

**13<sup>TH</sup> INTERNATIONAL BAUXITE, ALUMINA & ALUMINIUM  
CONFERENCE & EXHIBITION (IBAAS-IMMT-IIM 2025)  
OCTOBER 8-10, 2025 | BHUBANESWAR**



International Bauxite, Alumina & Aluminium Society (IBAAS)

In Association With

Institute of Minerals and Materials Technology (IMMT)

&

Indian Institute of Metals (IIM), Bhubaneswar Chapter

# REPORT

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# IBAAS-IMMT-IIM 2025 CONFERENCE & EXHIBITION BHUBANESWAR



## Overview and Theme

The 13<sup>th</sup> International Bauxite, Alumina, and Aluminium Conference & Exhibition (IBAAS–IMMT–IIM 2025), held from 8 to 10 October 2025 at CSIR–IMMT, Bhubaneswar, concluded with remarkable success, reaffirming its status as one of the most significant global platforms for the aluminium industry.



The central theme, “A Green and Smart Aluminium Industry for Tomorrow,” reflected the sector’s evolving priorities—sustainability, innovation, and digital transformation—and aligned with India’s vision of building a globally competitive and environmentally responsible aluminium industry.

## India’s Aluminium Industry: Focus Areas

With India witnessing rapid expansion in alumina and aluminium production, the conference spotlighted strategies for:

- **Value addition** across the aluminium value chain
- **Import substitution** to strengthen self-reliance
- **Energy conservation** and sustainability as drivers of long-term growth





These discussions underscored India's pivotal role in shaping the global aluminium landscape.

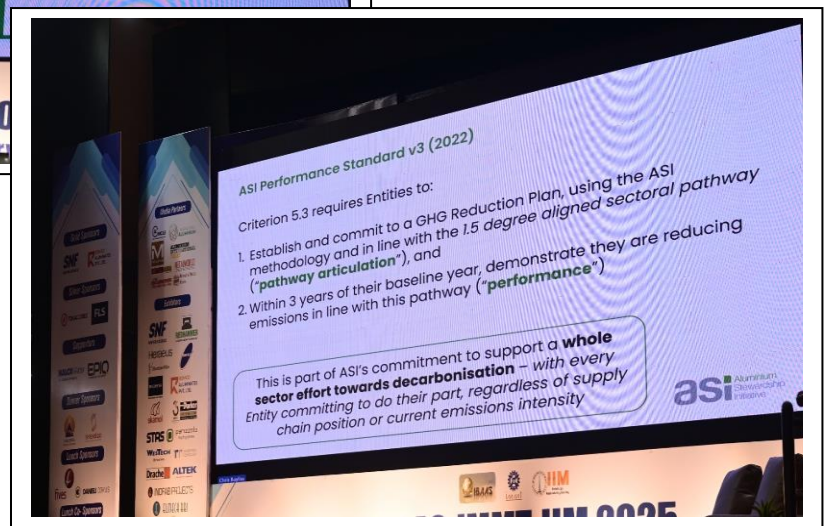
## Decarbonization and Digitalisation Initiatives

A major highlight was the **special session on Decarbonization and Digitalization**, dedicated to lowering the carbon footprint of aluminium manufacturing. Experts discussed the integration of **AI, automation, and digital tools** to enhance process efficiency, reduce emissions, and accelerate the transition toward a **net-zero aluminium industry**.

## Comprehensive Coverage of the Aluminium Value Chain

Spanning three days, the conference featured **interactive technical sessions, panel discussions, and knowledge-sharing forums** covering the entire aluminium value chain—from **bauxite mining - beneficiation to alumina refining, smelting technologies, and downstream product development**.

These sessions provided a platform for global experts, researchers, and industry leaders to exchange insights, share success stories, and outline collaborative opportunities for future innovation.





## Sponsors and Supporters



IBAAS extends its heartfelt gratitude to all sponsors and supporters whose generous contributions ensured the success of this landmark event in Bhubaneswar. Their collaboration played a key role in attracting an impressive gathering of professionals and organizations from across the world.



Thanks to the above sponsors and their valuable support, the IBAAS-2025 Conference & Exhibition was highly successful and witnessed the participation of a large number of delegates. IBAAS conveys special thanks to National Aluminium Company Limited (NALCO) for sponsoring the event and for their support in strengthening the global aluminium fraternity.

## Exhibition



A major attraction of IBAAS–IMMT–IIM 2025 was the **grand exhibition** hosted under a **German hanger**, featuring **19 domestic and international companies**—including leading producers of aluminium equipment, specialty chemicals, and technology solutions.







The exhibition drew significant attention from delegates and visitors, serving as a vibrant marketplace for innovation and technology exchange. The list of these exhibitors is given below.

