



H2020  
Marie Skłodowska-Curie Actions  
European Training Networks

## Reference Book

*Composite Materials and Structures in Aerospace Engineering.* Edited by E. Carrera. Trans Tech Publications, 2016

## Upcoming Events

Seminar on Durability and Ageing of Organic Matrix Composites (OMC) by Professor Marco Gigliotti, 20-22 April 2016, Politecnico di Torino, Turin, Italy

FULLCOMP Special Session at the 19th International Conference on Composite Structures (ICCS19), 5-9 September 2016, Porto, Portugal

## Work-packages

1. Project management and network coordination
2. Analysis and computational methods
3. Design and optimization
4. Damage and failure analysis
5. Health-Monitoring, repairing and NDT
6. Multiscale Methods
7. Manufacturing and experimental approaches
8. Entrepreneurship
9. Dissemination and transfer of knowledge
10. Recruitment and training

FULLY INTEGRATED ANALYSIS,  
DESIGN, MANUFACTURING  
AND HEALTH-MONITORING  
OF COMPOSITE STRUCTURES



A project under  
European Union's Horizon 2020  
research and innovation program

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Visit our website

[www.fullcomp.net](http://www.fullcomp.net)



## Contacts

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modelling design industry prognosis interdisciplinary Composite structures damage cooperation Marie-Curie testing global-local manufacturing industry partnerships materials H2020 health-monitoring research universities international multi-scale multi-field 7 countries



### FullCOMP in Figures:

- 3M € Budget
- 4 Years project
- 7 Universities
- 1 Research Centre
- 1 Company
- 12 PhD Students

The FULLCOMP project is funded by the European Commission under a Marie Skłodowska-Curie Innovative Training Networks grant for European Training Networks (ETN). FULLCOMP provides intersectoral, interdisciplinary and international training to Early Stage Researchers (ESRs). The FULLCOMP consortium is composed of 7 Universities - Politecnico di Torino (Italy), University of Bristol (UK), Ecole Nationale Supérieure d'Arts et Métiers (Bordeaux, France), University of Hannover (Germany), University of Porto (Portugal), University of Washington (USA), RMIT (Australia), 1 research institute (Luxembourg Institute of Technology) and 1 company (Elan-Ausy, Hamburg, Germany). FULLCOMP recruited 12 PhD students who are working in an international framework to develop integrated analysis tools to improve the design of composite structures. The full spectrum of the design of composite structures is dealt with, such as manufacturing, health-monitoring, failure, modeling, multiscale approaches, testing, prognosis, and prognostic. The FULLCOMP research activity is aimed at many engineering fields, e.g. aeronautics, automotive, mechanical, wind energy, and space.

## Partners

### Politecnico di Torino

Prof. Erasmo Carrera



### University of Bristol

Prof. Paul Weaver

### Ecole Nationale Supérieure d'Arts et Métiers

Prof. Frederic Dau



### Leibniz Universität Hannover

Prof. Raimund Rolfes

### Luxembourg Institute of Science and Technology

Dr. Gaetano Giunta



### ELAN-AUSY GmbH

Dr. Steffen Czichon

### Universidade do Porto

Prof. António Mendes Ferreira



### University of Washington

Prof. Anthony Waas

### Royal Melbourne Institute of Technology

Prof. Adrian Mouritz



## Early Stage Researchers

### ESR1 - Li Guohong

Variable, mixed, linear and nonlinear kinematic shell formulations

### ESR2 - Alberto García de Miguel

Diagnostic and prognostic of composite structures and computational multi-scale approaches

### ESR3 - Ibrahim Kaleel

Impact Response through a variable kinematic component-wise approach based on Carrera Unified Formulation

### ESR4 - Margarita Akterskaia

Failure analysis of composite structures through global-local methods

### ESR5 - Sander van den Broek

Reduced-order models and probabilistic analysis for nonlinear structural analysis of composite structures

### ESR6 - Yanchuan Hui

Multi-scale modelling and design of composite structures

### ESR7 - Gabriele De Pietro

Modelling and design of multi-stable composite structures

### ESR8 - Sergio Minera

Buckling of Thin-Walled shells using Carrera Unified Formulation

### ESR9 - Mayank Patni

3D stress fields in localized areas of stiffened panels: stringer terminations and rib-foot connectors

### ESR10 - Lorenzo Cappelli

Durability of thermoplastic composite and variability effects

### ESR11 - Pietro del Sorbo

Multi-scale approaches using an original discrete element method for the treatment of impact on dry textile

### ESR12 - Georgios Balokas

Advanced methods for design, sizing and manufacturing of composite structures in aerospace applications