

## **CURRICULUM VITAE ET STUDIORUM OF CARMINE COVELLI**

2002: Degree in Civil Engineering at University of Naples Federico II.

2006: Philosophy Doctor in 'Engineering of Hydraulic, Transportation and Territorial Systems' at University of Naples Federico II, discussing the thesis: 'On the evaluation of the hydraulic causes of the levees' failure: security implications of hydraulic territory' - supervisor Prof Pianese.

2003: register of certified professional Engineers.

Officially inserted as team member in several projects of financed research – scientific responsible Prof Pianese – he developed: a numerical modeling of the debris flow phenomena; a study of contamination processes in natural rivers; a numerical model based on finite volume model for the simulation of phenomena of propagation, collision and slowdown of debris flow; an integrated system to forecasting, recognition and control of the extreme hydrogeological events; a specific numerical models to evaluate the unsteady flow phenomena that arise in the drainage networks, and to optimize that with respect to economy and reliability problems.

PRIN 2008: 'Safety and Reliability of pressurised water supply and distribution systems towards water contamination, also intentional, and service levels to guarantee to the users' (University of Naples Federico II – Prof Pianese; University of Ferrara – Prof Frachini; University of Cassino – Prof Gargano; Polytechnic of Bari – Prof Giustolisi).

December 2010: scholarship on the 'Safety and Reliability of pressurised water supply and distribution systems towards water contamination, also intentional, and service levels to guarantee to the users'.

October 2012: post-doctoral fellow in 'Criteria and methods for the optimized design of rural and urban drainage networks reducing the risk of flooding with minimal investment cost'.

Member to the errands of examinations of several courses in the Faculty of Engineering of Naples Federico II.

Assistant of the supervisor in eleven thesis for the degree.

Author and co-author of 36 publications.