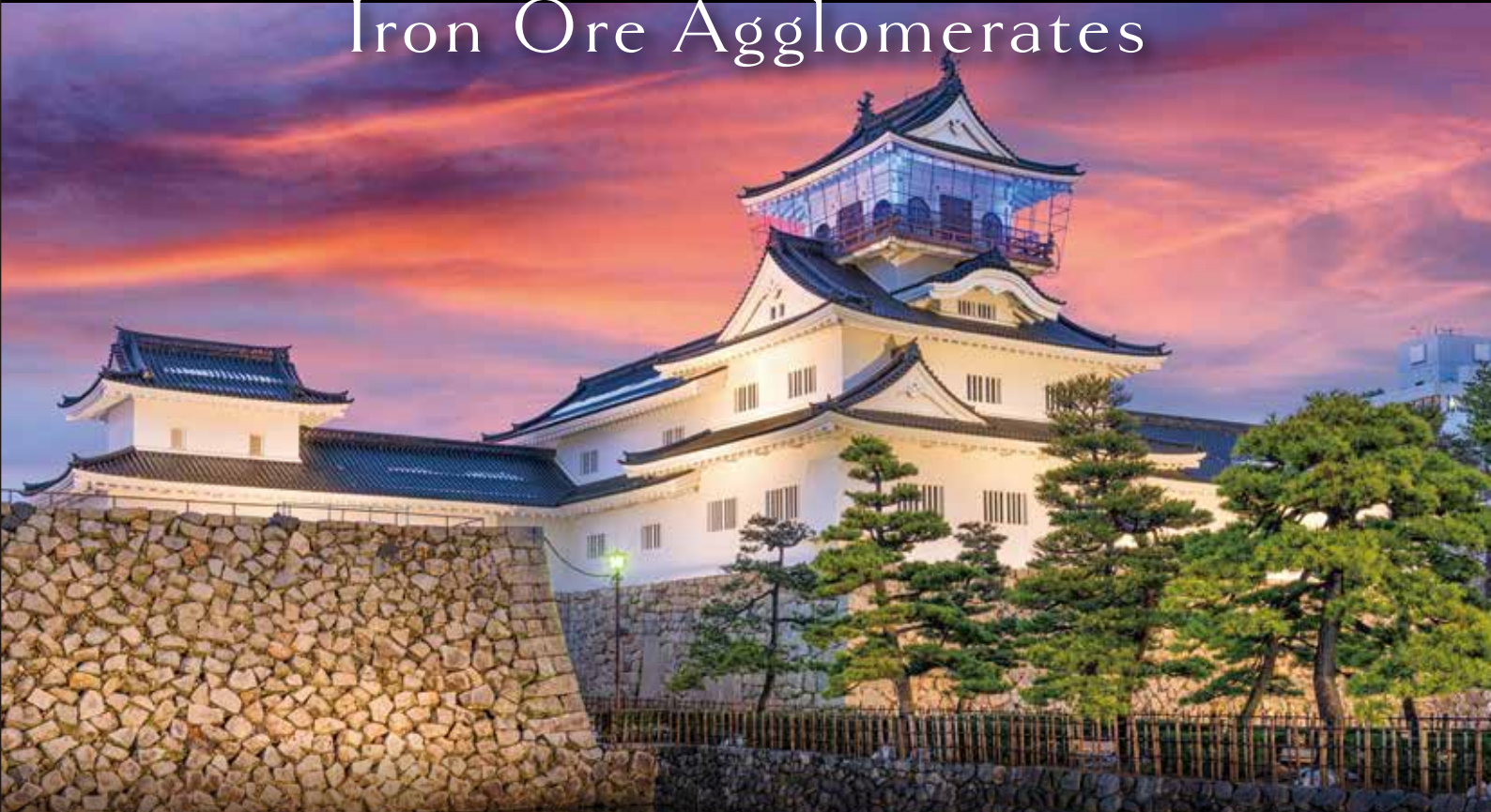


The 2nd International Symposium on Iron Ore Agglomerates



SynOre 2026

October 7-10, 2026

Toyama International Conference Center

I m p o r t a n t D a t e s

Abstract Submission Deadline	January 30, 2026
Notification of Acceptance	March 31, 2026
Extended Abstract Submission Deadline	July 31, 2026
Early bird Registration Deadline	July 31, 2026