<b>SR. NO.</b>	<b>ORGANIZATION</b>
1	SNF India
2	Riedhammer GmbH
3	Westech
4	ALTEK Europe Ltd
5	Abhitech Energycon Limited
6	Heraeus Technologies India Pvt Ltd
7	Elmech BBI
8	Drache
9	T. T. Tomorrow Technology
10	Precimeter
11	Bruno Presezzi
12	Skamol
13	Gouda Refractories
14	Tokai Cobex
15	STAS
16	Panizzolo
17	Indfab Projects Private Limited
18	U3S Engitech Pvt. Ltd.
19	Romco Aluminate Pvt Ltd

This was one of the biggest attractions for many delegates and visitors of this conference.

### **ASI Session and ESG Awards**

A key highlight of the event was the **Special Session and Panel Discussion by the Aluminium Stewardship Initiative (ASI)**, focused on **responsible production, traceability, and sustainability standards** within the global aluminium industry.

The prestigious **IBAAS–CETIZION ESG Awards 2025** celebrated companies demonstrating outstanding leadership in **Environmental, Social, and Governance (ESG)** performance.





#### Award Recipients:

COMPANY NAME	AWARD
Aditya Aluminum	GOLD
Bharat Aluminum Company Limited	SILVER
Bhorukha Extrusion	BRONZE
Cevher Jant Sanayii A.Ş.	GOLD
Hirakud Power and Smelter (Hindalco Industries Limited)	SILVER
Mahan Aluminum (Hindalco Industries Limited)	SILVER
Midal Cables	GOLD
Hindalco Industries Limited Mouda	GOLD
TAHA International for Industrial Services	SILVER





## Participation



The event brought together over 300 delegates from 100+ companies and organizations across the aluminium ecosystem—comprising bauxite, alumina, and aluminium producers, R&D institutes, equipment suppliers, service providers, and academia.

Delegates hailed from India, Australia, Guinea, Denmark, France, Germany, Japan, Hungary, Switzerland, UAE, and the USA, reflecting the global reach of IBAAS.





## Inaugural Function

The inaugural function was graced by **Mr. Brijendra Pratap Singh, CMD, NALCO**, as **Chief Guest**. Other distinguished dignitaries included:

- **Mr. Mark Annandale**, Director, Aluminium Stewardship Initiative (ASI)
- **Mr. Kailash Pandey**, President – Business Head, Hindalco Industries Ltd.
- **Dr. Ramanuj Narayan**, Director, CSIR–IMMT
- **Dr. B.C. Tripathy**, Chairman, IIM Bhubaneswar Chapter

The session commenced with a warm welcome by **Dr. Arun Nandi**, Secretary, IBAAS, followed by the **Conference Convener's address** outlining IBAAS's mission and the highlights of the 2025 program.



A **souvenir volume** containing abstracts, advertisements, and sponsor profiles was formally released, and all delegates received the **IBAAS BINDER Volume XIII** containing the full set of technical papers.





The inaugural function was concluded with a **vote of thanks** by **Mr. Sankar Sankaranarayanan**, followed by the **opening of the exhibition**.

### Keynote Addresses

After the inaugural function, seven keynote addresses were delivered by leading Indian and international experts as given below:

1. Beyond Challenges to Competitiveness: India in the Global Aluminium Map by Mr. Kailash Pandey, President- Business Head, HINDALCO
2. Can India become a leading alumina producer in the world? By Mr. Hirak Mitra of HINDALCO
3. Technological breakthrough in the utilization of Indian Low Grade Bauxite ore by Mr. Y. Occello, IB2 Founder and Mr. R. Girbal, IB2 CEO and Co-Founder
4. Bauxite to Brilliance - Hindalco's high purity aluminium journey by Mr. Senthil Nath, HINDALCO
5. Promoting Differential Extraction for Sustainable Alumina Industry in India: Strategies for Effective Implementation by T. Harato of AlTech Consultant, Tokyo, Japan
6. Pathway to sustainable Low-Carbon Aluminium: Opportunities and Challenges in Smelter Decarbonisation and Renewable Integration by Mr. Jagannath P. Nayak, Hindalco
7. Improvement of the effectiveness of making alumina by the Updated ILTD Process: alumina refineries in India as examples by Mr. György (George) Bánvölgyi of Senior Process Consultant, Budapest, Hungary





There were 3 remarkable papers on utilization of high silica bauxites of India presented by alumina experts of Japan, Hungary and France. Delegates appreciated these keynote addresses as they provided the latest industry insights and pointed the way forward for future R&D efforts. Later in the day, sponsors have made their company presentations and showcased their technologies, equipment, and specialty chemicals through videos and demonstrations.



## Technical Program

The second day (9<sup>th</sup> October) started with three parallel technical sessions and in the auditorium there were series of high-quality technical papers on sustainability, decarbonization and Aluminium industry 4.0. With India aiming for significant carbon emission reductions by 2030,



these papers outlined strategies for reducing greenhouse gas emissions and adopting technologies that could be implemented at a commercial scale. Wood Mackenzie, India presented a good review paper on 'Decarbonization of Aluminium: Emerging Industry Trends' followed by interesting papers by FLSmidth, GEA Process and Mr. Pradip Ranjan Choudhury. The afternoon session in the main hall saw the panel discussion and interesting presentations by Aluminium Stewardship Initiative (ASI) conducted by Mr. Mark Annandale, Director, ASI. This was followed by ESG award ceremony to felicitate companies, achieving high standard of environment management and this was hosted by Mr. Gangaa C Sharma, Managing Director & CEO CETIZION Verifica.



