

## Call for Papers

We request contributions to the **16th International Conference on New Actuators** from engineers, scientists and other experts from institutes and companies working in the field of new actuators, low-power electromagnetic drives and their applications. For oral presentation (20 min. incl. discussion), preference will be given to contributions expressing a comprehensive view of the chosen subject. Please note that detailed theoretical contributions and papers of a very specialised nature are more suitable for the poster exhibition.

The **conference contributions** will be compiled after the evaluation of the abstracts received in response to this Call for Papers. For this purpose, we expect high-quality abstracts of 400 to 600 words in English language, clearly describing the suggested content. They must quote the caption, the name(s) of author(s) and institution(s). The name of the author appointed for presentation should be marked by a "\*" behind her/his last name and the preferred kind of presentation (oral or poster) should be specified on the abstract. Abstracts not rateable will be rejected.

Additionally, we would like to publish a short abstract (10 lines/500 characters) of each contribution on our event homepage. Both abstracts need to be received by the organiser **by uploading the files to the event homepage [www.actuator.de](http://www.actuator.de) not later than 30 November 2017.** All abstracts will be forwarded for review to the members of the committee, who will then decide on the acceptance as well as on the final assignment to topics and sessions.

Authors appointed for presentation will be informed by 31 January 2018 as to whether their paper has been accepted for oral presentation or poster session. They will receive detailed instructions on suitable data formats and the layout of text and pictures for the final version of their manuscript. The final scripts have to be uploaded to the event homepage by 31 March 2018. Proceedings of the conference containing the manuscripts of the oral presentations as well as the poster contributions will be issued in English. A digital version will be distributed to the conference participants at the check-in desk of the conference. A printed version is also available on subscription base.

**For the first time, the digital version of the conference proceedings will be published by the VDE Verlag GmbH (VDE Publishing House). The manuscripts will also be included in the IEEE Xplore Digital Library to ensure an international visibility and a high value for the citation index.**

## Committee

- ▶ **W. Amrhein**, Johannes Kepler Universität Linz, Austria
- ▶ **A. Ando**, Murata Manufacturing Co. Ltd., Kyoto, Japan
- ▶ **S.-B. Choi**, INHA University, Incheon, South Korea
- ▶ **F. Claeysen**, CEDRAT TECHNOLOGIES S.A., Meylan, France
- ▶ **J. Goldasz**, BWI Beijing Western Industries, Kraków, Poland
- ▶ **W.A. Groen**, Delft University of Technology, The Netherlands
- ▶ **L.A. Kahrs**, Leibniz Universität Hannover, Germany
- ▶ **H.-J. Karkosch**, Contitech Vibration Control GmbH, Hannover, Germany
- ▶ **R. Keller**, Dr. Fritz Faulhaber GmbH & Co. KG, Schönaich, Germany
- ▶ **P. Krippner**, Bürkert Werke GmbH & Co. KG, Karlsruhe, Germany
- ▶ **G. Kullik**, Dräger Medical GmbH, Lübeck, Germany
- ▶ **J.C. Lötters**, Bronkhorst High-Tech B. V., Ruurlo, The Netherlands
- ▶ **J. Maas**, Technische Universität Berlin, Germany
- ▶ **H.-P. Monner**, DLR e. V., Braunschweig, Germany
- ▶ **P. Müllner**, Boise State University, USA
- ▶ **E. Pagounis**, ETO MAGNETIC GmbH, Stockach, Germany
- ▶ **J. Perret**, Haption GmbH, Aachen, Germany
- ▶ **P. Pertsch**, PI Ceramic GmbH, Lederhose, Germany
- ▶ **A. Preumont**, Université Libre de Bruxelles, Belgium
- ▶ **H. Schlaak**, Technische Universität Darmstadt, Germany
- ▶ **S. Seelecke**, Universität des Saarlandes, Saarbrücken, Germany
- ▶ **K. Uchino**, The Pennsylvania State University, USA
- ▶ **E. Vander Poorten**, Katholieke Universiteit Leuven, Heverlee, Belgium
- ▶ **G. Vergani**, SAES Getters S.p.A., Lainate, Italy
- ▶ **U. Wallrabe**, Albert-Ludwigs-Universität Freiburg, Germany

## Conference Fee

**For registration until 31 March 2018** EUR 750 plus 19 % VAT  
**For registration from 1 April 2018** EUR 850 plus 19 % VAT  
**One-day ticket** EUR 425 plus 19 % VAT  
**Reduced fee for students and one author of a paper or poster** EUR 425 plus 19 % VAT  
The conference fee includes lunches, coffee breaks, entrance to exhibition, welcome reception, and conference proceedings (digital version).

A **printed version of the proceedings** may be **separately ordered** by conference delegates at a subscription price of EUR 50 plus 7 % VAT. This offer is only valid if order is received together **with a conference registration** by 30 April 2018. Afterwards, it is only guaranteed as long as stocks last. There will be different conditions for non-participants.



## Conference/Exhibition Site

The Exhibition and Congress Center Bremen offers up to 30,000 m<sup>2</sup> of exhibition space with integrated first-class congress facilities, just a three minutes' walk away from the main railway station. The centre meets the highest demands, providing ideal conditions for innovative and eventful fairs and congresses. The Bürgerpark and the Old Town are within view, inviting you to go for a relaxing walk in between. A visit to the historical market square and a tour through the picturesque alleys of the Schnoor district are just two examples of the variety of cultural attractions Bremen has to offer.

## Further Information

A detailed brochure including the conference programme as well as the related programme will be mailed in March 2018. To order this brochure or the detailed conditions of exhibition, please fill in the contact form on our homepage [www.actuator.de](http://www.actuator.de)

## Organiser



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## Correct Address?

