

# IBAAS-IMMT-IIM 2025

13<sup>th</sup> International Bauxite, Alumina & Aluminium Conference & Exhibition



## Highlights of 13th International Bauxite, Alumina & Aluminium Conference & Exhibition (IBAAS-IMMT-IIM 2025)

Dr. ASHOK NANDI, CONVENER

8-10 October, 2025  
CSIR-IMMT, Bhubaneswar, India

# **International Bauxite, Alumina and Aluminium Society (IBAAS)**

- **Established in 2012 as a professional organization.**
- **Organized 12 international conferences and exhibitions in India, China, and Guinea.**
- **Events bring together industry leaders, researchers, technology providers and equipment manufacturers .**
- **A platform for global collaboration and knowledge sharing in the aluminium industry.**
- **Supports innovation, operational efficiency, and greener industry practices.**

# Why IBAAS was set up?

- **There was no Indian bauxite, alumina and aluminium forum for regular technical interactions, review developments and plan future for this important industry.**
- **7 aluminium professionals joined together and registered the IBAAS in 2012 in Nagpur with the objective to have an Indian international forum.**
- **Prior to this Indian Engineers and Scientists were sending papers and some of them were participating in TMS (USA), Alumina Quality Workshop (Australia) and ICSOBA etc.**

## Why IBAAS was set up? (Contd.)

- **IBAAS is an Indian registered Company and have experience of organizing international conferences and exhibitions in China and Guinea.**
- **IBAAS is mainly serving primary and secondary aluminium producers and encouraging young scientists and engineers to have technical contributions and interact with scientists and experts.**
- **In the past 12 years, IBAAS have become an established organization for the promotion of this industry thanks to support of bauxite, alumina and aluminium producers and sponsors / supporters.**

## Some Facts – Bauxite Quality

- **Minimum 50%  $\text{Al}_2\text{O}_3$  and  $<3\%$   $\text{SiO}_2$  plant feed during Seventies**
- **Now  $>40\%$  alumina and  $<6\%$   $\text{SiO}_2$**
- **Indian low temperature alumina refineries can very well accept bauxite with about 35% available alumina and about 4% reactive silica**
- **Worsley alumina refinery in Western Australia, where I worked during 2007 uses 29% A.Al and 4% R.Si and still produces alumina economically thanks to a large scale of operation.**



## OLD POTHOLE BAUXITE MINING



## MODERN BAUXITE MINE WITH SURFACE MINER



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## OLD ROTARY ALUMINA CALCINER



