

**Klinik und Poliklinik für  
Anästhesiologie, Intensivmedizin und  
Schmerztherapie**



**Organizing committee:**

*Klinik und Poliklinik für Anästhesiologie,  
Intensivmedizin und Schmerztherapie  
(KAIS) - Exp. Anästhesiologie - RoMBAT*

Dr. Wolfram Miekisch  
Dr. Patricia Fuchs  
Dr. Pritam Sukul

&

Prof. Dr. med. Daniel A. Reuter

**Venue:**

**Universitätsmedizin Rostock**

**BIOMICUM**, Schillingallee 70 D

Ground floor – room SR 3  
18057 Rostock

Exp. Anästhesiologie - **R**ostock **M**edical **B**reath  
Research **A**nalytics & **T**echnologies (RoMBAT)  
Tel.: 0381 494-5955

**Clinical Breath Analysis – Tool or Toy?**

*Symposium in the honor of Prof. Dr. Jochen K.  
Schubert's lifetime contribution to breath research*

Morning sessions  
Thursday, 29.02.2024

08:30 Registration

08:50 Opening remarks

**S1 Technical tools and improvements towards clinical VOC monitoring**

09:00 "What I learned during two decades in real-time breath analysis and how Jochen Schubert was involved"

**J. Herbig** – *IONICON Analytik, Austria*

09:20 "Inspiratory insights from SIFT-MS"

**P. Spanel** – *Academy of Science, Czech Republic*

09:40 "Breath research from Dornbirn 2004 to Rostock 2024"

**K. Unterkofler** – *Vorarlberg University, Austria*

10:00 "Breath analysis with absorption spectroscopy – are we there yet?"

**P. Maslowski** – *University of Torun, Poland*

10:20 Coffee break

10:40 "Engineering of automated sampling devices for exhaled VOC"

**D. Hein** – *PAS Technology, Germany*

11:00 "Assessing volatile emissions and adsorption as quality assurance measures in breath sampling"

**J. Beauchamp** – *Fraunhofer Institute, Germany*

11:20 "Breath research aspects of PIMMS and IMPACT: a ten-year collaboration"

**C. A. Mayhew** – *Inst. of Breath Research, Austria*

11:40 "Real-time metabolic monitoring through breath VOC analysis during exhaustive exercise"

**G. Pugliese** – *Max-Planck Inst. Mainz, Germany*

12:00 Lunch break – Doc(k) 7

Afternoon sessions  
Thursday, 29.02.2024

**S2 Interactive Networking – Clinical breath tests – tool or toy?**

13:00 Networking tables

13:50 Presentation of NW results by table facilitators

**S3 Clinical applications of breath VOC tests**

14:00 "Breath tests with clinical utility using stable isotope probes"

**A. Modak** – *Cambridge Isotope Labs. Inc., USA*

14:20 "Lipid peroxidation a measure of human homeostasis"

**T. Risby** – *Johns Hopkins University, USA*

14:40 "Identification of heart failure patients at high prognostic risk by breath analysis during cardiopulmonary exercise tests"

**F. Di Francesco** – *University of Pisa, Italy*

15:00 "Breath VOC monitoring in pediatric patients"

**D.-C. Fischer** – *University Med. Rostock, Germany*

15:20 Coffee break

15:40 "Searching for cancer biomarkers. Past, present and future"

**B. Buszewski** – *University of Torun, Poland*

16:00 "VOC in the diagnostics of infectious diseases – mycobacteria infections of livestock"

**H. Köhler** – *Friedrich-Loeffler-Inst. Jena, Germany*

16:20 "VOCs in the context of relevant pediatric surgical diseases"

**G. Singer** – *University Clinic Graz, Austria*

16:40 "My doctor-father, I & the origin of isoprene in us"

**P. Sukul** – *University Med. Rostock, Germany*

Evening sessions  
Thursday, 29.02.2024

17:00 "Podium discussion: Clinical breath analysis – tool or toy"

17:20 "Clinical breath analysis – tool or toy? - lessons learned from 30 years of breath research"

**J.K. Schubert** – *University Med. Rostock, Germany*

17:50 "Final remarks"

19:00 Conference Dinner

You can find us here:



**BIOMEDICUM**

Universitätsmedizin Rostock  
Schillingallee 70 D  
18057 Rostock

**Öffentliche Verkehrsmittel**

S-Bahn bis Parkstraße, Straßenbahnlinien 3 und 6 bis Parkstraße, Buslinien 25, 27, 28, F1 und F2 bis Schillingallee