

**ICSOBA**  
*The Aluminium Industry Forum*



**International Committee for Study  
of Bauxite, Alumina and Aluminium**

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The background features a large, abstract graphic of a powder explosion. The explosion is centered and radiates outwards, with a mix of blue and pink/purple hues. The particles are most dense in the center and become more sparse towards the edges. The overall effect is dynamic and energetic.

# Newsletter

**Volume 25**

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*In case you consider publishing in this forum, please contact the editors before writing your article.*



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## FOREWORD



Up to the last week of August we, ICSOPA Directors, were hoping to maintain ICSOPA 2021 as a hybrid (combined physical and virtual) event taking place in Manama, Kingdom of Bahrain, under the Host Sponsorship of Aluminium Bahrain.

After the successful Virtual ICSOPA 2020, our decision regarding the format of the upcoming ICSOPA 2021 was a no brainer.

The messages from our members through the post event satisfaction survey was loud and clear: everyone aspired to meet physically after so many months of travel restriction and conference calls “overdose”. At the same time, the lesson learned from ICSOPA 2020 clearly support the decision to add a virtual component to such “traditional” conference format as an attractive and efficient way to share knowledge with an ever-increasing wider audience who would never have the opportunity to travel to an International Conference.

And, last but not least, we were blessed to have a Host Sponsor, Alba, fully engaged and motivated to support us in this endeavor.

All along the year we monitored the health and travel conditions, both in Bahrain, through regular call with Alba leadership, and throughout the world. After several months of hope, both the possibility and the willingness of travelling of our members stays questionable. This was confirmed by the undisputable results of the “intention survey” carried out late August.

In parallel, ICSOPA 2021 program was shaping up and promised a highly attractive conference with 10 distinguished Keynote Speakers and more than 100 technical abstracts submitted.

Based on this, we therefore took the decision **to shift ICSOPA 2021 to a full virtual format.**

We are very thankful to Alba to continue its unfailing support to the conference.

From last year conference members feedback, we contracted vFairs as platform provider to ensure a step change capability with regards to interactivity between speakers, exhibitors and delegates. This was the main point for improvement identified in the post ICSOPA 2020 satisfaction survey.

At a time when the energy transition outlook and sustainability issues are directly impacting the future of our industry, ICSOPA, the Aluminium Industry Forum, is inviting you not only to listen to highly knowledgeable speakers, but to voice your view and interact with the whole industry community.

For closing, take advantage of the low level of registration fees (delegates, sponsors, exhibitors) and absence of travel cost to join us at Virtual ICSOPA 2021 and support our contribution for aluminium industry.

Stay safe!

With my best regards,

*Dr. Claude H. Vanvoren*  
*Chairman of ICSOPA*

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## UPCOMING EVENT: Virtual ICSOBA-2021

### 22 – 24 November 2021



**39<sup>th</sup> CONFERENCE AND EXHIBITION**

**Online ICSOBA - 2021**

**22 - 24 November 2021**

**ICSOBA**  
The Aluminium Industry Forum  
(Since 1963)

**hosted by**  
**alba**  
Aluminium  
for the world

[www.icsoba.org](http://www.icsoba.org) **BAUXITE - ALUMINA - ALUMINIUM** [www.albasmelter.com](http://www.albasmelter.com)

In all ICSOBA materials available to the public the ICSOBA-2021 conference in Bahrain has been advertised and planned as a hybrid event, with the physical part to take place in **Manama, Bahrain** for participants that will be able to travel and with virtual part online for participants that will not be able to travel. We all hoped for a return to normality in our professional lives by the end of 2021.

Sadly, it remains clear at present that the risk of travel and gathering is elevated and that Covid-19 is set to disrupt travel for years to come. All around the world, a jumble of rules causes confusion, chokes tourism and leaves businesses struggling to work out who can do what and go where. The chaos is unlikely to subside soon, as new outbreaks emerge and governments struggle to co-ordinate policy.

There is no question that the present situation causes a total change of perception of the world on the way we conduct business and travel. What is more, it will take a long time before this perception is going to change and people will start thinking differently. Any travel will remain highly restricted. These are unprecedented times for everybody.

Of course, the ICSOBA 2021 organizing committee has been monitoring the situation all the time and extending the wait time for the travel conditions to improve was no longer an option. In a dedicated survey carried out very recently we asked the international community for opinion on the potential to travel. Corporate members, past exhibitors, past delegates and 2021 speakers were contacted and only 7% of the people taking survey seem to be ready to travel. Consequently, **the decision to cancel the hybrid format of the conference was made in favour of the virtual ICSOBA-2021 event.**



**ICSoba**  
The Aluminium Industry Forum  
(Since 1963)

**39<sup>th</sup> CONFERENCE AND EXHIBITION**  
*Virtual*  
**ICSoba-2021**  
**22 - 24 November 2021**

hosted by  
**alba**  
Aluminium  
for the world

[www.icsoba.org](http://www.icsoba.org) BAUXITE - ALUMINA - ALUMINIUM [www.albasmelter.com](http://www.albasmelter.com)

We would like to take this opportunity to thank all those who have communicated with us so far this year. In addition, we are deeply grateful to the partners and sponsors who have worked with us at all stages of this important industry event. Thank you for your patience and we look forward to continuing our work with all those involved as we announce a new form of the 2021 conference.