Organized by : The Iron and Steel Institute of Japan, ISIJ

Welcome Message

Welcome Message

Currently, about 70% of the raw materials for blast furnaces worldwide are iron ore sinter, which is produced in large quantities using iron ore, limestone, and coke breeze. However, its characteristics vary greatly depending on the sintering process and are extremely complex, leading to an insufficient understanding of the material. While conferences for iron ore and pellets existed, such as IronOre in Australia and COREM in Canada, until 2022 there had yet to be an international conference primarily focused on iron ore sinter. In 2022, ISIJ hosted the first international symposium of iron ore agglomerates (SynOre2022) where academic discussions on the production and quality of sinter were held in Matsue, deepening collaboration among researchers in the field.

Since then, the world has moved rapidly toward carbon neutrality, making the decarbonization of ironmaking processes a critical issue. Vast amounts of fossil fuel-derived energy are used in the production of iron ore agglomerates such as sinter, and reducing this consumption is urgent. Moreover, discussions from a quality perspective are also necessary.

SynOre aims to provide an academic platform for researchers from industry and academia worldwide to discuss the production and quality of sinter and other agglomerates, such as iron ore pellet and carbon-iron ore composite, thereby contributing to the decarbonization of ironmaking processes and expanding resource flexibility. In addition, we hope this will help to build a robust research network.

SynOre2026 will be held at the International Conference Center in Toyama. Toyama, located in the Hokuriku Region of northern Chubu in Japan, has become easily accessible since the opening of the Hokuriku Shinkansen in 2015. Selected by the New York Times as one of the "52 Places to Go in 2025," Toyama is a notable tourist destination. October, when the conference is held, is the time when the autumn leaves in the mountains are in full bloom, and the Alpine Route accessible by cable car or ropeway is a famous tourist attraction. We look forward to seeing you in October 2026.



MURAKAMI, Taichi

Chair of SynOre2026, Tohoku University

Organizing Committee Members

Organizing Committee Members

Chair

MURAKAMI, Taichi (Tohoku University)

Committee

ADACHI, Takero (Kobe Steel, LTD)

FUJITA, Kazuki (Nippon Steel Corporation)

HIGUCHI, Kenichi (Nippon Steel Corporation)

HAYASHI, Miyuki (Institute of Science Tokyo)

IWAMI, Yuji (JFE Steel Corporation)

KATAYAMA, Kazuaki (Nippon Steel Corporation)

KATO, Kengo (University of Toyama)

MATSUMURA, Masaru (Tohoku University)

MIYATA, Kenshiro (Kobe Steel, LTD)

MORIKAWA, Yasuyuki (JFE Steel Corporation)

NITTA, Kazuaki (Kobe Steel, LTD)

NOGAMI, Hiroshi (Tohoku University)

OHNO, Ko-ichiro (Kyushu University)

ONO, Hideki (University of Toyama)

SAKAMOTO, Mitsuru (Kobe Steel, LTD)

YAMAMOTO, Tetsuya (JFE Steel Corporation)

Supporting Organizations

Associazione Italiana di Metallurgia (AIM)

Energy and Industrial Technology Development Organization, Japan (NEDO)

Society of Environmental Science, Japan (SES)

The Chemical Society of Japan (CSJ)

The Chinese Society for Metals (CSM)

The Consortium for Scientific and Engineering Research on Ironmaking Processes

The Institute of Life Cycle Assessment, Japan (ILCAJ)

