ANDREA DALL'ASTA

Curriculum Vitae

EDUCATION

1993, PhD in Structural mechanics, University of Bologna

1988, Laurea (cum laude) in Civil Engineering, University of Ancona

EMPLOYMENT

since 2000 Professor of Structural Engineering at the University of Camerino

1998-2000 Associate Professor of Structural Engineering at the Univ. Camerino

1997-1998 Researcher (Assistant Professor) at the University of Ancona

1993-1997 Post Doctoral Fellow at the University of Ancona

ACADEMIC EXPERIENCE

since 2013 Member of the governing body of the University of Camerino

2009-2013 President of the Senato of the University of Camerino

2005-2009 Director of the Department of Environment Construction and Design

2004-2006 Member of the Senato of the University of Camerino

2000-date Member of the advisory board of the PhD School of the University of Camerino (Director of the course in Architecture and Design, 2005-2008)

2000-2010 Member of the advisory board of the PhD course in Structures and Infra-structures of the Marche Polytech. Univ.

1998-2005 Member of the deanship comittee of the Architecture Faculty, University of Camerino

TEACHING (UNIVERSITY)

since 1998 Structural Design, Univ. Camerino

since 2006 Structural shapes for industrial design, Univ. Camerino

2015-2014 Seismic design of steel structures, Univ. Rome "Sapienza"

2010-2011	Seismic design of existing bridges, Univ. of Pisa
2006-2010	Special structures, Marche Polytech. Univ.
2007-2008	Seismic design of bridges, Univ. of Trieste
2006-2007	Seismic design of steel structures, Univ. of L'Aquila
2003-2004	Structural problems in historical buildings, Univ. Camerino
1998-2004	Theory and design of steel structures, Marche Polytech. Univ.
1996-1998	Statics, Univ. Camerino
1996-1997	Eurocodes, Univ. of Ancona

RESEARCH ACTIVITY

The research activitiy of Andrea Dall'Asta mainly concerns the following topics.

Nonlinear analysis and models. Research results provide theoretical models to describe the mechanical and geometrical nonlinear behaviour of composite, hybrid and spacial structures, as systems with slipping cables. Relevant numerical solutions based on FEM are also provided.

Passive systems for the control of the structural dynamic response. Research results concern consitutive models to describe complex damping devices and relavant material (e.g. high damping rubber and BRB devices), in addition to studies of their efficiency in the control of the dynamic response, with special attention to the seismic design of bridge and existing buildings.

Uncertainty propagation and probabilistic assessment of seismic risk. The research results in this field provide insights on the influence of uncertainties concerning actions and structural response on the system performance, with a special attention to the description of the seismic action and to the dynamic response of bridge and buildings. The research activity is completed by studies on the response sensitivity and the optimal design based on probabilistic measures of the performance.

International cooperations.

Professor Dall'Asta cooperates with other international research groups, e.g. University of Louisiana (USA) (prof. M. Barbato, structural uncertainties and reliability), Rice University (USA) (prof. J.E. Padgett, risk analysis and loss analysis), TARRC research centre (UK) (dr. Hamid Ahamadi, seismic devices), Un. Liverpool (UK) (prof. E. Patelli, optimization and failure analysis), Xiamen Un. (China) (prof. Q. Gu, sensitivity analysis), Hasselt Un. (Belgium) (prof. H. Degée, hybrid systems), University of Sydney (Australia) (prof. G. Ranzi, composite structures). These cooperations led to scientific results published in international journals and conference proceedings.

Bibliometric indexes (updated February 12, 2017):

Scopus
Documents: 80
Citations: 730 total citations by 428 documents
h-index: 15

VQR 2004-2010 (National evaluation of the research quality)

Presented research product 1
DALL'ASTA A., RAGNI L. (2006). Experimental tests and analytical model of high damping rubber dissipating devices. *ENGINEERING STRUCTURES*, vol. 28, p. 1874-1884

Evaluation 1: Excellent

Presented research product 2
DALL'ASTA A., ZONA A. (2004). Comparison and validation of diplacement and mixed elements for the non-linear analysis of continuous composite beams. *COMPUTERS & STRUCTURES*, vol. 82, p. 2117-2130

Evaluation 2: Excellent

Presented research product 3
RANZI G, DALL'ASTA A, RAGNI L, A. ZONA (2010). A geometric nonlinear model for composite beams with partial interaction. *ENGINEERING STRUCTURES*, vol. 32, p. 1384-1396

Evaluation 3: Excellent

VQR 2011-2014 (National evaluation of the research quality)

Presented research product 1
Zona A., Dall'Asta A. (2012). Elastoplastic model for steel buckling restrained braces. JOURNAL OF CONSTRUCTIONAL STEEL RESEARCH, vol. 68, p. 118-125, ISSN: 0143-974X, doi: 10.1016/j.jcsr.2011.07.017

Evaluation 1: Excellent

Presented research product 2
Freddi F., Tubaldi E., Ragni L., Dall'Asta A. (2013). Probabilistic performance assessment of low-ductility reinforced concrete frames retrofitted with dissipative braces. EARTHQUAKE ENGINEERING AND STRUCTURAL DYNAMICS, vol. 42, p. 993-1011, ISSN: 1096-9845, doi: 10.1002/eqe.2255

Evaluation 2: Excellent

HONORS and MEMBERSHIPS

CEN-European Committee for Standardization, Member of TC 250/SC 3/WG 13 "Evolution of EN 1993-2 – Bridges" since 2014

CEN-European Committee for Standardization, Member of TC 250/SC 4/WG 3 "Evolution of EN 1994-2 - Eurocode 4 - Design of composite steel and concrete structures - Part 2: General rules and rules for bridges", expert nominated by the national standard body, since 2014

UNI-National Committee for Standardization. Member of the Structural Engineering commission, Vice-chairman of the Sub-Commission on Steel and Concrete composite structure, since 2014

ISRN Civil Engineering (scientific journal). Member of the Editorial Board, 2012-2014.

