

**INTERNATIONAL COMMITTEE FOR STUDY
OF BAUXITE, ALUMINA AND ALUMINIUM
I C S O B A**

NEWSLETTER



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The picture on the front page shows the Parliament House in Hamburg, Germany and nearby Elba river. In case you consider publishing in this forum, please contact the editor before writing your article.

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ICSOBA is registered as non-profit association at:
128 Des Fauvettes, St. Colomban, Quebec J5K 0E2, Canada Corporations Canada, Ontario under number 802906-7, and *Registraire des entreprises*, Quebec under number 1167982181.



FOREWORD



Dr Claude Vanvoren,
Chairman of ICSOBA

Dear ICSOBA Members!

As you will discover reading through this Newsletter, ICSOBA Organisation is accelerating its transformation towards its vision of being “The Conference of the Aluminium Industry, for the Aluminium Industry”.

When writing this Foreword, just about two months after our 2017 Hamburg Conference, I would like to come back on several key elements of this transformation.

- [ICSOBA Strategic Initiatives 2017 – 2021](#)

ICSOBA Board worked earlier this year on this strategic plan and we reported progress made during Hamburg member’s meeting.

We are now reviewing this plan in the light of your comments made during the meeting and more generally during the conference – you can already notice we have adjusted ICSOBA Vision according to your input.

Two main thrusts for 2018 will certainly be around increasing our Corporate members number and making a step change in the way we communicate with you.

- [2018 Improvement Plan](#)

Alongside strategic orientations, we are also identifying more “down to earth” improvement initiatives to ensure ICSOBA Conference is and stays wholly and truly YOUR Aluminium Conference.

To this end, you gave us an amazing number of suggestions through the Hamburg satisfaction survey – for which I would like to warmly thank you again: having a 62 % response rate is already a huge success but getting 30 to 40 suggestions per “open question” is really overwhelming.

We are currently in the process of sorting, grouping and ranking those suggestions, but, as you will read in this Newsletter, some suggestions are already under way, like the Conference App, or even already implemented, like the new payment platform.

As I was mentioning earlier, making a step change in the way we are liaising with you all year long is one of our 2018 targets, so stay with us, we will touch base with you regularly, pending seeing you for the 36th International Conference and Exhibition of ICSOBA which will be held 29 October to 1 November 2018, in Belem, Para, Brazil in collaboration with Hydro.

With my best regards,

Claude Vanvoren
Chairman of ICSOBA



UPCOMING EVENT: ICSoba 2018

ICSoba 2018 in Belem

The 36th ICSoba International Meeting & Exposition will be held October 29 – November 1, 2018, in Belem, Brazil in collaboration with Hydro. The theme of the meeting will be "Bauxite, Alumina & Aluminium Industry in Brazil and New Global Developments," and your paper could be a part of the excitement! It is already time to start working on your submissions for the next year conference!

Invitation

Dear Colleagues,

The International Committee for Study of Bauxite, Alumina and Aluminium (ICSoba) has great honor to announce the 36th International Conference and Exhibition of ICSoba.

The event will be held in the Grand Mercure hotel in Belem, Para, Brazil from 29 October to 1 November 2018 in cooperation with Hydro Brazil.

Objectives of the Conference are to:

- Review the status of bauxite, alumina and aluminium industries in the world with emphasis on Brazil
- Discuss promising research developments aimed at production, productivity and cost improvements
- Highlight proposed Greenfield and Brownfield activities in the aluminium industry
- Discuss developments in the field of environment and safety
- Update market aspects of bauxite, alumina and aluminium and their products
- Provide an excellent opportunity to interact with international experts, scientists, engineers, technology suppliers, equipment manufacturers and representatives of aluminium industries the world over
- Facilitate university students meeting with industry representatives.

We look forward to seeing you at the ICSoba 2018 Conference in Belem in October.

Raphael Costa, Claude Vanvoren and Frank Feret



Call For Papers

The Organizing Committee is inviting the submission of papers. Abstracts and papers should be written in the *ICSOBA Author Guidelines Template*, the presentations should use *ICSOBA Presentations Template*, both will be available on the ICSOBA website www.icsoba.org/icsoba 2018. The submission of abstracts, papers and presentations is managed by ConfTool which is being customized for ICSOBA 2018 Conference. The access to ConfTool will be also via ICSOBA website. Paper selection and review will be ensured by ICSOBA Technical Committee under the leadership of Program Director and Subject Organisers.

