

**INTERNATIONAL COMMITTEE FOR THE STUDY OF BAUXITE, ALUMINA
AND ALUMINIUM**
fondé par

L'ACADÉMIE YOUGOSLAVE DES SCIENCES ET DES ARTS
a Zagreb

TRAVAUX

**DU COMITÉ INTERNATIONAL
POUR L'ÉTUDE DES BAUXITES,
DE L'ALUMINE ET DE L'ALUMINIUM**

Vol. 18, 1988, No. 21.
Special Issue

**25
YEARS OF
ICSOBA**



Edited
by the Hungarian National Committee
of ICSOBA

Travaux ICSOBA, Vol. 18, 1988 pp. 1–No. 21 BUDAPEST, 1988

BRIEF HISTORY OF ICSOBA

ICSOBA being an international scientific organization has the aim to keep all his members together under the leadership of the Presidency, elected for terms of 3–4 years and to promote theoretical as well as practical activity which covers all the fields of bauxite-alumina and aluminium research and production. ICSOBA organizes congresses, generally every 4–5 years, symposia, and sometimes colloquia or conferences between congresses, to assure the exchange of experiences by lectures and field – trips to plants, companies, institutes and factories.

ICSOBA is managed by the Presidency, the members of which are the President, Vice-Presidents and the General Secretary.

The work of the International Presidency has been helped directly or indirectly by five National Committees: the Yugoslavian, the Hungarian, the Czechoslovakian, the French and the American (USA) National Committees, however, this does not mean that any country is involved as such in this organization.

ICSOBA enjoys its international character mainly through the activity of individual members and through the participation of certain companies from all over the world, but in those five countries well organized National Committees can give an extra help to the work of the International Presidency.

The Hungarian National Committee of ICSOBA was organized in 1970. Hungarian members are now most numerous, after Yugoslavian and American ones. Dr. Gy. Bárdossy who was one of the founder-members of ICSOBA was also the initiator of the Hungarian National Committee as well as Dr. Gy. Dobos, who was the President of ICSOBA from 1969 until 1973.

This Committee organized the second International Congress of ICSOBA in Budapest, in 1969, an ICSOBA Symposium at Tihany, in 1981 and the next one at Tapolca, in 1985.

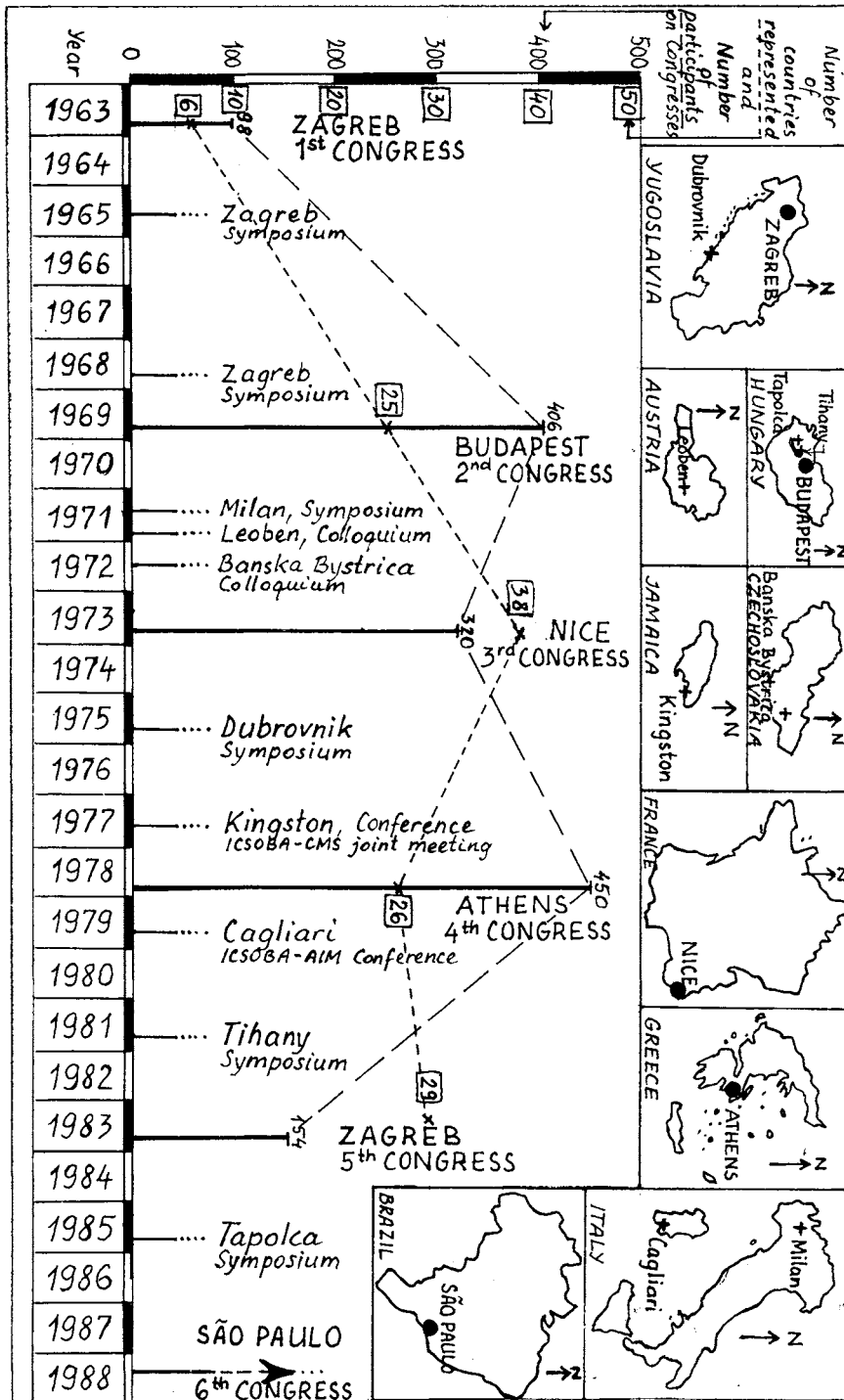
CONGRESSES OF ICSOBA

The most important events of ICSOBA, the Congresses are generally held in 4 years intervals. During 25 years ICSOBA organized six Congresses as shown below:

No of Congs.	Held in	Date	Number of participants	Number of countries represented	Number of lectures published
1 st	ZAGREB Yugoslavia	1-3 October 1963.	98	6	24
2nd	BUDAPEST Hungary	6-10 October 1969.	406	25	71
3rd	NICE France	17-21 Sept. 1973.	320	38	114
4th	ATHENS Greece	9-12 October 1978.	450	26	95
5th	ZAGREB Yugoslavia	26-28 Sept. 1983.	154	29	55
6th	SÃO PAULO POÇOS DE CALDAS Brazil	11-20 May 1988.			

In order to recall the most important events of ICSOBA let us take a short look on the highlights of these international meetings.

LOCATION AND TIME TABLE OF ICSOBA EVENTS, 1963-1988.