## MODERN FLUIDIZED BED ALUMINA CALCINER

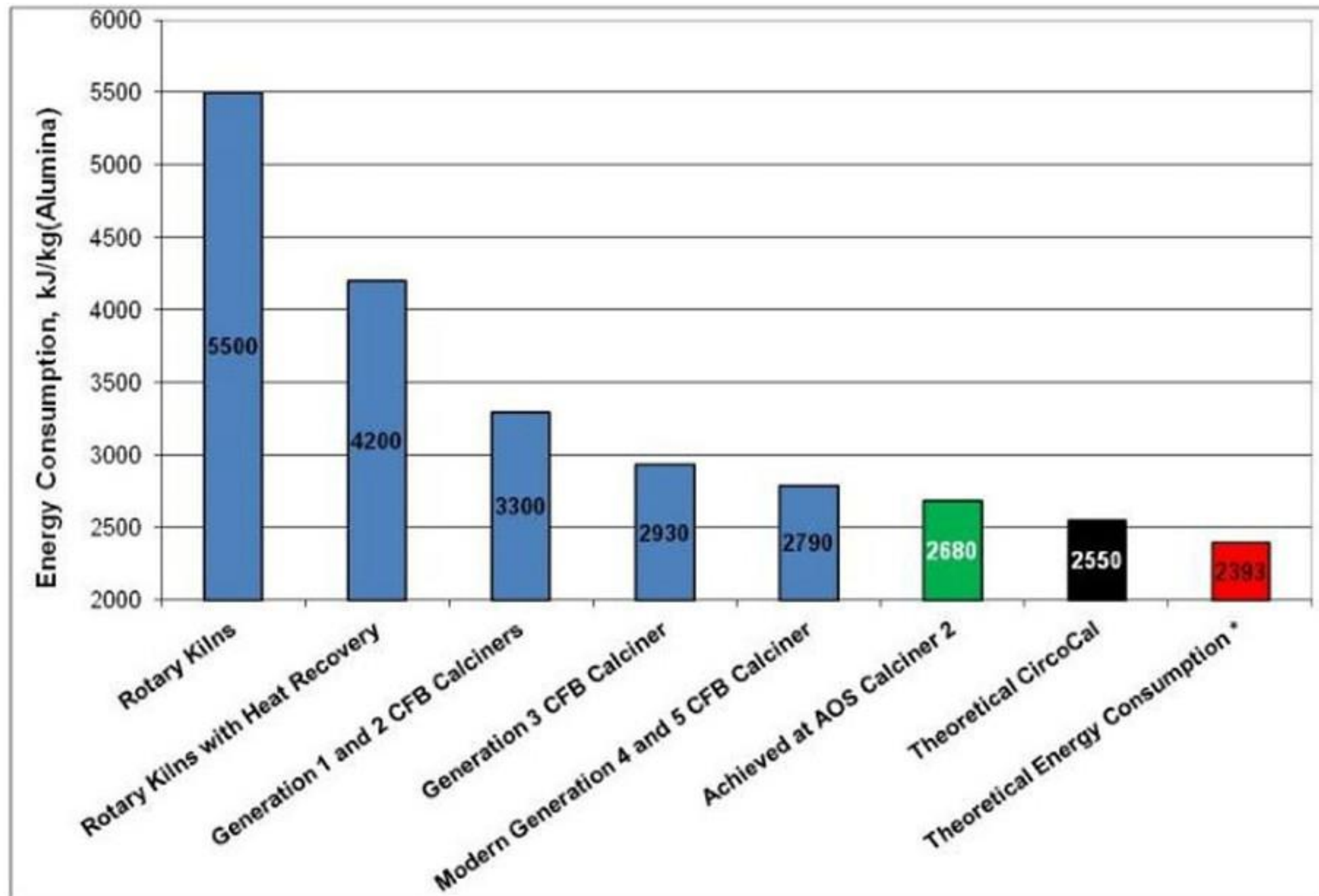


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# Some Facts – Alumina Production

Same Bayer's Process- tremendous improvements in production and productivity

Energy consumption  
in Rotary Kiln before  
1990 to present day  
Fluidized Bed Calciner





