



Foreword

Dear Participants of the 13th ICBEM and readers of the proceedings

The 13th *International Conference on Bioelectromagnetism* (ICBEM) took place 26th - 28th May 2021 under the auspices of the *International Society for Bioelectromagnetism* (ISBEM). It continued the longstanding tradition, which started with the first ICBEM in 1996 in Tampere, Finland, and continued every two or three years at different locations worldwide. Unfortunately, due to the Covid-19 restrictions, the 12th ICBEM originally planned to take place in 2020 in St. Louis, Mo, USA had to be canceled and therefore the 13th ICBEM in Heilbad Heiligenstadt, Germany, was held as an online event already in 2021.

The 13th ICBEM was jointly organized by the *Institute for Bioprocessing and Analytical Measurement Techniques e.V.*, Heilbad Heiligenstadt, and the *Max Planck Institute for Human Cognitive and Brain Sciences*, Leipzig. It provided a platform for contributing the latest research work in various fields of electromagnetic phenomena at the living matter. Scientists from 10 countries contributed 25 presentations. Plenary talks on recent accomplishments in diverse areas were given by six outstanding scientists. Moreover, a special workshop on instrumentation was organized by the sponsors *Scioscope GmbH* and *Inomed GmbH*.

More specifically, this year's focus included:

- transcranial magnetic stimulation (TMS),
- optical magnetometers,
- source imaging and mapping techniques,
- mathematical and computer models,
- instrumentation for electrical bioimpedance measurement.

Based on the judgments of at least two expert reviewers, 19 papers were selected to appear in these two special issues of the IJBEM.

We thank our technical sponsors *International Federation of Medical and Biological Engineering* (IFMBE) and the *German Society for Biomedical Engineering* (VDE DGBMT) for announcing the conference in their publications. We also thank all participants for their contributions, but also for listening and asking questions thus making this conference an unforgettable event.

Uwe Pliquett
Conference Chair

Thomas R. Knösche
Co-Chair