# INTERNATIONAL BAUXITE, ALUMINA & ALUMINIUM SOCIETY (IBAAS)

IN ASSOCIATION WITH INDIAN INSTITUTE OF METALS (IIM), GOA CHAPTER





SECOND CIRCULAR MAY, 2024

**PRESENTS** 

12<sup>TH</sup> INTERNATIONAL BAUXITE, ALUMINA & ALUMINIUM CONFERENCE & EXHIBITION

# **IBAAS-IIM 2024**

**ALUMINIUM INDUSTRY-VISION 2030** 

Birla Institute of Technology & Science, Pilani K K Birla Goa Campus, Goa

SEPTEMBER 25-27, 2024



# Invitation

We are delighted to extend our warm invitation to you for the 12<sup>th</sup> International Bauxite, Alumina & Aluminium Conference & Exhibition (IBAAS-IIM 2024), organised by IBAAS in collaboration with the Indian Institute of Metals (IIM). The conference is scheduled to take place during September 25-27, 2024, at the picturesque location of Goa. The theme of the conference is "Aluminium Industry – Vision 2030".

### **Objective of the Conference:**

- Develop a road map for Bauxite, Alumina and Aluminium industry in India.
- Provide a platform for primary and secondary aluminium producers to share knowledge and review latest developments in the entire value chain of Aluminium Industry.
- Application of Bauxite and Alumina in non-metallurgical industries.
- Aluminium Industry 4.0.
- Decarbonization and Green Aluminium.
- Aluminium recycling industry.

The conference will bring together industry leaders, experts, researchers, professionals, technology providers and equipment manufacturers from the bauxite, alumina, and aluminium sectors to deliberate on the current status of this industry.

Best Regards, International Bauxite, Alumina & Aluminium Society (IBAAS) & Indian Institute of Metals (IIM) IBAAS-IIM 2024



# **Organizer**



# **International Bauxite, Alumina & Aluminium Society**

**Co-Organizer** 



Indian Institute of Metals (IIM), Goa Chapter

**Gold Sponsors** 





**Silver Sponsor** 

Metso

**Media Partners** 









# **Participating Companies**











































































# **About IBAAS**



IBAAS, International Bauxite, Alumina & Aluminium Society was set up by professionals active in various fields of aluminium industry and is registered in India Registration No.MAH-820/12 (N). The society has vast experience in organizing conferences on bauxite, alumina and aluminium in India, China and Guinea.

IBAAS has successfully organized Eleven International Aluminium Industry events in Asia and Africa during the period 2012-2023. Details of these past IBAAS International conferences can be downloaded from the IBAAS website <a href="http://www.ibaas.info/">http://www.ibaas.info/</a>.

### **About IIM**



The Indian Institute of Metals was formed in 1945 to provide a professional body for metallurgists in India. The Institute has since grown to over 10,000 members. It is recognized as one of the premier metallurgical organizations in the world, with activities including organizing conferences, conducting research, and publishing materials related to metallurgy and allied technologies. The organization was established to undertake key activities in the space of metallurgy in India.



#### **Patrons**

- Mr. Satish Pai, Managing Director of Hindalco Industries Ltd
- Dr. Anupam Agnihotri, Director of JNARDDC, India
- Prof. Suman Kundu, Director of BITS-Pilani, Goa
- Prof. B S Murty, Vice President & Chairman: Metal Science Division, Indian Institute of Metal (IIM)
- Mr. Bibhu Mishra, Advisor of HINDALCO, India
- Mr. Errol Jaeger of JAELEM Engineers, LLC
- Dr. Vilas Tathavadkar, Chief Technology Officer (Aluminium upstream and Copper) of Hindalco Industries Ltd

#### **Technical Committee**

- Dr. T.R. Ramachandran
- Dr. K P Jayadevan
- Prof. Gautam Bacher
- Mr. Harish Talreja
- Mr. Gyorgy Banvolgyi
- Dr. Amit Chatterjee
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- Mr. Ram Narayanan
- Mr. Kausikisaran Misra
- Mr. Abhijeet Bandi
- Mr. Sankar Sankaranarayanan
- Mr. Kiran Deshpande

