



**CIMAC** 15  
CASCADES

BUSAN, OCTOBER 14-15, 2025

## Dear friends of CIMAC,

CIMAC and its Korean National Member Association (KOFCE, Korea Federation of Combustion Engines) are pleased to invite you to the 15TH CIMAC CASCADES event which will be held on:

**DATE:** Wednesday, 15 October, 2025

**TIME:** 09:00-17:30

**VENUE:** Grand Josun Busan

292, Haeundae Haebyun-ro, Haeundae-gu, Busan, Republic of Korea

<https://gjb.josunhotel.com/about/aboutUs.do>

This CIMAC CASCADES event offers the opportunity for younger engineers to meet with leading industry experts to exchange information and network together. The objective is to encourage and inspire younger engineers to realize their goals in an engineering career.

The core event will be twelve short presentations by younger engineers to describe their projects, how they tackled them, the difficulties they encountered and the outcome. The theme around which the presentations will be based is

**"Decarbonization and Digitalization: Moving Toward a Green Future."**

The young engineer who gives the outstanding presentation will receive the CIMAC CASCADES AWARD.

## Pre-program

On Tuesday, 14th October, there will be a social evening to enable you to meet, and share your experiences, with your contemporaries and established industry experts. You are invited to:

- Welcome dinner, restaurant "Four Seasons" at 18:30, nearby Haeundae Beach.  
**[for only Presenters, NMA members and Special guests]**

We look forward to seeing you at CIMAC CASCADES 2025 in Busan.



Prof. Dr. **KangKi Lee**

Managing Director of Zollner Energy Systems GmbH  
President of Korea Federation of Combustion Engines  
(CIMAC Korean National Member Association)

# Registration

To register for the 2025 Busan CASCADES, please send an email to the following secretariat staffs. <Participants in the Chinese/Japanese Cascades should contact the secretariats of the CIMAC NMAs, CSICE/JICEF>

Participant Countries	Contact (email) for Registration	Remarks
CHINA	<b>CSICE Secretariat</b> ZHANG DANDAN ( <a href="mailto:zhangdandan_csice@163.com">zhangdandan_csice@163.com</a> ) WANG LU ( <a href="mailto:wanglu@csice.org.cn">wanglu@csice.org.cn</a> )	CSICE → KOFCE
JAPAN	<b>JICEF Secretariat</b> Masayoshi Kawakami ( <a href="mailto:masayoshi.kawakammi@jicef.org">masayoshi.kawakammi@jicef.org</a> )	JICEF → KOFCE
KOREA & Others	<b>KOFCE Secretariat</b> CHA JIHYOUB ( <a href="mailto:chajh@kofce.org">chajh@kofce.org</a> ) KIM SAEIL ( <a href="mailto:diesel74@naver.com">diesel74@naver.com</a> )	Counting & Preparation

# Participation Fee

**Participants:** KRW 200,000 (only for Cascades seminar on OCT 15), approx. 125 EUR

**Seminar Presenters:** Free (Including welcome dinner on OCT 14)

**NMA Secretariats Members:** Free (Full event schedule, OCT 14-16)

## Payment of Participation Fee

Participation fees should be paid in **Korean Won (KRW)** at the venue (Registration desk) or by wire transfer before the seminar.

On 15th Oct: > Grand Josun Busan (at **registration desk** for the Seminar incl. Lunch, Dinner)

You shall receive your CASCADES seminar badges accordingly.

When email registration, please provide the secretariat with payment options of participation fee (① Invoice issuance for wire transfer before seminar, or ② Credit card payment at the venue), KOFCE Secretariat will assist you for payments.

## 14<sup>th</sup> October, 2025

– 14:30	Arrival in Busan, Korea & Check-in Hotels
15:00 – 17:30	Optional Scenic Rest Tour (for only Presenters, NMA Members and Special guests)
18:30 – 20:00	Welcome Dinner (for only Presenters, NMA Members and Special guests)