### **Conference Timing**

ICSoba website <https://icsoba.org/upcoming-icsoba-event-2021/> gives technical details of the conference and indicates the deadlines for submission of abstracts, papers and presentations as well as general readiness of the conference.

15 April 2021	●	Call for papers
30 June 2021	●	Abstract submission deadline
31 August 2021	●	Full paper submission deadline
15 September 2021	●	Program at a Glance Available Registration opens
30 September 2021	●	Presentation submission deadline
22 October 2021	●	Virtual Platform is on Deadline for Recorded Presentation Submission
1 November 2021	●	Final conference program available
22 November 2021	●	Opening of the Conference
25 December 2021	●	Virtual platform is available till this date

The submission of abstracts, papers and presentations is managed by ConfTool which is customized for ICSoba 2021 conference. The access to ConfTool is <https://www.conftool.net/icsoba2021/>. The use of templates facilitates the review and allows to have consistent formatting for the printed proceedings.

### **Virtual Platform**

The conference will cover Bauxite, Alumina, Bauxite Residue, Carbon for aluminium electrolysis, Aluminium production, and Aluminium Recycling. There will be parallel sessions

of technical presentations in separate rooms with Keynote presentations attended by all participants. Delegates and speakers will share their latest developments with live Q&A sessions among the delegates in a lively environment.

All participants will be able to connect to a virtual platform to attend the event live online, as well as on demand with a short delay.

A modern platform supporting such conference format, even if obviously not providing the face-to-face quality of interaction, will nevertheless be able to offer ICSOBA delegates, sponsors, and exhibitors a highly valuable experience.

For the Virtual ICSOBA 2021 Conference, ICSOBA contracted [vFairs](#) as platform provider. This choice was driven by two main criteria:

- the rating of this platform and its ability to handle the events
- its enhanced capability with regards to interactivity between speakers, exhibitors and delegates. This was the major point for improvement identified by to our member in the post ICSOBA 2020 satisfaction survey.

As a consequence, ICSOBA 2021 virtual platform will exhibit several major improvements in comparison to ICSOBA 2020:

- Interactivity between delegates and speakers:
  - TRAVAUX book, specific paper and presentation will be downloadable from the platform ahead of the conference
  - Questions could be raised to speaker ahead of their presentation through dedicated chatroom (example: Bauxite Residue, Carbon, ...)
  - During the conference, questions could be raised “live” using chat system
  - Both set of questions will be available to Session Chair to manage each technical session Q&A panel
  - Note: we elect to move from single speaker 5 minutes Q&A to 20 minutes Q&A panel with the 4 speakers at the end of each technical session to maximize interaction opportunities between delegates and speakers and encourage technical discussion around technical topics. Those discussions could then be continued in the networking lounge in a similar way as during a physical conference.
- Interactivity between delegates and exhibitors:
  - Each exhibitor will have a dedicated chatroom
  - Chat meeting and/or audio/video meeting could be booked
  - Exhibitor could contact delegate via chat system
- Interactivity between delegates:
  - Chat system will be available for connected delegates (offline delegates will see their message when they connect)

- Intuitive “interaction platform” available from Networking Lounge. The most efficient (and fun) way to mimic corridor informal discussion in a physical conference.

And, shortly after each live session, the “on demand” playback will be available.

The ICSOBA 2021 Virtual Platform is under construction, but you can already get a feel of it at: [39th International Conference and Exhibition - ICSOBA 2021 \(vfairs.com\)](https://vfairs.com).

The platform will open on Friday 22 October, i.e., one month before the conference. During that time, you will be able to download conference proceedings (TRAVAUX № 50) specific paper and corresponding presentations pdfs to raise questions to the speakers ahead of their presentation. Also, all registered delegates will be able to exchange chat messages. After the conference, the platform will still be open till 25 December 2021 for you to view “On Demand” the recorded presentations including the Q&A sessions.

We strongly believe in the conference success for a fraction of the cost, free of health risk and without travel and accommodation expenses.

### ***Program of the Conference***

The three-day conference will take place on 22, 23 and 24 November 2021. The conference will cover **Bauxite, Alumina, Bauxite Residue, Carbon for aluminium production, Aluminium and Recycling of aluminium** and will feature most known forms like live seminars, live discussions, and even a virtual exhibition.

