in the

Department of Technology.

• Dates (from – to) 1995-1997

Name and address of employer
 Università degli Studi di Pisa, Italy

• Type of business or sector Higher education

Occupation or position held
 Assistant of structural mechanics and bridge construction

• Main activities and responsibilities

Research activity. Teaching assistant in the courses of strength of materials in the school of aerospace engineering and bridge construction in the school of civil engineering.

• Dates (from – to) 1993-1994

Name and address of employer University of Minnesota, USA

Type of business or sector
 Occupation or position held
 Higher education
 Post-doc associate

• Main activities and responsibilities Research activity in the department of aerospace engineering and Mechanics of the

university of Minnesota

EDUCATION AND TRAINING

• Dates (from – to) 1990-1993

• Name and type of organization Consortium of the Universities of Firenze, Bari, Genova, Pisa, Udine, Italy providing education and training

Title of qualification awarded
 Ph.D. in Structural Engineering

• Level in national classification Dottorato di Ricerca in Ingegneria delle Strutture

• Dates (from – to) 1991

• Name and type of organization providing education and training Ordine Nazionale degli Ingegneri (National Register of Professional Engineers)

Title of qualification awarded
 Level in national classification
 Esame di stato ed abilitazione alla professione di Ingegnere

• Dates (from – to) 1985-1990

Dates (from – to)
 Name and type of organization providing education and training
 1985-1990 University of Pisa, Italy

• Title of qualification awarded Master of Science (summa cum laude) in Civil Engineering (major in structures)

Level in national classification
 Laura in Ingegneria Civile, indirizzo strutture, votazione 110/110 e Lode

• Dates (from – to) 1980-1985

• Name and type of organization Liceo Scientifico A. Vallisneri Lucca providing education and training

• Title of qualification awarded Secondary school diploma

Level in national classification
 Diploma di Maturità Scientifica (votazione 60/60)

ACADEMIC RESPONSIBILITIES

• Dates (from – to) 2017 – to date

Name of institution University of Parma, Italy

Occupation Director of graduate studies in Industrial Engineering.

• Dates (from – to) 2013 – to date

Name of institution University of Parma, Italy

Occupation Member of the faculty board of graduate studies in Industrial Engineering.

• Dates (from – to) 2006– 2009

Name of institution University of Parma, Italy

• Occupation Member of the faculty board of graduate studies in Architecture.(Forms and Structures in

Architecture)

• Dates (from – to) 2008– 2009

Name of institution University of Pisa, Italy

Occupation Member of the faculty board of graduate studies in Civil Engineering.

• Dates (from – to) 2004– 2008

Name of institution University of Pisa, Italy

Occupation Member of the faculty board of graduate studies in Civil Engineering.

• Dates (from – to) 2004– 2010

• Name of institution University of Parma, Italy

• Occupation Coordinator of the Erasmus Exchange Program, school of Architecture.

OTHER POSITIONS IN RESEARCH INSTITUTIONS

• Dates (from – to) 2017 – to date

Name of institution
 University of Houston, Cullen College of Engineering, Houston, TX, USA

• Sector Public USA University

• Occupation or position held Adjunct Professor.

Involved in research and teaching at the graduate level.

• Dates (from – to) 2016 – to date

• Name of institution Construction Technologies Institute – National Research Council of Italy ITC-CNR (Istituto

per la Tecnologia della Costruzione, Consiglio Nazionale delle Ricerche), San Giuliano

Milanese, Milano, Italy.

• Sector National Research Institution

• Occupation or position held Research associate.

ITC-CNR promotes the enhancement of the built environment by seeking new assessment and verification methods to support the development of construction technologies, sustainable building, performance assessment and evaluation of the quality

of products, components and construction systems.

• Dates (from – to) September 1st 2020 – November 30th 2020

Name of institution
 Department of Mechanics and Control, Peter The Great St. Petersburg Polytechnic

University, 195251 St.Petersburg, Russia.

Sector State University

Occupation or position held Adjunct Professor.

Peter The Great St.Petersburg Polytechnic University is a top-ranked school of

Engineering in Russia.

• Dates (from – to) November 30st 2019 – December 10st 2019

• Name of institution Department of Civil, Environmental, and Geo- Engineering. University of Minnesota,

Minneapolis, MN, USA.

Sector State University

Occupation or position held MTS Visiting Professor.

The university of Minnesota is one of the top-ranked schools in the USA.

• Dates (from – to) May 25th 2019 – June 6th 2019

• Name of institution Okinawa Institute of Science and Technology (OIST), Okinawa, Japan.

• Sector State University

Occupation or position held Visiting Professor.

OIST is a graduate school for advanced studies, a top institution in Japan

• Dates (from – to) November 30th 2018 – December 15th 2018

• Name of institution Okinawa Institute of Science and Technology (OIST), Okinawa, Japan.

Sector State UniversityOccupation or position held Visiting Professor.

OIST is a graduate school for advanced studies, a top institution in Japan

• Dates (from – to) July 21st 2018 – July 31st 2018

Name of institution
 Department of Civil, Environmental, and Geo- Engineering. University of Minnesota,

Minneapolis, MN, USA.

Sector State University

• Occupation or position held Visiting Professor.

The university of Minnesota is one of the top-ranked schools in the USA.

• Dates (from – to) January 2018 – February 2018

Name of institution
 Okinawa Institute of Science and Technology (OIST), Okinawa, Japan.

• Sector State University

• Occupation or position held Visiting Professor.

OIST is a graduate school for advanced studies, a top institution in Japan

• Dates (from – to) July 15th 2017 – July 28th 2017

Name of institution Department of Civil, Environmental, and Geo- Engineering. University of Minnesota,

Minneapolis, MN, USA.

