

**Prof. Roberto Di Giulio**

Direttore

Roberto Di Giulio is an architect, Phd in "Technology of Architecture" at the University "La Sapienza" in Rome, Full Professor at the University of Ferrara, Faculty of Architecture, where he teaches Construction Design.

Head of the Department of Architecture at the University of Ferrara from 2006 to 2012.

Dean of the new Department of Architecture at the University of Ferrara from 2012.

Member of the Administrative Committee and Research Council of the University of Ferrara from 2002 to 2005.

Within the Department of Architecture, University of Ferrara, he is responsible of the Building Maintenance Laboratory (LEM) and member of the Scientific Committee of the Departmental Centres: DIAPREM (Development of Integrated Automatic Procedures for Restoration of Monuments) and SealineLab (Development of Coastal Systems and Tourist Infrastructures).

His research covers a broad range of issues from studies of materials performances and building design methodologies to investigation of building process management, maintenance strategies and building condition assessment.

**RESEARCHES**

His research activity includes: collaboration with research programmes co-ordinated by both public and private national and international organizations such as the research projects carried out within the University of Florence and Ferrara and the research projects commissioned by European Economic Community EEC.

Coordinator of the University of Ferrara Working Group in the National research project funded by the Ministry of University and Scientific and Technological Research "Definition of indexes for the development of building maintenance schedules and programmes" (2000-2003).

Coordinator of the University of Ferrara Working Group in the National research project funded by the Ministry of University and Scientific and Technological Research "Quality assurance methods; reliability tools; building design and construction" (2001-2004).

Coordinator of the University of Ferrara Working Group in the National research project funded by the Ministry of University and Scientific and Technological Research "Quality control in the hospitals and healthcare districts" (2003-2006).

National coordinator of the Research Project (2010-2012) funded by the Ministry of University "PRIN 2008\_Renovation, regeneration and valorisation of social housing settlements built in the suburban areas in the second half of last century" which involves the Universities of Bologna, Chieti, Torino and Venezia.

Co-ordinator of the Italian research group and member of the Technical Committee into the following EC funded research projects:

- International research project "BE 4213 - Condition assessment and maintenance strategies for building and buildings components" funded by the European Community within the Brite Euram Programme [1991/95].
- International research project "ARIADNE Access, Information and Navigation Support in the Labyrinth of Large Buildings" funded by the European Community within the TIDE Programme - Telematics for the Integration of Disabled and Elderly people" [1996/1999].
- International research project "BE 4670 - Socio-Technological-Commercial Framework and Decision Support Systems for Building Refurbishment" funded by the European Community within the Brite Euram Programme [1998/2001].
- International research project "G1RD-CT2000-00474 - IFD Buildings: Socio-Technological-Commercial Process Model and Supporting Communication/Information System for Design and Delivery of Industrialised, Flexible and Durable Buildings" funded by the European Community within the Competitive and Sustainable Growth Programme - 5th FP [2001/2003].
- International research project "NNE5-2001-00263 - EBOB Energy Efficient Behaviour in Office Buildings" funded by the European Community within the 5th FP "Energy, Environment and Sustainable Development" [2002/2004].
- International research project "VILLAS - Villas, Stately Homes and Castels: compatible use, valorisation and creative management" funded by the European Community within the INTERREG Programme [2004/2006].
- International research project "SuRE-Fit - Sustainable Roof Extension Retrofit for High-Rise Social Housing in Europe" funded by the European Community within the 6th FP "Intelligent Energy" [2006/2008].