#### **Conference topics**

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ICSOBA 2021 will explore the following key issues:

- Bauxite deposits
- Bauxite mining
- Alumina refining
- Carbon materials
- Primary aluminium
- Aluminium recycling
- Overcoming operational challenges
- New technology
- Greenfield and Brownfield activities
- Success stories in projects implementation
- Market scenarios
- Health, environment and safety

This conference is a great opportunity to communicate your achievements to the aluminium community and to meet other experts in the field, technology suppliers, equipment manufacturers and representatives of worldwide aluminium industry.

The entire conference will take place online. Due to different time zones, it is impossible to offer comfortable time-windows to all participants. The daily sessions will not be duplicated (see tentative agenda hereunder).

The speaker will not see the audience, but all participants will have access to the registered names and could contact each other through the platform chat system.

Papers (TRAVAUX book proceedings) and pdf presentations will be available for download from ICSOBA website according to our Knowledge Dissemination Policy. On-demand download of session presentations will be available from the conference platform to the delegates for a limited period.

Even if ICSOBA 2021 will not be a physical conference, networking opportunities will be maintained by supporting delegates interactions like chat, web meeting, etc. All other aspects of the conference will remain the same, i.e., abstract submission, full paper submission and peer-review process.

### ***Speaker Program***

The “Program at a Glance” is available on the ICSOBA website. Please consult it periodically as more details will emerge.

Virtual speakers will have to record their presentation according to ICSOBA guidelines and submit it for broadcasting at the conference, like it was done at ICSOBA 2020 virtual conference. The recording should be done using the zoom software, next downloaded to a link provided on the website. The webcasts will take place Monday 22 November to Wednesday 24 November. During the conference, and after the presentation each speaker will need to be online to answer questions.

According to the Tentative Speaker program the conference information video on Lobby and Auditorium main screens will take place on Monday, 22 November. As the program is different each day, please consult the details at the ICSOBA website at [www.ICSOBA.org](http://www.ICSOBA.org).

**There will be at least 3 keynote presentations every day of the conference. The confirmed keynote speakers are:**



**Green Aluminium and China.**

*Paul Adkins, Managing Director, AZ China Limited*



**Large scale green hydrogen production to help decarbonizing the aluminium sector.**

*Roland Héquet, Vice President Hydrogen Strategy & Origination, John Cockerill*



**The energy transition and the challenge of supply development.**  
*Julian Kettle, Senior Vice President, Vice Chair Metals and Mining, Wood Mackenzie*



**Alcoa's advance sustainably strategy: The Alcoa pathway to sustainability in the aluminum industry.**  
*Pascal Lavoie, Director - Smelting Manufacturing Excellence at Alcoa*



**Waste management in the Indian aluminium industry - key to circular economy.**  
*Manasa Mishra, Director (Project & Technical), NALCO*



**Sustainability in the aluminium industry – challenges and opportunities.**  
*Pernelle Nunez, Deputy Secretary General, Director – Sustainability, International Aluminium Institute, London, United Kingdom*



**Aluminium market outlook: A tectonic shift or a temporary blip.**  
*Uday Patel, Senior Research Manager, Global Aluminium Markets, Wood Mackenzie*



**ASI - Responsible production, sourcing, and stewardship of aluminium.**  
*Fiona Solomon, Chief Executive Officer, Aluminium Stewardship Initiative, Melbourne, Australia*



**Environmental, social and governance strategies should be central to African mineral value chains**

Souleymane Traoré, Managing Director, Compagnie des Bauxites de Guinée (CBG)



**Moving to CO<sub>2</sub>-neutral aluminium/ alumina production.**

Hans-Erik Vatne, Senior Vice-President, Chief Technology Officer, CTO, Norsk Hydro

The official program of the conference will be available on 1 November 2021. At present (September) the Organizers can confirm submission of 114 papers at the date of the deadline.

Status of abstracts and papers submissions in ConfTool on 1 October is as follows:

Session	Keynote	Bauxite	Alumina	BR	Carbon	Aluminium	Other
No of Submitted papers	10	5	23	19	11	45	1

The following companies have submitted their technical papers to the conference:

 جامعة أبوظبي Abu Dhabi University	 AKW Equipment + Process Design	 Alcoa	 altec A NEW WORLD OF ALUMINA
Abu Dhabi University	AKW Apparate + Verfahren GmbH	Alcoa	ALTEO
 Aluminium for the world	 asi Aluminium Stewardship Initiative	 ALVANCE	
Aluminium Bahrain	Aluminium Stewardship Initiative (ASI)	ALVANCE	Aushex
 Ban-Volgy Ltd	 BATHCO	 CAETE	 CHALCO
Bán-Völgy Limited Partnership	Bathco AG	CAETE Engenharia	CHALCO
 CLAUDIUS PETERS	 cba	 immt	 DTE DYNAMIC TECHNOLOGY EQUIPMENT
Claudius Peters	Companhia Brasileira de Alumínio	CSIR-IMMT	DT Equipment
 الإمارات العالمية للألمنيوم EMIRATES GLOBAL ALUMINIUM	 EIL	 EPIQ MACHINERIE / MACHINERY	 ETS
Emirates Global Aluminium	Engineers of India	EPIQ Machinery	ETS

