



# RGD32

32<sup>nd</sup> International Symposium on  
Rarefied Gas Dynamics

13-17 July 2020  
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
- Granular Flows and Aerosols
- Multiphase Flows and Kinetic Modeling
- Non-equilibrium Reacting Flows
- Experimental Techniques for Non-equilibrium Flows
- Hypersonic 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

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

### Important Dates

Abstract Submission  
1 Dec 2019

Registration Open  
1 Feb 2020

Abstract Deadline  
15 Mar 2020

Abstract Notification  
15 Apr 2020

<http://www.rgd32.org>

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## Symposium Chairs

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

## International Advisory Committee

A. Alexeenko (USA) Y.A. Bondar (Russia) D. Bruno (Italy) R. Caflisch (USA) C. Day (Germany) J. Fan (China) J. M. Fernandez (Spain) A. Frezzotti (Italy) M.A. Gallis (USA) M.-A. Gaveau (France) V. Giovangigli (France) M. Grabe (Germany) G.M. Kremer (Brazil) R. Kumar (India) E.V. Kustova (Russia) D. Levin (USA) L. Mieussens (France) S. O'Byrne (Australia) H. Struchtrup (Canada) Q. Sun (China) K. Suzuki (Japan) S. Takata (Japan) V. Titarev (Russia) I. Wysong (USA) Y. Zhang (UK)

## Abstract Submission

Papers will be selected based on a one-page abstract. The abstract template will be available on the RGD32 website by December 1st, 2019. Full manuscripts (not mandatory) will be solicited in August 2020. Manuscripts that are accepted after review will be published in AIP Conference Proceedings.

## Registration Information

General	900,000 KRW	Student	550,000 KRW
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## 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 (Hotel Le Méridien Seoul, Gangnam)

The Le Méridien Seoul is a five-star hotel located in the heart of Gangnam. The European-style hotel—opened in 2017—features design-forward décor rendered in a soothing palette of lavender, blue and green. Its modern accommodations provide a relaxing atmosphere, with some featuring private balconies. It is located near the COEX Convention & Exhibition Center and can be conveniently reached by the Seoul Metropolitan Subway and the airport shuttle.



國立交通大學  
National Chiao Tung University