## OLD POT ROOMS



## MODERN ALUMINIUM SMELTER

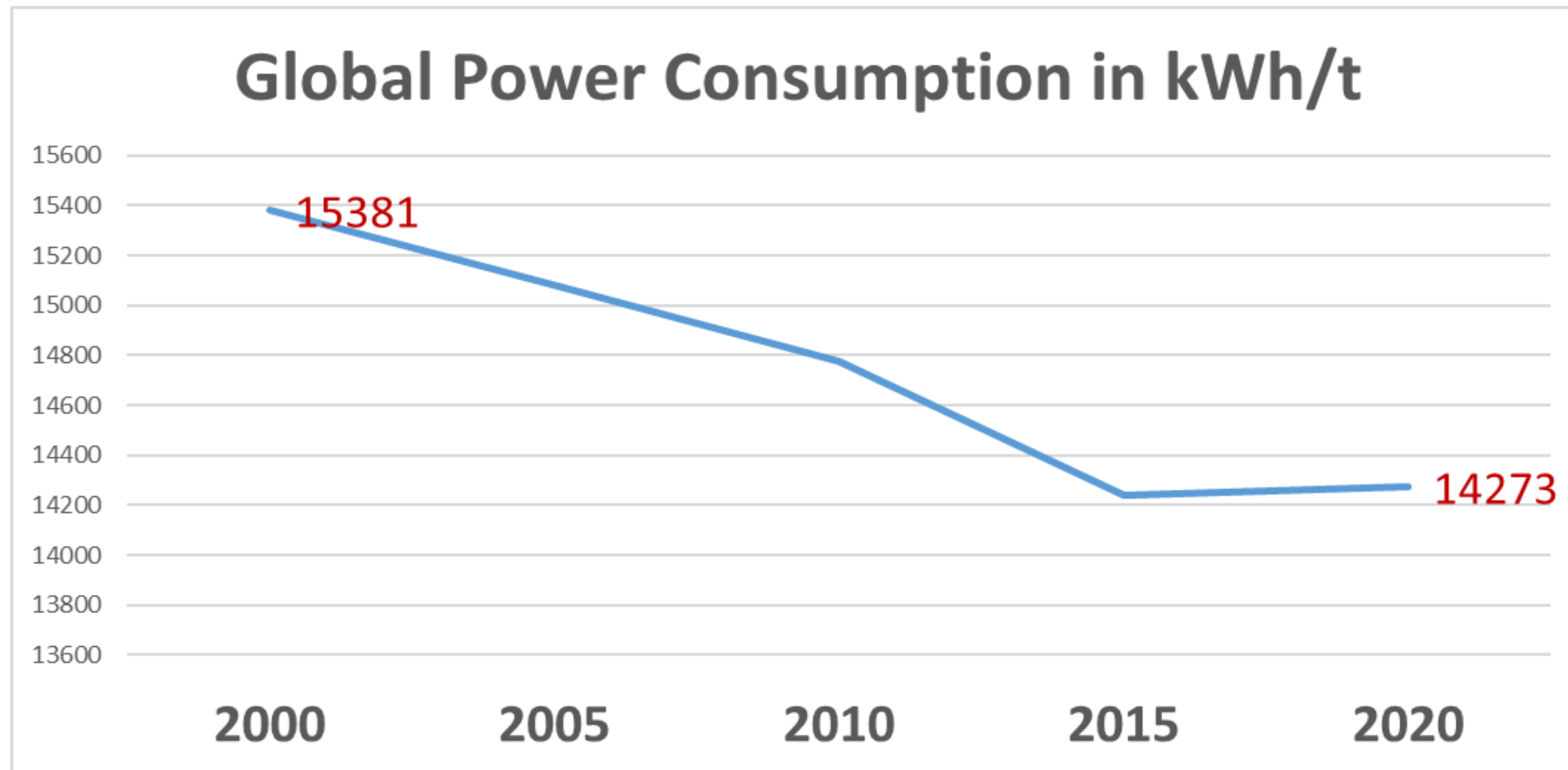


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# Some Facts – Aluminium Smelting

Hall Heroult Process of Electrolysis, however, continuous improvements in production and productivity.



# Conference Overview

## 13<sup>th</sup> International Bauxite, Alumina & Aluminium Conference & Exhibition (IBAAS-IMMT-IIM 2025)

Theme: A Green and Smart Aluminium Industry for Tomorrow

Organizer



Associated Organizations



Venue  
CSIR-IMMT,  
Bhubaneswar, India

Date  
October 8-10, 2025

8-10 October, 2025  
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# Sponsors & Supporters

Gold Sponsor



Silver Sponsor



FLS

Supporters

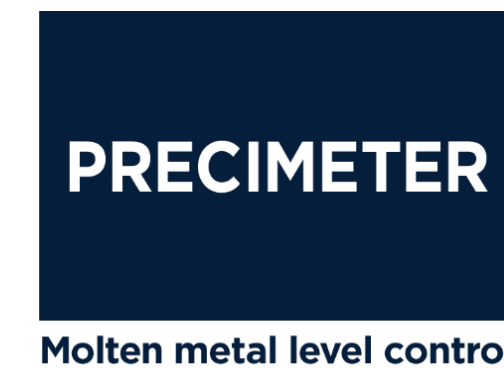
Lunch Sponsor

Lunch Co-Sponsor



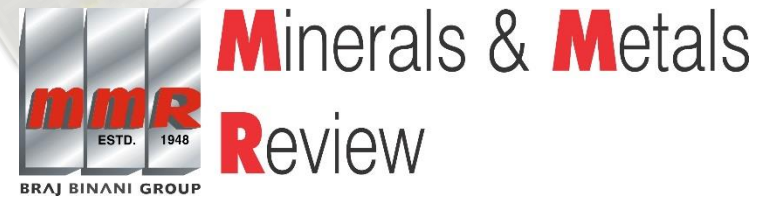
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# Exhibitors



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# Media Partners



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# Participating Companies/Organizations

- 90+ Companies & Organizations
- 20+ countries
- Australia, Canada, France, Germany, Guinea, Japan, Hungary, Italy, Netherlands, Singapore, Sweden, Senegal, Denmark, Estonia, Russia, Switzerland, UAE, UK, USA & India