I. INTERNATIONAL CONGRESS OF ICSOBA
1963.
ZAGREB, YUGOSLAVIA



Cathedral of Zagreb

The first international meeting of bauxite and aluminium experts was the "Symposium sur les bauxites, oxydes of hydroxydes d'aluminium", on 1–3 October, 1963, in Zagreb, Yugoslavia, which became the founding convention of ICSOBA. This meeting, which has been declared to be the first congress was attended by 98 participants coming from 6 countries (Austria, France, Greece, Hungary, USSR and Yugoslavia), a relatively small number, but among the attendants were some names with high reputation in the world of "bauxite science".

After the first Congress a very successful visit was arranged to the bauxite deposits of Dalmatia. During the concluding session at Opatija the Hungarian participants made the proposal that the Yugoslav Academy should contemplate the possibility of establishing a permanent international working community. The Yugoslav Academy accepted this proposal and has elaborated the Statue of the International Committee for the Study of Bauxite, Alumina and Aluminium.

II. INTERNATIONAL CONGRESS OF ICSOBA
1969.
BUDAPEST, HUNGARY



View of the Parliament, Budapest, HUNGARY

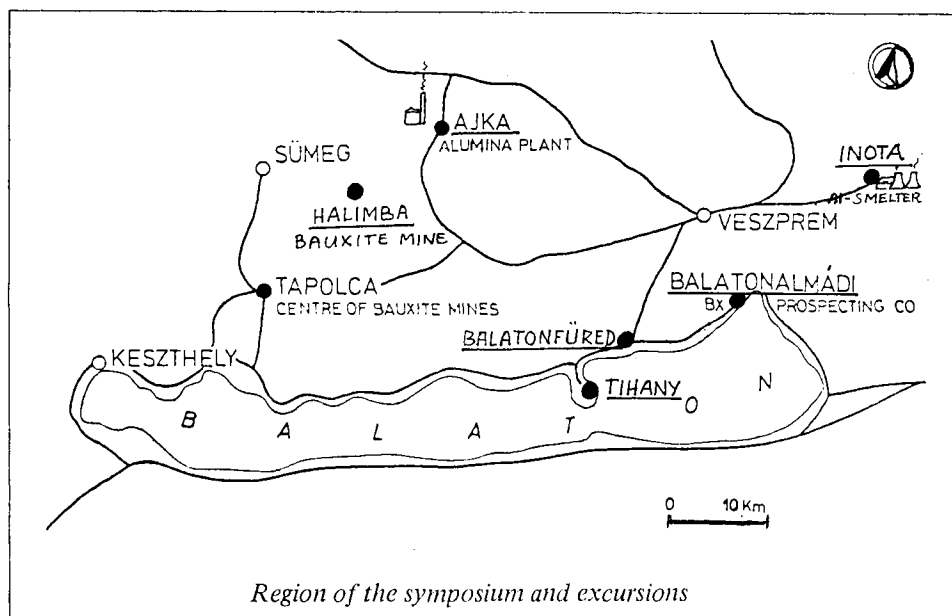
The 2nd Congress of ICSOBA was held 6–10 October, 1969, in Budapest, Hungary, with 406 participants coming from the following 25 countries; Austria 10, Australia 3, Bulgaria 1, Canada 4, Czechoslovakia 19, France 11, Federal Rep. Germany 24, German Dem. Republic 13, Great Britain 2, Greece 5, Hungary 220, India 2, Indonesia 1, Iran 1, Italy 7, Japan 7, Netherlands 1, Norway 4, Poland 5, Rumania 5, Sweden 2, Switzerland 2, USA 19, USSR 5, Yugoslavia 32.

One participant was a representative of UNIDO.

The main topics of the Congress were as follows:

- Bauxite Geology
- Investigation of Bauxite
- Bauxite Mining
- Power – Economy, Projection and Rentability of the Bayer Process
- Chemistry and Theory of the Alumina Production
- Analysis in the Alumina Production, Contaminants
- Technology and Equipment of the Bayer – Process I.
- Technology and Equipment of the Bayer – Process II.
- Complex Processes and Secondary Products

- Technology of the Aluminium – Electrolysis
- Electrocorund and other Questions
- Structure of the Aluminium – Electrolyser – Cells and Power – Economy



MEMBERS of the Presidency of the International Conference

Dr. F. Lévárdi	Minister of Heavy Industry, Budapest
Prof. Dr. J. Papastamatiou	President of ICSOBA, Athens
Prof. Dr. M. Karsulin	Secretary General of ICSOBA and of the Yugoslav Academy of Sciences and Arts, Zagreb
Prof. Dr. L. Maric	Vice-President of ICSOBA, Zagreb
Dr. Gy. Bárdossy	Vice-President of ICSOBA, Budapest
Dr. K. Bielfeldt	Direktor, Vereinigte Aluminiumwerke AG, Bonn
L. N. Bobkov	General Manager, Glavaljuminij, Moscow
J. Brucy	Manager, Compagnie Pechiney, Paris
Dr. R. Chowdhury	General Manager adj. Geological Survey of India, Lucknow
Dr. Gy. Dobos	General Manager, Hungarian Aluminium Corporation, Budapest
Dr. J. Fülöp	Head of the Hungarian State Geological Institute, Budapest

Prof. Dr. E. Grjotheim
Prof. Dr. Z. Gyulay

Prof. Dr. H. Ivekovic
Prof. Dr. S. I. Kuznyecov
P. Lugagne-Delpon
Prof. Dr. W. E. Petrascheck
Dr. I. Roberts

H. F. Scandrett

Norges Tekniske Hogskole, Trondheim
Technical University for Heavy Industry,
President of OMBKE, Miskolc
Jugoslav Academy of Sciences, Zagreb
Institute for Polytechnics Ural, Swerdlowsk
Manager adj. Companie Pechiney, Paris
Montanistische Hochschule, Leoben
Vice-President, Reynolds Metals Co. Rich-
mond, USA
Berkeley, USA

Internationale Konferenz der Aluminiumindustrie in Budapest

Budapest, 4. Oktober (NN)
– Ungarn, das reichste Land an Bauxit und Tonerde in Mitteleuropa, ist Gastgeber der wissenschaftlichen Beratung der zweiten internationalen Konferenz der ICSOBA (International Committee of Studies of Aluminium), die vom 6.-10. Oktober im Haus der Technik stattfindet. Die Konferenz, an der 300 Fachleute, darunter Vertreter aus 30 Übersee-Ländern teilnehmen, wird vom Minister für Schwerindustrie, Dr. Ferenc Lévárdi, eröffnet. Auf ihr werden Fragen der technischen Entwicklung der Aluminiumindustrie, und die neuesten Erfahrungen bei der geologischen Erforschung von

Bauxitvorkommen sowie der Aluminiumverarbeitung beraten.

Den Vorsitz der Konferenz führt der griechische Professor J. Papastamatiou, stellvertretender Konferenzleiter ist Dr. György Bárdossy (Budapest). Zu den prominenten Gästen gehören Prof. Dr. M. Karsulin von der Akademie der Wissenschaften und Künste in Zagreb, Dr. Bielfeldt, Direktor der Vereinigten Aluminiumwerke AG Bonn, und Prof. Kuznezow vom Institut für Polytechnik in Swerdlowsk.