Sector State University

• Occupation or position held MTS visiting Professor.

The university of Minnesota is one of the top-ranked schools in the USA.

• Dates (from – to) October 2016 – November 2016

Name of institution
 Department of Structural Engineering, University of São Paulo, São Carlos, Brazil.

• Sector State University
• Occupation or position held Visiting Professor

Dates (from – to)
 October 2015 – April 2016

Name of institution
 Department of Civil and Environmental Engineering, Cullen College of Engineering,

University of Houston, TX, USA.

• Sector State University

Occupation or position held Visiting Professor.

• Dates (from – to) 2010- to date

• Name of institution CNR (National Research Council). Institute for the applications of calculus M. Picone,

Rome

Sector Applied mathematics

Occupation or position held
 External researcher

• Dates (from – to) 1999- 2002

Sector Computations

Occupation or position held
 Member of the research project "Large Deformations in non-linear elasticity and the

Thermomechanics of propagating phase boundaries"

HONORS AND AWARDS

• Date 2020

• Institution Stanford University – Elsevier list

• Type of award Named in the Stanford University-Elsevier list of the top 2% most-cited scientists.in the

world. Category: Mechanical Engineering & Transport)

• Date 2020

Institution ASCE Journal of Engineering Mechanics

• Type of award Paper selected by the editor to be featured on the journal homepage in the ASCE Library,

Issue 7 – July 2020. Awarded article: Bonati, A., Pisano, G., Royer-Carfagni, G., Structural optimization of laminated annealed glass, ASCE J Eng. Mech., 146, art. n. 04020071,

2020. DOI: 10.1061/(ASCE)EM.1943-7889.0001805.

POSITIONS IN NATIONAL AND INTERNATIONAL COMMITTEES

Dates (from – to)Name of institutionNEN

Sector Structural Eurocodes

Occupation or position held
 Member of the Project Team "Structural Glass" for "Phase I tasks for the development of

the 2nd generation of EN Eurocodes", under contract SA/CEN/GROW/EFTA/515/2017-

08, Mandate M/515 phase 3-4.

• Dates (from – to) 2017- to date

• Name of institution Italian Ministry of Roads and Transportation - High Council of Public Works

Sector Construction and building structural standards

Occupation or position held Member of the committee in charge of writing the official Guidelines for the "Qualification"

and control of structural glass."

Dates (from – to)
Name of institution
NEN

Sector Structural Eurocodes

• Occupation or position held Member of the Project Team "Structural Glass" for "Phase I tasks for the development of

the 2nd generation of EN Eurocodes", under contract NEN-CEN/2014/02 Mandate M/515

phase 1.

• Dates (from – to) 2013- to date

Name of institution CNR (National Research Council), Italy

Sector Guidelines for the construction and building industry

Occupation or position held
 Member of the committee in charge of the preparation and analysis of technical standards

for buildings and civil engineering works.

Dates (from – to)
 2013- 2017

• Name of institution Italian Ministry of Roads and Transportation - High Council of Public Works

Sector Construction and building structural standards

Occupation or position held
 Member of the committee in charge of writing the official Guidelines for the "Qualification"

and control of fiber-reinforced cementitious matrix (FRCM) for the structural consolidation

of existing buildings."

• Dates (from – to) 2011- to date

Name of institution ATIV – Italian Association of Glass Technologists

• Sector Glass industry

Occupation or position held
 Vice - president

• Dates (from – to) 2010- 2013

Name of institution CNR (National Research Council), Italy

Sector Guidelines for the construction and building industry

Occupation or position held
 Coordinator of the Working Group in charge of writing the technical document CNR-DT-

210 "Instructions for the design, construction and control of buildings with structural glass

elements".

• Dates (from – to) 2010- to date

• Name of institution CEN TC 250 – SC11

Sector Structural glass. Eurocode

Occupation or position held Italian delegate

• Dates (from – to) 2010- to date

• Sector U73 – Committee of Structural Engineering

Occupation or position held
 Member

• Dates (from – to) 2010- to date

• Name of institution UNI – Ente Italiano di Normazione

• Sector U73 – SC11 - Working group on structural glass

Occupation or position held Coordinator

• Dates (from – to) 2010- to date

Sector GL4 - Working group on flat glass

Occupation or position held
 Member

• Dates (from – to) 2010- 2013

Name of institution
 Italian Ministry of Roads and Transportation - High Council of Public Works

Sector Construction and building structural standards

Occupation or position held
 Member of the Working Group in charge of writing guidelines for the use of non-traditional

materials in accordance with Chapter 4.6 of the Ministerial Decree 14.01.2008 (Structural

Technical Standards)

• Dates (from – to) 2010- 2013

• Name of institution Italian Ministry of Roads and Transportation - High Council of Public Works

Sector Construction and building structural standards

• Occupation or position held Participation in the revision of the Italian Structural Technical Standards

• Dates (from – to) 2009- to date

Name of institution
 Co.R.I.Ve.- Consorzio Ricerca ed Innovazione del Vetro

• Sector Research and Innovation in glass

Occupation or position held
 Member of the steering committee

• Dates (from – to) 2008- 2011

Name of institution
 ATIV – Italian Association of Glass Technologists

Sector Glass industry

Occupation or position held
 Member of the steering committee

• Dates (from – to) 1998- 2006

Sector Public Administration

• Occupation or position held Member of the board of directors

• Dates (from – to) 1992- 1993

Name of institution European Community

Sector Construction and building standards

Occupation or position held
 Consultant for pre-normative research in the construction sector

EDITORIAL ACTIVITY

• Dates (from – to) 2021- to date

• Name of Journal Frontiers in Mechanics of Materials

Sector Materials and Structures

Occupation or position held Associate Editor

https://www.frontiersin.org/journals/materials/sections/mechanics-of-materials#.