# Conference Overview

- **Around 300 delegates, including 50+ international representatives**
- **80 technical presentations**
- **10 keynote addresses**
- **19 papers from HINDALCO & ABSTCPL,**
- **18 papers from Vedanta & BALCO**
- **15+ exhibitors**
- **Best Technical Paper Awards**
- **Special session by Aluminium Stewardship Initiative (ASI)**
- **ESG Awards**

## Conference Overview (Contd.)

- **As there are a large number of technical papers and keynote addresses, it is recommended to restrict each presentation in 15 minutes to highlights the main points.**
- **The conference souvenir will have all the abstracts, company details and advertisements and hard copies will be distributed among the delegates.**
- **All the technical papers will be available in the proceedings (BINDER Volume XII) and soft copy of the same will be made available for the delegates on the IBAAS website.**



# General Program Highlights

Registration Desk opens at 11AM on 7<sup>th</sup> October, 2025 and continues till 6PM at  
IMMT Auditorium

8th October 2025	
9.30 - 11.00	Inaugural Session Followed by Opening of Exhibition
11.00 - 11.30	High Tea
11.30 - 13.00	Keynote Addresses & Presentation by Leading Experts
13.00 - 14.00	Lunch Break
14.00 - 15.30	Keynote Addresses & Presentation
15.30 - 16.00	Tea/Coffee Break
16.00 - 18.00	Presentation by Sponsors & Supporters
19.00 onwards	Dinner

# General Program Highlights (Cont.)

9th October 2025	
9.30 - 10.30	Three Parallel Sessions
	<b>Auditorium:</b> Decarbonization and Aluminium Industry 4.0
	<b>Hall 1:</b> Bauxite- Alumina
	<b>Hall 2:</b> Aluminium Smelting
10.30 - 11.00	<b>Tea/Coffee Break</b>
11.00 - 13.00	Three Parallel Sessions
	<b>Auditorium:</b> Decarbonization and Aluminium Industry 4.0
	<b>Hall 1:</b> Bauxite- Alumina
	<b>Hall 2:</b> Aluminium Smelting
13.00 - 14.00	<b>Lunch Break</b>
14.00 - 15.30	<b>Auditorium:</b> Special Session by Aluminium Stewardship Initiative (ASI) - Panel Discussion
14.00 - 15.30	Two Parallel Sessions
	<b>Hall 1:</b> Bauxite- Alumina
	<b>Hall 2:</b> Aluminium Smelting
15.30 - 16.00	<b>Tea/Coffee Break</b>
16.00 - 17.00	<b>Auditorium:</b> ASI presentations
17.00 - 18.30	<b>Auditorium:</b> ESG Awards Ceremony
16.00 - 18.00	Two Parallel Sessions
	<b>Hall 1:</b> Bauxite- Alumina
	<b>Hall 2:</b> Aluminium Smelting
19.00 onwards	<b>Dinner</b>

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# General Program Highlights (Contd.)

10th October 2025	
9.30 - 10.30	Three Parallel Sessions
	<b>Auditorium:</b> Bauxite- Alumina
	<b>Hall 1:</b> Aluminium Smelting
	<b>Hall 2:</b> Aluminium Downstream
10.30 - 11.00	<b>Tea/Coffee Break</b>
11.00 - 13.00	Three Parallel Sessions
	<b>Auditorium:</b> Bauxite- Alumina
	<b>Hall 1:</b> Aluminium Smelting
	<b>Hall 2:</b> Aluminium Downstream
13.00 - 14.00	<b>Lunch Break</b>
14.00 - 15.30	Three Parallel Sessions
	<b>Auditorium:</b> Bauxite- Alumina
	<b>Hall 1:</b> Aluminium Smelting
	<b>Hall 2:</b> Aluminium Downstream
15.30 - 16.00	<b>Tea/Coffee Break</b>
16.00 - 18.00	Three Parallel Sessions
	<b>Auditorium:</b> Bauxite- Alumina
	<b>Hall 1:</b> Aluminium Smelting
	<b>Hall 2:</b> Aluminium Downstream
18.00 - 19.00	<b>Concluding Session, Prize Distribution for Best Paper Presenter and High Tea</b>