Die Teilnehmer der Konferenz werden die bedeutendsten ungarischen Rohstoff-Fundorte und Verarbeitungsbetriebe in Ungarn besuchen.

*Detail from a newspaper
(Neueste Nachrichten)
Oct. 4, 1969*

PHOTOGRAPS OF SOME MOMENTS OF THE CONGRESS



The Presidency of the Congress



A group of participants



"Prosit! – for better results", a moment with Prof. M. Karšulin, Prof. J. Nicolas, Dr. Gy. Dobos, Mr. L. N. Bobkov, and J. Roberts



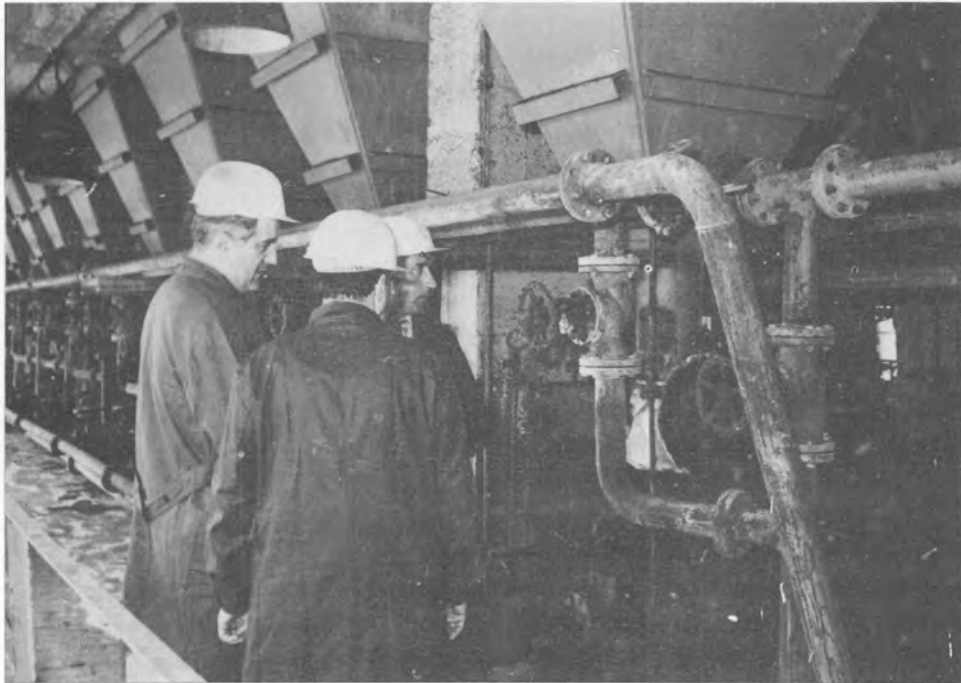
Dr. G. de Weisse



Discussion



In the dining room



Visitors in the Ajka Alumina Plant, HUNGALU



Visit to the Alumina Plant at Ajka, HUNGALU



*A group of participants at the Ajka Alumina Factory,
HUNGALU*

III. INTERNATIONAL CONGRESS OF ICSOBA
1973.
NICE, FRANCE



View of the harbour in NICE

The 3rd Congress of ICSOBA was held in Nice, France 17–21 Sept. 1973. Here 38 countries were represented by 320 participants, and that was so far the biggest convention of the world of bauxite-aluminium in respect of the number of represented countries.

The Congress was organised by

- “Le département de Géologie Appliquée de l’Université Paris VI
 - Péchiney Ugine Kuhlmann and l’Aluminium Péchiney”
- with the cooperation of the University of Nice.



THE ORGANIZING COMMITTEE WAS

Chairman: Professor Jean NICOLAS Vice-President of ICSOBA
GENERAL SECRETARY OFFICE

D. BERNARD – B. HIÉRONIMUS – P. BILDGEN – P. ROBERT

THE SCIENTIFIC PROGRAM COVERED THE FOLLOWING THEMES:

A) Bauxite

- 1) – Geology and mineralogy
- 2) – Prospection, exploration, identification of deposits
- 3) – Open cast and underground workings
- 4) – Pretreatment and ore concentration

B) Alumina

- 1) – Variation of the melting conditions as a function of the quartz content
- 2) – Influence of the physical and chemical properties of the alumina obtained by different processes for the extraction of metallic aluminium
- 3) – Alkaline treatment of silica bearing aluminium ores
- 4) – Analytical problems and other topics

C) Aluminium

- 1) Electrolysis
 - Control and serial automatisation
 - Alumina quality
- 2) Anodes
 - Factors of anode consumption
 - Quality of coke and tar
- 3) Anti-pollution
 - Exhalation of baths (preheated and Söderberg)
 - Vapour decontamination processes

LE MAIRE DE NICE, DEPUTE DES ALPES-MARITIMES
ET LE CONSEIL MUNICIPAL DE LA VILLE DE NICE

vous prie de bien vouloir assister à la Réception qui
sera donnée dans les Salons de la Villa Masséna, le
Lundi 17 septembre 1973, à 18 h., à l'occasion du

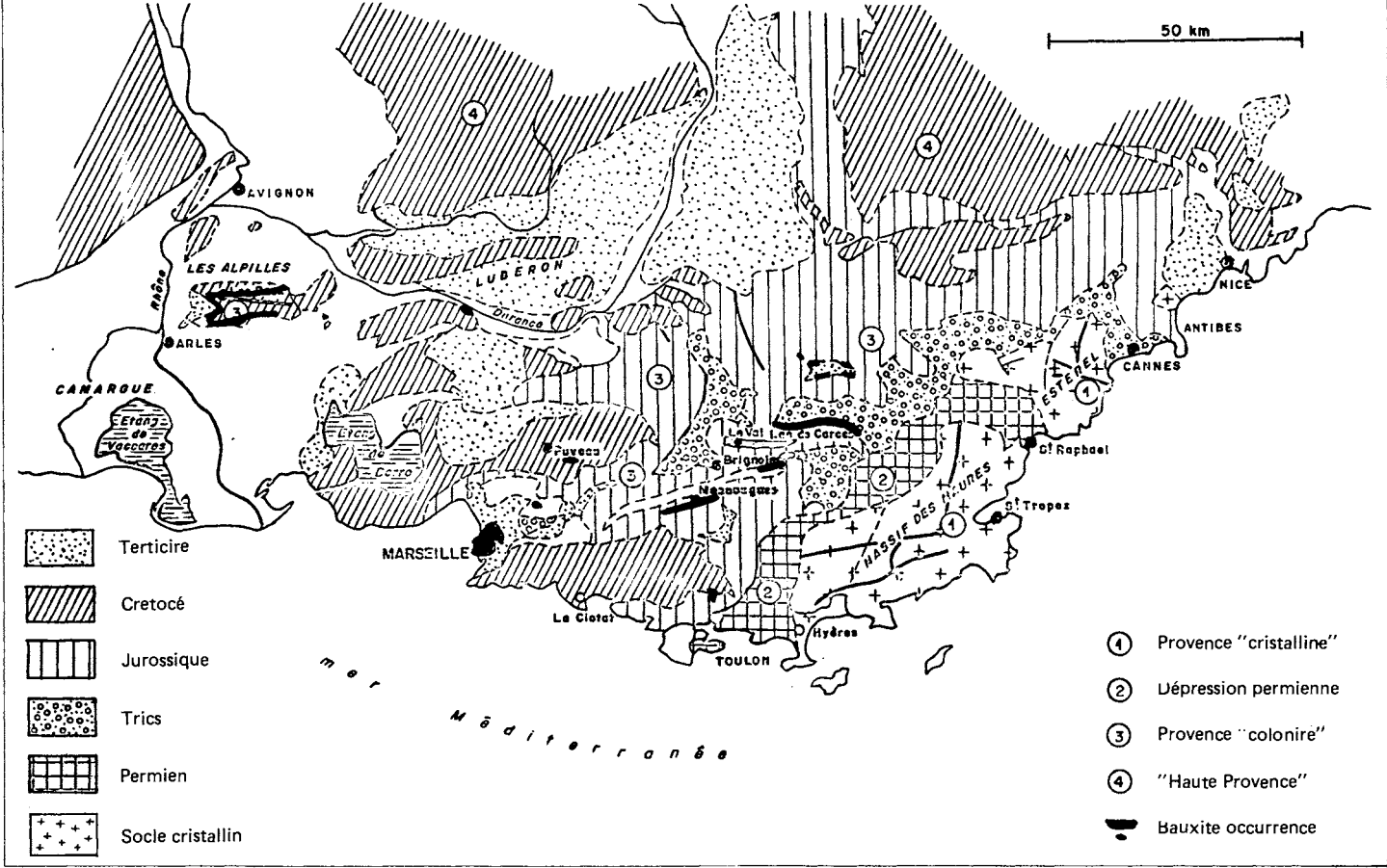
III^e CONGRES
de l'INTERNATIONAL COMMITTEE FOR STUDIES
OF BAUXITES AND ALUMINIUM-OXIDE-HYDROXIDES
« I.C.S.O.B.A. »