• Dates (from – to) 2016- To date

Name of Journal ASCE Journal of Engineering Mechanics

Sector Materials and Structures, American Society of Civil Engineers

Occupation or position held
 Member of the Editorial Board

http://ascelibrary.org/page/jenmdt/editorialboard.

• Dates (from – to) 2016- 2020

• Name of Journal Journal of the Mechanics of Materials and Structures (JoMMS)

Sector Materials and Structures

Occupation or position held
 Member of the Board of Editors

http://msp.org/jomms/about/journal/editorial.html.

• Dates (from – to) 2014- To date

• Name of Journal Frontiers in Mechanics of Materials

Sector Materials and Structures

Occupation or position held
 Review Editor

Dates (from – to)
 Name of Journal
 Sector
 Structural Magazine
 Structural Engineering

Occupation or position held
 Member of the Editorial Board

http://www.structuralweb.it/cms/it4-magazine.asp.

Dates (from – to)
 Name of Journal
 Journal of Elasticity

Sector Mathematical and physical science of solids

Occupation or position held Associate Editor

http://www.springer.com/physics/classical+continuum+physics/journal/10659?detailsPage=editor

ialBoard.

SCIENTIFIC AND PROFESSIONAL SOCIETIES

• Dates (from – to) 2017 - to date

Name of institution AIMETA www.aimeta/

• Interests Italian Association for Theoretical and Applied Mechanics

• Occupation or position held Member.

• Dates (from – to) 2000 - to date

Name of institution Laboratoire Lagrange www.lagrange.it/

• Interests Italian – French association for research in the field of mechanics

Occupation or position held Member.

• Dates (from – to) 1999 - to date

• Name of institution Society for Natural Philosophy www.ms.uky.edu/~snp/

• Interests Founded in 1963 by Clifford Truesdell, it nourishes specific research aimed at the unity of

mathematical and physical science.

Occupation or position held Member.

• Dates (from – to) 1999 - 2004

Name of institution ASCE American Society of Civil Engineers www.asce.org

Interests Research and innovation in all fields of civil engineering

Occupation or position held
 Member

• Dates (from – to) 1998 - to date

Name of institution AIMETA – Italian Association of Theoretical and Applied Mechanics www.aimeta.it

Interests Mechanics and Engineering

• Occupation or position held Member of the working group on materials

• Dates (from – to) 1997 – 2000

Name of institution
 IABSE – International Association for Bridge and Structural Engineering www.iabse.org

• Interests Structural Engineering

Occupation or position held Member

SUPPORTED RESEARCH PROJECTS

• Dates (from – to) 2021 – 2022

• Supporting institution Rice University, Houston, TX, USA

•Title of the project Optimal design and analysis of CNT fiber based structures

Role Responsible of the research unit at the University of Parma, Italy

Partners Rice University, Houston, TX, USA

Budget Research unit: \$30000

• Dates (from – to) 2018 – 2022

Supporting institution Dipartimento Protezione Civile – Consorzio ReLUIS (Laboratories University Network of

seismic engineering)

•Title of the project Masonry structures

Role Coordinator of the research unit at the University of Parma, Italy

Partners Technical Schools (Politecnico) of Milan and Turin. Universities of Bergamo, Bologna,

Brescia, Calabria, Cassino, Ferrara, Firenze, Genova, Lecce, Napoli Federico II, Perugia,

Roma La Sapienza, Roma II Tor Vergata, Roma III, Salento, Sannio, Salerno.

• Budget Research unit: € 7.500 per year

• Dates (from – to) 2017 – 2020

Supporting institution
 Italian Ministry of University and Scientific Research. Progetti di Rilevante Interesse

Nazionale (PRIN)

•Title of the project Advanced mechanical modelling of new materials and structures for the solution of

Horizon 2020 challenges.

Role Member of the research unit of Modena-Reggio Emilia University, Italy

Partners Technical Schools (Politecnico) of Milan and Turin. Universities of Palermo, Calabria,

Catania, Parma, Messina, Salerno, Perugia, Padova, Napoli Federico II, Roma La Sapienza, Modena-Reggio Emilia, Bologna, Salento, IUAV Venezia, Politecnico di

Milano, Politecnico di Torino.

• Budget Research unit: € 45.000

• Dates (from – to) 2014 – 2017

Supporting institution Dipartimento Protezione Civile – Consorzio ReLUIS (Laboratories University Network of

seismic engineering)

•Title of the project Innovative materials for structural rehabilitation of existing buildings

Role Coordinator of the research unit at the University of Parma, Italy

Partners Technical Schools (Politecnico) of Milan and Turin. Universities of Bergamo, Bologna,

Brescia, Calabria, Cassino, Ferrara, Firenze, Genova, Lecce, Napoli Federico II, Perugia,

Roma La Sapienza, Roma II Tor Vergata, Roma III, Salento, Sannio, Salerno.

• Budget Research unit: € 30.000

• Dates (from – to) 2017 – 2020

• Supporting institution Italian Ministry of University and Scientific Research. Progetti di Rilevante Interesse

Nazionale (PRIN)

•Title of the project Advanced mechanical modelling of new materials and structures for the solution of

Horizon 2020 challanges.

Role Member of the research unit of Modena-Reggio Emilia University, Italy

Partners Technical Schools (Politecnico) of Milan and Turin. Universities of Palermo, Calabria,

Catania, Parma, Messina, Salerno, Perugia, Padova, Napoli Federico II, Roma La Sapienza, Modena-Reggio Emilia, Bologna, Salento, IUAV Venezia, Politecnico di

Milano, Politecnico di Torino.

