



# 16th CIMAC CASCADES

Seminar for younger engineers

**OKAYAMA**

November 10, 2026

**Desired Requirements for Future Power Systems:  
Green, Efficiency, Reliability and Digitalization**



**Case Studies In Combustion engine Applications  
and Design Experiences**

in cooperation with



## Dear friends of CIMAC,

CIMAC and its Japanese National Member Association (JICEF, Japan Internal Combustion Engine Federation) are pleased to invite you to the 16th CIMAC CASCADES event which will be held on:

**DATE:** Tuesday, 10th November, 2026

**TIME:** 08:30-18:00

**VENUE:** 2<sup>nd</sup> floor, Okayama Convention Center “Reception Hall”  
14-1, Ekimotomachi, Kitaku, Okayama 700-0024, Japan  
<https://www.mamakari.net/en/>

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 students and recently graduated engineers to realize their goals in an engineering career.

The core event will be 14 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

### **“Desired Requirements for Future Power Systems: Green, Efficiency, Reliability and Digitalization”.**

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

On Monday, 9th November, there will be a factory tour and a social evening to enable you to meet, and share your experiences, with your contemporaries and established industry experts. You are invited to:

- Tour of MITSUI E&S Tamano Factory, start at about 14:00 (Tentative)
- Welcome reception and dinner in MITSUI E&S Hon-Club, Tamano

We look forward to seeing you at the CIMAC CASCADES 2026 in Okayama.



Yasuyuki Takahata  
President of Japan Internal Combustion Engine Federation  
(CIMAC Japanese National Member Association)

# JICEF

Japan Internal Combustion  
Engine Federation

## Registration

The registration procedure would be handled by JICEF. The detailed information including how to register for the CASCADES 2026 in Okayama and 16th CIMAC CASCADES Participation Application Form will appear soon on JICEF's website:

<https://www.jicef.org> (Japanese)

[https://www.jicef.org/e\\_jicef/e\\_index.htm](https://www.jicef.org/e_jicef/e_index.htm) (English)

We kindly ask for your understanding that, due to the seating capacity of the venue, registration for this event will be limited to the first 100 participants. Registration will close once the maximum number has been reached. We appreciate your cooperation in this matter.

You will receive the official registration confirmation letter and an invoice from JICEF by e-mail just after your complete application is received.

JICEF Registration Desk will be located at;

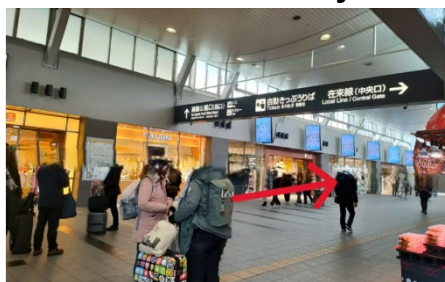
On 9<sup>th</sup> November > at the near Bus stop 27, 28 and 29 of Okayama Station West Exit Bus Terminal

On 10<sup>th</sup> November > at the entrance of the Reception Hall, Okayama Convention Center  
(For those joining from 10<sup>th</sup> Nov.)

Please show your official registration confirmation letter from JICEF at the JICEF Registration Desk, then you will receive your CASCADES badge accordingly.

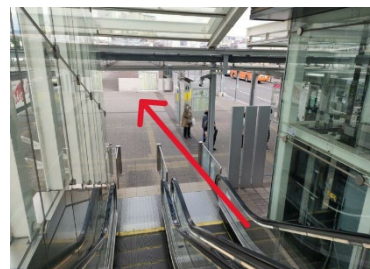
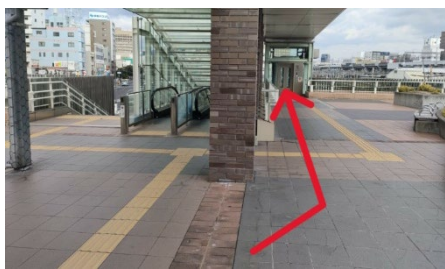
### [How to reach the West Exit Bus Terminal from the Okayama Station]

- Exit the central ticket gate (2<sup>nd</sup> floor) of JR Okayama Station and proceed to the right (towards the West Exit/Sports Park Exit).



- Walk straight along the concourse and turn right before the pedestrian overpass.

- Take the escalator or elevator located before the taxi stand down to the ground floor (1<sup>st</sup> floor).



- Bus stop 27, 28 and 29 is located in the area directly in front of you after you get off the escalator.



- It takes about 5 minutes from Okayama Station to the bus stop. Considering possible congestion along the way, it would be advisable to allow an extra 5 to 10 minutes.