Deadlines for abstracts, manuscripts and presentations:

Abstract:	30 May 2018
Full Paper:	30 July 2018
Presentation:	15 September 2018

2018 Conference Organizing Committee

President	Raphaël Costa
General coordination:	Claude Vanvoren, Frank Feret, Wladimir Penna
Secretary General:	Andrey Panov
Conference Management:	Matthieu Arlettaz
Regional Organizer:	Bhavani S. Pani
Program Organizer:	Michel Reverdy
Subject Organizers:	
Bauxite & alumina:	Robert LaMacchia
Carbon:	Matthieu Arlettaz
Aluminium:	Vinko Potocnik

Program

- I. Keynote session: 29 October
- II. Technical sessions: 29 to 31 October
 - Global bauxite resources and mining scenario
 - Bauxite residue, challenges and its applications
 - Alumina production, specialty alumina
 - Aluminium reduction – new smelter and cell design
 - Carbon and carbon materials, non-consumable anodes and new cathode design
 - Casting and aluminium recycling
 - Economics, finance, new projects in mining & metallurgy
 - Regional dynamics and market analysis
 - Upstream and downstream challenges and opportunities



- Environment, zero emission plants, health and safety
 - Operational excellence and productivity
 - Innovation and new technologies
 - Manpower for the next generation aluminium industry.
- III. Technical field trips: 1 November

Exhibition:

During the Conference, an Exhibition of latest technologies, equipment and other devices for the aluminium industry is planned (29 - 31 October). Please confirm your participation at the earliest.

Registration, Welcome Reception and Meals:

The registration will start on Sunday, 28 October from 16 to 20 h and will continue on Monday, 29 October in the morning at the Welcome Desk. Welcome Cocktail with drinks and light buffet will be on Sunday, 28 October, and the Gala Dinner will be on Monday, 29 October in the evening. Best Papers Cocktail will be on Wednesday, 31 October in the evening.

Language:

Presentations will be in English. The papers and presentations will be published in English.

Hydro and Brazil - Bauxite, Alumina and Aluminium Industry

Hydro is a global aluminium company with production, sales and trading activities throughout the value chain, from bauxite, alumina and energy generation to the production of primary aluminium and rolled products as well as recycling. Based in Norway, the company has 13 000 employees involved in activities in more than 40 countries on all continents. Rooted in more than a century of experience in renewable energy production, technology development and progressive partnerships, Hydro is committed to strengthening the viability of the customers and communities they serve.

In Brazil, Hydro is present in many parts of the aluminium value chain. Brazil is Hydro's main source of bauxite and is the country where the company has the most employees - or more than 5 000 if long-term contractors are included.

Bauxite is mined in Paragominas and Trombetas and refined to alumina at the world's largest alumina refinery, Alunorte in Barcarena. Hydro Brazil also produces 460 000 tons of aluminium metal annually at the Albras plant, which they partly own.

Sapa (now Hydro Extrusions) has operations in Brazil. Hydro Extrusions is the world leader in aluminium solutions within extrusion, building systems, and precision tubing.

Technical field trips:

On 1 November two field trips to two different plants will take place. Details will arrive in the 2nd Call for Papers.



ICSOBA 2017



Dr Frank Feret, CEO,
Vice Chairman of ICSOBA

ICSOBA 2017 Conference and Exhibition in Hamburg



General view of Hamburg

The 35th International Conference and Exhibition of ICSOBA was held in the period 2 – 5 October in Hamburg, Germany in the Radisson Blu hotel. The selection of Hamburg, Germany for the 35th International Conference and Exhibition, follows ICSOBA's practice of rotating the venue of International Meetings to countries that play an important role in the global aluminium industry.

The last ICSOBA conference in Europe was held in Saint Petersburg, Russia in 2004. Therefore, bringing the conference to Europe this year was like coming back home and to its roots. ICSOBA has never been in Germany before, and Hamburg being so rich in science and expertise is the most representative place for the aluminium industry in the country.

The Conference obtained support from TRIMET Aluminium and DADCO and attracted 280 delegates from 34 countries. Personal implication and support of ICSOBA by Martin Iffert and Evi Rodemann of TRIMET Aluminium, as well as of Marco van der Werff of DADCO added to the success of ICSOBA 2017.

The ICSOBA 2017 conference featured 125 international industry and academia speakers who covered topics including bauxite and bauxite resources, alumina production and bauxite residue solutions, primary aluminium production, carbon and carbon materials, as well as aluminium downstream processing.