• Budget Research unit: € 45.000

• Dates (from – to) 2014 – 2015

Supporting institution
 European Community. Research Fund for Coal and Steel

•Title of the project Steel-based applications in earthquake-prone areas (Steel-Earth)

Role Coordinator of the research unit at the University of Parma, Italy

Partners Convention Européenne de la Construction Métallique ASBL European Convention for

Constructional Steelwork ECCS

European Centre for Training and Research in Earthquake Engine (EUCENTRE), Italy

Ferriere Nord SpA, Gruppo Pittini, Italy

Institut National des Sciences Appliquées de Rennes (INSA) France

Polytechnic University of Timisoara, Romania

Regione Toscana, Italy Riva Acciaio, Italy RWTH Aachen, Germany

Shelter Sa, Industrial Investment and Construction Company, Greece

VTT Technical Research Centre of Finland, Finland

Université de Liège, Belgium University of Camerino, Italy University of Pisa, Italy

University of Roma, La Sapienza, Italy University of Thessaly, Greece

Research unit: € 119.675, Total: € 1.062.859.

• Dates (from – to) 2012 – 2016

Budget

Supporting institution European Community. Research Fund for Coal and Steel

•Title of the project Innovative steel-glass composite structures for high performance building skins (S+G)

Role Project coordinator

Partners Centro Sviluppo Materiali, Italy

Dow Corning Europe, Belgium Permasteelisa S.p.A., Italy RWTH Aachen, Germany

TRIMO, Slovenia

TyssenKrupp Acciai Speciali Terni, Italy University of Cambridge, United Kingdom

University of Ljubljana, Slovenia

University of Pisa, Italy

• Budget Research unit: € 268.295, Total: € 1.582.350.

• Dates (from – to) 2010-2013

• Supporting institution Dipartimento Protezione Civile – Consorzio ReLUIS (Laboratories University Network of

Seismic Engineering)

•Title of the project Structural Crystals

Role Coordinator of the research unit at the University of Parma, Italy

Partners Technical School (Politecnico) of Milan. Universities of Bergamo, Bologna, Brescia,

Calabria, Cassino, Ferrara, Firenze, Genova, Lecce, Napoli Federico II, Perugia, Roma

La Sapienza, Roma II Tor Vergata, Sannio, Salerno.

• Budget Research unit: € 30.000

• Dates (from – to) 2009-2012

• Supporting institution Italian Ministry of University and Scientific Research. Progetti di Rilevante Interesse

Nazionale (PRIN)

•Title of the project Theoretical and experimental study on the post-glass breakage response of laminated

glass elements under bending, aiming at new high-performance technologies in terms of

structural safety against collapse

Role Coordinator of the research unit at the University of Parma, Italy

Partners IUAV Venezia, Technical School (Politecnico) of Milan, Universities of Firenze and Pisa.

Budget Research unit: € 35.264

• Dates (from – to) 2009-2010

• Supporting institution Regione Emilia Romagna, Progetto Spinner "Interventi per la qualificazione delle risorse

umane nel settore della ricerca e dell'innovazione tecnologica"

•Title of the project Epitecture: high technology innovative envelopes. Thermomechanical response,

reliability, safety, bio-compatibility and set-up for renewable energies.

Role Project coordinator
• Budget Total: € 42.000

• Dates (from – to) 2006-2007

Supporting institution
 Italian Ministry of University and Scientific Research. Progetti di Rilevante Interesse

Nazionale (PRIN)

•Title of the project Theoretical and experimental study of the fracture mechanisms in glass

Role Coordinator of the research unit at the University of Parma, Italy

Partners IUAV Venezia, Technical School (Politecnico) of Milan, Universities of Firenze and Pisa.

• Budget Research unit: € 52.857

• Dates (from – to) 2006

Supporting institution CoopSette S.C.R.L., Italy

•Title of the project Fiber reinforced polymer structures

Role Coordinator
• Budget Confidential

• Dates (from – to) 2005

Supporting institution
 DuPont de Nemours & Co. Inc., Wilmington, De, USA

•Title of the project Innovative design for laminated glass with high performance ionoplastic polymers

Role Coordinator
• Budget € 7.000

• Dates (from – to) 2004-2005

Supporting institution Technopali SpA, Italy

•Title of the project Feasibility study for the construction of supports for wind power generators with products

by Tecnopali SpA

Role Coordinator

• Budget € 30.000

• Dates (from – to) 2004

• Supporting institution CoopSette S.C.R.L., Italy
• Title of the project Innovative design for façades

and roof made of laminated glass

Role Coordinator
• Budget € 45.000

• Dates (from – to) 1999 – 2001

Supporting institution
 Title of the project
 European Community. Municipality of Helsinki
 Developing Long Term Durability of Marble Façades

Role Coordinator of the research unit at the Univ façade rsity of Pisa, Italy
Partners Centro Tecnologico de Pedra Natural de Portugal (CEVALOR) Portugal

Stonecon Oy, Finland

• Budget Research unit: € 110.000

• Dates (from – to) 1997 – 2000

• Supporting institution European Community.

•Title of the project Characterization of Mechanical Properties and Damage of Natural Building Stones in

Historical Monuments

Role Coordinator of the research unit at the University of Pisa, Italy

Partners Internazionale Marmi e Macchine, Italy

National Technical University of Athens, Greece

IKU Petroleumsforskning AS, Norway Technical University of Crete, Greece, Technical School (Politecnico) of Milan, Italy

• Budget Research unit: € 97.500

COORDINATION OF OTHER SERVICES UNDER CONTRACT WITH THE ACADEMIC INSTITUTION

• Dates (from – to) 2017-2017

• Client Enpower 3 S.r.l., Aero-Rossa S.r.l.

