Special Issue “Magnetic Resonance in Porous Media”

A selection of contributions presented as posters at the 9th International Bologna Conference Magnetic Resonance in Porous Media (MRPM 9), July 2008, Cambridge MA, USA

This special issue of the online journal Diffusion Fundamentals contains contributions presented at the 9th International Bologna Conference Magnetic Resonance in Porous Media, held in Cambridge MA, USA from 13th to 17th July 2008, in the brand-new research facility of Schlumberger-Doll Research. The issue is dedicated to a selection of papers presented as posters and contains the abstracts of all the accepted conference contributions as well. Along with the publication of articles originating from invited talks and contributed oral presentations in the AIP Conference Proceedings (volume 1081, 2008) this issue gives an up-to-date and complete documentation of the state of the art and evolution of this discipline.

Conference contributions of the MRPM have been published in a special issue of the online journal Diffusion Fundamentals (volume 5, 2007) the first time after MRPM8 (Bologna, 2006), along with the Conference Proceedings in a special issue of Magnetic Resonance Imaging (volume 25, issue 4, 2007). With this issue, we continue to publish contributions to the MRPM Conference, indeed confirming that aforementioned volume 5 did not remain an isolated event as predicted in its editorial.

The range of topics in this issue is as broad as it was for the conference itself. It covers for instance biomedical and biochemical applications, polymer science or diffusion in rocks, cements and plaster. It also stretches over a broad range of NMR instrumentation, NMR pulse sequence design and NMR data processing. Traditional NMR experiments have once more proved to be powerful in various applications, while new methods become more and more established.

The conference was very successful in bringing together experimentally and theoretically working scientists from physics, chemistry, materials science, and industrial research in order to enable an exchange of experience and to discuss current and arising topical problems in an interdisciplinary context.

We would like to thank all the delegates, speakers and sponsors for presenting and sharing their perspectives on topics related to porous materials as well as their investigation by means of magnetic resonance. We also thank the members of the organizing and scientific committees of MRPM9, and in particular the two Chairs Martin D. Hürlimann and Yi-Qiao Song.

The next International Bologna Conference MRPM10 will be organized by Petrik Galvosas and Jörg Kärger at the University of Leipzig (Germany), from 12th to 16th September 2010. We hope to see all of the participants, in even greater numbers, in Leipzig, for an even more successful conference in this interdisciplinary area of great scientific and commercial significance.

Paola Fantazzini, Petrik Galvosas, Yi-Qiao Song, Martin D. Hürlimann, Jörg Kärger