Note) These photos were taken from the following URLs.  
<https://secure.j-bus.co.jp/busrepo/2025/01/22/post-28560/>  
<https://okayama-journal.com/okayamaeki-nishiguchi-bus/>

## Participation Fee

Participants: JPY 27,000 (including seminar, welcome dinner and factory tour), approx. 150  
EUR

Speakers: Free of charge (including seminar, welcome dinner and factory tour)

Co-authors: Co-authors who are not presenting are kindly requested to pay the standard participation fee JPY 27,000

Students: Free of charge (not including welcome dinner and factory tour)

Dinner and Factory Tour: JPY 3,000 (for students who are going to attend the seminar),

## Payment of Participation Fee

Participation fees should be paid in Japanese yen (JPY) by bank transfer by 20th October, 2026 and any bank charge must be paid by yourself.

If you would like to pay on site, please let us know in advance. We accept cash payments in Japanese yen or credit cards (**only tap-to-pay VISA and Mastercard are acceptable**) at the “**JICEF Registration Desk**” near Bus stop 27, 28 and 29 of Okayama Station West Exit Bus Terminal with showing your official registration confirmation letter from JICEF.

The JICEF Registration Desk will be located at;

On 9th November > at near Bus stop 27, 28 and 29 of Okayama Station West Exit Bus  
Terminal

On 10th November > at the entrance of the Reception Hall, Okayama Convention Center  
(for those joining from 10th Nov.)

On the first day you attend the event, please present your official registration confirmation letter from the JICEF at the JICEF Registration Desk. Then you will receive your CASCADES badge accordingly. Please wear your CASCADES badge at all times during the events.

## 9th November, 2026

11:30 – 12:30	Meet at Okayama Station West Exit Bus Terminal (Receive your CIMAC CASCADES badge (and pay the participation fee for those who have not paid))
12:30	The buses will depart from Okayama Station West Exit Bus Terminal.
13:30 – 14:00	Arrive at MITSUI E&S Tamano Factory
14:00 – 16:30	MITSUI E&S Tamano Factory Tour
17:00 – 19:00	Welcome Dinner
19:00	The buses from MITSUI E&S, Tamano for Okayama Station will depart.

## Welcome Reception and Dinner

JICEF warmly invites you to a welcome reception and dinner held at the MITSUI E&S Hon-Club, Tamano just after the factory tour ends.

The buses will depart from Okayama Station at 12:30. And the buses from MITSUI E&S, Tamano for Okayama Station will depart at about 19:00. (The departure times for buses from Okayama station to MITSUI E&S, Tamano and from MITSUI E&S, Tamano for Okayama Station are tentative.)