Cette invitation
ne peut pas être cédée

65, rue de France

Invitation card for the reception

SKETCH GEOLOGICAL MAP AND MAJOR BAUXITE OCCURRENCES OF PROVENCE



PHOTOGRAPHS OF SOME MOMENTS OF THE CONGRESS

Réception au château Valrose en l'honneur
des congressistes du Comité international pour
l'étude des bauxites



Le président Jean Nicolas aux côtés du doyen Dars (au centre) et de M. Baril, adjoint au maire, au moment de l'accueil des congressistes.
(Photo Gargano)



Les Baux, from where bauxite was first described by Berthier

IV. INTERNATIONAL CONGRESS OF ICSOBA
1978.
ATHENS, GREECE



The Akropolis in Athens

The 4th International Congress of ICSOBA was held in Athens, Greece 9–12 October, 1978, where more than 400 scientists participated from 27 countries. The Congress was organized by ICSOBA Organizing Committee under the auspices of the Ministry of Culture and Sciences, the National Technical University of Athens, Department of Mineralogy – Petrology – Geology. Besides the Organizing Committee other Committees as Scientific Committee, Honorary Committee, Greek Honorary Committee were active during the Congress.

On the first day, 9th October, after the Opening Ceremony, a General Assembly was held. Two sessions took place in the afternoon. On 10th October, 4 sessions, on 11th October, 5 sessions and on 12th October, 5 sessions were organized.

The following excursions to major bauxite mining and metallurgical areas of Greece were offered to the participants and registered accompanying persons:

Friday, Oct. 13. Excursion I.: The Parnassos – Giona mining area, by bus to Delphi. Guided tour of the archaeological site of Delphi. Bus tour to Osios Loukas and guided tour of the Monastery. Return to Athens.

- Friday, Oct. 13. Excursion II.: The "Aluminium de Greece" Alumina Plant and Smelter. Bus from Athens to the "Aluminium de Greece". Bus to Delphi.
- Saturday, Oct. 14. Same as Excursion I.
- Friday, Oct. 13. Excursion III.: The mining area of Mandra. Bus from Athens to the Byzantine monastery at Daphni and the Mandra mining area. Guided tour of the archaeological site at Eleusis. Return to Athens.

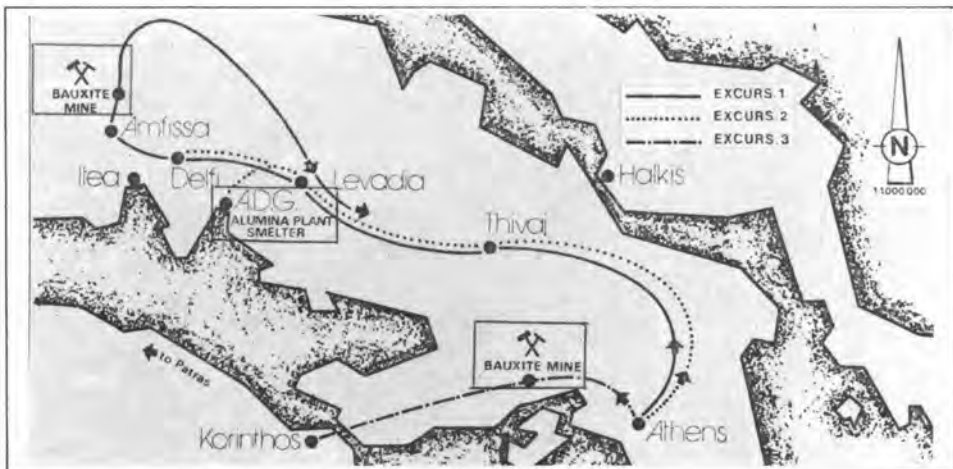
Special programs for ladies were also organized.

The main topics of the Congress, organized and held by sessions were as follows:

- Bauxite geology, genetics, geochemistry, petrology – mineralogy, texture.
- Bauxite mining, methods, exploration and exploitation in underground and opencast mines.
- Alumina production, – technology.
- Non bauxitic raw materials and their utilization.
- Computerization in the bauxite – alumina industry.
- Materials testing methods.

The presented papers of the Congress reflected the interdisciplinary spirit of ICSOBA. The Organizing Committee of the 4th International Congress issued the lectures in three volumes (I.–II. and III.) received by the participants and all members of ICSOBA. This was, indeed, a collection of contributions towards the maximum possible recovery and use of aluminium for the benefit of mankind.

The Organizing Committee of ICSOBA was indebted to "Bauxites Parnasse Mining Co." and "Aluminium de Grece S.A." for sharing the expenses of that publication.



Sketch map of field trips of the Congress

PHOTOGRAPHS FROM THE CONGRESS



*Prof. Dr. S. S. Augusthithis, Prof. Dr. Olga Lahodny-Sarč, and
Prof. Dr. J. Nicolas*



A group of participants on the Plenary Session of the Congress

V. INTERNATIONAL CONGRESS OF ICSOBA
1983.
ZAGREB, YUGOSLAVIA



Zagreb. International Trade Fair Center.