Ministry of Infrastructure - Standard commission. Member of the work group n.4 Steel and composite structures, since 2010

Spazioricerca (scientific journal). Director from 2005 to 2009.

IABSE - International Association for Bridge and Structural Engineering, Member since 2009.

ANIDIS. Italian association for the seismic engineering. Member of the executive board, since 2009.

FPA-Steel promotion foundation. Member of the Seismic commission for structural steel, since 2006.

Ingegneria Sismica Italiana. Member of the scientific board, since 2012

Collegio dei Tecnici dell'Acciaio. Member since 2010

RESEARCH SUPPORTED BY PUBLIC AUTHORITIES

Participation and success on calls involving competitive peer review:

European Union (2014-2015), STEEL-HEART: Steel-based applications in earthquake prone areas – Research Fund for Coils and Steel. Total funding: 627.106,00€, unit funding: 31.044,00 € (Unit coordinator)

University of Camerino (2014-2015). PROCULT: Probabilistic performance-based methodlogy for seismic risk assessment of cultural heritage. Funding 50.160,00€ (Principal investigator)

European Union (2010-2013), INNO-HYCO-Innovative Hybrid and Componsite steel-concrete structural solution in seismic areas – Research Fund for Coils and Steel. Total funding: 1.488.000,00 (Principal investigator).

European Union (2007-2010), Prefabricated steel structures for low-rise buildings in seismic areas – Research Fund for Coils and Steel. Funding:119.000,00 € (Unit coordinator)

Fondazione CARIMA (2005-2006) Safety in existing construction. Funding:15.000,00 € (Principal investigator)

Min. Università e Ricerca (PRIN:2002-2004): Advanced design and performance control of steel-concrete frames in seismic area (working group component)

Min. Università e Ricerca (PRIN:2000-2002). Seismic risk: strategies for the vulnerability mitigation (working group component)

Ministero Attività Produttive (PRIN:2000-2002). Models and systems for the automated management of construction companies. Funding:125.000,00 €. (Principal investigator)

Ministero Attività Produttive (PRIN:2000-2002). Process innovation in the management of the construction company production units. Funding:125.00,00 € (Principal investigator).

Min. Università e Ricerca (PRIN:1997-1998). Safety in high performance concrete construction (working group component).

Main research agreements (not competitive) with public authorities:

National Civil Protection Agency (2014-2018), RELUIS-3 Project: Network of Seismic Engineering Italian Loboratories. Line 6-Seismic isolation and seismic damping systems Funding: 32.000,00 € (unit coordinator): Line 9-Implicit risk Funding: 14.000,00 € (unit coordinator)

Ministero dei Beni e delle Attività culturali e del Turismo (2014-2015). ARCUS Project- Seismic safety assessment of national museums. Funding 83.800,00€ (unit coordinators prof. L. Dezi and prof. A. Dall'Asta)

National Civil Protection Agency (2010-2012), RELUIS-2 Project: Network of Seismic Engineering Italian Loboratories. Task AT2 – Code innovation and new technologies in seismic engineering . SubTask 2.3.2. Development of new technologies for the seismic retrofitting. Funding: 30.000,00 € (unit coordinator)

National Civil Protection Agency (2005-2009), RELUIS Project: Network of Seismic Engineering Italian Loboratories. Task 7 – Seismic isolation and dynamic control of structure and infra-structure. Funding: 90.000,00 € (unit coordinator)

Soprintendenza archeologica delle Marche (2005). Preliminary studies for the the Extension for the archeologic Museum of Ascoli Piceno. Funding: 30.000,00€ (working group member)

CONSULTANT ACTIVITY (most recent and significative ones)

DVD&C spa (2015). Seismic retrofit of the masonry bridge over the Aso river.

Municipality of Recanati (2015). Design of the seismic retrofit of the B. Gigli school.

Consultec (2014). Design of a new steel-concrete bridge over the Cesano river.

3TI (2012). Design of the bridge over the Adda river, steel bridge supported by arch and piers.

GLF spa (2012). Design of seismic isolation system for two Marche regional Hospitals in Camerano and Fermo.

University of Camerino (2011-date). Evaluation of seismic vulnerability of buildings with reinforced concrete and masonry structure.

DSD srl (2009) - Provincial administration of Pescara (2009). Design of cable stayed steel-concrete composite bridge.

ERAP (regional authority for the house) (2009). Design of innvative buildings with steel structure and seismic dissipative devices.

Italingegneria srl (2008-2012). Design of cable-stayed footbridge in Milan.

Provincial authority of Macerata (2009-2011). Design of steel arch bridge over the Potenza river.

Regional archbishopric (2008-2011) Seismic retrofit of historical buildings.

Provincial authority of Macerata (2008) Characterization of isolated bridge by experimental test program.

Municipality of Falconara (2006-2009). Design and experimental test program of a externally prestressed steel footbridge.

Ministero dell'Interno (2004) Seismic vulnerability and retrofit by dissipative devices of existing r.c. building.

Harbour authority of Ravenna (2001-2004) Design of steel structure of the authority headquarter

University of Ancona (2000-2003). Seismic design of the buildings of medicine faculty.

Regional authority of Marche (1998-2001) Design of retrofit of historical Camerino walls.

Provincial authority of Ancona (1999) Study for the identification of collapse cause of two steel geodetic structures.

Ancona, February 14, 2017