

Clinical Workshop on „Electrical Impedance Tomography for Cardiopulmonary Function“

**Univ.-Prof. Dr. -Ing. Dr. med.
Dr. h. c. Steffen Leonhardt**

**Chair for Medical Information
Technology**

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Aachen, 5. Mai 2023

**Wednesday, 14. Juni 2023, Generali Lecture Hall
Super C, RWTH Aachen, Templergraben 57, 52062 Aachen**

Organizers:

- Prof. Dr. med. Dr.-Ing. Dr. h.c. Steffen Leonhardt, Chair for Medical Information Technology, RWTH Aachen University, Aachen, Germany
- Prof. Dr. med. Christian Putensen, Sektionsleiter Operative Intensivmedizin, Klinik für Anästhesiologie und Operative Intensivmedizin, UNIVERSITÄTSKLINIKUM Bonn
- Prof. Dr. med. Inez Frerichs, Klinik für Anästhesiologie und Operative Intensivmedizin UNIVERSITÄTSKLINIKUM Schleswig-Holstein, Campus Kiel

8.00 – 9.00 am	Registration
9.00 – 9.45 am	1. Lecture: <i>Physical and Technical Basics of Electrical Impedance Tomography</i> (Prof. Leonhardt, RWTH Aachen)
9.45 – 10.30 am	2. Lecture: <i>Clinical Electrical Impedance Tomography Metrics</i> (Prof. Frerichs, UK Schleswig-Holstein)
10.30 – 11.00 am	Coffee Break
11.00 – 11.45 am	3. Lecture: <i>Current Clinical Applications of Electrical Impedance Tomography</i> (Prof. Putensen, UK Bonn)
11.45 – 12.30 am	4. Session: Hands-on Demonstration using <ul style="list-style-type: none"> a.) water tanks b.) electrical torso phantom, simulator or equivalent c.) healthy volunteers

- Workshop participation is free of cost. Limited number of seats available (50), first come first serve. Registration by email is required (eit2023@hia.rwth-aachen.de).
- Coffee and cookies during coffee break are free, lunch must be paid cash upon registration.
- The official recognition for continuous education by the Medical Association of *North Rhine* (ÄkNo, Ärztekammer Nordrhein, Anerkennung als offizielle Fortbildungsveranstaltung) has been applied for.
- Personal invitations sent to the following nearby University Hospitals: UK Bonn, UK Köln, UK Aachen, UK Düsseldorf, nearby Belgian and Dutch hospitals
- Departments: Intensive Care Medicine, Anesthesiology, Neonatology, Pulmology
- all hierarchical levels who want to learn about this new technology, in particular suited for newcomers on the assistant doctor or final year medical school level

Device and Handling Demonstrations offered by

- Dräger, Lübeck, Germany
- Sentec, Landquart, Switzerland
- Sciospec, Bennewitz, Germany
- Gense, Hong Kong, China
- MedIT, RWTH Aachen, Germany

Sponsoring Information

- This workshop will be a satellite event conducted at the last day of the parallel EIT2023 - 23rd „*International Conference on Biomedical Applications of Electrical Impedance Tomography*“. For more information, check <https://eit2023.rwth-aachen.de/>, for the schedule check https://eit2023.rwth-aachen.de/?page_id=135.
- The companies Dräger, Sentec, Sciospec and Gense will exhibit at the EIT2023 conference and kindly offered to demonstrate their EIT devices to workshop participants during the 4th session (hands-on experience) of the workshop.
- The whole EIT2023 conference which is hosting this satellite workshop is sponsored by the companies Dräger, Sentec and Sciospec, as well as the impedance imaging research center (IIRC) of Kyung Hee University, Korea (<https://iirc.khu.ac.kr/>), and the profile area *Medical Science and Technology* (MedST, <https://www.medst.rwth-aachen.de/cms/~epay/MedST/?lidx=1>) of RWTH Aachen University, see <https://eit2023.rwth-aachen.de/>.