#### **Organizing Committee**

- Dr. M K Roy
- Ms. Priyanka Jadhav
- Brig. Arun Ganguli
- Ms. Kabita Nandi
- Ms. Piyal Sen Gupta
- Mr. R.L. Bhatia
- Mr. Hiresh Shrirame

#### **Convener**

Dr. Ashok Nandi

#### **Co-Convener**

- Prof. Varinder Singh
- Prof. D M Kulkarni



# **Interesting Topics**

- Decarbonization of Alumina Calcination: Current Status and Path Forward by Edgar Gasafi of Outotec GmbH & Co.KG
- ➤ A Step Towards Net Zero by Christophe BOUCHE of FIVES
- > Hydrogen on Demand from Aluminum A Massive Growth Opportunity for the Industry by Kurt C. Koehler of AlGalCo-Hydrogen on Tap
- > Aluminium Via Chlorination of Bauxite by Sachin Arya of Gharda Scientific Research and Foundation
- > Almatis: Igniting India's Metal Industry Vision 2030 with Tabular Alumina and Beyond
- ➤ Conservation of Energy in Al Cast House Technology Advancement to Overcome Challenges by Shibu Mathew of BECHTEL
- > Nalco Water's New Hydroximate Flocculant Application on Settler by Shounak Banerjee of Nalco Water Pvt. Ltd.
- How Systematic Evaluation of Bauxite Deposit Helps in Optimizing Resources and Grades? by Ashok Nandi of IBAAS
- > The Enduring Role of Rotary Kilns in Specialty Alumina Manufacturing by Chandrakala Kari of Hindalco Industries Limited
- > Fostering Sustainable Futures in Belagavi Alumina Refinery through Circular Water Reliance by Santanu Dey of Hindalco Industries Limited
- Modern Concept for the Desanding of Red Mud by Thomas Baumann of AKW Apparate + Verfahren GmbH
- > Investigation of CO2 Adsorption Capacity and Kinetics of Feed and Mechanically-Activated Red Mud by Suman of AcSIR-Academy of Scientific and Innovative Research
- > Adoption of Chemical Aid for Fugitive Red Mud Dust Emission Control Ensuring Safe and Sustainable Red Mud Management by Santanu Dey of Hindalco Industries Limited
- > Iron extraction from Red Mud to Produce Green Steel by Hydrogen plasma by Saprativ Basu of Vedanta Aluminium Ltd
- Utilization of Bauxite Residue for Road Construction by Vaishali Surawar of Hindalco Industries Limited



- ➤ Lab Corrosion Resistance Testing of Silicon Carbide Sidelining Materials by Andrey Yurkov of Mendeleev University of Chemical Technology
- > Anode Quality Improvement Method By Optimizing C.P.Coke Specifications by Chandrasekhar Kalingiri of NALCO
- Specific AIF3 Consumption Reduction in Hirakud Smelter by Debasish Mallik of Hindalco Industries Limited
- > Refractories for Anode Baking Furnace by Gaurav Sinha of Calderys India Refractories Ltd.
- Beyond Traditional Binders: For Sustainable Carbon Anode Manufacturing by Sheetal Gupta of Aditya Birla Science & Technology Company Pvt. Ltd.
- > Sustainable Indigenous Pot Control System for Hirakud Smelter by Atanu Maity of Hindalco Industries Ltd
- Reduction of Melt Loss in Aluminium Casting by Sanjay Chaturvedi of Mahan Aluminium
- Energy Reduction Through Copper Insert Collector Bar in Low Amperage Pots by Niraj Raj of Aditya Birla Science and Technology Company (P) Ltd
- > Development and Outlook of Aluminum Recycling Industry in China by Xiangwen He of China Non-ferrous metals Processing Technology Co., Ltd.
- Evaluation of Microstructure and Properties of 3D-printed AlSiMg Components Subjected to Shock Absorption Test by Deepak Adhikari of CSIR – Institute of Minerals and Materials Technology
- Accelerating Aluminium Alloy Development Through ICME by Peeyush Mishra of Vedanta Aluminium Ltd.
- Deep Drawing and Anodizing Quality Improvement in AA3003 Ally Sheet by Anirban Giri of BALCO
- > Transforming Aluminium Extrusion: Leveraging Digital Transformation for Operational Excellence by Keerthan Jayaramu of Bhoruka Extrusions Pvt. Ltd.
- > Industry 4.0 initiatives for Digitalizing Aluminium Manufacturing by Saprativ Basu of Vedanta Aluminium Ltd.
- > Optimizing Casting Process Parameters by Using Design of Experiments and Machine Learning & Artificial intelligence by Jagadish Achinadka of q-Maxim LLP
- > Is Sustainability a Myth Without Energy Savings? by Errol Jaeger of JAELEM Engineers



