



IBAAS-JNARDDC 2022 - A Brief Summary of the Conference at Courtyard Marriott, Raipur (September 14–17, 2022)

IBAAS organized 10th International Conference and Exhibition (IBAAS-JNARDDC 2022) during September 14 - 17, 2022 at Courtyard Marriott, Raipur, India. The theme of the IBAAS-2022 conference was "**Sustainability Challenges of Bauxite, Alumina & Aluminium Industry**". This Conference covered complete value chain from bauxite to aluminium downstream products in four days of interactive meet. About 200 delegates, representing bauxite, alumina and aluminium industry, research organizations, technology / equipment suppliers, service providers, and academic institutes participated in this conference. The conference and networking sessions were followed by visit to the HINDALCO Jharsuguda smelter (Aditya Aluminium at Lapanga) on 18th September, 2022. The conference was inaugurated by Mr. Bibhu Mishra, President & Head, Manufacturing Centre of Excellence, Hindalco Industries. Dr. Anupam Agnihotri, Director, JNARDDC, Ms. Marieke van der Mijn, Director of Partnerships, Aluminium Stewardship Initiative (ASI) and Ms. Lavanya Kugaswaran, Environment Program Manager, International Aluminium Institute (IAI), London were guests of honor.

The inaugural function was conducted by Mr. Sankaranarayanan. Dr. Ashok Nandi, Convener of the Conference, highlighted the journey, growth and contribution of IBAAS to Aluminium industry. Ms. Marieke of ASI highlighted the activities of their International organization, certification process and



invited all the delegates to participate in ASI workshop, which was held on 16th September at the same venue. Ms. Kugaswaran introduced the International Aluminium Institute and showed various publications on bauxite, alumina, red mud and aluminium available on their website. Dr. Agnihotri spoke on the responsibility and vision of Indian Aluminium industry, particularly with reference to celebration of 75 years of India's independence. According to him, the demand of aluminium in India is expected to grow at 5-8% per annum and this will be driven by growth in sectors like electricity, transport, building, construction and packaging. The domestic Aluminium consumption is expected to double from ~4 MT in FY22 to ~8 MT in FY32. Dr. M.K. Roy, Secretary, IBAAS, proposed Vote of Thanks.

As many as 60 technical papers were presented in the conference during the deliberations covering wide range of subjects from Bauxite Beneficiation to Aluminium Downstream products. The presentations were grouped into following sessions:

- Key Note Addresses and Presentations by Sponsors on First Day
- Parallel Technical Sessions on Second Day
 - Bauxite, Non-Metallurgical Bauxite-Alumina & Bauxite Residue.
 - Alumina.
 - Aluminium Smelting & Downstream.
- Special Session on Sustainability by Aluminium Stewardship Initiative and Remaining Parallel Technical Sessions.



- One day Special Session on Non-Ferrous Metal Recycling in India by JNARDDC.

Several leading experts of India and abroad presented papers in this International event. Notable among them are Mr. Alessio Angelo Scarsella, Director of Light Metals of Outotec GmbH & Co. KG, Germany, Dr. Vilas Tathavadkar, Chief Technology Officer (Aluminium Upstream & Copper) of Hindalco Industries Limited, India, Mr. Hans Sauer, CEO of Clearguard, Australia, Mr. Jürgen Hahn, Director Global Sales of BOKELA GmbH, Germany, Mr. Sebastien Raymond Georges Gauguier, President of Fives Solios, France, Mr. Adrien Dagallier of Gaudfrin, France, Ms. Silvia Farias, Senior Mining Consultant of Hydro, Brazil, Mr. Diego Rosani of International Aluminium Institute, UK, etc.

IBAAS technical committee and Chairmen of various sessions selected best paper, presented by young scientists / Engineers, for award and they are listed below:

- **Non-Metallurgical Bauxite-Alumina**

- Synthesis of 3N Pure Alpha Nano-Alumina from Aluminium Foil by Ms. Pooja Yadav, SRF of JNARDDC, India.

- **Alumina**

- Mixing Behavior Analysis and its Effect on Precipitation Circuit Productivity by Abhishek Seth of Aditya Birla Science and Technology Company Pvt. Ltd, India.



➤ Aluminium Downstream

- Ramp up of Production and Quality Improvement Journey of Alloy Ingot for BALCO by Ms. Dyuti Mandal of BALCO, India

Main points and outcome of the conference are given below:

- ❖ Mr. Bibhu Mishra of HINDALCO presented the Digital Strategy, Its Deployment & Elements for Success: HINDALCO. Further Hadja Rayhanatou Diallo, Deputy General Manager of Soguiipami (Guinean State Mining Company) highlighted the major role of Soguiipami in the Development of Bauxite Resources in the Republic of Guinea.
- ❖ The Dinner Sponsor of IBAAS-2022 **Ashapura, India** has shown their bauxite mining, bauxite stocks and starting of National Laboratory of Geology in Guinea. **Nalco Water, India** Lunch Sponsor presented their paper. Co-Supporter of this conference **Gaudfrin, France** showcased their filtration technology and equipment range.
- ❖ The second day of the conference was devoted to series of technical papers in 3 parallel sessions namely Bauxite, Non-metallurgical bauxite-alumina and red-mud; Alumina and Aluminium Smelting and Downstream. About 60 high quality technical papers were presented by Engineers / Scientists of leading primary aluminium producers, R&D Institutes, technology and equipment suppliers. Some among them are as follows:
 - Freshwater Free Alumina Refinery by David brodie of Worley, Australia.



- Recovery of Mineral from Red Mud and Disposal Solution to Provide Green Footprint to Alumina Industry by Subhasis Das of FLSmidth Private Limited, India.
- Tailings Management and Sustainability by Silvia Farias of Norsk Hydro, Brasil.
- A Way to Use Local Bauxite Resources and to be Independent by Yves Occello of Amber Development SAS, France.
- Improved Process Control Based on Near Infra-Red Online Analytics by Petra Mühlen of SpectraFlow Analytics Ltd., Switzerland.
- Make Your Anode Baking Furnace Smart and Greener by Christophe BOUCHE of Fives Solios, France.
- Operational Advances in Aluminium Cast Houses with In-Furnace Cameras and Laser Level Systems by Mark Bumford of RIA Cast House Engineering GmbH, Germany.

Important additions to this edition of the conference are the Worksop by Aluminium Stewardship Initiative on 16th September, 2022 for the first time in India and the brainstorming session on 'Non-ferrous Metal Recycling in India' by Jawaharlal Nehru Aluminium Research Development and Design Centre (JNARDDC) on 17th September 2022. There was also a post-conference visit to Hindalco's Lapanga Smelter Plant in Jharsuguda.

A cultural program of classical dances was organized on the first day evening. Apart from Lunch & Dinner Sponsors, the conference was supported by Bokela,



Germany and Gaudfrin, France. The Gold Sponsor of this mega aluminium event was Tokai Cobex, Germany.