General view of the Hamburg port



Conference participants

The staging of this conference could not have been possible without the extraordinary effort of the organizing committee. The technical part was assured by a team led by Michel Reverdy, Program Director.



The subject organizers this year were: Steve Healy and Errol Yeager (bauxite and alumina), Yiannis Pontikes (bauxite residue), Matthieu Arlettaz (carbon), Vinko Potocnik and Viktor Buzunov (aluminium and downstream). Priceless contributions of: Claude Vanvoren, Andrey Panov, Houshang Alamdari, and BS Pani, on the part of the Board of Directors - as well as the administrative staff composed of Dipa Chaudhuri, Barbara Feret, Marie-Claude Goyette and Evi Rodemann of TRIMET must be acknowledged.

Under the direction of Michel Reverdy and Vinko Potocnik the 2017 papers were published in the TRAVAUX vol. No. 46, which this year contains 1172 pages (a record for ICSOBA). The success of ICSOBA 2017 in Hamburg is a testimony that, although Europe is no longer a leading region in terms of production, it is still at innovation forefront of aluminium industry.

The Best Papers Awards

At the end of the conference five papers were announced for the best paper award. The awards are dedicated to recognizing outstanding papers across the entire program. Four subjects were considered: bauxite and alumina, bauxite residue, carbon and electrolysis. The subject organizers of each stream: Steve Healy (bauxite and alumina), Yiannis Pontikes (bauxite residue), Mathieu Arlettaz (carbon) and Vinko Potocnik (electrolysis) made their selections. Given the breadth, diversity and quality of the nominations, the job of picking winners was quite difficult. Two aluminium electrolysis papers were awarded due to the larger number of papers in this subject. The recipients are:

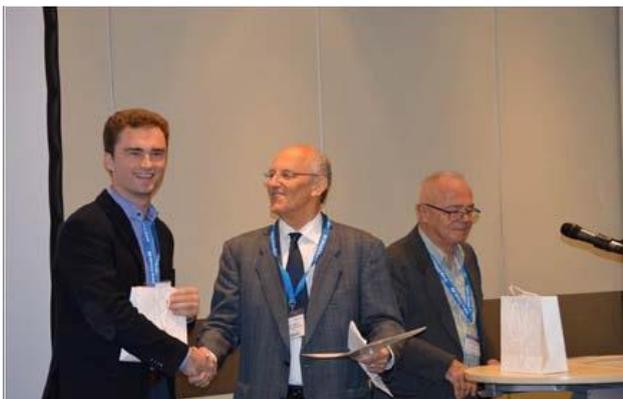
1. The “Best Bauxite & Alumina Paper Award”: Dilini Seneviratne, Hong Peng and James Vaughan for their paper: “The Impact of Organic Additives on Phase Transformation and Particle Size of Bayer Process Desilication Product”.
2. The “Best Carbon Paper Award”: Les Edwards for his paper: “Thermal Desulfurization of Petroleum Coke for Anode Use”.
3. The “Best Bauxite Residue Paper Award”: Tobias Hertel, Bart Blanpain and Yiannis Pontikes for their paper: “High Temperature Processing Options for the Valorisation of Bauxite Residue towards New Materials”.
4. The “Best Aluminium Paper Award”: Dagoberto Schubert Severo and Vanderlei Gusberty for their paper: “Heat Exchanger for Alumina Preheating in Aluminium Reduction Cells”.
5. The “Best Aluminium Paper Award” is given to Roman Düssel and Till Reek for their paper: “Surviving an Extended Power Outage after a Breakdown in the Sub Station”.



Dilini Seneviratne receives the Best Paper Award from Steve Healey



Tobias Hertel with the Best Paper Award, next to him are Frank Feret and Michel Reverdy



Roman Düssel takes the Best Paper Award from Vinko Potocnik



Dagoberto Schubert Severo has received the Best Paper Award from Vinko Potocnik

Sponsors and Exhibitors

ICSOBA could not continue its mission without sponsors supporting the not-for-profit organization. We worked hard to attract world class sponsors for this event and numerous companies and institutions responded; this is to our mutual benefit.

