

FIFTH COLLOQUIUM CAVITATION AND CAVITATION EROSION

05./06. NOVEMBER 2024

ANNOUNCEMENT AND CALL FOR PRESENTATIONS

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COLLOQUIUM ON CAVITATION AND CAVITATION EROSION

OCCASION

Cavitation has been the subject of research in various scientific disciplines for many decades, e.g., in physics, chemistry, mathematics, medicine and engineering.

The Ruhr University Bochum and the University of Duisburg-Essen are therefore jointly organizing a colloquium on cavitation and cavitation erosion for the fifth time.

The aim of the colloquium is to exchange knowledge and promote communication between representatives from academia and industry. The colloquium is designed as a networking workshop event, so contributions from different disciplines are welcome.

TOPICS AND DISCIPLINES

- Physics, medicine, chemistry, mathematics, engineering
- Fluid mechanics and materials science
- Fundamentals and application
- Theory, experiment and simulation
- Hydrodynamic and acoustic cavitation
- Turbo and displacement machinery, fluid and injection technology
- Cleaning technology
- Medical applications
- Bubble dynamics

TARGET GROUP

The colloquium is aimed equally at representatives from research and teaching, as well as from the industry. Students, PhD candidates, and scientists from research and teaching, as well as researchers, developers and users from the industry are all welcome.

CALL FOR PRESENTATIONS

Please send an abstract via email with the subject *Kavitation2024* to the HSM secretariat (hydro@rub.de) by **01. August 2024**:

- Presentation title,
- Authors,
- Summary of the content on approx. ½ to max. 2 DIN A4 pages,
- Contributions in German or English are welcome.

It is planned to make the abstracts and - if possible - the presentation slides available to the participants in the form of printed proceedings.

KOORDINATION 2024

RUHR-UNIVERSITÄT BOCHUM
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www.wp.rub.de

PROGRAM DRAFT

TUESDAY, 05. NOVEMBER 2024

09:00	Reception and welcome coffee
09:30-13:00	Presentations
13:00-14:00	Lunch buffet at the conference venue
14:00-16:00	Presentations
16:00-16:30	Coffee break
16:30-18:00	Presentations
18:30-21:00	Dinner at Restaurant <i>Franz Ferdinand</i> , Bochum

WEDNESDAY, 06. NOVEMBER 2024

09:00	Welcome coffee
09:30-13:00	Presentations
13:00-14:00	Farewell and lunch

ACCOMMODATION

Room contingents have been reserved for the night of 05.11. to 06.11.2024, as well as for two nights from 04.11.2024. You can register at the following hotels up to and including 24.09.2024 under the keyword „Kavitation“:

Moxy Bochum

ASHG Bochum OpCo GmbH
Stadionring 18
44791 Bochum
Tel.: +49 234 6101 115
Events.bochum@ashg.eu
Price category: Single room from 79,00 EUR

H+ Hotel Bochum

Curator Hotelbetriebsges. Ruhrgebiet GmbH
Stadionring 22
44791 Bochum
Tel.: +49 234 92566 511
ReservierungBO@h-hotels.com
Price category: Single room from 89,00 EUR

Both hotels are within walking distance of public transportation to the Veranstaltungszentrum Ruhr-Universität Bochum.

REGISTRATION

Please register via email with the subject *Kavitation2024* to the HSM secretariat (hydro@rub.de).

DATES

01.08.2024 Registration deadline for presentations
15.08.2024 Publication program
01.10.2024 Registration deadline for participation
05.11.2024 Colloquium day 1, approx. 09-18 Uhr
06.11.2024 Colloquium day 2, approx. 09-14 Uhr

PARTICIPATION FEE

We charge a participation fee of 250 € as a contribution to the costs:

- Colloquium incl. welcome coffee & refreshments during breaks
- Lunch buffet and dinner on 05.11.2024
- Lunch on 06.11.2024
- Printed proceedings

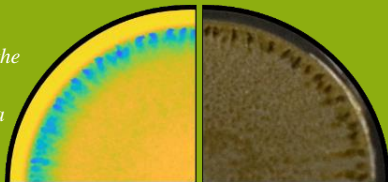
The prices include taxes. We ask you to transfer the fees by **15.10.2024**, the bank details will be communicated after binding registration.

Cash payment on the day of the event is not possible.
A reduced fee is available for students on request.

CONFERENCE VENUE

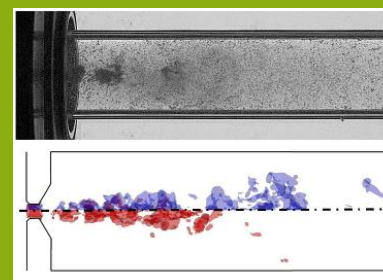
Ruhr-Universität Bochum
Veranstaltungszentrum Saal 1
Universitätsstraße 150
44801 Bochum

Erosion topography on the head and cavitation structures in the gap of a sonotrode.



Tip and hub vortex cavitation on a ship's propeller.

Air degassing at a cavitating nozzle flow:
Air (blue) and vapor structures (red).



Single bubble collapse near the wall: Experiment (left) and simulation (right).