## 15<sup>th</sup> October, 2025

08:30 – 09:00	Registration at Grand Josun Busan (3F, Conference Room)
	<b>Opening Speech - Chair: CHA Jihyoub, Korea Federation of Combustion Engines</b>
	<b>Welcome address by LEE Kangki, President of KOFCE</b>
09:00 – 09:20	<b>Keynote Report</b> <b>Decarbonization and Digitalization: Moving toward a Green Future</b> LEE Kangki / President of KOFCE
	<b>Session I - Chair: CHA Jihyoub, Korea Federation of Combustion Engines</b>
	<b>Development of the HiMSEN methanol engine through virtual product development technology</b> YU Gwanghyeon / HD Hyundai Heavy Industries Co., Ltd.
09:20 – 10:35	<b>Smart Operation of Power Plants Utilizing a Generation Scheduling Support System</b> Takahiro YOSINO / IHI Power Systems Co., Ltd.
	<b>Digitalization and Simulation on Internal Combustion Engines - The State of Art</b> YOON Sungjun / HD Korea Shipbuilding & Offshore Engineering Co., Ltd.
10:35 – 10:55	Coffee Break
	<b>Session II - Chair: LI Shusheng, Chinese Society for Internal Combustion Engines</b>
	<b>Development of in-cylinder high pressure methanol-diesel injector</b> SUN Peng / Shanghai Marine Diesel Engine Research Institute
10:55 – 12:10	<b>Experimental study of relation between combustion and emission characteristics for ammonia/hydrogen/air flames</b> Katsuyoshi ASAKA / DAIHATSU INFINEARTH MFG.CO.,LTD.
	<b>DeiNOx Technology for Tier-III emission solution</b> JANG Hyoseong, HANWHA Engines
12:10 – 14:00	Lunch
	<b>Session III - Chair: Yasuyuki Takahata, YANMAR POWER TECHNOLOGY Co., Ltd</b>
	<b>A Sustainable Future for Marine Transport: Innovations in Methane Slip Reduction for LNG-Fueled Engines</b> Tomonari SATO / YANMAR POWER TECHNOLOGY CO., LTD.
14:00 – 15:15	<b>Hybrid propulsion control system: Development, Validation and Future</b> KIM Hyeongjun / HD Hyundai Heavy Industries Co., Ltd.
	<b>Towards clean, efficient, and stable operation: experimental evaluation of pre-ignition and multi-objective optimization of hydrogen engine</b> BAO Lingzhi / Beijing Institute of Technology
15:15 – 15:45	Coffee Break
	<b>Session IV - Chair: CHA Jihyoub, Korea Federation of Combustion Engines</b>
	<b>Leveraging digitalization in HiMSEN production plant: Implementation of NEMOS for emission compliance</b> JANG Seohyun / HD Hyundai Heavy Industries Co., Ltd.
15:45 – 17:00	<b>Research on the combustion process of a new type of cycloidal piston rotary engine</b> WANG Huaiyu / Harbin Engineering University
	<b>NIP's practical approach to Dual-Fuel Injectors for Large Marine Engines</b> Fumiaki SASAKI / NICO Precision Co., Inc.
17:00 – 17:30	<b>CIMAC CASCADES AWARD</b>
18:00 – 20:00	Dinner

### Hotel Accommodation

The Grand Josun Busan, where the venue will be held, will be the starting point. If you wish to stay at this hotel for your convenience, please email a list of guests to the KOFCE office in advance. We will help you receive a discount on accommodation cost at the five-star Grand Josun Busan. If the accommodation cost at this hotel do not meet your organization's overseas business trip regulations, our association will provide you with information about other hotels near the venue.

### Grand Josun Busan (Venue)



Inside the Grand Josun Busan's 16 floors and 330 accommodations, you will find what determines hospitality. From our lobby, designed in a refined white-tone interior, we will lead you to your room where you'll be greeted by a glistening ocean-view over the lively Haeundae Beach. The Grand Josun is prepared with dining options to suit everyone's taste, including an authentic Cantonese cuisine, a lavish buffet and a stylish lounge and bar. Once settled and dined, relax and recover in our indoor & outdoor pools, sauna, fitness center, and more.

**Hotel address:** 292, Haeundae Haebyun-ro, Jung-dong, Haeundae-gu, Busan, Korea

**Telephone:** +82 51 922 5000

**Room rates:** Single/Double(Ocean view): 297,000 KRW per night (about 185 EUR), including breakfast.

**Reservation Due Date:** 12th September, 2025.

\* Please indicate that you are attending the "CIMAC CASCADES", enjoy the above corporate rate.

### How to reach the city and hotel

**GIMHAE International Airport:** approx. 30km.

By Taxi: 1.2 hours

By Bus: 1.5 hours (Incl. 10 minute walk)

By Metro: 1.5 hours (Incl. 10 minute walk)

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## Waves Above the Sky

# BUSAN X the SKY

BUSAN X the SKY is located in the second highest building in Korea, Haeundae LCT the Sharp (411.6 m).

In this highest, biggest-scale observatory,  
you can view the wide-spread ocean of Haeundae and the beautiful city of Busan.

On top of the world-famous landmark of Busan such as the Gwangandaegyo (Diamond Bridge) and Marine City,  
you can view the day and night of Busan while you enjoy the premium services  
of the interior media facade, lounge cafe, and casual cafe.

Experience the whole world below your feet at BUSAN X the SKY!



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KOREA FEDERATION OF  
COMBUSTION ENGINES

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Co-organizer of 30th CIMAC World Congress



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