The Japan Institute of Energy (JIE)

The Japan Institute of Metals and Materials (JIMM)

The Japan Research and Development Center for Metals (JRCM)

The Japanese Society for Experimental Mechanics (JSEM)

The Korean Institute of Metals and Materials (KIM)

The Mining and Materials Processing Institute of Japan (MMIJ)

The Society of Chemical Engineers, Japan (SCEJ)

The Swedish Steel Producers Association (Jernkontoret)

The Steel Institute VDEh

Program

Conference Schedule

	Morning	Afternoon	Evening
October 7 (Wed.)	Registration / Technical sessions / Poster Session		Welcome Party
October 8 (Thu.)	Registration / Technical sessions		Banquet
October 9 (Fri.)	Technical sessions		
October 10 (Sat.)	Technical Tour - Scheduled Dismissal in Nagano Station: 6:30 PM		

Plenary Lecturers



Professor ANDERSSON, Charlotte
(Luleå University of Technology)

The role of pelletizing in the fossil-free steel value chain



Professor Emeritus KASAI, Eiki
(Tohoku University)

Pretreatment and Agglomeration
Technology Trends with Changes in Iron
Ore Resource



Dr. EVANS, Tim
(Rio Tinto)

Research Lead, Rio Tinto Steel
Decarbonisation



Professor LIU, Zhengjian
(University of Science and
Technology Beijing)

Progress and Innovations in Burden
Preparation Technology for Blast
Furnace Ironmaking in China



Professor JUNG, Sung-Mo
(POSTECH& GIFT)

Current understanding of iron ore
sintering and its future

Topics

1 Raw Materials:

Iron ore resources, Beneficiation technology,
Fluxing materials

2 Pre-treatment of Raw Materials:

Mixing & granulation, Granule design, Charging

3 Sintering Process:

Agglomeration agents, Ignition technology,
Sintering reactions, Bed-structure change,
Yield & productivity, Exhaust gas treatment

4 Metallurgical Properties of Agglomerates:

Microstructure, Strength, Reduction disintegration,
Reducibility, Softening & melt-down properties,
Calcium ferrite

5 Carbon Neutrality of Ironmaking:

Hydrogen reduction of iron ore and agglomerates,
Agglomeration agent

6 Others

Call for Papers

Abstract Submission Deadline: January 30, 2026

Notification of acceptance: March 31, 2026

Extended Abstract Submission Deadline: July 31, 2026

Participants wishing to make a presentation on the results of their recent research are cordially invited to submit up to a maximum of 200 words abstract in English, by no later than January 30, 2026 via the online SynOre2026 conference website.

Authors of accepted papers will be notified by e-mail by March 31, 2026, with information on the format and typing instructions for the Extended Abstract.

Abstract Submission Instructions

Submission is only accepted via the online SynOre2026 conference website. Only one Abstract per Presenter is accepted for submission.

No fax or e-mail submission is accepted.

Please fill in the online submission form and submit the abstract with up to 5 Keywords.

Abstract should be written not exceeding 200 words. You are requested to choose the topics from the listed below that are most applicable to your abstract theme. After submission, you will receive an automatic submission number in return by e-mail when the submission succeeded.

1. Raw Materials
2. Pre-treatment of Raw Materials
3. Sintering Process
4. Metallurgical Properties of Agglomerates
5. Carbon Neutrality of Ironmaking
6. Others

Extended Abstract submission instruction will be notified on the website once ready.

Type of Presentation

Either Oral or Poster presentations is accepted. However, the Program Committee will make the final decision.

Registration

Early-bird Registration Deadline: **July 31, 2026**

Registration Fees

	Early-bird Registration until July 31, 2026	Regular Registration until October 9, 2026
Regular	JPY 110,000	JPY 130,000
Student	JPY 60,000	JPY 70,000
Excursion	TBD	
Documents for Visa acquisition	JPY 11,000	

- All participants are subject to register online in advance or on-site at the registration desk of the venue.
- All presenters are required to register in order to make a presentation and for the paper to be included in the Extended Abstracts Booklet.
- Students are requested to show their Student ID card at the onsite registration desk.