The 5th International Congress of ICSOBA was scheduled for 26–28 September, 1983 in Zagreb, almost at the 20th anniversary of the first international meeting of bauxite and aluminium experts on 1–3 October, 1963. In Zagreb at the 5th Congress 154 participants attended from 29 countries as follows: Algeria 1, Australia 5, Austria 1, Brazil 2, Canada 1, China (P.R.) 3, Czechoslovakia 4, Denmark 1, France 10, GDR 3, GFR 4, Greece 11, Hungary 19, India 5, Indonesia 3, Iran 1, Italy 3, Jamaica 3, Mexico 1, Netherlands 3, Norway 2, Philippines 2, Poland 3, Sweden 3, Switzerland 4, United Kingdom 1, USA 10, USSR 3, Yugoslavia 42.

51 papers and 12 posters were presented; 55 of these communications have been published in *Travaux*.

On the first day of the Congress, 26 September 1983, the General Assembly was held. According to the Statutes, a new presidency and Executive Committee were elected.

The new Presidency of ICSOBA is as follows:

President: Prof. Ivan Jurkovič, University of Zagreb, Member of the Yugoslav Academy of Sciences and Arts in Zagreb, Yugoslavia.

Vice-presidents: Dr. Gy. Bárdossy, Hungarian Aluminium Corporation, Budapest, Hungary, Dr. V. G. Hill, International Bauxite Association, Kigston,

Jamaica, Prof. Dr. A. J. Melfi, Instituto de Geociencias Universidade de Sao Paulo, Brazil, Prof. Dr. A. Poignant, Universite Paris VI., Paris, France, Prof. Dr. D. G. Sapoznikov, Academy of Science of USSR, Moscow, USSR, Prof. Dr. J. L. White, Purdue University, Lafayette, USA.

General Secretary: Prof. Dr. O. Lahodny – Šarc, University of Zagreb, Yugoslavia

Executive Committee: Prof. Dr. J. P. Combes, Université des Sciences et Techniques, Montpellier, France, Dr. G. Coumoulos, Bauxite Parnasse Mining Co., Athens, Greece, Dr. R. P. Lath, Bharat Aluminium Co., New Delhi, India, Dr. J. Lotze, Vereinigte Aluminium Werke, Bonn, FR Germany, Dr. E. Mack, Mineral Resource, Mine Development, Geneva, Switzerland, Dr. W. A. Phillips, Kaiser Aluminium and Chemical Corporation, Oakland, USA, Dr. N. H. Sinha, CSIRO, Division of Mineral Chemistry, Port Melbourne, Australia. Dr. Wei Hanguang, The China National Non – Ferrous Metal Industrial Corporation, Technical and Scientific Dept., Beijing, P. R. China.

IN MEMORIAM: Miroslav Karšulin (1904–1984)

The founder-member of our Society, the International Committee for the Study of Bauxite, Alumina and Aluminium, MIROSLAV KARŠULIN, University Professor and Member of the Yugoslav Academy of Sciences and Arts in Zagreb, died on February 12, 1984.

VI. INTERNATIONAL CONGRESS OF ICSOBA
1988.
SÃO PAULO, – POÇOS DE CALDAS BRAZIL

The Congress is organized by the International Committee for the study of Bauxite, Alumina and Aluminium, under the auspices of the University of Sao Paulo (USP) and Sociedade Brasileira de Geoquímica (SBGq) and sponsored by Fundacao de Amparo a Pesquisa do Estado de Sao Paulo (FAPESP), Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) and Financiadora de Estudos e Projetos (FINEP). The Organizing Committee is most grateful to: Companhia Brasileira de Alumínio (CBA), Mineração Rio do Norte (MRN), Mineração Curimbaba, Rio Doce Geologia e Mineração S/A (DOCEGEO), Alcan Alumínio do Brasil S/A, Alcoa Mineração S/A for their assistance and contributions.

CONGRESS ORGANIZING COMMITTEE

Chairman:	–	A. J. MELFI
Vice chairman:	–	B. BOULANGE
General secretary:	–	A. CARVALHO
Members:	–	J. B. SIGOLO M. C. TOLEDO GROKE Y. LUCAS B. KOTSCHOUBEY C. M. S. V. LEITE D. WILLIAMS C. PARISI R. ASSAD

The main objective of ICSOBA is to promote the exchange of ideas and experiences in the exploitation and exploration of bauxite and related materials, and their treatment in the production of alumina and aluminium.

In Brazil, due to its localization in the intertropical zone, lateritisation is rather active and responsible for the formation of extensive bauxite deposits (over 4 billions tons).

The VI International Congress of ICSOBA is going to be held in São Paulo, Brazil on May 11th–20th 1988, with a pre-session excursion (May 6th–10th).

The Congress will permit to evaluate the progress of the knowledge on the subject since the last meetings. On the other hand, through the excursions, it will be possible to correlate the Brazilian deposits with those of other regions.

VI INTERNATIONAL CONGRESS OF ICSOBA

INTERNATIONAL COMMITTEE FOR THE STUDY OF
BAUXITE, ALUMINA AND ALUMINIUM
(ICSOBA)



MAY 11-20, 1988

(WITH PRE-SESSION EXCURSION)
SÃO PAULO - POÇOS DE CALDAS
BRAZIL

ORGANIZED BY
UNIVERSITY OF SÃO PAULO (USP)
SOCIEDADE BRASILEIRA DE GEOQUÍMICA (SBGq)
ASSOCIAÇÃO BRASILEIRA DE ALUMÍNIO (ABAL)

SCIENTIFIC PROGRAMME

The Congress will comprise technical sessions of contributed and invited papers and excursions. The technical sessions will be concerned with the following topics:

1. **BAUXITE AND OTHER ALUMINIUM RAW MATERIALS**
Geology, Mineralogy, Ore Deposits – Exploration and Exploitation, Alternative Ores.
2. **ALUMINA**
Alternative Ores and Relevant Technologies, Developments in Bayer Process and Technology, New Processes, Economy and Energy Problems.
3. **ALUMINIUM**
Developments in Aluminium and Alloy Production Processes and Technology.
The technical sessions will be held in the period of May 12th–15th, 1988.

Nearly 70 papers have been submitted and most of them will be presented orally during the scientific sessions. Poster display will be arranged, followed by discussion sessions.

TIME DATE	MORNING		AFTERNOON		EVENING
May 11 (Wed)	REGISTRATION				INAUGURAL CEREMONY WELCOME RECEPTION
May 12 (Thu)	REGISTRATION OPENING CONFERENCE		Plenary Session	Technical Session	
May 13 (Fri)	Plenary Session	Technical Session	Plenary Session	Technical Session	GENERAL ASSEMBLY
May 14 (Sat)	Plenary Session	Technical Session	VISIT		
May 15 (Sun)	Plenary Session	Technical Session	Plenary Session	Technical Session	CONFERENCE DINNER

FIELD EXCURSIONS

A pre-session (I) and a post-session (II) excursions have been arranged.

I. Pre-session excursion. Bauxite deposit of the Amazon region (Northern Brazil).

May 6th–10th (optionally May 4th–6th)

Start – Belém (PA)

In the Amazon region we have one of the largest bauxite deposits in the world with a reserve estimated at 4,000 millions tons. In this excursion, we will visit the deposit of Trombetas which is the only one which has been extensively exploited in the region up to know.