Among the 2017 sponsors we had: TRIMET Aluminium and DADCO as the host sponsors. Other sponsors were: Cytec Solvay Group, Outotec, Fives Solios and Hatch. The conference attracted 10 exhibitors. Among the exhibitors at this conference were: AKW Apparate und Verfahren, Bruker, Claudius Peters Projects, Fives Solios, GEA Process Engineering SAS, GLAMA Maschinenbau, Cytec Solvay Group, Otto Markert & Gruppe, PANalytical and SysCAD.

Thanks to our sponsors!



ICSOBA Medals

On ICSOBA's 50th anniversary in 2013, the Awards Committee decided to produce commemorative medals (see below). The new "ICSOBA Commemorative Medal" is 70 mm in diameter and takes its inspiration from two past designs. On one side are the embossed portraits of Pierre Berthier, Karl Joseph Bayer, Paul Louis Toussaint Heroult and Charles Martin Hall. On the other side are the emblems of ICSOBA and the World, the full ICSOBA name, the name of the person awarded and the year of bestowal.



As in the past, the "ICSOBA Commemorative Medal" constitutes a special recognition and is awarded to those members who achieved significant scientific or practical results within the field of work, or who notably strengthened ICSOBA organization or promoted its international scientific and industrial cooperation. The name of the awarded person is inscribed on the medal, and the awarding event is published in the NEWSLETTER.

This year two medals were awarded in Hamburg to:

Dr Martin Iffert of TRIMET Aluminium and **Marco van der Werff** of DADCO for welcoming ICSOBA in Hamburg, facilitating the organization of the highly successful conference, and seeing to ICSOBA's prosperity and growth.

Since 2013 two medals are given each year to the visited plants as tokens of appreciation for hosting ICSOBA delegates. This year the medals were awarded to TRIMET Aluminium Smelter and to DADCO - Aluminium Oxid Stade GmbH.



Plant Visits



Participants in the DADCO plant visit



Participants in the TRIMET plant visit



Satisfaction Survey

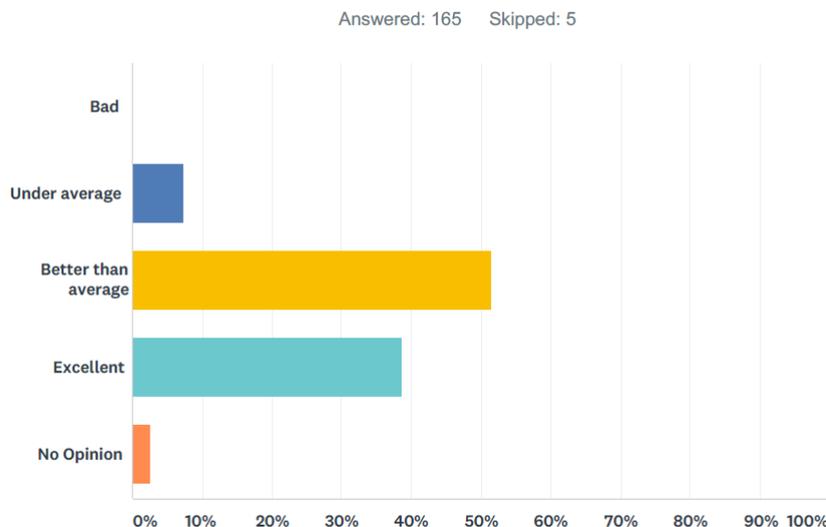
Open for input from the Conference second day, an online satisfaction survey was carried out among the participants. The comprehensive results of the survey lead to the selected conclusions as follows:

- A response rate of 62 % (170 responses collected) demonstrates the overall interest from delegates to ICSOBA organisation and conferences
- For technical quality, applicability and innovative nature of the papers we got good or very good results
- Very good results were obtained regarding organisation, registration process, staff support, conference material, social function
- We were quick to learn some 2016 weak points (conference venue, plant visit format), which are very well rated in 2017, as well as the newly introduced Conftool Conference Management system. This is an encouragement for the Board in its endeavor to continuously improve the quality of your ICSOBA conference.
- However, several points remain in our improvement plan like exhibition (size, format, layout) or ICSOBA website.
- But the highlight of the survey is the amazing contribution of the delegates to improvement suggestions (from 30 to 40 comments to the open questions on these fields). This will give us an invaluable material to dig from and develop our 2018 improvement plan.

Overall, a very good rating of the conference versus other events and an overwhelming 90 % of recommendation.

We therefore highly appreciate your feedback and give you our utmost commitment to continue to improve our organisation and conference towards our vision of “The Conference of the Aluminium Industry, for the Aluminium Industry”. Below are selected examples of the survey results.