**MITSUI E&S Tamano Factory and their production**

# Seminar Program

10<sup>th</sup> November, 2026

08:30 – 09:00	Registration at 2 <sup>nd</sup> floor, Okayama Convention Center “Reception Hall”
09:00 – 09:10	Welcome address by Mr. Yasuyuki Takahata, JICEF President, Japan
09:10 – 09:40	Keynote Speech: Visualization of oil ingress towards the combustion chamber of reciprocating engine using photochromism technique by Prof. Dr. Akihiko Azetsu, of Tokai University, Japan
	<b>Session I (Green &amp; Efficiency I (Hydrogen)) – Chair: TBD</b>
09:40 – 11:20	Experimental and CFD analysis of Backfire at hydrogen co-firing in Mitsubishi KU30GSI gas engine, Kazutoshi Nomura, Mitsubishi Heavy Industries Engine & Turbocharger, Ltd., Japan
	Development of Pilot Ignited Hydrogen Four-Stroke High-Speed Marine Engine, Wataru Kuwayama, Yanmar Power Solutions Co., Ltd., Japan
	Development Status of HiMSEN Pure Hydrogen Engine Using a Single-Cylinder Engine, Eun-kyu Lee, et al., HD Hyundai Heavy Industries Co., Ltd., Korea
	Yuchai’s Development of Highly Efficient Hydrogen Engine, Zhiyu Zhou, Hui Wang, Guangxi Yuchai Machinery Group Co., Ltd., China
11:20 – 11:40	Coffee Break
	<b>Session II (Efficiency &amp; Digitalization) – Chair: TBD</b>
11:40 – 12:55	Performance Improvement of Axial Turbines for MET Turbochargers, Hayato Suzuki, Mitsubishi Heavy Industries Marine Machinery & Equipment Co., Ltd., Japan
	Load-Dependent Characteristics for Turbochargers operating on Marine Auxiliary Engines
	Evaluation Based on Field Operation Profiles and Application Concept, Hajime Ishigai, Turbo Systems United Co., Ltd, Japan
	Development of TestGen: An Automated Verification Platform for Control Software, Heejin Woo, et al., HD Hyundai Heavy Industries, Korea
12:55 – 13:55	Lunch Break
	<b>Session III (Green &amp; Efficiency II (LNG, Ammonia, Methanol)) – Chair: TBD</b>
13:55 – 15:35	The next generation HiMSEN LNG DF, H35CDF, Tae u KIM, HD Hyundai Heavy Industries Co., Ltd., Korea
	Sustainable Fuels Technology Development for internal combustion engines, Tobias Birell, Wärtsilä Finland Oy, Finland
	Optical and Thermodynamic Investigation of Pilot Ignited Mixing-Controlled Ammonia Combustion Under Engine-like Conditions, Manuel Voggesser, University of Applied Sciences and Arts Northwestern Switzerland, et al., Switzerland
	Research on High-Proportion Methanol Substitution and Efficient Stable Combustion Regulation in Marine Medium-Speed Engines, Haibin He, Ningbo C.S.I. Power & Machinery Group Co., Ltd., China
15:35 – 15:50	Coffee Break
	<b>Session IV (Green &amp; Efficiency III, &amp; Reliability (Ammonia)) – Chair: TBD</b>
15:50 – 17:05	New Technologies on and Beyond the Main Engine to Enhance Vessel Efficiency, Anders Skytte Hansen, Everllence, Denmark
	Corrosion evaluation of ammonia contaminated lubricating oil and materials for ammonia fuel engines under ammonia atmosphere conditions, Yuhei Maegawa, et al., DAIDO METAL CO., LTD., Japan
	Design of a system to prevent leakages for a safe operation of ammonia engines, Christian Daniel Jerez Quezada, WinGD, Switzerland
17:05 – 17:20	Coffee Break
17:20 – 17:40	<b>CIMAC CASCADES AWARD</b>
17:40 – 17:50	Closing remarks by Mr. Yasuyuki Takahata, JICEF President, Japan

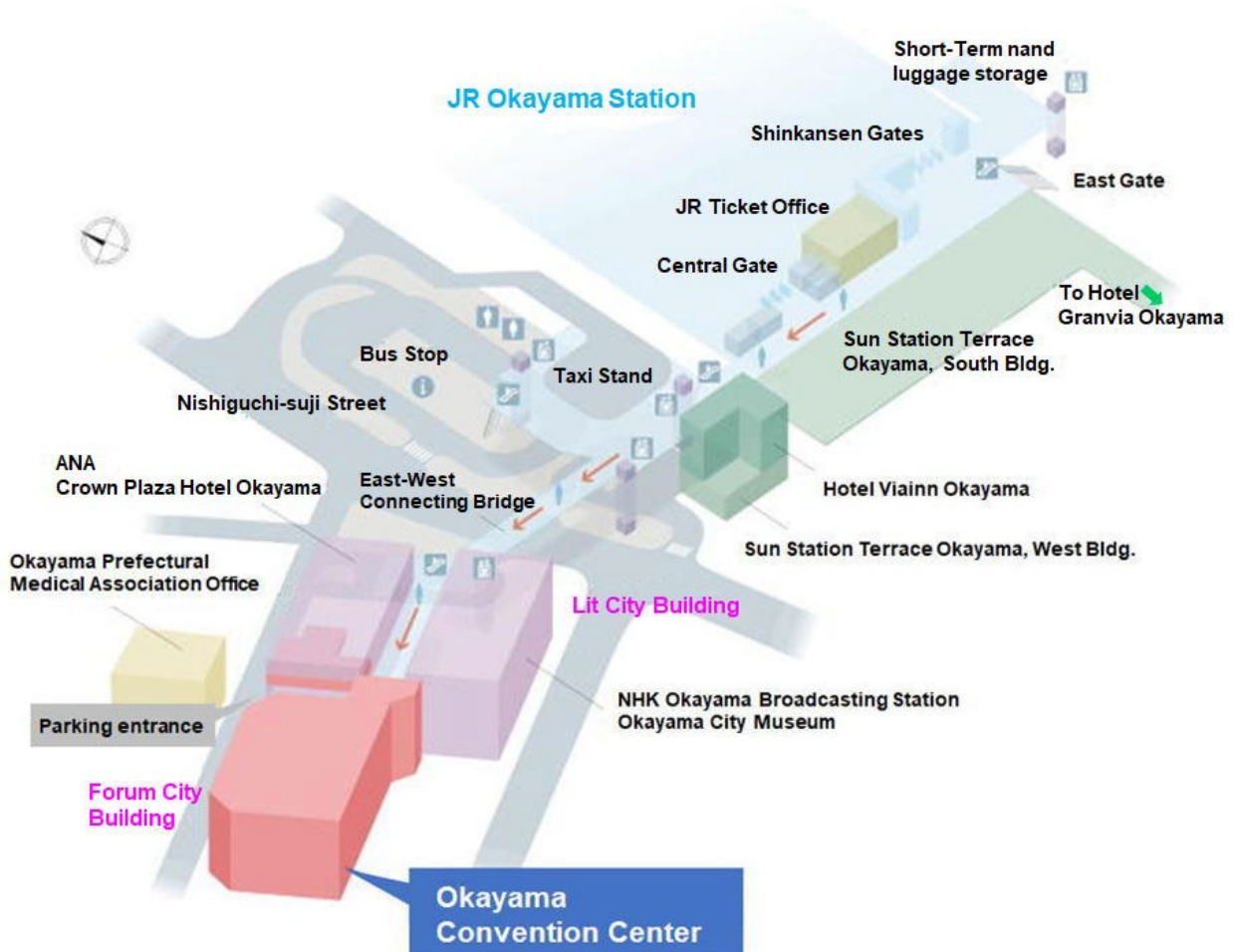
\*)This programme is subject to change without notice.

