The 15th International Workshop on 1&2 Dimensional Magnetic Measurement and Testing 24–26 September 2018, Grenoble, France

This special volume of IJAEM contains a selection of 18 papers of the 15th of series of International meetings previously held since 1991 at several sites of Europe, in Japan and China.

Same as the previous workshop, 2DM2018 brought academic and industrial specialists together to share and spread the latest advances in the field of magnetic measurement and testing. An exceptional large participation of 85 delegates, including a significant part on industrials, attended the workshop.

14 countries are represented: Austria, China, Finland, France, Germany, Italy, Japan, Poland, UK, Romania, Slovakia, South Korea, Sweden and Switzerland. The scientific program offered a large range of topics with 60 contributions presented in the form of oral and poster sessions, a plenary lecture and 5 keynotes, all arranged in the traditional single plenary session.

The program has consisted in the following topics: 1D measurement and non-conventional characterization, 2D characterization and modeling, materials modeling, applications, sensors and nondestructive testing. The workshop offered also an exhibition related to materials and measurements: Aichi Steel Corporation, Innovent, Brockhaus Measurements, Bs&T Analyser, Magnet-Physik, Supergrid Institute.

The organizers thank Dr. Fausto Fiorillo, Dr. Stan Zurek, Prof. Olivier Hubert, Prof. Anouar Belhacen, Dr. Samuel Dobak and Dr. Yasmine Gabi for their talks and reviews of the key issues in advanced magnetic characterization and testing, high frequency magnetic behavior and losses in nanocrystallines and ferrites, multiscale approach for magneto-mechanical behavior prediction, impact evaluation of sheets short circuits in transformer and inline integration incremental permeability method for steel non destructive testing.

All submitted manuscripts were subjected to standard peer reviewing involving at least two independent reviewers for each paper.

The workshop was organized by the Grenoble Electrical Engineering Laboratory G2Elab with the help of the event agency Inside Outsight. The organizers would like to thank the International Steering Committee for their help and confidence, the financial sponsorships: CNRS, UGA, Grenoble INP, IRT Saint Exupery, Supergrid Institute, Brockhaus Measurements, Megger and MMT as well as all the 2DM2018 workshop attendees.

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