- > Greening the Aluminium Industry: What Role for the Social Sciences? by Simon Lobach of Centre for International Environmental Studies / Geneva Graduate Institute
- Empowering Tomorrow: Unveiling the Potential of Aluminium Air Batteries for Sustainable Energy Solutions by P. Pradeep of Vedanta Aluminum
- ➤ Navigating the Future: Building Your Sustainability Roadmap in the Aluminum Industry by Rashmi Singh of enexion Consulting Private Limited
- Carbon Footprint Reduction by High Dense Bauxite An Alternative Refractory Garde Raw Material of Fused Corundum by J.P. Nayak of TRL Krosaki Refractories Ltd.
- > Biomass Pyrolysis for Sustainable Decarbonisation of Aluminium Industry by Suhas Dixit of APChemi Private Limited; SUS
- ESG in Aluminium value chain as per SEBI requirements by Gangaa C SHARMA of CETIZION Verifica Private Limited

### **Special Technical Sessions of the IBAAS-IIM 2024 Conference**

- Special session on Bauxite, Alumina, Aluminium and Raw Materials Market Trends by
   CRU
- Decarbonisation of Alumina & Aluminium Production to be co-ordinated by Dr. Amit
   Chatterjee
- Aluminium Industry 4.0 to be co-ordinated by Mr. Bibhu Mishra
- One of the Alumina sessions to be co-ordinated by Mr. Kausikisaran Misra
- One of the Aluminium Smelter sessions to be co-ordinated by Mr. Senthil Nath
- One of the Aluminium Downstream sessions to be co-ordinated by Mr. Harish Talreja
- Session on Aluminium Marketing by Mr. Ram Narayanan



#### **Subthemes of the IBAAS-IIM 2024 Conference**

#### **Bauxite-Alumina**

- Optimization of bauxite resources and grades
- Sustainable mining practices
- Technological advancements in alumina production
- Decarbonization of alumina production
- Future trends and disruptive technologies
- Non-metallurgical bauxite and alumina
- Valorization of bauxite residue (red mud)

# **Aluminium Smelting**

- Decarbonization route for green aluminium production
- Modelling & simulation studies
- Energy efficiency & environment control
- Digital transformation for operation excellence
- Digital twins
- Anode technology
- Waste management & utilization.

#### **Aluminium Downstream**

- Advances in aluminium rolling
- Advances in extrusion technologies
- Decarbonization of aluminium downstream operations
- Aluminium Industry 4.0
- Aluminium alloys, processing & characterization
- Recycling, & sustainability

# **Conference Highlights**

#### Pre-Conference Workshop

Department of Mechanical Engineering under the umbrella of Goa Chapter of Indian Institute of Metals (IIM) along with International Bauxite, Alumina and Aluminium Society (IBAAS) has planned a one-day workshop on basic and advanced 3D–Printing of polymers and metals. The workshop is planned on 24–September, 2024 day before the 12<sup>th</sup> IBAAS-IIM Conference at BITS Pilani, K K Birla, Goa Campus, Goa.