The other two parallel technical sessions were on the bauxite-alumina and aluminium smelting, where papers mainly by young Scientists and Engineers were presented. The bauxite-alumina session saw the presentations mainly on non-metallurgical bauxite-alumina, where good numbers of small and medium sized companies are active in India. There was an award-winning paper on de-ironing of bauxite by carbo-chlorination process, which was highly



appreciated by IBAAS delegates as this may lead to import substitution. In the smelter sessions of 9<sup>th</sup> October, papers mainly related to anode-cathode qualities and improvements were presented and discussed in detail.

On the 10<sup>th</sup> October, 3 parallel technical sessions on bauxite-alumina, smelter and aluminium downstream were organized, where many interesting new technologies were discussed. In the bauxite-alumina session of auditorium, papers were mainly presented by young scientists and engineers of HINDALCO, VEDANTA and companies producing specialty chemicals and working on water conservation. Aluminium smelter session was dominated by papers on latest developments of HINDALCO and BALCO on energy conservation efforts. Several presentations were made by international companies and consultants on latest developments in the technology. In the third hall, the aluminium downstream sessions were dominated by papers on new alloy developments, recovery of aluminium from Dross and efficient recycling of scraps.







The 3 days conference was concluded in the main auditorium with awards to **young scientists and engineers** for their best papers. The **IBAAS 2025 awards** were given to outstanding work to the following aluminium industry professionals:

<b>Bauxite-Alumina</b>	1	<b>Ms. Juhi Bhure</b> Assistant Manager of Hindalco Industries Limited, Belgaum, India	Low-Viscosity Hydrate Composites: Advancements and Applications in Multifunctional Materials
	2	<b>Mr. Debashis Tripathy</b> Hindalco Industries Ltd., Muri, India	Boosting Efficiency through In-House Optimization and Plant Strategies in Bayer Precipitation
	1	<b>Ms. Priyadarsini Dash</b> Red-1 Technical Incharge- 3 MTPA, Vedanta Limited, Lanjigarh, India	Overcoming Operational Challenges during Startup and Stabilization of 3 MTPA Alumina Refinery
	2	<b>Mr. Sachin Arya</b> Gharda Scientific Research and Foundation	De-ironing of Bauxite Ore Via Chlorination
<b>Aluminium Smelting</b>	1	<b>Mr. Ankit Pareek</b> Head Process of Vedanta Aluminium Limited, Jharsuguda (Presented by: Sandip Gore)	Amperage Increase at Vedanta Aluminium Smelter GP Prebake Technology Potlines
	2	<b>Mr. Pratap Sahu</b> Plant Head of Hindalco Industries Ltd., Hirakud Smelter, Hirakud, India (Presented by: Jay Prakash Soni)	Pot Turnaround Time Reduction at Hirakud Smelter to Enhance Productivity
<b>Sustainability &amp; Decarbonization</b>	1	<b>Mr. B.S. Pavan Kumar</b> Deputy Manager, Bhoruka Extrusions Pvt Ltd, Mysuru, India	Reducing Carbon Footprint in Aluminium Extrusion Industry
<b>Aluminium Downstream</b>	2	<b>Dr. Lipak Kumar Sahoo</b> Department of Metallurgical and Materials Engineering, NITK Surathkal, Karnataka, India	Production of Aluminium Alloy Powders through the Gasatomization Process: A Numerical Simulation Study



During all the 3 days, special **IBAAS Quiz Sessions** were organized mainly based on the papers, exhibition stalls and advertisements by the aluminium companies and best delegates were awarded for fast and accurate replies of queries set up by the IBAAS organizing team. There was several positive feedback for this major aluminium event of India by the delegates and some suggestions were also put forward for the improvements.







## Post-Conference Activities

The event concluded with a well-organised post-conference visit for selected IBAAS delegates to **NALCO's Angul Smelter** on 11<sup>th</sup> October 2025. This visit provided attendees with an opportunity to observe large-scale aluminium smelting operations of India and further strengthened industry-academic linkages.



Fostering Global Collaboration in Aluminium Excellence!

**13<sup>TH</sup> IBAAS-IMMT-IIM 2025 DELEGATION VISIT**

📍 Smelter Plant, Angul

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The **IBAAS–IMMT–IIM 2025 Conference & Exhibition** successfully achieved its objectives of promoting dialogue, collaboration, and innovation across the global aluminium industry. It served as a premier platform for **sharing technical excellence, recognizing sustainability leadership, and building partnerships** to shape the **future of a green, smart, and self-reliant aluminium industry**. All presentations, photographs, and the conference souvenir are available on the **IBAAS website: [www.ibaas.info](http://www.ibaas.info)**

For feedback and comments, please contact: [info@ibaas.info](mailto:info@ibaas.info)

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