Conference Registration Includes

Session participation, Conference kit, Welcome party, Coffee breaks, Banquet.

Payment Methods

After registering through the website, all payments must be made in Japanese yen by credit card only. The following cards can be used in the system. (Payment will be made in a single lump-sum.)



Confirmation and Receipt

The Pre-Confirmation e-mail bearing your registration number and details will be sent to you after your online registration is completed. The Confirmation e-mail will be sent to you after the payment has been confirmed.

Invoice, Receipt and Participants Certificate

You can download your own receipt from the system. The guideline for downloading will be available on the registration page.

Cancellation and Refunds

Cancellation Policy: No refund after payment.

Visa

Participants from certain countries may be required to obtain a visa to enter Japan. Once your participation has been accepted as a presenter or an audience, please contact Secretariat of SynOre2026 by July 31.

Technical Tour

Special Technical Tour at SynOre2026, hosted by The Iron and Steel Institute of Japan Scheduled Date: October 10 (Saturday), 2026

At SynOre2026, we invite you to a truly exceptional tour-one that ventures deep into the heart of Japan's mountainous marvels and cutting-edge infrastructure.



Murodo

The Tateyama Kurobe Alpine Route, cutting across mountains rising over 3,000 meters, is a spectacular representative of Japan's mountain tourism roads, where you can experience a fusion of nature and technology. Discover the Kurobe Dam, a monumental achievement hailed as a "20th-century engineering marvel," realized through the massive placement of concrete, the transportation of vast amounts of materials, and relentless innovation under extreme natural conditions. Its hydroelectric power stands not only as an emblem of renewable energy but also as a vital source of clean electricity for the advancement of green steel production.



The highlight of this journey lies beyond the tourist path: an exclusive visit to the state-of-the-art tunnel construction sites, normally closed to the public. Here you will encounter advanced excavation machinery and installation systems. These technologies have shaped not only tunnels but also the evolution of steel mills, blast furnaces, and port facilities across Japan, offering researchers fresh inspiration and new perspectives.



Special Public Viewing:
Construction Site Remains Tour

This is more than just a tour. It's a special opportunity to witness where the vastness of nature intersects with the challenges of human engineering. Take this opportunity to experience firsthand the impressive scale and engineering of this remarkable infrastructure.

* Important Notice

**This tour starts in Toyama and concludes at Nagano Station.
Please note that it does not return to Toyama.**

General Information about Japan and Toyama

General Information

Climate and Clothing

During November, the average temperature in Toyama is around 12-18 degrees Celsius (53-65 degrees Fahrenheit).

Currency

Only Japanese Yen is acceptable at regular stores and restaurants. Foreign currency can be changed into Japanese yen (¥) at major banks, hotels, and airports.

Credit Cards

Credit cards are widely accepted. Commonly recognized cards include Visa, MasterCard, and American Express.

Tipping

There is no custom of tipping anywhere in Japan, even at hotels and restaurants. On certain occasions, however, a service charge is added to the bill.

Electrical Appliances

The voltage in Japan is 100 - 110 volts for electrical appliances. Electrical sockets usually accept only two-pronged (vertical) plugs.

Special Requirements

Please give us the details of any special diet or disability assistance required on your registration form.

Insurance

The organizer cannot accept responsibility for any accidents which might occur. It is recommended that participants take out adequate medical, travel and personal insurance prior to the commencement of travel.