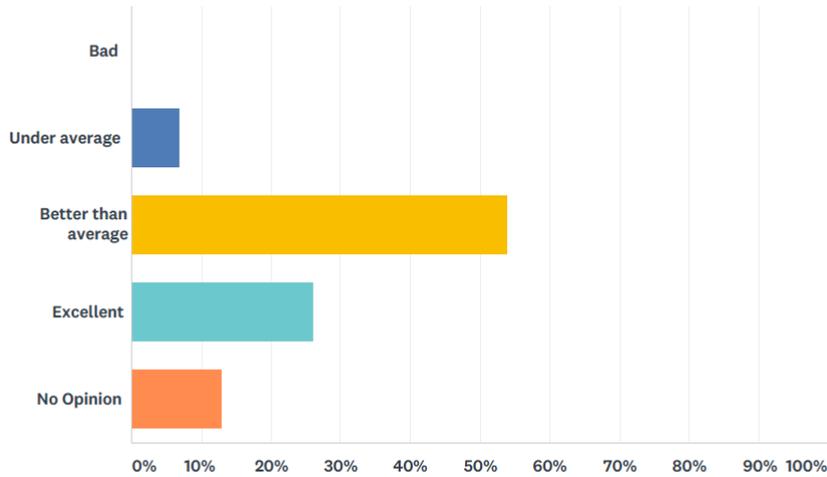
Q15 Technical quality and content of the presentation





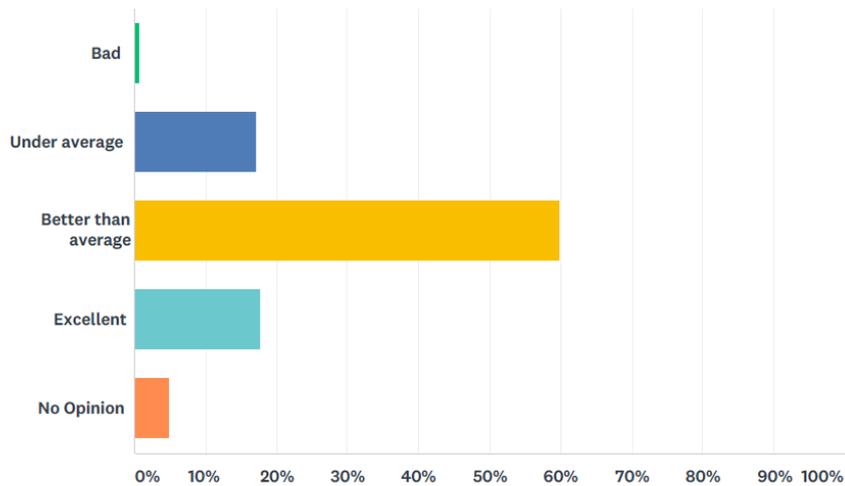
Q19 How ICSOBA 2017 compares with other similar events that you attended?

Answered: 161 Skipped: 9



Q17 Innovative nature of technical content presented (new information)