Activity Structural verification for the foundations supporting metallic piles bearing

aerogenerators.

• Budget € 10.000

• Dates (from – to) 2015-2015

Client Diocese of San Miniato, Italy

Activity Analysis of the resonance phenomena with the bell oscillations in the bell tower of the

San Miniato Cathedral, Pisa, Italy.

Budget Tribute paid to the Catholic Church

• Dates (from – to) 2013-2014

Client Amministrazione Provinciale di Parma Italy

Activity Assessment of the safety level according to the Prime Minister' Ordinances 3274/2003

and 3362/2004 of the masonry bridge over the Taro River along the S.P. 357R.

• Budget € 45.240

• Dates (from – to) 2012-2013

Client Consortium of the Parmigiano Reggiano Cheese

• Activity Innovative strategies for the improving the performance of the steel storage racks for

Parmigiano Reggiano cheese against seismic accelerations

• Budget € 40.000

• Dates (from – to) 2010

Client Archdiocese of Lucca, Italy

Activity Analysis of the stability of the rose window of the San Cristoforo Cathedral in Lucca

• Budget € 7.500

• Dates (from – to) 2008-2009

Client Amministrazione Provinciale di Parma Italy
 Activity Seismic analysis of school buildings in Parma

• Budget € 25.000

PROFESSIONAL DESIGN ACTIVITY. MAJOR WORKS

• Dates (from – to) 2018-to date

Client DAR Engineering (http://www.dar-engineering.com/)

Activity Technical consultant for the glass façades of the Al Maktoum airport expansion in Dubai,

United Arab Emirates

Status ongoing.

• Dates (from – to) 2016-2017

• Client Court of Bergamo, Italy

Activity Technical consultant for the façade in Bio-dynamical concrete of the "Palazzo Italia",

EXPO 2015, Milan. http://www.expo2015.org/rivivi-expo/padiglione-italia/.

Status Completed.

• Dates (from – to) 2016

• Client Società Italiana per Condotte d'Acqua SPA.

Activity Design of the façades made of structural glass for the new library "Pascoli-Longon", in

Bolzano, Italy.

Status Design competition. 1st classified.

• Dates (from – to) 2014

• Client Policreo – Design Bureau, Parma Italy

• Activity Design of the new glass façade of Terminal 3 in the Leonardo da Vinci Airport, Fiumicino,

Italy.

Status Design competition. 2nd classified

• Dates (from – to) 2014

Client Amministrazione Provinciale di Parma Italy

Activity Seismic verification of the masonry arch bridge in Fornovo Val di Taro, Italy. Completed

in 1905, the bridge is composed of 20 arch spans, for a total length of about 500 m.

Status Completed

• Dates (from – to) 2013-2014

Client Diocese of San Miniato, Italy

• Activity Restoration of the medieval masonry bell tower of the cathedral of San Miniato, Pisa, Italy.

Modelling of the resonant dynamic actions of the bells, and adoption of appropriate

countermeasures.

Status Completed

• Dates (from – to) 2013

• Activity Design of a glass sphere. Project: Development of the National Interactive Science

Centre, Villa Bighi, La Valletta. Member of the project team coordinated by Leonardo

Progetti, Pisa, Italy

• Status Design competition. 2nd classified.

• Dates (from – to) 2012-2013

Client Policreo – Design Bureau, Parma Italy

• Activity Design of glass structures for the stations of the new metro-line 4 in Milan

• Status Project completed. Construction not yet initiated.

• Dates (from – to) 2012-2015

Client Vitali S.p.A., Bergamo-Milano, Italy

Activity Technical consultant for the structural glass façades of the Microsoft headquarters in Peschiera

Borromeo, Milan, Italy

Status Completed.

• Dates (from – to) 2012-2013

Client Scafidi Family

Activity Technical consultant in the trial for the death of the young student Vito Scafidi, as consequence

of the collapse of the roof in the Darwin Secondary school in Rivoli, Turin, Italy. This has been a

crucial case for the discussion about structural-safety of school buildings in Italy.

Status Completed.

• Dates (from – to) 2012-2014

Client Authority STU SpA, Parma Italy

· Activity Structural testing and design validation (Collaudo) of the building "New School for

Europe". New school complex (5000 m²) dedicated to the personnel of the European Food

Safety Authority (EFSA).

Status Completed

Dates (from – to)
 2010-2014

Client BLT Italia, Lido di Camaiore, Italy

Activity Architectural design of the new office building

Status Completed

• Dates (from – to) 2008-2010

Client Amministrazione Provinciale di Parma Italy

• Activity Structural testing and design validation (Collaudo) of anti-seismic construction

rehabilitation works in various school buildings in Borgo Val di Taro, Parma

Status Completed

• Dates (from – to) 2007

• Client River Kilometro Rosso, Coopsette S.c.r.l.

Activity Design of the glass construction works in the A/2 building in the "Kilometro Rosso"

complex, Bergamo Italy. Architectural design: Atelier Jean Nouvel, Paris

• Status Completed

• Dates (from – to) 2006

• Client French Ministry of Culture

Activity Structural analysis and numerical modelling of the damage in the stonework of the French

Panthéon in Paris. Part of a broader project coordinated by Carlo Blasi.

Status Completed

• Dates (from – to) 2006

• Client Montefiore CONAD, Cesena

Activity Structural design of façades of laminated glass, supported by tensile cable structures, for

the new shopping Mall - Montefiore CONAD - in Cesena, Italy

Status Completed

• Dates (from – to) 2006

Client Municipality of Lucca

• Activity Structural testing (collaudo) of a railway bridge in Lucca.

Status Completed

• Dates (from – to) 2004-2008

• Client Corte Signori S.r.L.