- International research project "EU-CHIC – European Cultural Heritage Identity Card" funded by the European Community within the 7<sup>th</sup> FP [2009-2012].
- International research project "PROFICIENT – SME network business model for collective self-organised processes in the construction and retrofit of energy-efficient residential districts" funded by the European Community within the 7<sup>th</sup> FP [started in 2012 - in progress]
- International research project "STREAMER – Semantics-driven Design through Geo and Building Information Modelling for Energy-efficient Buildings Integrated in Mixed-use Healthcare Districts" funded by the European Community within the 7<sup>th</sup> FP [started in September 2013 – in progress]
- International research project "INSITER – Intuitive Self-Inspection Techniques using Augmented Reality for construction refurbishment and maintenance of energy-efficient buildings made of prefabricated components" funded by the European Community within the Horizon 2020 FP [funded - to be started in December 2014].

Chairman of the Cost Action TU0701 "Improving the Quality of Suburban Building Stocks" (2008/2013). By the appointment of the Ministry of Scientific Research he has been a member of the Management Committee of the European Commission COST Actions C5 "Urban Heritage - Building Maintenance" and C16 "Urban Building Envelopes". Member of the Focus Area Cultural Heritage of the European Construction Technology Platform.

#### MAIN PUBLICATIONS IN THE LAST 10 YEARS

He wrote several books concerning building technologies, design methodologies and maintenance strategies. Author of about 150 publications in books, conference proceedings, professional journals and magazines. The main publication in the last ten years include:

#### BOOKS

- **R.Di Giulio**, Z.Bozinovski, L.G.W.Verhoef, *Improving the quality of existing urban building envelopes. Structures*, IOS Press, Delft, NL, 2007 (ISBN 978-1-58603-736-9)
- **R.Di Giulio**, *Manuale di Manutenzione Edilizia*, 3a Edizione rivista e ampliata, Maggioli Editore, Rimini, 2007 (ISBN 88-387-3937-4).
- **R.Di Giulio**, *Improving the quality of suburban building stock\_Vol.1*, University of Malta, Malta, 2010, pagg.648 (ISBN 978-99932-0-880-8).
- **R.Di Giulio** e T.Zaffagnini (a cura di), *Case sparse. Paesaggi agrari tra Ferrara e Bologna: strategie per la valorizzazione e il riuso del patrimonio rurale*, Ed. Franco Angeli, Milano, 2010, pagg.208 (ISBN 978-88-568-2464-3).
- **R.Di Giulio**, *Improving the quality of suburban building stock\_Vol.2*, Unifepress, Ferrara, 2012, pagg.568 (ISBN 978-88-96463-08-6).
- **R.Di Giulio**, *Suburbanscapes*, Alinea, Firenze, 2012, pagg.203 (ISBN 978-88-6055-685-1).
- **R.Di Giulio**, *Suburban Atlas*, Alinea, Firenze, 2012, pagg.52 (ISBN 978-88-6055-686-8).
- **R.Di Giulio** e altri, *Paesaggi periferici*, Quodlibet, Macerata, 2013, pagg.359 (ISBN 978-88-7462-552-9).

#### ESSAYS CONTAINED IN BOOKS

- A.Boeri, P. Davoli, **R.Di Giulio**, T.Zaffagnini, *Emergenza del progetto: contributo della Facoltà di Architettura di Ferrara, Area Tecnologica*, in "Emergenza del progetto, Progetto dell'emergenza. Architetture Contemporaneità", pagg.202-209, Federico Motta Editore, Milano, 2005 (ISBN 88-7179-467-2).
- **R.Di Giulio**, *Metodi di garanzia per l'affidabilità delle opere edilizie nel ciclo di vita utile*, in "M.Fianchini (a cura di), Qualificazione del progetto edilizio", pagg.155-156 e 173-176, Alinea Editrice, Firenze, 2006 (ISBN 88-6055-028-9).
- **R.Di Giulio**, *Presentazione*, in "S.Brunoro, Efficienza energetica delle facciate", pagg.9-12, Maggioli Editore, Rimini, 2006 (ISBN 88-387-3651-0).
- **R.Di Giulio**, T.Zaffagnini, *Strategie per la salvaguardia e il riuso dell'edilizia rurale*, in "Villas, stately homes and castels: compatible use, valorisation and creative management", vol.1, pp. 155-160, Edizioni Lunargento, Venezia, 2006 (ISBN 88-900974-5-0).
- **R.Di Giulio**, M. Coccagna, *Scelte strategiche per la definizione di edifici affidabili nel tempo*, in "V. Legnante (a cura di), Principi di affidabilità nella progettazione e nella costruzione", pagg.179-212, Edizioni ETS, Pisa, 2006 (ISBN 978-88-467-1528-9).
- **R.Di Giulio**, S.Brunoro, P.Civiero, *Techniques for adaptations of the structures of a multi-storey family house in Florence*, in "R.Di Giulio, Z.Bozinovski, L.G.W.Verhoef (a cura di), Improving the quality of existing urban building envelopes. Structures", pagg.27-36, IOS Press, Delft, NL, 2007 (ISBN 978-1-58603-736-9).