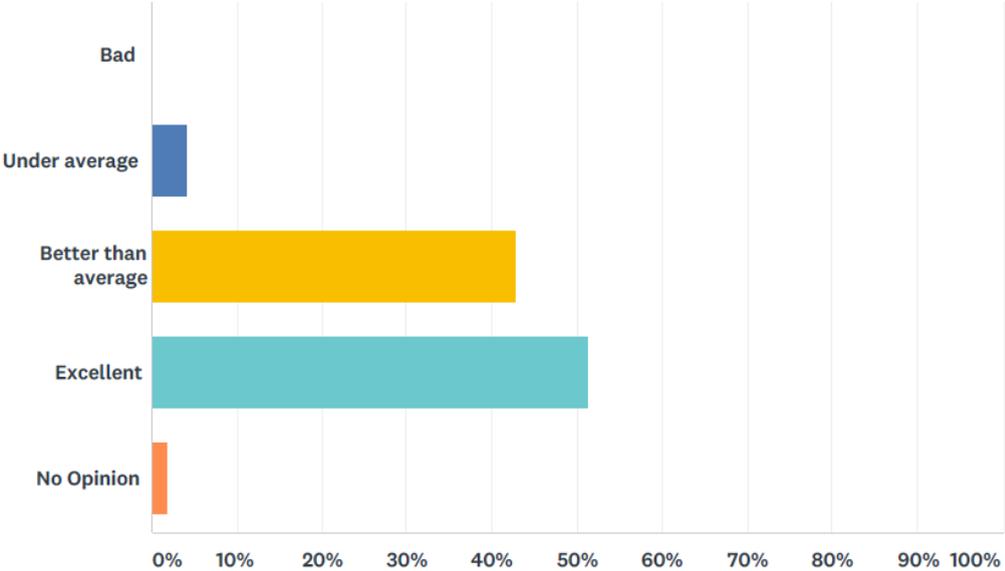
Answered: 164 Skipped: 6





Q8 Networking opportunities

Answered: 168 Skipped: 2





ICSOBA MATTERS

ICSOBA Bylaws

ICSOBA is governed by Bylaws. The Bylaws are ICSOBA's cornerstone, they guide the organization through the decision-making process since its beginning. The first Bylaws as assembled by Miroslav Karsulin (Secretary General) and Jean Papastamatiou (President) were published on 1 October, 1964.

The most recent Bylaws (ICSOBA_Bylaw_2017.pdf) as amended and proposed at the Annual Meeting of members on October 3, 2017 in Hamburg, Germany can be found on ICSOBA website at www.ICSOBA.org/About Us/Mission.

ICSOBA Management

ICSOBA is an international association of members and the members periodically affect the organization's structure during the Annual Meeting. The changes result from the need to strengthen ICSOBA and do everything possible to assure its continuity. More than a half century of contributions to society have proven ICSOBA's cause.

ICSOBA is managed by its Board of Directors, elected by the members, which is responsible to develop and strengthen the organization.

Since its first conference in 1963 in Zagreb (former Yugoslavia), ICSOBA's international success is founded on the practice of rotating the venue of International Meetings to countries that play an important role in the global aluminium industry

For supporting the setup of this rotating conference, an ICSOBA Organizing Committee is formed every year, which puts together different people. The typical composition of the Committee includes the ICSOBA Chairman, CEO, Program Director, Treasurer and the Director for Conference Management. The Committee is led by the ICSOBA President who is selected by the Board of Directors from among the active industry senior executives for a one-year term. President comes from the organization becoming the host sponsor of the annual event and thus provides increased visibility to both his company and to ICSOBA. The position of President recognizes accomplishments and highlights individual. It also acknowledges importance of his organization among the industry leaders.



The 2018 ICSOBA structure is as follows:

Who	Association	Position	E-mail Address
Raphael Costa	Hydro	President	Raphael.Costa@hydro.com
Dr Claude Vanvoren	C2V Consulting	Chairman	claud.vanvoren@gmail.com
Dr Frank Feret	ICSOBA	Vice Chairman, CEO	feretfr@gmail.com
Dr Andrey Panov	Rusal	Vice Chairman, Secretary General	Andrey.Panov@rusal.com
Michel Reverdy	Emirates Global Aluminium	Program Director	michel.reverdy@hotmail.fr
Matthieu Arlettaz	R&D Carbon	Conference Management Director	Matthieu.Arlettaz@rd-carbon.com
Prof. Dr Houshang Alamdari	Laval University	Director University Affairs	Houshang.Alamdari@gmn.ulaval.ca
B.S. Pani	SPAN Resources	Regional Director Asia	bspani@yahoo.com

At present, Andrey Panov, Frank Feret and Michel Reverdy, who were elected by members in Zhengzhou, China in 2014 continue their work for another year. Four Board members who were elected in 2016 and who complement the new Board are: Claude Vanvoren, Matthieu Arlettaz, Houshang Alamdari and Bhavani Pani. The Directors jointly assure legal responsibility for the organization and have assigned duties.

Corporate Membership

ICSOBA is a well-recognized international non-profit association of members with the vision of being the “Technology Conference of the Aluminium Industries, for the Aluminium Industries”

ICSOBA Mission consists of:

- Promoting the exchange of ideas and know-how from different fields of research related to bauxite exploration and mining, and alumina and aluminium production
- Organizing yearly Technology Conference with a scope of covering upstream aluminium activities from bauxite to liquid metal. Annual events represent a platform to advance the interests of our society as ICSOBA is the industry ally
- Organizing this event in such a way that it encourages companies to send their employees, universities and other R&D organizations to send their professors and students, consultants, suppliers and individuals to attend and contribute.