# GENERAL INFORMATION

## Hotel Accommodation

We kindly ask you to book your hotel directly through “Hotel Booking websites”. “Hotel Viainn Okayama”, “ANA Crown Plaza Hotel Okayama” or hotels around “Okayama Station (JR Line)” are recommended.

## How to reach the Okayama Convention Center from JR Okayama Station



**3 min. on foot from the central gate at JR Okayama Station**

Okayama Convention Center is very close to JR Okayama Station. You exit Okayama Station from the central gate and walk along the pedestrian walkway to the west side, you will find the Okayama Convention Center in front of you.

# How to reach JR Okayama Station from the Airports

## Between Okayama Momotaro Airport and JR Okayama Station

### Okayama Momotaro Airport

From Shanghai Pudong International Airport:\*  
Approx. 3 hr 10 min

From Incheon International Airport:\*  
Approx. 1 hr 30min

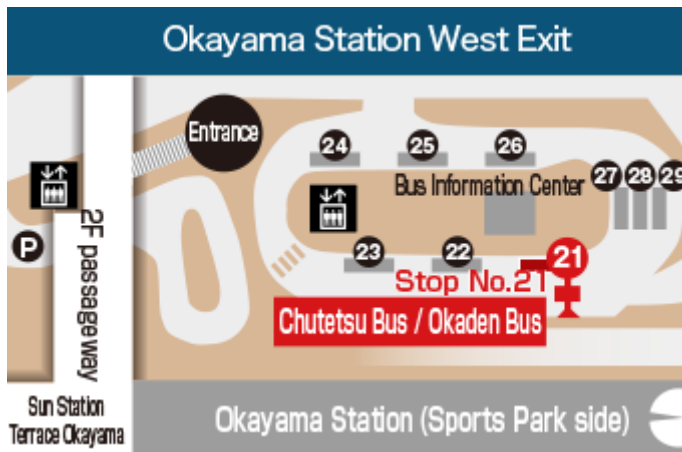
(\*:Please note that the above flights are not operated daily.)

### Okayama Momotaro Airport to JR Okayama Station

BUS Stops at Okayama Momotaro Airport



BUS Stops at JR Okayama Station



## Contact

**YUMI UEHARA (Ms.)**

Japan Internal Combustion Engines Federation (JICEF)

Room 203, 2nd Floor, NIT Tsukiji Bldg.

14-3, Tsukiji 2-chome, Chuo-ku, Tokyo, 104-0045 Japan

Phone : +81-3-6457-9789

(Connected to the office phone and the JICEF's mobile phone between 9:00-17:00JST.)

Fax.: +81-3-6457-9787

E-mail: [cascades2026okayama@jicef.org](mailto:cascades2026okayama@jicef.org)

Web: [https://www.jicef.org/e\\_jicef/e\\_index.htm](https://www.jicef.org/e_jicef/e_index.htm)

## Between Kansai International Airport and JR Okayama Station

### Kansai International Airport to JR Okayama Station

1. Train (Shinkansen + Limited Express "Haruka")

Route:

Take the Haruka Express from Kansai Airport Station to Shin-Osaka, then change to the Shinkansen at Shin-Osaka station and go to Okayama station.

Travel Time: Approximately 2.5 to 3 hours

Fare: Approximately 9,000 yen and up  
Transfers: 1



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