

REPORT OF IBAAS-JNARDDC ONLINE CONFERENCE

NOVEMBER 4-6, 2020

The online aluminium conference organized by International Bauxite, Alumina & Aluminium Society (IBAAS) in association with JNARDDC was a grand success and concluded on 6th November 2020. About 20 papers were presented by leading International bauxite, alumina and aluminium experts from Australia, Canada, Germany, Hungary, Italy, Sierra Leone, UK and USA. About 416 participants from 160 odd companies joined in this International Aluminium webinar of IBAAS and JNARDDC.

In order to make this online conference interesting and useful for industry, papers were invited from selected International experts and leading aluminium companies. Whole webinar was divided in the 5 technical sessions and each session was followed by interactive online Questions and Answers session. The conference was overall coordinated by Dr. Ashok Nandi, President IBAAS and Dr. Anupam Agnihotri, Director JNARRDC. In the first session of Keynote addresses, speakers from Aluminium Stewardship Initiative, President & Head Manufacturing Centre of Excellence, HINDALCO, Director, JNARRDC and Deputy Secretary General, International Aluminium Institute, London set the tone for this International event. The main theme for this session was sustainability of aluminium industry in the world and how to make this more viable and explore potential of this important sector. Among all the metals, it is demonstrated that aluminium and downstream products have the unique growth potential and will be a metal of future thanks to its unique properties. The issues associated with the growth of aluminium industry in the world are highlighted in the presentation of Mr. Chris Bayliss of International Aluminium Institute, UK.

The second session on Bauxite-Alumina was coordinated by Mr. Mukesh Chaddha, where eminent alumina expert George Banvolgyi from Hungary talked about improved digestion process for alumina extraction. The General Manager of bauxite project of Sierra Leone has shown the viability of small alumina refinery for Africa, which may be applicable for Asian countries also. Mr. Ted Dickson from UK highlighted the present and future market potential of special grade hydrates and alumina products. The production of special value-added alumina materials can be a boon for the growth of medium and small-scale industry in India.

The third session, coordinated by Dr. Suchita Rai, consisted of presentations on green alumina concept by alumina technology supplier (Worley) of Australia, which evoked keen

interest of delegates. All the efforts are being made in the world to reduce the carbon footprint of alumina and aluminium production to meet the target of zero carbon. The next presentation of Outotec, Germany has shown advanced equipment for filtration and evaporation used in alumina refineries. In the last presentation of this session AKW, Germany has demonstrated latest developments in bauxite beneficiation process. Many scientists / engineers working in Indian aluminium industry had asked several questions to these International experts and companies.

The fourth session on aluminium smelter was coordinated by Dr. Agnihotri, where leading expert from Germany talked about the levers for CO₂ abatement in primary aluminium production, which is current topic of discussion in the world and concern for the survival of this industry. This was followed by paper by Tokai Cobex, Germany on latest cathode development of Hall Heroult process of aluminium production. OSisoft Canada, one of the sponsors of this conference, talked about 'Smelter of the Future - How to succeed in Digital Transformation'. In the last presentation of this session, Les Edwards of Rain Carbon Inc. USA talked about their new plant being set up in Visakhapatnam to produce calcined petroleum coke for the aluminium smelting. Several queries of participants were answered by experts during live Q&A session and lively technical discussions were held.

The fifth and the last session of IBAAS-JNARRDC online conference was on Aluminium Downstream, coordinated by Mr. R.N. Chouhan, Principal Scientist of JNARDDC. Here joint President of HINDALCO talked about the new applications of aluminium in India keeping in view the actual requirements in our country. The paper was highly appreciated as this shows the path for new applications of aluminium products to reduce the carbon footprint and provide suitable materials for transport and defence sectors. This is followed by the presentation on aluminium recycling, which is a growing area in India and issues faced by small producers. The next presentation on aluminium extrusion in India discussed in detail the technical issues associated with quality of aluminium billets and measures to be taken by primary producers. After this, Mr. Rajeev Kapoor, Plant Head, TATA Advanced Systems Ltd., Nagpur delivered the presentation on 'Aluminium opportunity & challenges in the AEROSPACE industry in India', which has given insight of this industry and challenges being faced by aluminium with increasing use of advance composites in modern planes. The last presentation of this session was delivered by Mr. Alberto Ghisetti of Continuus-Properzi

S.p.A., Italy, this paper has shown the new technological developments and solutions in aluminium ingot and rod production. All the presentations evoked wide interest, which was evident in the Q&A session. Taking advantages of these presentations and online meetings, the discussions were held by aluminium industry for joint work and developing new emerging technologies in Indian plants.

The IBAAS-JNARDDC conference was organized on Microsoft Team platform from the premises of JNAARDC, which has excellent facilities for online conference. All the scientists and engineers of JNARDDC and IBAAS have actively participated in this online conference and interacted with International experts. Ms. Priyanka Jadhav and Mr. Krunal Lacharwar of IBAAS have carried out all the base work for this conference and actively supported the organization of this event. The next International conference and exhibition of IBAAS will be held during October 2021 in Raipur city in cooperation with JNARDDC.