It was also decided to include, without any extra charge, an optional visit to the area of Paragominas, the other important occurrence of bauxite in the Amazon Region (participants in the excursion will find enclosed detailed informations).

- | | | |
|-------------------------|---|--|
| Optional | – | Visit to Paragominas area (May 4th–6th) |
| May 4th (Wed) (evening) | – | Assemble in Belém
Night in Belém |
| May 5th (Thu) | – | Transfer (by coach) to Jabuti
Visit to bauxite deposits
Night – Jabuti |
| May 6th (Fri) | – | Return to Belém
(evening) – Assemble in the Hotel |
| May 7th (Sat) | – | Transfer (by air) to Porto Trombetas
Night – Porto Trombetas |
| May 8th (Sun) | – | Visit to the bauxite deposit
Free afternoon
Night in Porto Trombetas |
| May 9th (Mon) | – | Visit to bauxite and related deposits
(Afternoon) – Transfer (by air) to Santarém
Night – Santarém |
| May 10th (Tue) | – | Transfer (by air) to São Paulo
End of the excursion. |

II. Post-session excursion. Bauxite deposits related to aluminous rocks and pre-cambrian rocks (Minas Gerais and São Paulo regions).

May 16th–21th

Start – Poços de Caldas

End – São Paulo

In this excursion, the bauxite deposits at Poços de Caldas, Ouro Preto and Passa Quatro–Lavrinhas will be visited.

Poços de Caldas is situated in the core of a large alkaline massif of upper cretaceous age, that originated by weathering important bauxite deposits.

Ouro Preto is included in the so called Quadrilátero Ferrífero one of the most important mineral districts in exploitation in Brazil. Associated the iron ore (Banded iron formation) important deposits of bauxite occur, related to superficial evolution.

Passa Quatro is also an alkaline massif which has formed bauxite deposits. The interesting aspect here are the deposits situated in the pediments associated to the alkaline massif.

- May 16th (Mon) – Visit to the bauxite deposits in Poços de Caldas (afternoon) – Transfer (by coach) to Cruzeiro
Night in Cruzeiro
- May 17th (Tue) – Visit to the bauxite deposits in Lavrinhas
Transfer (by coach) to São João del Rey
- May 18th (Wed) – Transfer (by coach) to Ouro Preto
Visit to bauxite and kaolinite deposits
Night in Ouro Preto
- May 19th (Thu) – Visit to the bauxite deposits
Free afternoon
Night in Ouro Preto
- May 20th (Fri) – Transfer (by coach) to São Paulo
Night in São Paulo
End of the excursion.

The Final Circular is being sent to registered members (about 120 participants) from 25 countries.

SYMPOSIA OF ICSOBA

I. INTERNATIONAL SYMPOSIUM OF ICSOBA “White Bauxite” 1–4 October, 1965, Zagreb, Yugoslavia

The Yugoslav National Committee for the Study of Bauxite, Alumina and Aluminium had arranged in October, 1965, in the Yugoslav Academy of Sciences and Arts in Zagreb an Advisory Meeting on White Bauxite. The said meeting was attended by colleagues coming from Austria, France, USSR, Hungary who are especially, engaged in studies of the mineralogy, petrology and geology of white bauxite and are also concerned with investigations on the chemical and physico-chemical properties of this ore, which is genetically linked with red bauxite and represents a most important raw material in respect of technology, too. In continuation of the Meeting on white Bauxite, which was the 1st International Symposium of ICSOBA and at which 19 reports were read, the participants visited Bosnia, Lika and Istria where they inspected bauxite deposits and took samples to be used for laboratory investigations.



Zagreb. Site of the modern quarter close to the Sava river

II. INTERNATIONAL SYMPOSIUM OF ICSOBA “Structure, Genesis and Properties of Clays” 9–11 September, 1968, Zagreb, Yugoslavia

In September, 1968, the Yugoslav National Committee organized a Symposium on the Structure, Genesis, and Properties of Clays and other Silicate raw Materials in Zagreb, Yugoslavia. These ores were also related to the red bauxite and were most important in investigations on the genesis of bauxite as well as in its technological processing. This Symposium was attended by participants from France and for the first time also by participants from the United States. Results presented at this Symposium were published in No. 6 of *Travaux*.

III. INTERNATIONAL SYMPOSIUM OF ICSOBA “Anode Problems in Aluminium Electrolysis” 7–9 June, 1971, Milan, Italy



Roman Catholic Cathedral in Milan, Italy

This international meeting of ICSOBA differed in character from the 2nd Congress in Budapest 1969, which covered the entire research activity of the ICSOBA from bauxite geology to aluminium electrolysis. On this occasion the aim was to study thoroughly one of the fundamental problems of aluminium electrolysis, namely that of the anode.

This is in agreement with the statutes of ICSOBA pointing out, that the organization is engaged in clearing up problems of general importance and

of common interest, which promote the solution of problems related to technical progresses.

The colloquium was organized by Montecatini Edison SA and AIM (Associazione Italiana di Metallurgia) in cooperation with ICSOBA. The success of the colloquium was due to the special efforts of Mr. Callaioli, Mr. Vajna de Pava and Mr. Lo Pinto, chief organizers.

During this very important meeting the presented papers were ordered into three groups:

- the geological – mineralogical – petrological group with 18 lectures;
- the chemical and physico – chemical group with 16 lectures
- the technological group with 15 lectures.

All the lectures were published in three volumes corresponding to the groups mentioned.

In a special session the “Guido Donegani” gold medal was awarded. The great honour was conferred to Prof. Dr. Kai Grjotheim, who was one of the most active founding members of ICSOBA.

During the sessions 20 lectures were presented which were published in TRAVAUX No. 10.

Dr. György Dobos, President of ICSOBA told in his welcoming address, among others:

... “The third main field of activity of the Presidency has been the extension of the international organization of ICSOBA and its strengthening. To cope with this, we have started a general campagne of canvassing and as a result National Committees of ICSOBA had been founded in Yugoslavia, Hungary, the USA and France, and several other countries have also made steps in this direction. At present the international organization of ICSOBA has 50 corporate body members and 131 individual members registered. Among the corporate members are: Alcoa, Reynolds, Harvey Aluminium, Pechiney, Ugine–Kuhlmann, Vereinigte Aluminium–Werke, Université de Strasbourg, Giuliani, Alcan of Canada, Alusuisse and several Yugoslav and Hungarian Companies.”

IV. INTERNATIONAL SYMPOSIUM OF ICSOBA

“Terminology of bauxite”

18–19 Nov. 1971 – Leoben, Austria

ICSOBA organized this 2 days meeting in Leoben, Austria 18–19 November, 1971. Place of the meeting was the Institut für Matellkunde (Neues Gebaude). 73 participants came from the following 13 countries to discuss the main topics: Australia 1, Austria 21, Bulgaria 1, France 8, Greece 3, Guayana 1, Hungary 13, Iran 1, Italy 1, Jamaica 2, Switzerland 1, USSR 1, USA 4, Yugoslavia 15.