The tentative program of the 3D-Printing workshop is available on the IBAAS website. The link is given below:

http://www.ibaas.info/pre-conference-workshop

Interested delegates are requested to contact Prof. D M Kulkarni (<a href="mailto:dmk@goa.bits-pilani.ac.in">dmk@goa.bits-pilani.ac.in</a>) or Prof. Varinder Singh (<a href="mailto:vsingh@goa.bits-pilani.ac.in">vsingh@goa.bits-pilani.ac.in</a>) with CC to info@ibaas.info



# **Post Conference Visit**

A post conference visit to the HINDALCO Belagavi Alumina Refinery, Karnataka will be organized on September 28, 2024 for a maximum of 30 persons. Interested delegates are requested to contact the IBAAS office for details and registration. A fee of **Rs.10,000 (or US\$125)** +18% GST will be charged for the organization of this tour to Karnataka.

# **Conference Venue**

The IBAAS-2024 Conference & Exhibition will be held at the BITS Pilani K K Birla Goa Campus.



**Contact details:** 

Birla Institute of Technology & Science, Pilani

K.K. Birla Goa Campus

Address: NH 17B, Bypass, Road, Zuarinagar, Sancoale,

Goa 403726 Website:

https://www.bits-pilani.ac.in/goa/

# Accommodation

There are several hotels available near the conference venue of BITS, Goa. The list of Hotels with the room tariff are available on the IBAAS website. The link is given below:

http://www.ibaas.info/accommodation-ibaas-2024



# **Important Dates**

#### Deadlines for submission of final manuscript and presentation

Final manuscript: 30<sup>th</sup> June, 2024

Presentation: 30<sup>st</sup> July, 2024

Authors can submit the abstract, paper, or presentation online. Please visit the IBAAS website (http://www.ibaas.info/) for submission.

For young specialists, research scholars and students, a special Poster Session will be organized at the venue of conference.

#### **Language**

The language of the Conference is English. Papers will be published in the Proceedings Volume in English.

#### **Invitation Letter**

If requested by participants, an official invitation letter would be organized by IBAAS.

# **Proceedings**

Selected papers will be published in the form of PROCEEDINGS (BINDER Volume 12) and a soft copy will be made available to all the delegates during the Conference.

# **Conference fees**

#### **Delegate Fee**

Please find below the fees for delegates, paper presenters and student/research scholar. Delegates from India and other countries can pay in INR and US\$.

	Participants	Organizational Fee	
		INR (₹)	US\$
1.	General Delegates	30,000	400
2.	Paper Presenters	15,000	200



3.	Government R&D Institutes / Government Officials	15,000	200
5.	Students/Research Scholar	7,500	100
6.	Accompanying Spouse	7,500	100

- ✓ Delegate fee includes conference materials, lunches, dinner and tea/coffee.
- ✓ Extra 18% GST will be applicable on both INR and US\$.
- ✓ Interested students and research scholars should provide their poster presentations during the conference.

In case of outstanding papers by Academia and R&D Institutes, committee may review and consider a registration fee of only Rs. 7500 for paper presentation.

# **Sponsorship**

Sponsoring this IBAAS-IIM 2024 International Event will provide the opportunity to highlight your company profile and gain unparalleled access to the key decision makers in this industry.

The sponsorship packages available are:

# Platinum Sponsor: Rs. 11,00,000+18% GST or US\$14,000+ 18% GST

- 1. About 30-minute presentation on the first day of IBAAS conference.
- 2. Chairman of one session
- 3. A standard stall
- 4. Company logo on IBAAS webpage with a link.
- 5. Company name and logo on background board of conference venue, advertisements and conference documents.
- 6. Company name in all the publications of IBAAS.
- 7. Sponsorship highlighted in updated conference circular that will be sent to all the aluminium companies.
- 8. Projection of company name and logo in panel hall during tea break.
- 9. Full page coloured advertisement in conference souvenir (booklet).
- 10. Conference registration for 8 delegates included.