• Activity Architectural and Structural design of a complex of 22 apartments in Pisa, Italy.

Status Completed

• Dates (from – to) 2001

Client Henraux SpA, Italy.

• Activity Consultant for the restoration of the marble façade of the Bahà'l shrine in Haifa, Israel.

Status Completed

• Dates (from – to) 1997

Client Municipality of Helsinki, Finland

Activity Consultant for the restoration of the marble façade of Alvar Aalto's Finland Hall in Helsinki.

• Status Completed

• Dates (from – to) 1991-1997

Client Edilstructure SrL, Italy

Activity Architectural and Structural design of a complex of 46 houses and one shopping mall in

Pisa, Italy.

Status Completed

PATENTS

• Dates 2004

Inventors Fabio Frambati, Gianni Royer-Carfagni

• Title Elemento piano in vetro stratificato con strato intermedio prolungato e piegato oltre almeno

un bordo perimetrale dell'elemento piano stesso

Patent reference MI 2004 A534, 19/03/04

• Dates 2005

• Inventors Fabio Frambati, Gianni Royer-Carfagni

• Title Stratified flat element with intermediate layer extended and folded beyond at least one

peripheral edge of the said flat element

Patent reference European Patent # 05075628.7, 16-03-05

TAUGHT COURSES

•Dates (from – to) 2020- 2020

 Curriculum Master program in "Continuum Mechanics: fundamentals and applications", and

Mechanics and "Mathematical modelling", Peter The Great St. Petersburg Polytechnic

University, 195251 St.Petersburg, Russia

•Dates (from – to) 2019- to date

Course title
 An introduction to non-linear continuum mechanics

Curriculum Graduate studies in Industrial Engineering, University of Parma, Italy.

•Dates (from – to) 2019- to date

Course title
 An introduction to non-linear continuum mechanics

Curriculum Graduate studies in Industrial Engineering, University of Parma, Italy.

•Dates (from – to) 2012- to date

Course title Structural mechanics

Curriculum Undergraduate studies in Mechanical Engineering, University of Parma, Italy.

•Dates (from – to) 2017- to date

Curriculum Master in Civil Engineering, University of Parma

•Dates (from – to) 2017- 2017

Course title Structural mechanics of brittle materials

Curriculum Ph.D. program in Civil Engineering, University of Pisa, Italy

•Dates (from – to) 2016- 2016

Course title An introduction to the design of structural glass

Curriculum Ph.D. program in structural Engineering, University of São Paulo, São Carlos, Brazil.

•Dates (from – to) 2016- 2016

• Course title An introduction to phase-field models for fracture and plasticity.

Curriculum Ph.D. program in Civil Engineering, University of Houston, Tx, USA.

•Dates (from – to) 2012- 2016

Curriculum Master in Mechanical Engineering, University of Parma

•Dates (from – to) 2010- 2011

Course title Dynamics of structures

Curriculum Master in "Design, execution and control of buildings in seismic regions", IABC School,

Engineering Architecture and Cultural Heritage, Fondazione Campus, Italy

•Dates (from – to) 2013-2014

Curriculum School of Engineering Management, University of Parma

•Dates (from – to) 2010-2012

Curriculum Architecture, University of Parma

•Dates (from – to) 2010-2011

Course title Statics

Curriculum Architecture, University of Parma

•Dates (from – to) 2001-2012

Curriculum Architecture, University of Parma

•Dates (from – to) 2006

Course title Non-linear dynamics and the push-over method

Curriculum Ph.D program "Shapes and structures in architecture", University of Parma

•Dates (from – to) 2002-2004

Course title Advanced structural mechanics

Curriculum Master in architecture, University of Parma

•Dates (from – to) 2002-2003 • Course title Statics

Curriculum Industrial design, University of Parma

•Dates (from – to) 2002-2003 • Course title Statics

Curriculum Architecture and technical building works, University of Parma

•Dates (from – to) 2002-2003 • Course title Statics

Curriculum Architecture, University of Parma

•Dates (from – to) 1999-2000

• Course title AEM-2012. Dynamics

Curriculum Aerospace Engineering, University of Minnesota, USA

•Dates (from – to) 1999-2000

Curriculum Aerospace Engineering, University of Minnesota, USA

•Dates (from – to) 1998

Course title Mechanical properties of natural building stones

Curriculum PhD program in structural engineering, University of Pisa, Italy

•Dates (from – to) 1997-2001

Curriculum Civil, Mechanical and Electronic Engineering, University of Parma, Italy

•Dates (from – to) 1997-2001

Course title Advanced Structural Mechanics (teaching assistant)

Curriculum Civil Engineering, University of Parma, Italy

•Dates (from – to) 1997-1998

Course title Structural mechanics (teaching assistant)
 Curriculum Electrical engineering, University of Pisa, Italy

•Dates (from – to) 1992-1997

Course title Structural mechanics (teaching assistant)
 Curriculum Aerospace Engineering, University of Pisa, Italy

•Dates (from – to) 1990-1997

Course title Bridge design (assistant)

Curriculum Civil Engineering, University of Pisa, Italy

GRADUATE PH.D. STUDENTS

•Dates (from – to) 2019-

Student Claudio Boni

Title of the Thesis Flexural tensegrity structures (in progress)

Institution and Program University of Parma, Italy. Ph.D. program in Industrial Engineering

•Dates (from – to) 2018-

Student Luca Viviani

Title of the Thesis Dynamic response of glazed surfaces under blast waves (in progress)
Institution and Program University of Parma, Italy. Ph.D. program in Industrial Engineering

•Dates (from – to) 2016-2019

Student Gian Maria D'Ambrosio

Title of the Thesis Seismic rehabilitation of historic buildings with transparent glass structures (in progress)

Institution and Program University of Parma, Italy. Ph.D. program in Industrial Engineering

•Dates (from – to) 2014-2017

Student Gabriele Pisano

Title of the Thesis The statistical characterization of glass strength: from the micro to the macro-mechanical

response

Institution and program University of Parma, Italy. Ph.D. program in Industrial Engineering

•Dates (from – to) 2013-2017

Student Simone Massimiani

Title of the Thesis Seismic response of stiff and compliant structures: two extremal case studies.

