



RGD32

32nd International Symposium on
Rarefied Gas Dynamics

4-8 July 2022
Seoul, South Korea

Call for Papers

RGD32

Rarefied gas dynamics (RGD) is a multi-disciplinary field encompassing molecular physics of gases and thermodynamics, mathematics, computational simulation, and application of underpinning technology in various sectors. RGD32 will serve as a global platform to bring together the best of current work on diverse and emerging subjects in RGD like kinetic theory for complex systems, mesoscale and multiscale modeling, hypersonic glide vehicles, shale gases, and vapor deposition processes. Since the first symposium in Nice, France in 1958, it has been held every other year worldwide. RGD32 in Seoul will be the first RGD symposium to be held in South Korea and will include four inspiring plenary lectures from the world's leading experts.

Topics

- Boltzmann and Related Equations
- Kinetic Theory for Gases and Complex Systems
- Numerical Methods for Kinetic Equations
- PDE-based Computational Methods for Non-equilibrium Flows
- DSMC and Related Simulations
- Molecular Dynamics and Particle Methods
- Mesoscale and Multiscale Modeling
- Micro- & Nano-scale Flows and Heat Transfer
- Porous Media Flows and Shale Gases
- Granular Flows and Aerosols
- Multiphase Flows and Kinetic Modeling
- Non-equilibrium Reacting Flows
- Experimental Techniques for Non-equilibrium Flows
- Hypersonic Vehicles, Facilities, and Diagnostics
- Space Vehicle Aerodynamics and Propulsion
- Shock Waves in Rarefied Flows
- Gas-Surface Interactions and Slip Flows
- Vacuum Technology
- Vapor Deposition Processes and Simulation
- Molecular Beams and Collisions
- Plasma Flows and Processes
- Jets, Plumes and Surface Interaction
- Radiation and Astrophysics
- High-performance Computing in RGD

Plenary Lecturers

Grad Lecturer	Dr. Tai-Ping Liu , Institute of Mathematics, Academia Sinica
Thomas Lecturer	Prof. Wim Ubachs , Physics and Astronomy and LaserLaB, Vrije University
Bird Lecturer	Prof. Deborah Levin , Aerospace Engineering, University of Illinois at Urbana-Champaign
GNU-ERC Lecturer	Prof. Emer. Byung-Chan Eu , Chemistry, McGill University

Important Dates

Abstract Submission Reopen
1 Dec 2021

Registration Reopen
1 Dec 2021

Abstract Deadline
31 Mar 2022

Abstract Notification
1-30 Apr 2022

<http://www.rgd32.org>

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rgd32nd@gmail.com

Symposium Chairs

Chair Prof. **Rho Shin Myong**, Gyeongsang National University
Co-Chair Prof. **Kun Xu**, Hong Kong University of Science and Technology
Co-Chair Prof. **Jong-Shinn Wu**, National Chiao Tung University

International Advisory Committee

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Abstract Submission

Papers will be selected based on a one-page abstract. The abstract template is available on the RGD32 website. Full manuscripts (not mandatory) will be solicited in August 2022. Manuscripts that are accepted after review will be published in AIP Conference Proceedings.

Registration Information

General 900,000 KRW (550,000 KRW for online) Student 550,000 KRW (300,000 KRW for online)

Hybrid Format: Partially Online

Given the ongoing challenges of COVID-19, RGD32 will be held in a hybrid (mostly in-person, some online) format. Participants can choose to attend either in-person or online, depending on their preferences. Online participants will be able to view pre-recorded presentations of in-person participants, giving them access to all presentations. We hope that this format will allow more researchers from the field of rarefied gas dynamics to participate.

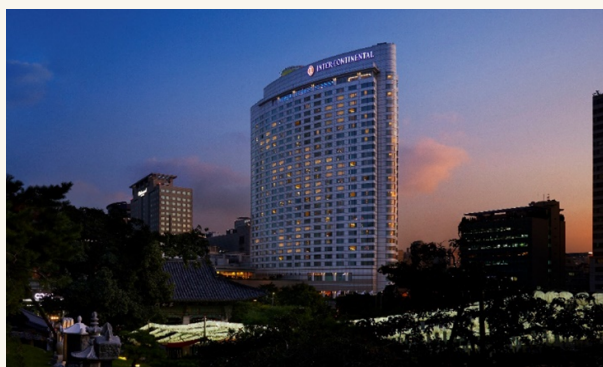
Seoul: Where new and old coexist in harmony

Seoul—the capital of Korea for over 600 years—is a city where tradition and cutting-edge technology coexist in perfect harmony. With one foot in the past and another in the future, Seoul houses 266 cultural properties and is the center of the so-called “Korean Wave” sweeping Asia and beyond. Seoul is also one of the safest places in the world for foreign travelers.



Venue: InterContinental Seoul COEX

InterContinental Seoul COEX is a modern business hotel perfectly suited for guests for an entertaining and relaxing experience. It is located at the heart of Gangnam, one of the most modern and exciting areas of Korea, but is also directly adjacent to Bongeunsa Temple, a place that exemplifies the traditional beauties of Korea. Guests can enjoy shopping, culture, and leisure thanks to its direct access to the COEX mall, casino, and duty-free shops.



國立交通大學
National Chiao Tung University

