

ACADEMIC C.V. OF LAURA VALENTINA SOCCO



Laura Valentina Socco, born in Turin (Italy) in 1966, is presently Full Professor in Applied Geophysics at the Department of Engineering of Environment, Land and Infrastructures (DIATI) of the Politecnico di Torino, where she took her civil engineering MSc in 1992 and her PhD in Environmental Geo-engineering in 1996.

In 2013 Prof Socco has been chosen as Honorary Lecturer by the SEG.

In 2014 Prof Socco has received the Conrad Schlumberger Award (EAGE).

In 2019 Prof Socco has received the Outstanding Educator Award from SEG

Prof Socco has been Editor in Chief of Geophysics from 2017 to 2019.

Scientific interests: Prof Socco works on developing geophysical techniques for near surface investigation in applications ranging from, seismic hazard and engineering, to hydrocarbon exploration, environment and cultural heritage. In the last twenty years, she has focused her research work on surveying techniques based on the propagation of seismic surface waves for estimating subsurface velocity models. In this framework she has developed a wide set of processing and inversion methods that have been successfully used in a broad variety of applications ranging from stochastic seismic response estimation, geotechnical characterization, mineral and hydrocarbon exploration, geohazard, FWI. More recently she has focused on geophysical data integration techniques developing joint inversion methods.

Research activities: Prof Socco has been principal investigator of several research projects financed by national and international institutions and companies. Since 2007 she has been in charge of the Applied Geophysics Lab of DIATI. She has a well-established international network and her cooperation includes among others MIT, TU Delft, Uppsala University, Le Mans University, Pierre and Marie Curie University (Paris), Norwegian Geotechnical Institute, Warsaw University, Grenoble University. Among the industry partners she has cooperated with there are Eni E&P, Total E&P, Saudi Aramco, Shell E&P, NAM, Yara, Nordic Iron Ore.

Publications and service to the community: Prof Socco is author of more than 150 scientific publications in peer reviewed journals and conferences. Her H index is 22 in Scopus and 20 in WOS. She has been awarded with a honourable mention in the category best paper in Geophysics in 2012, 2013 and 2016. She has been member of SEG, EAGE, EGU, member of Research Committee and Education Committee of EAGE and DL and Publication Policy Committees of SEG, and she has been vice-chairperson and chair-person of the Near Surface Division Committee of EAGE and member of EAGE Board (2014-16). She has been Associate Editor (2003-2013) Assistant Editor (2013-2017) of Geophysics and she has been Associate Editor (2006-2013) of Near Surface Geophysics. She has been Convener of several international workshops. She has been Guest Editor of two special issues of Near Surface Geophysics, published in 2004 and 2011, respectively. Prof Socco has been member of Politecnico Senate, she has led

several technical committees of DIATI and is presently member of the Gender Observatory of Politecnico.

Education activities: Prof Socco has been vice-Director of Politecnico Doctorate School (2007-2012) and is chair of the Education Program (1 BCs and 2 MSc programs) in Environment and Land Engineering at Politecnico di Torino since October 2018. Prof Socco is Professor of the course “Exploration Geophysics” in the MSc program in Petroleum Engineering at Politecnico di Torino and “Methods for Environmental Engineering” in the BSc Program of Environment and Lan Engineering. She is member of the Council of Civil and Environmental Engineering PhD Program of Politecnico. She has been advisor of 7 post-Docs, 9 PhD students and of more than 60 MSc students. She has been invited lecturer at more than 40 academic institutions and international conferences.