Contact

The 2nd International Symposium on Iron Ore Agglomerates (SynOre2026) Secretariat
c/o PCO, Inc. 2-25 Sakurabashidori, Toyama-shi,
Toyama, 930-0004, JAPAN Phone: +81-(0)76-461-7028
Fax: +81-(0)76-471-0745
E-mail: synore2026@pcojapan.jp

About Toyama

Toyama City, the capital of Toyama Prefecture, is situated between the Japan Alps and Toyama Bay on Honshu Island. Home to approximately 400,000 residents, this coastal city offers modern amenities while providing gateway access to spectacular natural landscapes. Recently recognized as one of the top "52 Places to Go in 2025" by the New York Times, Toyama allows visitors to "enjoy cultural wonders and culinary delights while skipping the crowds." October is blessed with comfortable temperatures (12-20°C) and stunning autumn foliage throughout the region.

The city boasts an efficient public transportation system featuring a convenient light rail network. As the entry point to the famous Tateyama Kurobe Alpine Route, Toyama serves as an ideal base for mountain exploration. The city's rich heritage includes historical landmarks like Toyama Castle and a distinguished tradition of glass craftsmanship that continues to flourish through contemporary art and exhibitions.



Access

Toyama International Conference Center

The Toyama International Conference Center (TICC) is a modern facility located in the heart of Toyama City, featuring state-of-the-art conference rooms, exhibition spaces, and auditoriums.

<https://www.ticc.co.jp/english/>

Access to Toyama (Prices as of 2025)

International Flight (Arriving at Tokyo's Narita or Haneda Airport)

- Transfer by Domestic Air: Toyama has a domestic airport with direct flights from Tokyo's Haneda Airport. The flight time is approximately 1 hour. From Narita Airport, travelers should first transfer to Haneda Airport via bus (90 minutes, 3,600 yen) or train (1 hour 40 mins, 1,800 yen).
- Transfer by Bullet Train (Shinkansen): The Hokuriku Shinkansen provides direct service from Tokyo to Toyama. The journey takes approximately 2 hours and costs around 13,000 yen. Trains from Narita Airport to Tokyo Station take about 60 minutes (3,000 yen).

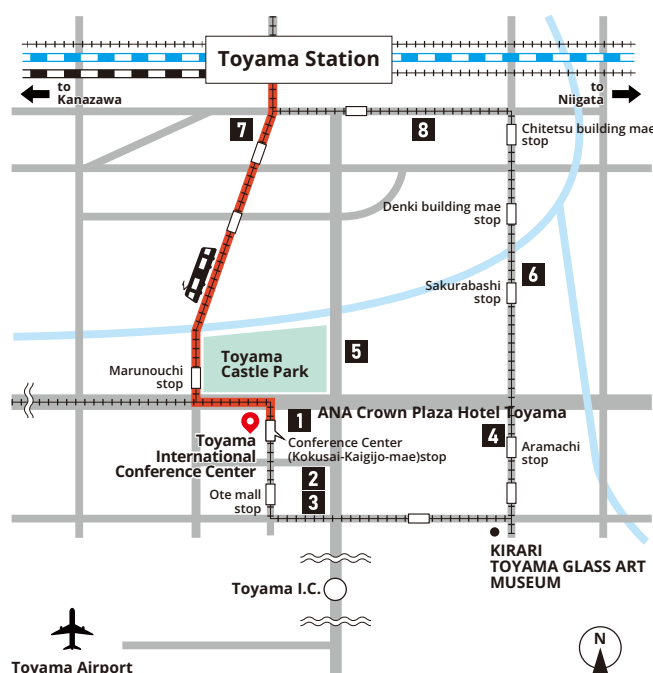
International Flight (Arriving at Kansai International Airport)

- Transfer by Limited Express Train: Take the JR Haruka Limited Express to Osaka/Shin-Osaka Station (50 minutes), then transfer to the Thunderbird Limited Express, and change to the Hokuriku Shinkansen in Tsuruga, stopping at Toyama. The entire journey takes approximately 3 hours and 45 minutes and costs about 13,000 yen.

