

Program

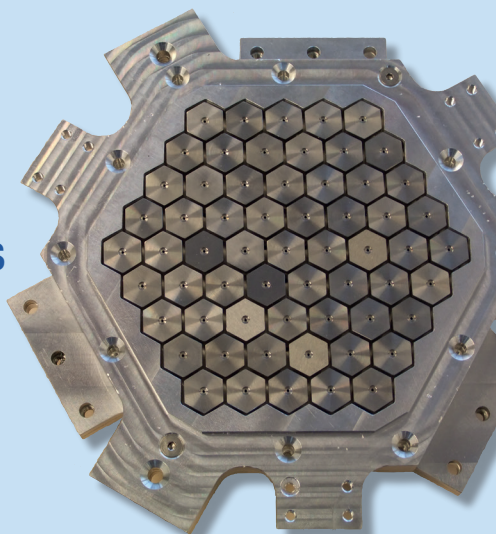
www.gas-bearing-workshop.com

4TH GAS BEARING WORKSHOP

November 15, 2021

Courtyard Hotel
Düsseldorf

- › LECTURES
- › POSTERS
- › TABLE TOPS



ORGANIZING INSTITUTIONS

Copyright Photo:
Phuc Vuong

ORGANIZER

For detailed information please contact:

VDE/VDI-Society Microelectronics Microsystems and
Precision Engineering (GMM)

Dr. Ronald Schnabel
Stresemannallee 15,
60596 Frankfurt am Main, Germany

Phone: +49 69-6308-227
Fax: +49 69-6308-9828
E-Mail: gmm@vde.com

During the workshop:
Phone: +49 171 4695 118

IN COOPERATION WITH

Dutch Society for Precision Engineering (DSPE)
High Tech Campus 1
5656 AE Eindhoven
PO Box 80036
5600 JW Eindhoven
info@dspe.nl

POSTERS AND EXHIBITION

All attendees are invited to show a poster representing their field of competence.

We invite companies to join the workshop with a table-top exhibition. The fee of 500 Euro (plus VAT) for the table-top exhibition includes one ticket for workshop admittance.

For further information please contact the organizer.

FOREWORD

4th Gas Bearing Workshop in Düsseldorf on November 15, 2021

The Gas Bearing Workshop is aimed at creating a platform for the gas bearing community. Experts, scientists, research engineers, users and manufacturers/vendors in this field are invited. Experts in gas bearings are going to present new applications and leading edge R&D - there will be space and time for discussion and personal contacts.

As usual, the program reflects the wide application field of gas bearings. Papers will be representing precision air bearing spindles for applications in ultra precision manufacturing. Another focus of the workshop are small, high speed spindles that are used in turbomachinery. All bearing technologies will be present: the spectrum ranging from aerostatic to aerodynamic, from rigid geometries via tilting pads to foil bearing designs.

For the first time there will be contributions from Switzerland, adding one more country to the GBW community.

I am looking forward to meeting you at the 4th GBW 2021 in Düsseldorf. We are sure that this workshop with its inspiring contributions will generate new impulses for the scientists and engineers. In addition to that, the program committee wants to create the conditions for new personal, scientific and business contacts.

Wolfram Runge
Chairman of the 2021 Gas Bearing Workshop

PROGRAM COMMITTEE AND CHAIRMEN

Wolfram Runge (General Chair)
Beuth Hochschule für Technik Berlin

Jos Gunsing (Chairman Program Committee)
MaromeTech/Dutch Society for Precision Engineering

Farid Al-Bender
KU Leuven

Ron A.J. van Ostayen
Delft University of Technology

Ronald Schnabel
VDE/VDI-GMM, Frankfurt am Main

PROGRAM

09.30	Welcome Reception/Poster Exhibition; Table Top Exposition
10.00	Opening Word <i>Wolfram Runge, Chairman, Beuth Hochschule für Technik Berlin, Germany</i>
10.15	Keynote: Gas bearing supported small-scale turbo- machinery – recent advancements <i>Jürg Schiffmann, EPFL, Lausanne, Switzerland</i>
10:50	Gas bearing applications for production equipment in semiconductor and solar industries <i>Jaap Beijersbergen, Levitech BV Almere, The Netherlands</i>

11:20	Break / poster exhibition / table top exposition
11:50	Active Shape Control in Aerodynamic Air Foil Bearing <i>Hossein Sadri, formerly TU Braunschweig, Germany</i>
12.20	Experiences Gained in Air Bearing Design <i>Johan Jacobs, Simex-Technology Eindhoven, The Netherlands</i>
12.50	Lunch / poster exhibition / table top exposition
13.50	Keynote: Addressing diverse precision manufacturing challenges through airbearing design <i>Byron Knapp, Professional Instruments/PI, Hopkins MN, USA</i>
14.25	Design, manufacture and test methods of gas bearings for ultra-low shaft errors in motion even at higher speeds <i>Ralf Dupont, Levicron GmbH, Kaiserslautern, Germany</i>
14.55	Break / poster exhibition / table top exposition
15.25	Design challenges in high-speed turbo compressors with herringbone gas bearings <i>Christof Zwysig, Celeroton AG, Volketswil, Switzerland</i>
15.55	Tilting pad bearings; world record high speed <i>Marius Nabuurs, NabTech, Eindhoven, The Netherlands</i>
16.25	Turbocharger bearing systems power loss experimental investigation: Air herringbone bearing vs air foil bearing vs ball bearing vs oil hydrodynamic bearing <i>Kostandin Gijka, KG Turbomachinery, Epinal, France; Wanhui Liu, Jürg Schiffmann, EPFL Lausanne, Switzerland</i>
16:55	Wrap up/Closure <i>Wolfram Runge, Beuth Hochschule für Technik Berlin, Germany</i>
17:10	Informal Discussion and Networking

WORKSHOP REGISTRATION

To register for the Gas Bearing Workshop 2021, please visit the homepage under www.gas-bearing-workshop.com.

REGISTRATION FEE

workshop attendance	290 €
table top exhibition (Including one ticket)	500 € + VAT

Payment for registration, including bank charges and processing fees, must be made in Euro. The workshop fee has to be fully paid in advance by credit card. Your registration can only be confirmed if VDE-Conference Services has recorded receipt of your full payment.

In case of cancellation, provided that written notice has been given to VDE-Conference Services before October 8, 2021, the registration fee will be refunded less a handling fee of € 80.00. After October 8, 2021, no refund will be made.

WORKSHOP VENUE

Courtyard by Marriot
Am Seestern 16
40547 Düsseldorf
Phone: +49 211/595 959
Fax : +49 211/593 569

TRANSPORT SERVICES CLOSE TO THE HOTEL

Parking on-site
18 € daily

Subway Station
Seestern or Prinzenallee

SPEAKERS LIST

- *Jürg Schiffmann, EPFL, Lausanne, Switzerland*
- *Jaap Beijersbergen, Levitech BV Almere, The Netherlands*
- *Hossein Sadri, formerly TU Braunschweig, Germany*
- *Johan Jacobs, Simex-Technology Eindhoven, The Netherlands*
- *Byron Knapp, Professional Instruments/PI, Hopkins MN, USA*
- *Ralf Dupont, Levicron GmbH, Kaiserslautern, Germany*
- *Christof Zwyssig, Celeroton AG, Volketswil, Switzerland*
- *Marius Nabuurs, NabTech, Eindhoven, The Netherlands*
- *Kostandin Gjika, KG Turbomachinery, Epinal, France*
- *Wanhui Liu, Jürg Schiffmann, EPFL Lausanne, Switzerland*