- **R.Di Giulio**, S.Brunoro, E.Arbizzani, *State of the art: Italy*, in "M.T.Andeweg, S.Brunoro, L.G.W.Verhoef (a cura di), Improving the quality of existing urban building envelopes. State of the art", pagg.155-168, IOS Press, Delft, NL, 2007 (ISBN 978-1-58603-734-5).
- **R.Di Giulio**, M. Coccagna, B. Turillazzi, *Procedure per facilitare la valutazione e la gestione dei fenomeni di degrado*, in "Innovazione, efficienza e sostenibilità nel costruito", pagg. 143-153, Ed.RICOS, Bologna, 2007
- **R.Di Giulio**, *Introduction*, in "R.Di Giulio (a cura di), Improving the quality of suburban building stock", pagg.1-8, University of Malta, Malta, 2010 (ISBN 978-99932-0-880-8) con Peer Review
- **R.Di Giulio**, E.Piaia, *Assessment of Quality of Suburban Building Stock. Case study: S.Eusebio, Cinisello Balsamo, Italy*, in "R.Di Giulio (a cura di), Improving the quality of suburban building stock", pagg.239-251, University of Malta, Malta, 2010 (ISBN 978-99932-0-880-8) con Peer Review
- **R.Di Giulio**, E.Piaia, *Assessment of Quality of Suburban Building Stock. Indicator matrix: S.Eusebio, Cinisello Balsamo, Italy*, in "R.Di Giulio (a cura di), Improving the quality of suburban building stock", pagg.407-417, University of Malta, Malta, 2010 (ISBN 978-99932-0-880-8) con Peer Review
- **R.Di Giulio**, *Introduzione*, in "R. Di Giulio e T: Zaffagnini, Case sparse. Paesaggi agrari tra Ferrara e Bologna: strategie per la valorizzazione e il riuso del patrimonio rurale", pagg.11-23, Ed. FrancoAngeli, Milano, 2010 (ISBN 978-88-568-2464-3).
- **R.Di Giulio**, S. Valicenti, *Il piano di manutenzione come strumento per la domanda di servizio: il caso della gestione dei siti industriali*, in "C. Talamo, Procedimenti e metodi della manutenzione edilizia. Il piano di manutenzione", Vol 2, pagg. 87-106, Esselibri, Napoli, 2010 (ISBN 978-88-513-0681-6).
- **R.Di Giulio**, *The MUDI project*, in "R.P.Borg (a cura di), Challenges in Conservation of Architectural Heritage", pagg. 99-107, Kamra tal-Periti, Malta, 2011 (ISBN 978-99957-0-133-8).
- **R.Di Giulio**, *An action towards the improvement of suburbia*, in "R. Di Giulio, Improving the quality of suburban building stock\_Vol.2", pagg.1-9, UnifePress, Ferrara, 2012, (ISBN 978-88-96463-08-6).
- **R.Di Giulio**, *About Suburbs*, in "R.Di Giulio, Suburbanscapes, pagg.11-22, Alinea, Firenze, 2012, pagg.203 (ISBN 978-88-6055-685-1).
- **R.Di Giulio**, *Note sulla gestione della complessità nel processo progettuale*, in "IUAV Alumni (a cura di), Il progetto di architettura. Gestione e controllo di interventi complessi, pagg.79-94, Franco Angeli, Milano, 2012, (ISBN 978-88-204-0935-1).
- **R.Di Giulio**, *High Technologies for Cultural Heritage: Technologies for the Survey and Monitoring of Cultural Heritage*, in "IRCICA, Islamic Urban Heritage", pagg. 213-222, IRCICA, Istanbul, 2013 (ISBN 978-92-9063-235-5).
- **R.Di Giulio**, *Strategie di riconnessione*, in "F.Castagneto e V.Fiore (a cura di), Recupero, Valorizzazione, Manutenzione nei Centri Storici", pagg. 142-145, Lettera Ventidue Edizioni, Siracusa, 2013 (ISBN 978-88-6242-084-6).