			
Federal University of Pará	Fives Group	GeniSim	Hatch
			
Hindalco Industries Limited	Hydro	Indian Institute of Technology	International Aluminium Institute
			
Kalinga Institute of Industrial Technology	KU Leuven	Metso:Outotec	Moscow Lomonosov State University
			
MYTILINEOS	National Aluminium Company	National Technical University of Athens	NOVALUM
			
REEL International	REGAL	RiA Cast House Engineering	Rio Tinto Aluminium Pechiney
			
RUSAL	Russian Academy of Sciences	Siberian Branch of Russian Academy of Science	SINTEF
			
Suez	Tokai COBEX	TRIMET	UAE University
			
Universite du Quebec a Chicoutimi	Université Laval	University of São Paulo	University of Toronto
			
Ural Federal University	Vedanta Resources Limited	VITO	Votorantim
			
Wood Mackenzie	Worley		

We all realize that recycled aluminium will increasingly become a raw material in the aluminium manufacture, its importance will only grow with time, as will the awareness of its potential. There already are some events that specialize in covering the subject, but there is room for ICSoba to propose the subject of AI Recycling to its delegates. In this way the ICSoba

forum could offer them access to a wide spectrum of issues. The “Recycling” already appears as a subject proposed in the program of the ICSOPA 2021 conference, so it is a good beginning. However, recycling is not ICSOPA core business. Therefore, we assume that having a full session in 2021 might be too early. We will see how it goes. As just one paper has arrived, it is integrated with the Smelting & Carbon pillar. For the future events we already encourage the potential contributors to participate.

The ICSOPA event gathers scientists and engineers from all major players in the field of primary aluminium production. The papers are of high-quality and rigorously peer-reviewed by strong technical people and since 1963 published in the ICSOPA proceedings (Travaux). Recently the publications became searchable from [Google Scholar](#) and [ResearchGate](#) and are accessible from the ICSOPA website.

### **Technical Committee**

The paper review is made by ICSOPA Technical Committee under the leadership of the Program Director (Michel Reverdy) and Subject Organizers. Vinko Potocnik is the Deputy Program Director.

<b>Subject</b>	<b>Subject Organizer</b>	<b>Reviewers</b>
Keynote	Michel Reverdy	According to the subject
Bauxite, Alumina, Bauxite Residue	Andrey Panov Carlos Suarez Thymis Balomenos	Steven Healy, Andrey Panov, Bijoy Satpathy, Frank Feret, Georgy Banvolgyi, Thymis Balomenos, Stephan Beaulieu, Patrick James, Evandro Leao, Gokhan Demir, Helen Adamson, Ajamu Duncan
Aluminium Reduction Technology	Vinko Potocnik	André-Felipe Schneider, B.K. Kakkar, Dagoberto Severo, Kristian Etienne Einarsrud, Stephan Broek, Yasar Kocaefe, David Roth (Aluminium Recycling)
Carbon	Houshang Alamdari	Duygu Kocaefe, Gøril Jahrsengene

The review process assures high technical quality of papers and presentations, as well as uniform formatting, defined in the Templates.

### **Exhibition**

During the Conference, a virtual Exhibition of latest technologies, equipment, and other devices for the aluminium industry is planned (22 - 24 November). Exhibition will be in two forms: booth and a company presentation (video). Only 10 booth exhibition spots will be available in which the selected company information can be placed. Selected activities and realisations can also be presented and supported by documents, video, audio and chat. Dedicated web meetings with customers may be organised as well.

1. Each exhibitors' video will be of 5 minutes
2. The booth exhibitors will have 5-min presentations included in the price

3. Two companies will make their presentations at the beginning of each technical session
4. Each company presentation will take place once a day for a total of three
5. Each virtual exhibitor obtains 1 free delegate for the event (booth manager).

To book an ICSOPA 2021 virtual booth or to get further information about virtual booth, please contact: [claudivanvoren@icsopa.org](mailto:claudivanvoren@icsopa.org).

Please confirm your participation at the earliest.

### **Registration**

Please note that the conference registrations are already open. As in the past, the registration process is managed by ConfTool, which is customized for the ICSOPA 2021 Conference. The access to ConfTool is via ICSOPA website: <https://www.conftool.net/icsopa2021>.

Once registered, and provided that all your payments are cleared, your login detail to access the Virtual Conference Platform (username and password) will be send to you one month before the event.

