

CURRICULUM OF

Daniele DESIDERI

Daniele Desideri took the degree in Electronic Engineering on 20.03.1989 at the University of Padova with full marks and honours. On 27.09.1994 he obtained the PhD in "Elettrotecnica" (Electrical Engineering), PhD course at the University of Padova. In 1994 he spent about six months in Great Britain at the European research laboratory JET. At the University of Padova, from 23.12.1994 to 06.01.2004 he was University research assistant of Electrical Engineering, and since 07.01.2004 he is Associate Professor of Electrical Engineering.

In 2006 he was elected member of the "Senato Accademico Allargato" (extension of the Senatus Academicus) of the University of Padova, representing the Associate Professors of Engineering (up to 2008). He was also member of the University Projects Commission of the University of Padova (call 2007), representing the Industrial Engineering. In 2009 he was elected Scientific Co-ordinator of the "Giovanni Someda" inter-Departmental Library of the University of Padova.

He is co-ordinator for the University of Padova - Department of Electrical Engineering of an agreement with the Technical University of Cluj-Napoca - Department of Electrical Engineering for the years 2009-2011.

He is member of the Sub-Committee SC 106A (Human exposure to electromagnetic fields - Low frequency) and of the Sub-Committee SC 210 A/NON ITE (EMC of NON ITE products) of the CEI (Comitato Elettrotecnico Italiano) since 2004.

His research activities have been focused on two main fields: a) plasma and thermonuclear fusion engineering and b) electromagnetic compatibility (EMC).

From the university degree up to about 2000, he worked on experimental and methodological topics, including design and operation of electrical systems, in the field of thermonuclear plasma (research activity performed on ETA-BETA II and RFX experiments). He was involved in: development of equivalent electrical networks for the analysis of electrical systems; numerical analyses; development of algorithms and techniques for signal processing; analyses of power inductive-capacitive circuits with non linear load. He dealt with numerical studies about fast reconstruction of the plasma internal magnetic configuration in a reversed field pinch experiment.

Since 2000 his research activity has been focused mainly on EMC field. He promoted the development of a university laboratory on this research field and he is actually co-responsible of the laboratory of "Industrial Electromagnetic Compatibility" at the Department of Electrical Engineering of the University of Padova. He was involved in analytical and numerical analyses of the electric field near a reinforced concrete pole of a MV line, and related experimental validations, in the areas of the human exposure and of the environmental analysis. He has performed studies on welding equipments with reference to human exposure to electromagnetic fields. He has taken part to the design, realization and characterization of a low cost two-port TEM cell for test frequencies up to about 200 MHz. He was involved in the characterization of a DC magnetron sputtering system with a single cathode of four inches target diameter for the deposition of thin films. Now he is working on a two planar cathodes magnetron sputtering system, whose construction has been partially supported by a grant assigned by the Scientific Equipments Commission of the University of Padova (call 2007).

He was technical/scientific responsible of research contracts for the Department of Electrical Engineering of the University of Padova.

He is co-author in about 35 journal papers and in about 25 international conference papers.

Padova, October 13th 2009