

15-19 August, 2022
Technische Universität Berlin
Berlin, Germany



First Joint Meeting of the
International Workshop on Detonation for Propulsion

IWDP 2022

-and-

International Constant Volume and Detonation
Combustion Workshop

ICVDCW 2022

First Joint Meeting of IWDP & ICVDCW 2022

Dear Colleagues,

Despite the disruption by the COVID-19 global pandemic, we are very excited to announce the first joint meeting of the International Workshop on Detonation for Propulsion (IWDP 2022) and the International Constant Volume and Detonation Combustion Workshop (ICVDCW 2022) to be held in Berlin, Germany during August 15-19, 2022, by the Technische Universität Berlin. On behalf of the Organizing Committees, we would like to welcome you to participate in the workshop.

Brief Description

The International Workshop on Detonation for Propulsion (IWDP) has successfully brought together scientists worldwide to exchange cutting-edge technical achievements and new ideas in detonation applications for aerospace propulsion.

In parallel, the International Constant Volume and Detonation Combustion Workshop (ICVDCW) has facilitated discourse in the development of fundamental and practical topics in the areas of constant volume combustion, detonations, and pressure gain combustion.

Due to the unexpected complications from the global pandemic that we have all experienced within the past year, it was decided to align these two events into a combined meeting. This first joint meeting will endeavor to unite the parallel research objectives in a forum to facilitate the discourse and exchange of ideas in these topics through discussion sessions, as well as highlight the latest developments in the areas of detonations, constant volume combustion, and their applications. In order to maximize the in-presence representation of our global participants from lands with diverse responses to the pandemic, this meeting is planned to occur in the late summer of 2022.

Scientists, engineers and students in the relevant fields are welcomed to participate and present their research contributions in the workshop.

Scope and Topics

This joint meeting will cover a diverse range of topics that are representative of the two composite workshops, including:

- New findings in detonation, CVC, PGC, and/or DDT physics from experimental and theoretical studies.
- Analytical and computational methods of detonation or CV combustion processes.
- Progress in experimental or numerical modelling in combustion and propulsion systems, including: rotating or pulsed detonation, CVC, pulsed jet, or other PGC or confined combustion devices.
- Development of diagnostic and/or analytical techniques relevant to high-speed or unsteady reacting flows.
- Combustor integration with turbomachinery and/or cooling systems
- New concepts in detonative or CVC propulsion from sub-component to system levels

Meeting webpage coming soon!

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Meeting Format

The meeting will span five intense days of discussions, presentations, and social activities.

A number of sessions, focused on specific topics relevant to the detonation, propulsion, constant volume combustion, and pressure gain combustion community will highlight the progress in these topics across the globe.

Topical discussion sessions, forums, and moderated panels will be interspersed throughout the week to focus on important issues to the community, such as current and future technological and political issues, ways and means of advancing the technology, encouraging the engagement of industry, improvement of standard practices, etc.

To facilitate the important aspects of networking, informal discussions, and catching up with our globally distributed friends and colleagues (especially important following our long year of COVID-19 induced isolation), the meeting will also feature an active social agenda.

Instructions for Authors

Authors wishing to present current results should submit a short abstract for review and sessioning, followed by a short paper after acceptance.

- Abstracts should be limited to between 300 and 500 words.
- Short papers should be limited a maximum of 4 pages (A4), which will be collected into a book to be distributed to meeting participants after the workshop.

Please submit abstracts and short papers through the conference webpage (final dates, deadlines, etc. below and on the conference webpage)

Authors and students are also invited to submit abstracts for poster presentation

Tentative Important Dates

Oral/Poster Abstract submission deadline: **March 31st, 2022**

Short paper for Oral Presentations deadline: **June 30, 2022**

Registration opens: Beginning May, 2022

Registration deadline: **Mid-July, 2022**

Meeting Dates: 15-19 March, 2025