We are steadily improving our mailing list. Please check the address on the envelope. We appreciate your corrections/new entries/cancellations by e-mail to [actuator@messe-bremen.de](mailto:actuator@messe-bremen.de). Thank you for your support!

# ACTUATOR 18

International Conference and Exhibition  
on New Actuators and Drive Systems

Bremen, Germany  
25 – 27 June 2018



1988 – 2018

Announcement,  
Call for Papers and  
Invitation for Exhibitors



[www.actuator.de](http://www.actuator.de)





## Announcement

**ACTUATOR 2018**, the **16th International Conference on New Actuators** and the **10th International Exhibition on Smart Actuators and Drive Systems**, will take place in Bremen, Germany, on 25 – 27 June 2018.

ACTUATOR is a major biennial event bringing together leading experts, suppliers and users in the field of new actuators and low-power electromagnetic drives from all over the world.

The invitation to attend ACTUATOR is directed at executives and researchers from industrial companies as well as institutes, colleges and universities, who are interested in the transfer of R&D results into innovative actuator applications and drive technologies.

## The Conference

In attracting about 400 participants from more than 20 countries the **16th International Conference on New Actuators** is the most important market place to meet leading international specialists, to share their expertise and to start business co-operations in the field of new actuator technologies.

ACTUATOR has been the key forum promoting actuators based on smart materials and micro technologies as well as their applications in all areas of engineering for thirty years now. Over the years a huge variety of excellent ideas and results have been reported. A lot of them have been raised from vision to mass product. Among the success stories you will find quite a number of established applications of new actuators, in particular their well-known use in fuel injection, adaptive shock absorbers, nanopositioning, precision engineering like camera lenses and other applications of miniaturised drives.

In this way, ACTUATOR has launched the realisation of new product generations whose compactness and performance had not been able in conventional technologies. Small wonder that based on this ignition, new actuators are now rapidly opening up new markets.

## Conference Focus

### Technological Topics

- ▶ Actuators based on ER/MR fluids
- ▶ Low-power electromagnetic actuators
- ▶ Magnetic shape memory actuators
- ▶ Magnetostrictive actuators
- ▶ Micro/nano actuators
- ▶ Piezoelectric actuators
- ▶ Polymer actuators
- ▶ Shape memory actuators
- ▶ Shape memory polymer actuators
- ▶ Emerging actuation principles

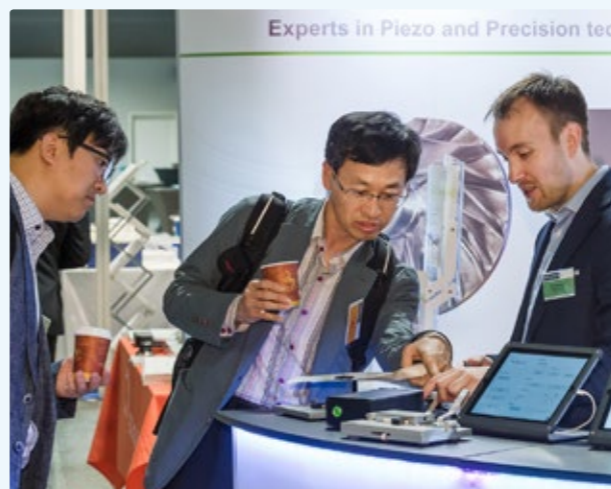
### Application-oriented Topics

- ▶ Active vibration/active noise control
- ▶ Actuator control
- ▶ Adaptronics
- ▶ Aerospace applications
- ▶ Automation/micro robotics/robotics
- ▶ Automotive applications
- ▶ Haptic/tactile applications
- ▶ (Bio) Medical applications/medical engineering
- ▶ Microfluidic handling devices
- ▶ Micro/nano manipulation/micro/nano positioning
- ▶ Microscopy/scanning probe microscopy
- ▶ Piezomotors
- ▶ Pneumatics

## The Exhibition

**The 10th International Exhibition on Smart Actuators and Drive Systems** will present components, system approaches and applications of smart actuators and low-power electromagnetic drives based on conventional (electromagnetic) and innovative working principles (new actuators), and associated subjects. The range of topics also includes measurement techniques, control concepts and circuits, driver components and units, system integration, layout and simulation tools etc.

Within the exhibition area, we will again have application-oriented presentations on a product level, besides the in-depth conference programme. This **Exhibition Forum** provides additional information about the exhibition topics on the product level especially to visitors of the exhibition. Exhibitors and other parties are therefore invited to bring contributions and demonstrations that are aimed at potential clients.



Exhibition conditions and further details on the Exhibition Forum may be obtained from the organiser or can be downloaded from the event homepage ([www.actuator.de](http://www.actuator.de)).

## Exhibition Topics

Components, system approaches and applications of smart actuators and low-power electromagnetic drives and related topics dedicated to:

### Applications in

- ▶ Acoustics/ultrasonics
- ▶ Analysis/measuring technique
- ▶ Fine-/precise-/nanopositioning
- ▶ Micro-/nanomanipulation
- ▶ Fluid handling
- ▶ Microfluidics
- ▶ Noise and vibration control

### Related to Areas such as

- ▶ Adaptronics
- ▶ Automation/micro robots/robots
- ▶ Information technology
- ▶ Manufacturing technique/micro assembly
- ▶ Medicine/medical engineering/biotechnology
- ▶ Motor vehicles/aviation
- ▶ Optics/laser
- ▶ Precision engineering

## Event Language

The official conference language is English; there will be no simultaneous translation. Presentations in the Exhibition Forum may be given in English or German.