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GPR 2014

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Editors

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Foreword

It is our great pleasure to present the Proceedings of the 15th International Conference on Ground Penetrating Radar (GPR 2014), held in Brussels, Belgium, from June 30 to July 4, 2014. The International Conference on Ground Penetrating Radar is a longstanding traditional event making the premier forum of research and applications in the field of GPR. GPR 2014, the 15th in the series that has been held biannually since 1986, has brought together high-standard scientists, engineers, industrial delegates and end-users working in all GPR areas, ranging from fundamental electromagnetics to the so various fields of application. Topics covered include novel developments of GPR systems and antennas, advanced data processing algorithms for improved subsurface imaging, radar data modeling approaches and inversion strategies for quantitative reconstruction of soil and material properties, and finally, data interpretation in a range of fields, including geology and sedimentology, glaciology, environmental and agricultural engineering (e.g., hydrological monitoring, digital soil mapping, forestry), civil and military engineering (e.g., utility detection, monitoring of transport infrastructures, nondestructive testing, landmine detection), archeology and cultural heritage, and planetary exploration, among others. GPR 2014 is in particular co-organized with EU-COST (European Cooperation in Science and Technology) via the Cost Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar".

These conference proceedings contain 202 contributing, 4-6-page papers, from 33 countries worldwide. The contributions for GPR 2014 have been selected by the Editors based on the reviews of single page abstracts and full-length manuscripts conducted by the international scientific review panel (45 reviewers). These papers were judged on scientific quality and originality, the value for the GPR community, the themes of the conference and the absence of commercialism. The papers were revised once by the authors following the scientific panel comments to make them complying with the conference standard and formatting. Although the GPR 2014 Organizers and Editors believe that all papers presented have technical merit, complete accuracy and technical validity cannot be assured. The GPR 2014 Organizers and Editors accept neither responsibility nor liability for misprints or misinterpretations that may be contained in these proceedings.

We are warmly grateful to all the reviewer specialists that accepted to review the papers of this conference. Their constructive comments and corrections were essential for the success and quality of this event. In particular, we thank Peter Annan, Steve Arcone, Andrea Benedetto, Norbert Blindow, John Bradford, Amelia Rubio Bretones, Charlie Bristow, Nigel Cassidy, Ilaria Catapano, Chi-Chih Chen, Lorenzo Crocco, David Daniels, Xavier Dérobert, Nectaria Diamanti, Colette Grégoire, Susan Hubbard, Khan Zaib Jadoon, Harry Jol, François Jonard, Anja Klotzsche, Steven Koppenjan, Lanbo Liu, François Lavoué, Guido Manacorda, Xavier Neyt, Frédéric Nguyen, Raffaele Persico, Elena Pettinelli, Cristina Ponti, Fayçal Rejiba, Albane Saintenoy, Motoyuki Sato, Francesco Soldovieri, Mercedes Solla, Anh Phuong Tran, Jan van der Kruk, Marc van Meirvenne, Craig Warren, Xiong-Yao Xie, and Richard Yelf.

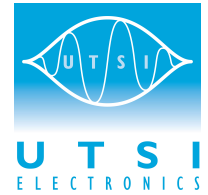
The conference has received generous sponsorship from 17 organizations, namely: Geoscanners, IDS, GSSI, Radar Systems, Geotech, Roadscanners, 3D-Radar, Allied Associates, Geomatrix Earth Science LTD, Utsi Electronics, Transient Technologies, Mala, Sensors & Softwares, Radarteam Sweden, Rohde&Schwarz, the European GPR Association, and the Université catholique de Louvain, as well has the technical support from the Université catholique de Louvain and FNRS, Delft University of Technology, the University of Edinburgh, Roma Tre University, the EU Cost Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar", and IEEE GRSS. We are grateful to all these supports to ensure a successful conference.

Sébastien Lambot, Antonis Giannopoulos, Lara Pajewski, Frédéric André, Evert Slob, and Christophe Craeye

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- Radar image processing
- Radar systems and antenna design
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