By becoming an ICSOBA Corporate member you intend to:

- Support, in the long run, the vision of ICSOBA to become the “Technology Conference of the aluminium Industries, for the aluminium Industries”



- Support, in the long run, the ambition of ICSOBA to organize the best annual Technology Conference of the aluminium industry as well as achieve ICSOBA mission
- Influence, in the long run, ICSOBA strategy and strategy deployment to achieve the above vision and mission through a dedicated Corporate Members Council, meeting twice a year (1 member = 1 vote).

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 six continents at ICSOBA conventions and through its website.

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 of ICSOBA you will increase the visibility of your company in the bauxite, alumina and aluminium industry through ICSOBA Newsletter, website and general communication.

The corporate membership is renewed annually. As corporate membership is associated with a “long run” support mindset, we encourage multi-year engagement:

- 5 years (corresponding to strategic plan) U\$ 4000
- 4 years U\$ 3400
- 3 years U\$ 2600
- 2 years U\$ 1800
- 1 year U\$ 1000

For any further information, please contact us at info@icsoba.org and we will provide you with all details on ICSOBA corporate membership and the application process corresponding to your specific situation.

New Payment Platform

Following last year’s introduction of ConfTool to the ICSOBA daily interaction with conference delegates, a new payment platform, called Stripe, fully integrated with ConfTool, is added at present. We heard you telling us (in the satisfaction survey and directly) that PayPal generalization was not supported and payment by credit cards was strongly requested.



For ICSOBA 2018 the credit cards such as Visa, Master Card and American Express can be used to process your registration fee using Stripe, which is one of the best online credit card processors. The currency of the payment must be the US\$. Payment in cash is only possible for people who register directly at the conference.

In 2018, we will also implement an updated payment policy which will become available on ICSOBA website. New payment policy will clarify payment process and deadline for registration confirmation, otherwise registration will be cancelled. A deadline for registration refund will be specified, too.

Conference application

We are currently in the selection process of an Conference Application working on your smartphone (IOS or Android) to be available to ICSOBA delegates starting next year. The purpose of such application, is mainly to enable delegates, during the conference, to set their own agenda on their mobile telephone to attend the presentations they are interested in.

It also enables the conference organisation to send messages to all delegates during the event and a few other things like having speaker bio online, dinner list confirmation, etc.

We will come back to you later in 2018 to make a comprehensive presentation of this new facility for ICSOBA Conference.

Associated Organizations

The list of associated organizations can be found on the ICSOBA website at. <https://icsoba.org/associated-organisations> These organizations are:

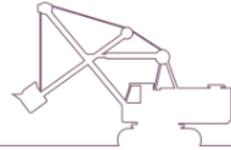
ABAL, AlCircle, Aluminium International Today, Aluminium Network, AZ-China, Brazil Mineral, CNIA, Chalco Zhengzhou R&D Center, International Aluminium Institute, International Aluminium Journal, Light Metal Age, Metal Bulletin, METALS - Open Access Metallurgy Journal, Minerals & Metals Review Online, Non-Ferrous Metals Siberia, Red Mud Project.



Details of the upcoming 24th Bauxite & Alumina conference are given at:
<http://www.metalbulletin.com/events/bauxite-alumina-seminar/details.html>

24th Bauxite & Alumina Conference

Hilton Rose Hall Resort & Spa
Montego Bay, Jamaica
27 February - 2 March 2018



The 2nd **Bauxite Residue Valorisation and Best Practices Conference** – BR2018 –will be held from **7-10 May, 2018, in Athens, Greece.**

The Organising and Scientific Committees of the 2nd Bauxite Residue Valorisation and Best Practices conference - BR2018 cordially invite you to participate in an event that aims to promote the development of high-quality research in this field by bringing together specialists from both academia and industry from all over the world, presenting recent results and discussing the way ahead. Join an opportunity to update yourself with the latest innovations as well as to contribute in the development of possible strategies and new collaborations for a more sustainable way of using our resources.

For further information on BR2018 conference, please visit:

<http://conference2018.redmud.org>





Public Relations and Communication

For additional information on this year and past events please consult www.ICSOBA.org.

ICSOBA's executive office



All inquiries sent to ICSOBA, including requests for past proceedings whether by email to info@icsoba.org or by phone to + 91 982 328 98 17, are answered by Ms. Sudipta (Dipa) Chaudhuri in Nagpur, India.

Also, mailings and the underlying database of ICSOBA's contacts are taken care of by Ms Dipa Chaudhuri in the executive office.