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## Some Interesting Papers

- **A French company is presenting paper on how to use high silica bauxite in the alumina refinery. They are already setting up plant in China.**
- **A paper on differential alumina extraction technology of Sumitomo for processing high silica bauxite and on similar lines Hungarain paper on ILTD technology are interesting for refinery people.**
- **De-Ironing of Bauxite Ore Via Chlorination is interesting for non-metallurgical bauxite.**
- **Modern Efficient Alumina Refinery Digestion Design by Worley, Australia**

## Some Interesting Papers (Contd.)

- **Decarbonization of Aluminium: Emerging Industry Trends by WM**
- **Anthropogenic Soils through CCU of the Red Mud**
- **Performance and Advantages of Slotted Baked Anodes**
- **A Machine Learning Model for Aluminium Pot Longevity**
- **Smart Aluminium Smelters**
- **Transforming DROSS as by-products**
- **Reducing Carbon Footprint in Aluminium Extrusion**
- **Additive Manufacturing of Al-based alloys**



# IBAAS-IMMT-IIM 2025 Exhibition

## Featuring the German Hanger Setup



- **German Hanger Structure Fully Air-Conditioned Setup**
- **Wooden Platform Flooring**
- **Spacious Layout for stalls and networking**
- **World-Class Exhibition Experience**



# Conference Highlights

## Special Session & Panel Discussion by Aluminium Stewardship Initiative (ASI)

Date: 9th October 2025 | Time: 2:00 PM – 6:00 PM

ASI'S ROLE IN THE ALUMINIUM VALUE CHAIN, INCLUSIVE SUSTAINABLE DEVELOPMENT

Special Session by

**ASI** (Aluminium Stewardship Initiative)

A Special Session and Panel Discussion by the Aluminium Stewardship Initiative (ASI) will be conducted during the IBAAS-IMMT-IIM 2025 Conference & Exhibition, scheduled to be held on 9<sup>th</sup> October between 2 to 6PM. This session will focus on sustainability standards, ASI certification process, benefits and responsible practices across the aluminium value chain. It will also provide an opportunity for participating companies to engage in meaningful discussions with ASI on ESG performance, traceability, and the role of stewardship in promoting sustainable development.



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# Conference Highlights

## IBAAS – CETIZION Verifica ESG AWARDS 2025



**ESG AWARD  
CEREMONY**

**OCTOBER 8-10, 2025**

**VENUE**  
**CSIR-IMMT BHUBANESWAR, INDIA**

**"A GREEN AND SMART ALUMINIUM  
INDUSTRY FOR TOMORROW"**

**REGISTER NOW**

**FEE: ₹ 75,000 (US\$ 900) + 18% GST APPLICABLE**

**CONTACT US FOR MORE INFORMATION**

[www.ibaas.info](http://www.ibaas.info) [www.cetizionverifica.com](http://www.cetizionverifica.com)

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Recognizing Sustainability in the Aluminium Industry

# IBAAS-CETIZION Verifica ESG 2025 Awards



**SAVE THE WORLD**  
Empower sustainable  
aluminium practices



**SAVE WATER**  
Drive water-efficient  
innovations in metal processing



**RECYCLE**  
Promote circular economy in  
aluminium



**ECO LIFE**  
Build a cleaner, greener  
aluminium future



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# Conference Highlights

## Post - Conference Plant Visit to NALCO's Aluminium Smelter, Angul



1

Location

**NALCO's Aluminium Smelter at Angul**

3

Fee

**Rs. 10,000 + 18% GST  
(USD 125 + 18% GST)**

2

Date

**11th October 2025 (Saturday)**

4

Capacity

**Limited to 30 delegates on a  
first-come, first-served basis**

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# Post Conference Visit

**8.00 – 18.30 : Post - Conference Plant Visit to NALCO's Aluminium Smelter, Angul**



- **A 35-seater luxury bus will leave at 8 AM from Hotel Swosti Premium**
- **Maximum number of allowed IBAAS delegates – 30 on first come first serve basis.**
- **Plant induction and visit 11 AM to 2 PM – followed by working Lunch – return Bhubaneswar at 6.30 PM**



# Conference Venue & Accommodation

## Venue

CSIR-IMMT, Bhubaneswar,  
India

## Accommodation

Several hotels available in and  
around IMMT

<http://www.ibaas.info/accommodation-ibaas-2025>



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# IBAAS Organizing Committee

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... Thank you ...



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