### **Fees**

After registration you will receive an invoice for paying by credit card, PayPal, or wire transfer. ICSOPA (since 1963) is a non-profit organization, so the delegate fees are maintained low. This year the fees are on the whole low and highly encouraging to participate, so the organizers count on numerous participations of delegates from various environments, including universities. Publishing a paper with ICSOPA will be particularly advantageous for the authors, as the cost is exceptionally attractive. Access to the conference virtual venue, program, proceedings, and presentations is also included in the conference fee.

<b>PARTICIPANT</b>	<b><i>Fee in USD</i></b>
Keynote speaker	free
Delegate	400
Conference speaker	300
Student or retired delegate	150
Sponsor – gold (6 are available)	1,200
Sponsor – silver (6 are available)	800
Company presentation during the technical sessions (will be broadcasted 3 times during the conference, 16 slots available)	500
Exhibitor with booth + company presentation	2,000
Potential sponsors and exhibitors are welcome to enquire on respective conditions at <a href="https://icsopa.org/contact-us">https://icsopa.org/contact-us</a>	

The sponsors and exhibitor's registration are also available via the ConfTool.

## ***Sponsorship***

All sponsors will be promoted during the conference and the details will follow. Several organizations have already expressed interest in becoming sponsors, but the sponsorship campaign has only begun very recently. To become an ICSoba 2021 sponsor or to get further information about virtual booth, please contact: [claudivanvoren@icsoba.org](mailto:claudivanvoren@icsoba.org).

**Aluminium Bahrain (Alba)** is the event host sponsor this year conference. **Alba** is the world's largest aluminium smelter outside China and is recognized for technological excellence, innovative solutions, high quality products, outstanding technical services, and strict compliance to safety and environment regulations.

Alba currently produces more than 1.55 million tons per annum (2020) of high quality primary aluminium products in the Kingdom of Bahrain. Being in the heart of the resource rich Gulf region gives Alba a tremendous geographical advantage due to proximity to the markets of Europe, Southeast Asia and Africa.

Alba enforces strict environmental guidelines, maintains a high track record for safety, and is widely regarded as one of the top performers on a global scale. Consult further details about Alba at <https://www.albasmelter.com/>. Also, watch *Welcome to Bahrain 2021* video at: [https://www.youtube.com/watch?v=2A\\_IChNkGdo&t=1s](https://www.youtube.com/watch?v=2A_IChNkGdo&t=1s).

## ***Plant Visits***

We regret to acknowledge that physical field trips to plants, which have been synonymous with the annual ICSoba event cannot take place this year. However, the discussion about possible virtual plant tours, are currently going on with Alba and Maaden. In case of feasibility of such arrangement, that shall be included in the program.

## ***Language***

Presentations will be in English. The papers and presentations will be published in English. No live translation to another language is predicted at the event.

## ***Retired & Student Incentives***

ICSoba offers great incentives for retired delegates and for students (including post docs) to attend the conference. From reduced fees to award opportunities, students can receive all the benefits the conference has to offer at a low cost.

This conference is a great opportunity to communicate your achievements to the aluminium community and to meet other experts in the field.

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## ICSOBA MATTERS - Life of the Association

To help you stay informed, here is the most recent news about ICSOBA. Happy reading!

### ***ICSOBA 2021 President***

Beginning in 2015 the ICSOBA President is elected by the Board of Directors and comes from the organization becoming the host sponsor of the annual event. As this year Aluminium of Bahrain (Alba) became the host sponsor, Dr Abdulla Habib, Chief Operations Officer at Alba became the 2021 President of ICSOBA.



### **Dr. Abdulla Habib**

Chief Operating Officer, Aluminium Bahrain

*“Aluminium is the metal of the future. As the world’s largest aluminium smelter ex-China, we believe in partnering with industry-specific associations such as ICSOBA that will enable us to exchange and transfer knowledge as well as best practices. Through this, we aim to achieve efficient and cost-effective solutions that will help us stay ahead of the curve in an ever-changing global environment. This in turn will translate Alba’s Vision ‘To be the number one aluminium supplier for the generations to come “.*

Dr Abdulla holds a PhD in Chemical Engineering and master’s degree in Aluminium Smelting from University of New South Wales, Australia. He also holds MBA from ESSEC/French Arabian School. Dr. Abdulla is a member of many international committees related to Aluminium Industry like The Minerals, Metals & Material Society (TMS) and has been an advisor to the Engineering College of Bahrain University.

### ***ICSOBA Regional Representation (IRA)***

To support its strategic objectives, ICSOBA aims to increase its worldwide visibility and capacity to regularly interact with Bauxite, Alumina and Aluminium players around the world. For this purpose, a network of “regional ambassadors” has been deployed.

ICSOBA Regional Ambassadors (IRA) are persons demonstrating the willingness to support ICSOBA future by effectively identifying new Corporate Members as well as contributing to the success of ICSOBA annual conference. There could be several IRA for the same region with the purpose of covering all subjects of forthcoming ICSOBA conference (for example: B&A, Smelting, Academia, ...). The Regional Ambassadors achieving results and associated with ICSOBA on the long run are rewarded and incentivized.