The main topics of the meeting were as follows:

- Exploration of bauxite deposits
- Problems of bauxite mining
- Classification of reserves and evaluation of technological properties
- Terminology of bauxite in respect of geology, petrography and mineralogy.

The main organizer of the meeting was Prof. Dr. W. E. Petrascheck, Montanistische Hochschule, Leoben.

During one of the sessions a film about a tunneling machine "The Alpine Miner" – was presented by Maschinenfabrik Zeltweg of Österreichische Alpine Montan – Gesellschaft.

In the Grand Hotel Baumann a reception was given by the Vereinigte Metallwerke Berndorf A. G. for participants personally invited.

V. INTERNATIONAL SYMPOSIUM OF ICSOBA
"Aluminium Production from Low Grade Bauxite"
Banská Bystrica – Žiar nad Hronom
Czechoslovakia, 6 – 8 June 1972.

The Colloquium was organized by:

- VTS – Slovak and Czech Metallurgical Association – Regional Committee of VTS in Banská Bystrica.
- The working Committee of VTS at the Alumina Plant Žiar nad Hronom.
- Kovohty Prague; General Management for Plants of Non-Ferrous and Powder Metallurgy.
- The Alumina Combinat Žiar nad Hronom.
- The International Presidency of ICSOBA.

The Opening Session was held on 6 June, 1972 in Banská Bystrica, followed by four Scientific Sessions on which 22 lectures were presented.

The main topics of the Scientific Sessions were:

1. General Problems,
2. The bauxite grade's influence on alumina technology
3. Beneficiation of bauxite and treatment of red mud
4. Bauxite processing by pyrogenic methods.

A bus trip and visit to the Alumina Plant at Žiar nad Hronom was organized on 7 June, 1972 and this was followed by a cultural program in the afternoon.



Banská Bystrica



"Leányvár" at Selmechánya



SOME MOMENTS OF THE MEETING



VI. INTERNATIONAL SYMPOSIUM OF ICSOBA
“Advances in Geology, Geochemistry and Treatment of Bauxite”
20–22 October, 1975, Dubrovnik, Yugoslavia



Castle of Dubrovnik

This Symposium was organized between 20–22 October, 1975, by the Organizing Committee of ICSOBA, the Yugoslav Academy of Sciences and Arts in Zagreb. The Symposium “Advances in Geology, Geochemistry and Treatment of Bauxite” was attended by 170 participants from 26 countries. 60 communications were presented during three days. This represented an important contribution to the science and technology of the exploration, exploitation and treatment of bauxite.

Very attractive and interesting programs were organized for the field trips to bauxite mines in Niksič and Mostar and alumina plants in Titograd and Mostar. All the lectures were precisely prepared and published in the Proceedings of the Symposium.



A group of participants



A group of participants



Exchange of experiences

VII. INTERNATIONAL SYMPOSIUM OF ICSOBA
ICSOBA — CMS Conference
“Bauxite and Clay Minerals”
14–20 August, 1977. Kingston, Jamaica



Sheraton Hotel, Kingston, Jamaica

ICSOBA and the Clay Minerals Society (CMS) held a joint meeting and International Conference at Kingston, Jamaica, 14–20 August, 1977. Organizer and host of the Conference was the Ministry of Mining and Natural Resources of the Government of Jamaica. 322 Specialists from 27 countries participated at the Conference.

For the first time ICSOBA had a joint meeting with another scientific society. It proved to be extremely useful because of the many common features existing among bauxite and clay minerals. The 80 lectures presented by ICSOBA and CMS members were arranged into two parallel sessions. The topics of the Conference were: Alternatives to bauxite — Bauxite genesis. — Bauxite and red mud. — Bauxite chemistry. — Bauxite, alumina and development. — Reclamation of mined lands. — Clay chemistry. — Characterization of clay minerals. — Beneficiation and processing. — Weathering processes.

The four field trips organized and prepared by the Organizing Committee and supported by the bauxite companies, as ALCAN JAMAICA Ltd., ALPART JAMAICA Ltd., and REYNOLDS JAMAICA Ltd. were very useful

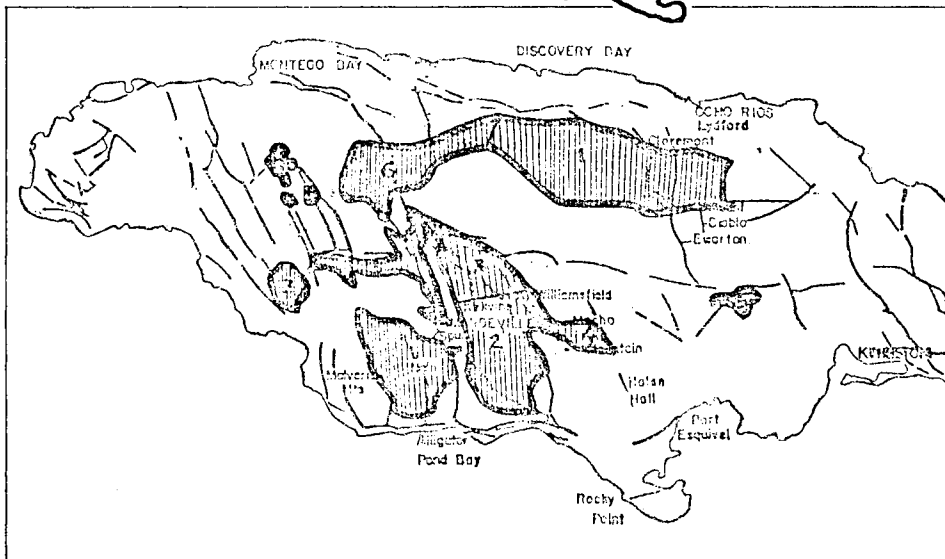
The Clay Minerals Society.



International Committee
for the Study of Bauxites,
Alumina, and Aluminium.

Organizers of the Symposium

and informative for all visitors. The scientific program of the Conference was completed by a set of remarkable cultural and social events, as a welcoming poolside-party at Sheraton Hotel on August 15; a performance of the National Dance Theatre Company at the Little Theatre on August 16, and a joint ICSOBA-CMS banquet.



Location of major bauxite provinces in Jamaica



Some moments of the field trips to the Jamaican bauxite deposits



Field trip on the Manchester Plateau deposit

VIII. INTERNATIONAL SYMPOSIUM OF ICSOBA
ICSOBA – AIM Conference
“New processes in aluminium production”
26–28 September, 1979. Cagliari, Italy



*Sight of Cagliari, Sardegna
Italy*

The ICSOBA – AIM Conference on “New processes in aluminium production” had been held 26 – 28 September, 1979 at Cagliari on Sardinia in Italy. The sponsors of the Conference were ICSOBA – AIM (Associazione Italiana di Metallurgia), ALSAR (Societa Mineraria Chimico – Metallurgica per l’Industria dell’Alluminio in Sardegna), and ALUMETAL (Societa Alluminio e Metalli).