#### Gold Sponsor: Rs. 8,50,000+18% GST or US\$11,000+18% GST

- 1. A 25-minute presentation on the first day IBAAS conference.
- 2. A standard stall
- 3. Company logo on IBAAS webpage with a link.
- 4. Company name and logo on background board of conference venue, advertisements and conference documents.
- 5. Company name in all the publications of IBAAS.



- 6. Sponsorship highlighted in updated conference circular that will be sent to all the aluminium companies.
- 7. Projection of company name and logo in panel hall during tea break.
- 8. Full page coloured advertisement in conference souvenir (booklet).
- 9. Conference registration for 5 delegates included.

#### Silver Sponsor: Rs. 7,50,000+18% GST or US\$ 10,000+18% GST

- 1. A 20-minute presentation on the first day IBAAS conference.
- 2. Company logo on IBAAS webpage with a link.
- 3. Company name and logo on background board of conference hall, advertisements and conference documents.
- 4. Company name in all the publications of IBAAS.
- 5. Sponsorship highlighted in updated conference circular that will be sent to all the aluminium companies.
- 6. Projection of company name and logo in panel hall during tea break.
- 7. Full page coloured advertisement in conference souvenir (booklet).
- 8. Conference registration for 3 delegates included.

# Support Sponsor: Rs. 5,00,000+18% GST or US\$ 7,000+18% GST

- 1. Company logo on IBAAS webpage with a link.
- 2. Company name in all the publications of IBAAS.
- 3. Sponsorship highlighted in updated conference circular that will be sent to all the aluminium companies.
- 4. Projection of company name and logo in panel hall during tea break.
- 5. Full page coloured advertisement in conference souvenir (booklet).
- 6. Conference registration for 2 delegates included.

#### Conference Dinner Sponsor: Rs. 4,00,000+18% GST or US\$ 5,000+18% GST

- 1. Company name and logo on banners at the venue.
- 2. Company logo on dinner coupon.
- 3. Company logo on IBAAS webpage with a link.
- 4. Company name and logo on background board of conference hall, advertisements and conference documents.
- 5. Company name in all the publications of IBAAS.
- 6. Sponsorship highlighted in updated conference circular that will be sent to all the aluminium companies.



- 7. Projection of company name and logo in panel hall during tea break.
- 8. Full page coloured advertisement in conference souvenir (booklet).
- 9. Conference registration for 2 delegates included.

### Conference Lunch Sponsor: Rs. 3,00,000+18% GST or US\$ 4,000+18% GST

- 1. Company name and logo on banners at the venue.
- 2. Company logo on lunch coupon.
- 3. Company logo on IBAAS webpage with a link.
- 4. Company name and logo on background board of conference hall, advertisements and conference documents.
- 5. Company name in all the publications of IBAAS.
- 6. Sponsorship highlighted in updated conference circular that will be sent to all the aluminium companies.
- 7. Projection of company name and logo in panel hall during tea break.
- 8. Full page coloured advertisement in conference souvenir (booklet)
- 9. Conference registration for 2 delegates included.

# **Exhibition**

At the venue of the IBAAS-IIM 2024 conference, an exhibition will be organized showcasing the developments of the aluminium industry in India and the world over.

Fully furnished aluminium framed stalls of 2m x 2m size would be available for interested companies. More than 200 delegates from India and abroad are expected to participate in this International mega event.

The tariff for the exhibition stall is as follows:

Sr.No.	Exhibition module	Tariff for 3 days conference	
		INR (₹)	US\$
1	1 stall	300,000	3,600
2	2 stalls	500,000	6,000
3	3 stalls	600,000	7,500

- ✓ The exhibitor will get 2 free delegates on registration of each stall.
- ✓ Extra 18% GST will be applicable on both INR and US\$.



#### **Advertisement**

A Souvenir (booklet) will be published containing company profiles and advertisements.