Institution and program University of Parma, Italy. Ph.D. program in Industrial Engineering

•Dates (from – to) 2011-2016

Student Mohammed Adnan

Title of the Thesis Solution processing of boron nitride nanotubes and bending behavior of carbon

nanotube fibers

Institution and Program Rice University, Houston, TX; USA (Principal Advisor, Prof. Mattee Pasquali).

Ph.D. program in Chemical and Biomolecular Engineering.

•Dates (from – to) 2011-2013

Student Annalisa Franco

Title of the Thesis On the debonding of an elastic stiffener from a brittle substrate.

Institution and Program University of Pisa, Italy. Ph.D. program in Civil Engineering

•Dates (from – to) 2010-2012

Student Marco Rossi

Title of the Thesis Crack propagation in brittle materials.

Institution and Program University of Pisa, Italy. Ph.D. program in Civil Engineering

•Dates (from – to) 2009-2011

Student Valentina Beatini

Title of the Thesis Kinemorphisms: mechanisms that define the architectural space.

Institution and Program University of Parma, Italy. Ph.D. program in forms and structures in Architecture

•Dates (from – to) 2007-2009

Student Mirko Silvestri

Title of the Thesis On the post-glass-breakage response of glass panels.

Institution and Program University of Parma, Italy. Ph.D. program in forms and structures in Architecture

•Dates (from – to) 2001-2003 Student Cecilia Lucchetti

Title of the Thesis Modelling the degradation in historical-monumental buildings: proposal for a

Thermodynamic approach to biological damage.

Institution and Program University of Bologna, Italy. Ph.D. program in structural mechanics

POST-DOCTORAL FELLOWS

•Dates (from – to) 2018-

Student Gabriele Pisano

Title of the research Characterization of size effect in glass structures

•Dates (from – to) 2014-2015 Student Laura Galuppi

Title of the research Structural application of steel in earthquake prone areas

•Dates (from – to) 2014-2015 fellow Annalisa Franco

Title of the research Construction works with steel and glass

•Dates (from – to) 2011-2014 fellow Laura Galui

fellow Laura Galuppi

Title of the research Experiments and modelling in advanced mechanics of materials and structures

•Dates (from – to) 2010

fellow Mirko Silvestri

devices for structural laminated glass

•Dates (from – to) 2009

fellow Sabrina Capra

Title of the research Epictecture: the architecture of the building envelope

ORGANIZED CONFERENCES

Dates November 22-23, 2018

Location Centro Santa Elisabetta, University of Parma, Italy

• Title The Italian Glass Day 2018. XXXIII ATIV conference.

Organizing institution ATIV (Italian Association of Glass Technologists).

Dates November 16-17, 2017

Location Centro Santa Elisabetta, University of Parma, Italy
 Title The Italian Glass Day 2017. XXXII ATIV conference.

Organizing institution ATIV (Italian Association of Glass Technologists), SSV (Stazione Sperimentale del Vetro,

Venice)

Dates June 9-14, 2017

Location Headquarters of the Cassa di Risparmio di Firenze, Florence, Italy

Title Mechanics in the Scientific Discovery. Italian American colloquium on advanced problems

in solid mechanics.

Organizing institution Universities of Houston, Parma and Florence

Dates March 24, 2017

Location Headquarters of the National Research Council of Italy, Rome, Italy

• Title Primo Premio Nazionale Vito Scafidi

Organizing institution Fondazione Benvenuti in Italia.

Dates October 21-22, 2016

Location Centro Santa Elisabetta, University of Parma, Italy

• Title Glass between technique and creativity. XXXI ATIV conference.

Organizing institution ATIV (Italian Association of Glass Technologist), SSV (Stazione Sperimentale del Vetro,

Venice)

• Dates October 28th, 2015

Location Fiera Milano Rho, in collaboration with the EXPO 2015

• Title Advances in glass processes: key innovation in hollow and flat glass. XXX ATIV

conference.

Organizing institution ATIV (Italian Association of Glass Technologist), SSV (Stazione Sperimentale del Vetro,

Venice)

• Dates October 13, 2014 Location Sede CNR, Rome, Italy

Title The technical document CNR-DT-210 "Instructions for the design, construction and control

of buildings with structural glass elements".

Dates September 22-24, 2014

Location University of Parma, Parma, Italy

• Title 12th ESG (European Society of Glass) conference.

Organizing institution ATIV (Italian Association of Glass Technologist), SSV (Stazione Sperimentale del Vetro,

Venice)

Dates June 30, 2014

Location Sede Ordine Ingegneri della Provincia di Napoli, Naples, Italy

• Title The technical document CNR-DT-210 "Instructions for the design, construction and control

of buildings with structural glass elements".

• Dates June 20, 2014

Location Politecnico di Milano, Milan, Italy

Title Building with Glass

Organizing institution Italian group of IABSE: International Association of Bridge and Structural Engineering

• Dates July 23-26, 2013 Location Montreal, QC, Canada

• Title Fourth Canadian Conference on nonlinear solid mechanics CanCNSM2013. Mini-

symposium: Singularities in the mechanics of solids

Organizing institution McGill University

• Dates June 21, 2012

Location University of Parma, Parma, Italy

• Title The new Italian standards for glass. What is going to change?