In order to promote the IRA, to ensure their visibility and to formalise their official status within ICSOPA organisation, the Ambassadors are made known on the ICSOPA website <https://icsoba.org/leadership/>. Their portrait, professional details, and addresses (including @icsoba.org email addresses) appear on the website and below:

**Bertrand Allano**

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**Congratulations!**

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## **ICSoba Membership**

ICSoba is a well-recognized international not-for-profit association of members with the vision of being the “Technology Conference of the Aluminium Industry, for the Aluminium Industry”.

ICSoba members are active in different fields and specializations, and they work within different social and economic frameworks, but there is one thing they have in common: they share the same conviction of the strategic role of aluminium in the present stage of world development.

There are two (2) classes of members in the association namely Individual Members and Corporate Members. Membership is typically renewed every year / couple of years with a cycle time starting on the first day of the yearly conference and ending on the eve of the first day of following year conference.

As Corporate Member of ICSoba you are part of the global community of bauxite, alumina and aluminium industry and would be able to freely exchange ideas and results of work with the best of scientific researchers and domain specialists from the fields of bauxite, alumina, and aluminium from all five continents at ICSoba conventions and through its website. You have access to all past events papers and presentations (in the years where presentations were available).

As Corporate member of ICSoba your company and its workforce will benefit from the annual events because they:

- Allow your company delegates to learn, grow personally and expand their professional horizons and to widen their circle of contacts
- Offer unique exposure to different facets of our industry across the world
- Result in higher potential and technical competence of your professional workforce.

As Corporate Member, a 10% discount applies to the registration fee at all stages for each delegate of your company.

We are very pleased to announce that so far in 2021 several new organizations renewed the membership or became the most recent Corporate Members of ICSoba. They are: Alba, Alcoa, Alvanco Group, Amber Development, Bokela GmbH, CBG, EGA, Eco Nalco Water, ERG – Euroasian Group, Fives Group, Hatch, Hydro Aluminium S.A., Metso, Outotec, Mecfor, Mytilineos S.A., Rain Carbon, Rio Tinto, Ria Casthouse Engineering GmbH, Sefar BDH, Suez Water Technologies and Solutions, Tokai Cobex, Trimet, and Vimetco Alum S.A.

It is entirely appropriate to think that the value created by ICSoba operations must be in balance with what it obtains from the communities. We trust you understand ICSoba vocation very well and we all are grateful for your continuing help. Without this help ICSoba would not be able to accomplish its mission. Please provide our secretariat with your PO number to set up an invoice. Our desire to help others is the reason behind the Corporate Members Council.

For further information, feel free to contact one of ICSoba Director. A continuously updated list of CM can also be visited on the ICSoba website at <https://icsoba.org/corporate/>

## 2021 Corporate Members

 Aluminium for the world		
 For Bauxite & Alumina Business		
 DEPUIS 1963		
 الإمارات العالمية للألمنيوم EMIRATES GLOBAL ALUMINIUM	 MACHINERIE / MACHINERY	
		
		
		 ALUMINIUM OF GREECE   METALLURGY BUSINESS UNIT
	 An Ecolab Company	
		
		
		
		
	 transforming elements	

Signing a CM agreement by a company is a confirmation of belonging. We strongly hope that the engaged companies will also look with a more favorable eye to sending their employees to the ICSOPA event.

For the businesses that decided to become corporate members we thank again for your support of ICSOPA. Given the unprecedented challenges of the last year, all of us at ICSOPA are especially grateful to our supporters for your continuing support. With it ICSOPA may carry on its mission. One cannot forget that ICSOPA is an international association of members and partnership with the industry enriches the society and active professionals and is a guarantee of ICSOPA continuity and growth. With great abilities come great possibilities.

### ***Associated Organizations***

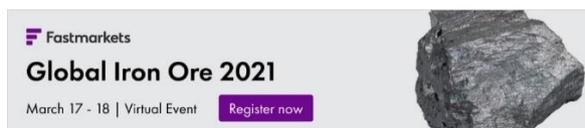
The list of associated organizations can be found on the ICSOPA website at: <https://www.icsoba.org/associated-organisations>. Among the aluminium associations closely collaborating with ICSOPA we have: Aluminium Association of India, Brazilian Aluminium Association (ABAL), European Aluminium and International Aluminium Institute (IAI). The remaining associated organizations are: Chalco Zhengzhou R&D Center, Non-Ferrous Metals and Minerals Russia, as well as Red Mud Project.

AlCircle, Aluminium Insider, Aluminium International Today, AZ-China, International Aluminium Journal, Fastmarkets, Light Metal Age, METALWORLD - Open Access Metallurgy Journal, Minerals & Metals Review Online are ICSOPA's media partners.