The tariff is as follows:

Sr. No.	Advertisement in Conference Souvenir	Fee	
		INR (₹)	US\$
1	Back Page Cover (Coloured)	120,000	1,700
2	Front inside Page (Coloured)	96,000	1,400
3	Back inside Page (Coloured)	72,000	1,000
4	Full Page (Coloured)	60,000	900
5	Half Page (Coloured)	48,000	700
6	Black & White (Full Page)	48,000	700

- ✓ For Indian companies extra 18% GST will be applicable.
- ✓ For Foreign companies No GST is applicable.

# **Mode of Payment**

A new payment gateway is established for IBAAS conferences and exhibition. A new company named as INSTITUTION OF BAUXITE ALUMINA AND ALUMINIUM STUDIES PVT LTD. (IBAAS) has been set up for this purpose. The Registration No. of this company is U74999MH2020PTC338118 and the Permanent Account Number (PAN) is AAFCI5966F and the GSTIN is 27AAFCI5966F1ZA. Kindly use this new payment gateway for all the IBAAS remittances.

The Indian companies / delegates can pay registration, sponsorship, advertisement and exhibition fee in one of the following ways:

Payment to the Bank account of IBAAS, India:

• By wire / Internet transfer to IBAAS Current Account

Account No. 005905020300

Bank name: ICICI Bank (Nagpur Civil Lines)

**SWIFT CODE: ICICINBBCTS** 

RTGS/NEFT IFSC code: ICIC0000059



- By multicity cheque or demand draft in the name of "INSTITUTION OF BAUXITE ALUMINA AND ALUMINIUM STUDIES PVT LTD" and send it by post to IBAAS, Row House A/5, Rajat Utsav II Kachimet, Amravati Road, Nagpur 440033, India.
- Payment can also be made by Indian companies and delegates through the QR code given below:



The foreign companies / delegates can pay their registration, sponsorship, advertisement and exhibition fee in the following way:

• By wire / Internet transfer to IBAAS Current Account

Ultimate Beneficiary:

Account Number: 005905020300

Account Name: INSTITUTION OF BAUXITE ALUMINA AND ALUMINIUM STUDIES PVT

LTD

Beneficiary Bank: ICICI Bank Ltd, Mumbai (India)

ICICI BANK SWIFT CODE: ICICINBBCTS

Corresponding/Intermediary Bank Name: J P MORGAN CHASE BANK, NEW YORK

Corresponding Bank Swift Code: CHASUS33XXX

Purpose: Advertising, trade fair service

Receipt of payment will be provided by e-mail and hardcopy will be sent by post/courier.

Please confirm your payment on e-mail <u>info@ibaas.info</u> and contact us for further queries on payments.

# **Contact Information**

#### **IBAAS Office**

A-5, Rajat Utsav II, Kachimet, Amravati Road, Nagpur-440033, India

Web site: <a href="http://www.ibaas.info/">http://www.ibaas.info/</a>

Office E-mail: info@ibaas.info; info.ibaas@gmail.com



#### **Contact Persons**

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President & Conference Convener

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# **Prof. Varinder Singh**

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#### Prof. D M Kulkarni

Senior Professor, BITS-Pilani & Co- Convener

Cell No.: 0832 2580401 dmk@goa.bits-pilani.ac.in

#### Mr. Hiresh G. Shrirame

Geologist

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You are requested to send all materials related to Conference "IBAAS-IIM 2024", to the e-mail addresses shown above. Your participation in the Conference will be highly appreciated.

# **Organizing Committee**

IBAAS-IIM 2024

# IBAAS-IIM 2024 "Aluminium Industry – Vision 2030"

# **REGISTRATION FORM**

Title-(Prof/Dr/Mr/Mrs/Ms)		
Name of the Participant		
Position		
Name of the Organization/Institute / Company / Industry		
Address		
City	State	
Zip Code	Country	
Email		
Telephone	Mobile No.	
Require Visa Support Letter  Paper Detail (For Authors only)		
Paper Title		
Payment Detail		
Mode of Payment: Bank Transfer / Cheque / DD / Cash		
Hotel Accommodation		
Require Hotel		
Accommodation Choice, if any:		
Post Conference Plant Visit		
Date:	Signature:	