#### ARTICLES IN SCIENTIFIC JOURNALS

- **R.Di Giulio**, Q.L. Kiang, C.Terpolilli, *IFD Industrialised, Flexible, Durable*, allegato al n.24 di d'Architettura, Federico Motta Editore spa, Maggio/Agosto 2004.
- **R.Di Giulio** e T. Zaffagnini, *Strategie per la salvaguardia e il riuso degli insediamenti rurali*, in Paesaggio Urbano, Ed. Maggioli, n.5, settembre-ottobre 2006.
- **R.Di Giulio**, M. Coccagna, *Costruire sulla Città*, in Paesaggio Urbano, pagg. 44-49, Ed. Maggioli, Rimini, n.3, maggio/giugno 2009. (ISSN 1120-3544)
- **R.Di Giulio**, *Easy system / Easy construction*, in Materia, pagg. 152-157, Ed Il Sole 24 Ore, Milano, n.67, Settembre 2010. (ISSN 1121-0516)
- **R.Di Giulio**, L.Emanuelli, *Brindisi città di mare*, in Paesaggio urbano, pagg. 76-89, Ed. Maggioli, Rimini, n.5, settembre/ottobre 2010. (ISSN 1120-3544)
- **R. Di Giulio**, S.Brunoro, E.Piaia, M.Ronconi, *Profilo*, in Techne, pagg. 315-316, Firenze University Press, n.03-2012, (ISSN on line 2239-0243)
- **R. Di Giulio**, Christina Claeson-Jonsson, Rizal Sebastian, *Performance-based procurement for low-disturbance bridge construction projects*, in "Construction Innovation", Vol.13, n.4, Emerald Group Publishing Limited, 2013 (ISSN 1471-4175)

#### PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS

- C. Alessandri, **R. Di Giulio**, V. Mallardo, S. Mazzacane, S. Rossi, B. Turillazzi, *New perspective in European research: the role of Gdansk and Ferrara for the development of the scientific knowledge*, in Atti della Conferenza Internazionale "CES - Civil Engineering for Society", Gdańsk, Poland 30 Settembre/2 Ottobre 2004.