In 2021 ICSOPA closely collaborated with 7 events by information partners by placing their banners at ICSOPA website:

1. [Global Iron Ore](#)

March 17 – 18, 2021, online



2. [Mexican Steel Forum](#)

March 29 – 30, 2021, online



3. [Scrap, DRI & Mini-Mills](#)

April 15 – 16, 2021, online



4. [Steel Success Strategies 2021](#)

November 7 – 9, 2021, Miami



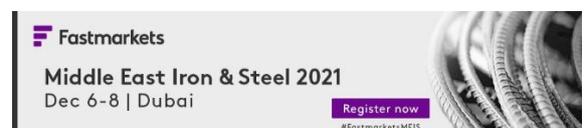
5. [International Ferroalloys 2021](#)

November 14 – 16, 2021, Prague



6. [Middle East Iron & Steel 2021](#)

December 6 – 8, 2021, Dubai



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### 7. Future Aluminium Forum

December 1-2, 2021. Online



The trends and technical solutions discussed at these forums including those for reduction of energy consumption / controlling CO<sub>2</sub> emissions could be useful for wider technical society including ICSoba members. These forums, which bring to the same place producers, equipment suppliers, IT providers and experts, also provide an exceptional opportunity to network and to support aluminium industry collaborative approach to current challenges.

### **ICSoba Website**

The ICSoba website is ICSoba's window to the world and has undergone a major revamping not so long ago and the result is a modern and graphically attractive platform. If you did not yet have a chance to visit the new ICSoba website, please do so now.

Printed proceedings of ICSoba events in the past five years, the so-called TRAVAUX volumes, have been scanned to separate searchable pdf files and are available on the website <https://www.icsoba.org/publications>. The past NEWSLETTERS are available on the ICSoba website, as well. Each conference has its own image and description. The dates, venue and heading are clearly indicated. To enable link by GS, all files will have their own URL distinct for individual papers and separate for the TRAVAUX volume.

There are several rules for accessing papers. There are two main types of access on the site: corporate account (CM) and individual user (IM). Access to the CM or IM accounts is granted after earlier registration.

*Corporate members* have access to all materials of all conferences including the ppts of the last 10 conferences. In each conference, they can download any TRAVAUX Book. A CM becomes a user with corporation domain: name@site.com.

*Individual members* (IM) can download the TRAVAUX Book only of the conference, which they have attended. At other conferences, the block with the Travaux Book is displayed but inactive.

# Publications

## ICSOPA

The International Committee for Study of Bauxite, Alumina & Aluminium

[Proceedings](#) [Newsletters](#)

Enter keywords



[Sign in](#)



### 38th conference and exhibition ICSOPA 2020

16 – 18 November 2020

#### Virtual Conference

The first of its kind virtual conference of ICSOPA. Due to the COVID-19 pandemic the ICSOPA 2020 was held as a virtual event...

[Select >](#)



### 37th conference and exhibition ICSOPA 2019

16 - 20 September 2019

#### Krasnoyarsk, Russia

Third ICSOPA conference in Russia, a joint event with 25th "Aluminium of Siberia" Conference of "Non-Ferrous Metals and Minerals"...

[Select >](#)



### 36th conference and exhibition ICSOPA 2018

29 October – 1 November 2018

#### Belem, Brazil

Third ICSOPA conference in Brazil and second in Belem: "Bauxite, Alumina and Aluminium Industry in Brazil and New Global Developm..."

[Select >](#)



### 35th conference and exhibition ICSOPA 2017

2 to 5 October 2017

#### Hamburg, Germany

The event was held in Hamburg, Germany from 2 to 5 October 2017 in cooperation with TRIMET and DADCO...

[Select >](#)



### 34th conference and exhibition ICSOPA 2016

3 to 6 October 2016

#### Quebec City, Quebec, Canada

The 2016 ICSOPA was held in Quebec, Canada from 3 to 6 October with support from Rio Tinto and REGAL (Aluminium Research Centre)...

[Select >](#)

# ICSOPA 2020

16 – 18 November 2020

Virtual Conference

Proceedings   Newsletters

### Host sponsor



### Editors

Michel Reverdy, Andrey Panov, Houshang Alamdari, Vinko Potocnik

### Description

The 38th International Conference and Exhibition of ICSOPA (The International Committee for Study of Bauxite, Alumina and Aluminium) was held from 16 to 18 November 2020 online. Due to the COVID-19 pandemic the ICSOPA 2020 was held as a virtual event to ensure the health, safety and comfort for all delegates, in line with our vision to be "the technology conference of the aluminium industry, for the aluminium industry"

[Read more >](#)

