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# Journal of Magnetism and Magnetic Materials

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## Preface to the Special Issue “Scientific and Clinical Applications of Magnetic Carriers”

This Special Issue is dedicated to a long-planned conference that never was, due to the extraordinary circumstances of the COVID-19 world pandemic and the resulting travel restrictions in 2020. The 13th International Conference on “Scientific and Clinical Applications of Magnetic Carriers”, or “MagMeet 2020” for short, was planned to take place on June 2–5, 2020, at University College London in London, UK, as a continuation of a 26-year old tradition of meetings of a diverse group of people interested in multidisciplinary applications of magnetic microparticles and nanoparticles in biomedical research and clinical diagnostics and therapy. The conference planning started at the conclusion of the previous meeting in 2018 in Copenhagen, DK, and its organization was taken on locally by Dr. Nguyen T.K. Thanh, UCL and her team working on the conference up until its being called off due to the pandemic.

Nevertheless, the momentum was there and we have decided to keep up with the tradition of publishing the work presented at the MagMeet conferences, this time based solely on the selection of conference abstracts and authors’ interest in contributing to the Special Issue. The selection of papers included in this volume represents well the diversity

of topics typical of MagMeet conferences and covers the latest advances in magnetic particle synthesis and characterization, nanomagnetism, magnetic forces, magnetic separation, magnetic sensing, magnetic particle applications in biology and clinical research and practice, including magnetically targeted drug delivery, magnetic hyperthermia, and magnetic particle imaging.

This broad range of topics illustrates well the significance of magnetic micro- and nano-particles to current biomedical applications as well as the breadth of the technical expertise involved in such applications. The table of contents, however, necessarily misses the less formal aspects of the MagMeet conferences: inspiring invited talks from leading experts in the magnetics-related fields, boat outings for conference dinners, visits to local pubs and cafés, and chance conversations evolving into professional, long-term collaborations.

We hope that this Special Issue will provide a timely update on scientific and clinical applications of magnetic carriers, and will interest the readers in participating in the next conference at the welcoming venue of UCL, London, UK to take place from June 14–17, 2022. The latest updates on the topics presented in this volume and the next



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conference can be found at [www.magneticmicrosphere.com](http://www.magneticmicrosphere.com).

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