- **R.Di Giulio**, L.K. Quah, G.J. van den Brand, *Process innovation for Design and Delivery of IFD Buildings*, in Atti del Convegno Internazionale "Building for a European Future", Vol.2, pagg.405-417, Maastricht (NL), 14/15 Ottobre 2004.
- **R.Di Giulio**, M. Coccagna, L.K. Quah, G.J. van den Brand, *IFD Buildings as design and delivery innovation*, in Atti del "22<sup>nd</sup> International Symposium on Automation and Robotics in Construction", Ferrara 11-14 Settembre 2005.
- **R.Di Giulio**, M. Coccagna, G. Tonelli, *IT Tools for the Valorisation of the Building Heritage*, Atti del 8th International Conference on "Progress in Design & Decision Support Systems in Architecture and Urban Planning", Eindhoven University of Technology, 4/7 Luglio 2006, Eindhoven (NL), 2006 (ISBN-10 90-386-1756-9 / ISBN-13 978-90-386-1756-5)
- **R.Di Giulio**, T. Zaffagnini, S. Brunoro, D. Longo, E. Piaia, *The reuse and valorization of rural building heritage*, in "C.A. Brebbia, F.D. Pineda; Sustainable Tourism II", Second International Conference on Sustainable Tourism, Proceedings, pagg. 261-270, WIT Press, Ashhurst, Southampton, UK, 2006 (ISBN: 1-84564-044-6 ISSN: 1743-3541).
- **R.Di Giulio**, T. Zaffagnini, S. Brunoro, M.Coccagna, D. Longo, E. Piaia, *Promotion activities and strategies for reuse and valorisation of reuse and valorisation of rural buildings*, in AA.VV. "Manors and Villas: cultural heritage as a generator of economic development", Conference Proceedings, Varazdin 13-14 Ottobre 2006, pp.103-112, Ed. Acta Architectonica, Zagabria, 2006 (ISBN 953-6229-49-8).
- **R.Di Giulio**, M. Coccagna, B. Turillazzi, *Running proposals to assess, manage and prevent the building decay*, in "R.Pietroforte, E.De Angelis, F.Polverino, Construction in the XXI century: local and global challenges", pagg.384-385 (testo completo su CD allegato), Atti del Joint International Symposium of CIB Working Commissions W55/W65/W86, Roma 18-20 October 2006, Edizioni Scientifiche Italiane, Napoli, 2006 (ISBN 88-495-1339-9).
- **R.Di Giulio**, M. Balzani, M. Coccagna, G. Prearo, G. Tonelli, *Il progetto Villas: un sistema informativo integrato territoriale e architettonico*, in "Atti della 10<sup>a</sup> Conferenza Nazionale ASITA", Bolzano, 14-17 novembre 2006, vol. 1, pp. 891-896 (ISBN 88-900943-0-3).
- **R.Di Giulio**, M. Coccagna, B. Turillazzi, *Procedure facilitate per valutare, gestire e controllare i fenomeni di obsolescenza*, in "Vittorio Fiore (a cura di), La cultura della manutenzione nel progetto edilizio e urbano", pagg.54-59, Atti del Convegno Nazionale "La cultura della manutenzione nel progetto edilizio e urbano", Siracusa 24-25 Maggio 2007, Ed. Lettera Ventidue, Palermo, 2007 (ISBN 978-88-6242-000-6).
- **R.Di Giulio**, *Sustainable roof-top extension: a pilot project in Florence (Italy)*, in "AA.VV (a cura di), Sustainable Building Affordable to All", pagg.255-263, Atti del Convegno Internazionale "Portugal SB10 - Sustainable Building Affordable to All", Vilamoura, Algarve (Portugal) 17-19 Marzo 2010, Ed. University of Minho – IST – iSBE Portugal, 2010 (ISBN 978-989-96543-1-0) con Peer Review.
- **R.Di Giulio** (a cura di), *Improving the quality of suburban building stock*, Proceedings of International Conference, 20/21 April 2012, Ferrara, Ed.Unifepress, Ferrara, 2012, pagg.33 (ISBN 978-88-96463-11-6).
- **R.Di Giulio**, M.Balzani, E.Piaia, M.Zuppiroli, *European protocols for methods, tools and techniques: new standard for 3D laser scanner*, in "R.Zarnic, V.Rajcic, B.Vodopivec, Heritage protection from documentation to interventions", pagg.145-147, Proceedings of the Eu-CHIC International Conference on Cultural Heritage Preservations, 29 May – 1 June 2012, Split (Croatia), Ed. University of Zagreb, 2012 (ISBN 9789536272518).

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