Organizing institution ATIV (Italian Association of Glass Technologist),

Dates April 12-13, 2012

Location University of Parma, Parma, Italy

• Title Symposium of the working group on materials of the AIMETA

Dates November 19-20, 2010

Location University of Parma, Parma, Italy

• Title Glass. When technology meets design, XXV A.T.I.V. Conference

Organizing institution ATIV (Italian Association of Glass Technologist),

Dates February 25-26, 2010

Location University of Palermo, Palermo, Italy

• Title Symposium of the working group on materials of the AIMETA. Special session: Is glass

brittle

Organizing institution AIMETA (Italian Association of Theoretical and Applied Mechanics

Dates November 7, 2008

Location Département Génie Civil Bâtiment, CNRS, Vaulx-en-Velin, France

• Title Développements scientifiques autour des problèmes posés par le bâti ancien

Organizing institution Laboratoire Lagrange

• Dates June 19-23, 2002 Location Vancouver, BC, Canada

• Title Second Canadian Conference on nonlinear solid mechanics CanCNSM2002. Mini-

symposium: Modern prospective in continuum mechanics and the physical science of

solids

Organizing institution Simon Fraser University

VISITED INSTITUTIONS

• Dates December 2018

Institution Visiting Professor, Okinawa Institute of Science and Technology, Okinawa, Japan.

• Dates July 2018 (two weeks)

Institution MTS grant Visiting Professor, Department of Civil, Environmental and Geo-Engineering,

University of Minnesota, Minneapolis, MN, USA

• Dates January-February 2018

Institution Visiting Professor, Okinawa Institute of Science and Technology, Okinawa, Japan.

• Dates July 2017 (two weeks)

Institution MTS grant Visiting Professor, Department of Civil, Environmental and Geo-Engineering,

University of Minnesota, Minneapolis, MN, USA

• Dates October-November 2016

Institution Department of Structural Engineering, University of São Paulo, São Carlos, Brazil.

• Dates October 2015-April 2016

Institution Department of Civil and Environmental Engineering, University of Houston, TX, USA.

• Dates November 2013

Institution Department of Civil Engineering, University of Minnesota, USA. MTS grant visiting

professor

• Dates November 2012 (two weeks)

Institution Department of Civil Engineering, University of Minnesota, USA. MTS grant visiting

professor

Dates May 2005

Institution DuPont de Nemours & Co. Inc. Research Center, Wilmington De, USA

• Dates August 2004

Institution Department of Aerospace Engineering and Mechanics, University of Minnesota, USA

• Dates April 2004

Institution DuPont de Nemours & Co. Inc. Research Center, Wilmington De, USA

Dates March 2004

Institution Laboratoire de Mécanique et Technologie de l'École Normale Supérieure de Cachan (Fr)

• Dates April-August 2003

Institution Department of Aerospace Engineering and Mechanics, University of Minnesota, USA

• Dates June 2002

Institution Department of Aerospace Engineering and Mechanics, University of Minnesota, USA

• Dates March 2002

Institution Laboratoire de Mécanique et Technologie de l'École Normale Supérieure de Cachan (Fr)

• Dates May-June 2001

Institution Scuola Normale Superiore, Pisa, Italy

• Dates March 2001

Institution Department of Aerospace Engineering and Mechanics, University of Minnesota, USA

Dates February 2001

Institution Laboratoire de Mécanique et Technologie de l'École Normale Supérieure de Cachan (Fr)

• Dates January-June 2000

Institution Department of Aerospace Engineering and Mechanics, University of Minnesota, USA

Department of Mechanical Engineering, University of California at Berkeley Graduate Aeronautical Laboratories, California Institute of Technology, Pasadena

• Dates April-August 1999

Institution Minnesota Supercomputing Institute, University of Minnesota, USA, USA

Department of Mathematics, University of California at Berkeley, USA Graduate Aeronautical Center for non-linear analysis, Carnegie Mellon University, Pittsburgh, USA

• Dates July-August 1998

Institution Department of Aerospace Engineering and Mechanics, University of Minnesota, USA

Dates August 1996

Institution Department of Aerospace Engineering and Mechanics, University of Minnesota, USA

• Dates 1994-1995

Institution Postdoc. Department of Aerospace Engineering and Mechanics, University of

Minnesota, USA

• Dates June-August 1992

Institution Institut de Statique et Structures, IBAP Béton armé et Précontraint, École Polytechnique

Fédérale de Lausanne, Switzerland

Büro für Baudynamik GMBH, Leonhardt Ändra und Partners, Stuttgart Germany

HONORS AND AWARDS

• Date 2017

Description The RFCS Project "Innovative steel-glass composite structures for high performance

building skins (S+G)" awarded within the RTD SUCCESS STORIES

http://ec.europa.eu/research/infocentre/article_en.cfm?artid=47376&pk_campaign=rtd

https://twitter.com/EU_H2020/status/960523414716014592

• Date 2009

Name of institution ADI (Italian Association of Industrial Design)

Description In the ADI design Index, the point-fixing system for structural glazing denoted as Gecko

(patented), is referred to as one of the 10 best Italian products of the year.

• Date 2006

Name of institution "Costruire" prize.

Description "Prize for innovation" awarded to the point-fixing system for structural glazing

denoted as Gecko

• Date 2004

Name of institution "OICE" prize.

Description "Prize for the best thesis in structural engineering" awarded to Mirko Silvestri for

the work "A proposal for an arch footbridge in Venice made of structural glass

masonry".

ANNEXES LIST OF PUBLICATIONS

I declare that all the information provided on this document is true and correct to the best of my knowledge.

Signature:

Gianni Royer Carfagni