Domestic Transportation

- From Toyama Station to Conference Venue: The Toyama International Conference Center is accessible from Toyama Station via a 15-minute walk or a 7-minute tram ride. Taxis are also readily available at the station, with a fare of approximately 1,000 yen to the venue.
- Within Toyama City: The city features an extensive public transportation network, including trams, buses, and rental bicycles. A one-day pass for unlimited tram and bus rides costs 650 yen and is an economical option for exploring the city center.

<https://www.ticc.co.jp/english/access/>



Accommodation

Accommodation

All participants are requested to book their accommodation by themselves.

SynOre2026 Organizing Committee or Secretariat Office will not arrange accommodation for the participants.

Please enquire at your favorite online hotel-booking page or travel agency.

Some hotels in the vicinity of the conference venue are listed below for your reference.

Please contact directly to the hotel you would like to stay at. Please note that the Organizing Committee or Secretariat Office has no special contract with these hotels and is not responsible for participants' hotel reservations.

Hotel Name	Distance from the venue
1 ANA Crowne Plaza Toyama	Approx. 1-min on foot
2 Dormy Inn Toyama	Approx. 2-min on foot
3 Onyado Nono Toyama	Approx. 4-min on foot
4 Hotel Enoe Toyama	Approx. 5-min on foot
5 Super Hotel Premier Toyama Castle Park	Approx. 5-min on foot
6 Toyama Manten Hotel	Approx. 10-min on foot
7 Double Tree by Hilton Toyama	Approx. 15-min on foot
8 Daiwa Roynet Hotel Toyama-Ekimae	Approx. 15-min on foot

*The above hotel number is listed on the map within the Access page.

For more information, go to: <https://www.toyamashi-kankoukyoukai.jp/en/accommdation/>

Tourism Information

Tourism Information

Toyama offers visitors an exceptional blend of natural beauty, cultural heritage, and culinary delights.



Toyama Castle Park

Originally built in 1543 and meticulously reconstructed, Toyama Castle Park forms the city's historical center. In October, autumn foliage transforms the traditional Japanese landscape of ornamental ponds and stone bridges. The castle museum features samurai culture and local history exhibits, while its observation deck provides panoramic city views with the Japan Alps in the distance.



Gokayama

Located 40 kilometers south of Toyama City, UNESCO World Heritage Site Gokayama features traditional gassho-zukuri farmhouses—thatched-roof structures over 300 years old designed to withstand heavy snowfall. October provides a stunning backdrop of autumn colors against these weathered wooden houses. The villages of Ainokura and Suganuma offer glimpses into traditional rural Japanese life, with farmhouses serving as museums, restaurants, and accommodations. Cultural experiences include washi paper-making workshops and demonstrations of traditional folk songs preserved in this historically isolated region.



Kurobe Gorge

The spectacular Kurobe Gorge offers one of Japan's most scenic railway journeys via the vintage Kurobe Gorge Railway. This 20-kilometer narrow-gauge track winds through the dramatic V-shaped ravine, crossing bridges and tunnels while providing breathtaking views of Japan's deepest gorge and vibrant autumn foliage. The journey begins at Unazuki Station and traverses the deep canyon, where the emerald waters of the Kurobe River flow far below amid towering cliffs painted in brilliant fall colors.

Toyama's Culinary Specialties



Toyama's cuisine celebrates the bounty of both mountains and sea, with fresh seafood being particularly renowned. "Toyama Bay Sushi" features prized local catches including firefly squid, white shrimp, and masu trout. The region's clear, mineral-rich waters produce exceptional sake, with several historic breweries offering tours and tastings. Other local specialties include Toyama black ramen (featuring a distinctive soy-based broth), himi udon (thick wheat noodles), masuzushi (pressed trout sushi), and shiro-ebi ryori (dishes featuring sweet white shrimp). October brings seasonal delicacies like sweet kosui pears from Kureha and newly harvested rice.

For more information about Toyama, go to: <https://visit-toyama-japan.com/en>