



Within the schedule of Computing Workshop for Materials annually inside the campus, PHENIKAA University is honor to collaborate with Osaka University, Vietnam Japan University - VNU, HPC SYSTEMS Inc. and INT2 Co. Ltd to hold

14th Asia Computational Materials Design Workshop - 2022

Computational materials design (CMD®) is a computational approach aimed at developing new materials with specified properties and functionalities. The basic ingredient is the use of quantum simulations to solve the materials science problems in order to design a material that suits this specification. CMD® has proved its high potentiality to impact the real industrial research and development.

With the purpose of imparting the quantum simulations techniques, Asia CMD® Workshop (ACMD) has been organized in Vietnam since 2009 with the cooperation of Osaka University and universities in Vietnam for many times. In 2022, ACMD will be held at PHENIKAA University.

This workshop will provide lectures on cutting-edge research in computational material design as well as hands-on practical training on quantum simulation. The lectures will also cover an overview of the possible role of CMD® in Vietnam, techniques of electronic structure calculations together with their applications to design new functional materials for catalysis, fuel cells, and batteries. And the software owners on the hands-on practical training courses will introduce several simulation packages, which provide efficient first-principles electronic calculation and molecular dynamics simulation.

For the best efficiency of practical training, the hands-on tutorial lectures are for 40 participants at maximum. We welcome participants who are working in the fields of Materials Science, Physics, Chemistry, Biology and Medicine as graduate students, experimentalists, and researchers coming from either Academic institutions or Industrial R&D departments. All the special lectures given by the experts in Materials Science and Computing are open freely.

In the workshop, we open the poster session for participants so that they can share their works and discuss with the experts in the fields of Materials Science and Computing. Prizes for the best poster presentations will be awarded at the end of the workshop.

Venue: Conference Room 606, A2 Building, PHENIKAA University, Nguyen Van Trac, Yen Nghia ward, Ha Dong, Hanoi, Vietnam

Date: November 09 - 12, 2022

Language: English

Organized by:

- PHENIKAA University
- Osaka University
- Vietnam Japan University, Vietnam National University – Hanoi
- HPC SYSTEMS Inc. & INT2 Co., Ltd.

Co-chairs

- Tamio Oguchi (Osaka Uni.)
- Do Van Nam (PHENIKAA Uni.)

Organizing Committee

- Koun Shirai (Vietnam Japan Uni, VNU)
- Nghiem Thi Minh Hoa (PHENIKAA Uni.)
- Đàng The Hung (PHENIKAA Uni.)
- Pham Duc Thang (PHENIKAA Uni.)
- Nguyen Viet Cuong (HPC SYSTEMS Inc. & INT2 Co., Ltd.)

Lecturers

- Tamio Oguchi (Osaka Uni.)
- Ikutaro Hamada (Osaka Uni.)
- Kazunori Sato (Osaka Uni.)
- Yoji Shibutani (Osaka Uni.)
- Koun Shirai (Vietnam Japan Uni. - VNU)
- Tomoyuki Terai (Osaka Uni.)
- Dinh Van An (Osaka Uni.)
- Nguyen Phu Khanh (PHENIKAA Uni.)
- Nguyen Ngoc Linh (PHENIKAA Uni.)
- Nguyen Tien Lam (PHENIKAA Uni.)
- Dang The Hung (PHENIKAA Uni.)
- Nguyen Viet Cuong (HPC SYSTEMS Inc. & INT2 Co., Ltd.)
- Bui Van Hao (PHENIKAA Uni.)
- Hoang Khang (North Dakota State University)
- Giovanni Pizzi (Ecole polytechnique fédérale de Lausanne & Paul Scherrer Institut)

Secretariats

- Pham Thi Anh Nguyet (PHENIKAA Uni.)
Email: nguyet.phamthianh@phenikaa-uni.edu.vn

Deadline for Registration: October 20, 2022

Registration: by filling the form: <https://forms.gle/sFwxv9uczzbotkP6>.

Confirmation of registration will be sent back within one day.

Note:

- Participants are requested to bring their own laptops for practicing within the hands-on tutorial lectures.
- Participants who attend and complete the course will receive the CMD® certificates.
- Participants are requested to return the name badges after the workshop to recycle for the next workshop.
- Participants who have the poster presentations are requested to bring the posters before the session, and take them down at the end of the workshop.