## Conference materials

Enter keywords



Sign in

All   Keynote   Bauxite   Alumina   Bauxite Residue   Carbon   Aluminium

**Papers**

**TRAVAUX N° 49**  
Full ICSOPA 2020 Proceedings

**PRESENTATIONS**  
Full 2020 Presentations Archive

**KN01 - Alba's Journey to 1.5 Million Tonnes Site Capacity - Challenges and Opportunities**  
Authors: Abdulla Habib, Nabeel Jallabi, Raghavendra Rao and Vasantha Rangasamy

**KN02 - Growth of Indian Aluminium Industry and Vedanta**  
Authors: Gobinda Copal Pal

**KN03 - China's Aluminium Industry - Why It Is in Seriously Bad Health**  
Authors: Paul Adkins

**KN04 - Long Term Sustainability of the Aluminium Sector (2020-2050)**  
Authors: Christopher Bayliss, Marlen Bertram, Pernelle Nunez, Katy Tsemmelis and Linlin Wu

**KN05 - Aluminium Market Outlook Across the Value Chain**  
Authors: Carl Firman and Uday Patel

**KN06 - Aluminium Market Outlook Across the Value Chain**  
Authors: Carl Firman and Uday Patel

**BX01 - Reduction of Bauxite Moisture Using Concentrated Solar Energy**  
Authors: Fernando Berlinck Dutra Vaz

**KN01 - Alba's Journey to 1.5 Million Tonnes Site Capacity - Challenges and Opportunities**  
Authors: Abdulla Habib, Nabeel Jallabi, Raghavendra Rao and Vasantha Rangasamy

Travaux No.49 - IC... 1 / 1   47%  

TRAVAUX 49. Proceedings of the 38<sup>th</sup> International ICSOPA Conference, 16 - 18 November 2020

**KN01 - Alba's Journey to 1.5 Million Tonnes Site Capacity - Challenges and Opportunities**  
**Abdulla Habib<sup>1</sup>, Nabeel Jallabi<sup>2</sup>, Raghavendra Rao<sup>3</sup> and Vasantha Rangasamy<sup>4</sup>**

1. Chief Operations Officer  
2. Senior Process Control & Development Manager  
3. Technical Advisor  
4. Supervised Process Control  
Aluminium Bahrain B.S.C., Akaab, Kingdom of Bahrain  
Corresponding author: abdulla.habib@alba.com.bh

**Abstract**

"Set a goal so big that you can't achieve it all you grow into organization who can". During 2017, Alba (Aluminium Bahrain) went through a unique challenging time to recover the frozen Pottline-5 resulted from long power outage. In the same year, Alba embarked the journey to become the largest single site smelter in the world outside China. This journey involved restarting Pottline-5 in a normal recovery period, creating the existing assets in order to produce more than 1 Mt and starting up the largest, most efficient and cost-effective reduction line in the world, Pottline-6. Nevertheless, this journey was shadowed with turbulent and downturn trend in aluminium market which had negative impact on profitability of all primary aluminium smelters. This paper presents the lessons learned during the journey, and the resilience strategy adopted to mitigate the risks to achieve the objective. This paper also shares Alba experience and impact of pandemic COVID-19 on business along with the future strategy to stay competitive in challenging market.

**Keywords:** Alba, Pottline-5, Pottline-6, aluminium market, COVID-19.

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If an IM wants to download a paper or TRAVAUX volume outside of his current registration year, up to 5 papers can be downloaded (the number can be changed later). Then a message is shown offering to download the whole TRAVAUX for a discount amount of 50 \$ (regular price is 100 \$) or become a CM to obtain an unlimited access.

If a guest user wants to download more than 5 papers, he is shown a message inviting him to purchase Travaux volume for \$ 100, or to become CM with free access, or to become IM with 50% discount for all volumes.

Guests can see all the materials, but they will be inactive.

Frequently Asked Questions accessed on the front page represent a very practical option.

Your feedback to make the website more attractive is welcome [here](#).

### ***About the ICSOBA Logo***

The Board of directors discussed the content of the ICSOBA logo earlier this year. The Board decided to complement the existing logo to reinforce and clarify the ICSOBA mission. Consequently, a new text: “The Aluminium Industry Forum” was added to the logo.



The ICSOBA logo, as it has been conceived by our predecessors and fathers of this organization, contains symbols of tools common for mining and metallurgy field, a globe image and ICSOBA acronym. They all together constitute a unique representation. Complementing the existing logo and adding below it “The Aluminium Industry Forum” reinforces and clarifies the ICSOBA mission.

### ***ICSOBA’s Executive Office***

ICSOBA is registered with Industry Canada.

ICSOBA executive office is located at 128 Des Fauvettes, Saint Colomban, QC, J5K0E2 Canada.

All inquiries are to be sent to ICSOBA by email to [info@icsoba.org](mailto:info@icsoba.org).

*The ICSOBA Annual Event is the  
Technology Conference of the Aluminium Industry,  
for the Aluminium Industry.*

