CARLO APPINO - CV

1985: **Degree in physics** (110/110), from Università di Torino. 1992: **Ph. D. in physics**, from Politecnico di Torino.

Since 1994: Full-time researcher at the Materials Department of the Istituto Elettrotecnico Nazionale

Galileo Ferraris (IENGF) (now INRIM - Electromagnetics Division).

1998-2004: **Responsible** for official lines of research at IENGF.

1997-2005: Organizer/director of the IENGF School "Measurements and Magnetic Materials".

15/09/2010-14/12/2010: Invited scientist at the CNRS-G2Elab, Grenoble (France).

12/10/2014-18/10/2014: **Invited scientist** at the SATIE laboratory (ENS de Cachan, France).

Co-chair of the Program Committee for the 13th International Workshop on One- and Two-Dimensional Magnetic Measurement and Testing (Torino 10-12 September 2014).

Project leader of the "Extended measurements to Project IEC/TR TC 68-7" (Single Sheet Tester Round Robin Test, Epstein and other measurement), for which INRIM played the role of Pilot Laboratory (2013-2014).

Referee of a number of international journals (e.g., IEEE Trans. on Mag., JMMM, J. Phys., Physica B, IJAEM), and of main international conferences on magnetism.

He served as editor for the International Conferences ICM (2003), SMM19 (2009) and 2DM 2014.

Co-tutor of 6 dissertations for the Physics Degree at the University of Torino and 8 bachelor degrees at Politecnico di Torino and University of Napoli.

Teaching activity: he taught courses in physics and materials science at Politecnico di Torino, Università di Torino and Università del Piemonte Orientale.

He participated in 8 International Research Projects/Networks (responsible for IENGF in one of them).

He is author/co-author of 78 peer-reviewed scientific papers published in international journals or conference proceedings (2 chapters of book).

Its research activity mainly regarded the fundamental properties of crystalline and amorphous magnetic materials and thin films, with particular interest devoted to the vector nature of the magnetization process, both from experimental and theoretical viewpoint. Recent efforts have been devoted in theory and experiments on soft magnets, in particular the novel magnetic composites, subjected to complex excitation regimes: distorted, rotational, and elliptical fluxes. Such regimes emulate the real working conditions of magnetic cores in electrical machines.

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E. Della Vecchia, M. Coisson, C. Appino, F. Vinai, R. Sethi

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C. Ragusa, C. Appino, F. Fiorillo (INVITED paper)

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PRZEGLAD ELEKTROTECHNICZNY

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C. Appino, F. Fiorillo, C. Ragusa

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C. Appino

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Extended frequency analysis of magnetic losses under rotating induction in soft magnetic composites

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Characterization and prediction of magnetic losses in Soft Magnetic Composites under distorted induction waveform

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C. Appino, O. de la Barrière, F. Fiorillo, M. Lo Bue, F. Mazaleyrat, C. Ragusa

Classical eddy current losses in Soft Magnetic Composites

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Beatrice, C. Appino, O. de la Barrière, F. Fiorillo, C. Ragusa

Broadband magnetic losses in Fe-Si and Fe-Co laminations

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