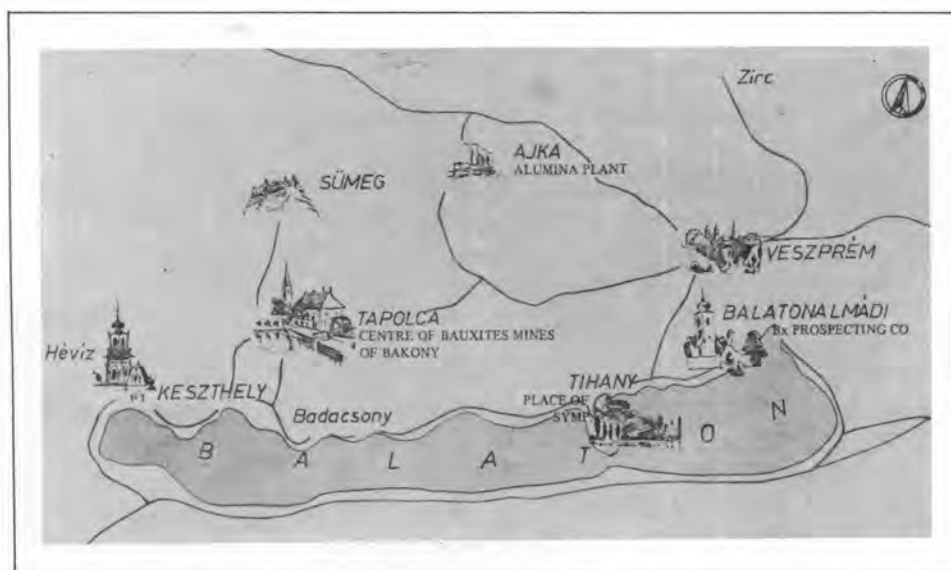
The total number of participants was 126 from the following countries: Italy 43, Yugoslavia 18, Fed. Rep. Germany 10, USA 10, Norway 6, USSR 5, Denmark 4, Hungary 4, Great Britain 3, Greece 3, Netherlands 3, Austria 2, Belgium 2, France 2, Spain 2, Switzerland 2, Argentina 1, Czechoslovakia 1, Egypt 1, Guyana 1, Iran 1, Jamaica 1, Mexico 1.

Regarding the rather specialized theme and the somewhat out – of – the – way conference site it must be admitted that this is a remarkable number of participants. The success of the conference was great and the lectures given could serve as a good survey and summary of the actual ideas and methods for the evaluation of new raw material resources and their processing in the alumina and aluminium industry.

IX. INTERNATIONAL SYMPOSIUM OF ICSOBA
"Alumina Production until 2000"
6-9 October, 1981. Tihany, HUNGARY

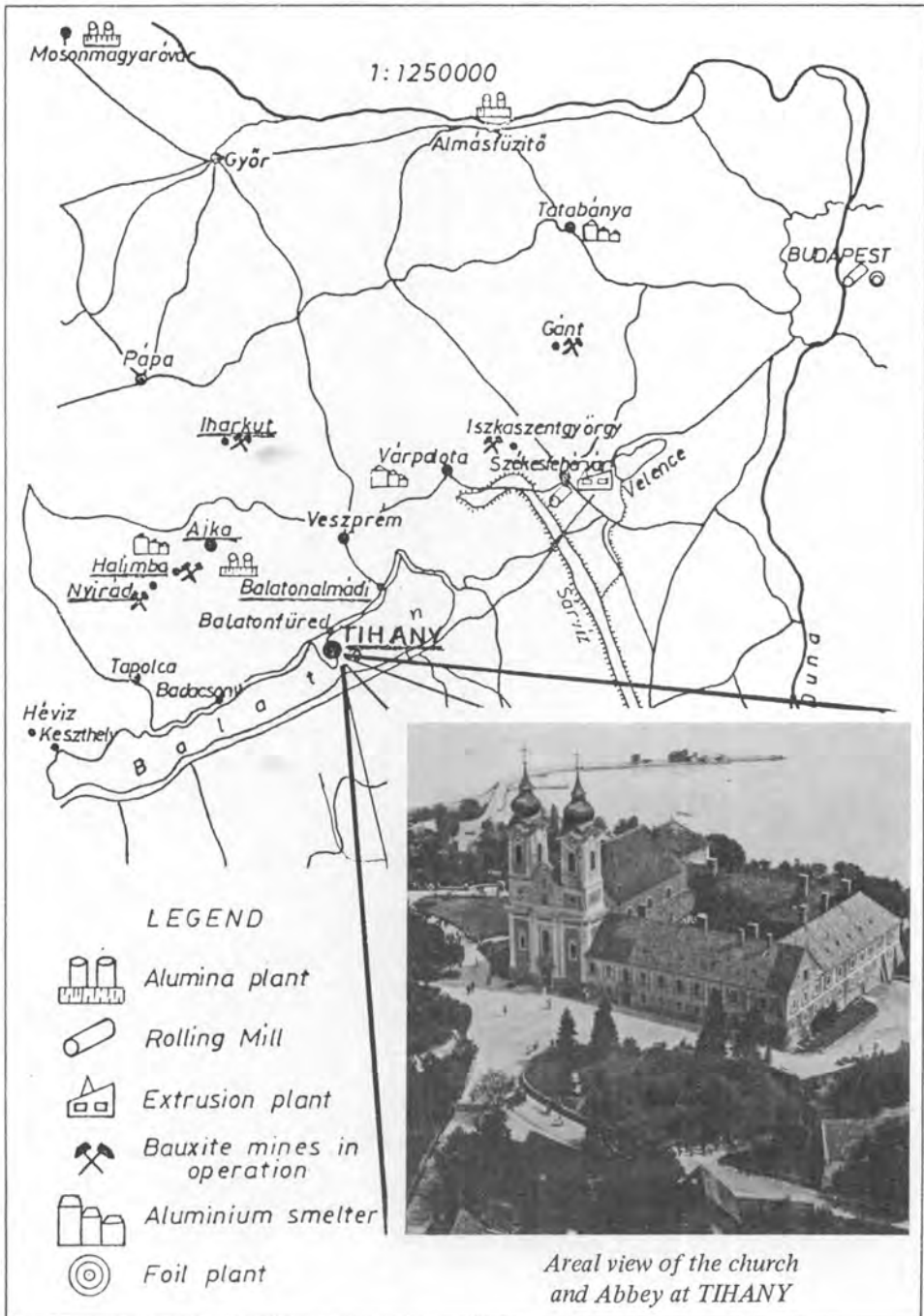
The International Symposium "Alumina production until 2000" was organized between 6-9 October, 1981 by ICSOBA, the Hungarian Mining and Metallurgical Society (OMBKE) and the Hungarian Aluminium Corporation (HUNGALU) in Tihany, at Lake Balaton, Hungary. The about 250 participants arriving from 34 countries and representing almost all important alumina producers of the globe, entered in a joint venture to forecast the technical and economical situation developing in the alumina industry during the next two decades. Most of this job was accomplished by the 17 lecturers who gave comprehensive proposals relevant to the topics "Processes and trends" "Bauxite", "Bauxite processing", "Aluminium hydroxyde", "Alumina", and "Process control and byproducts". 40 papers were presented in poster form and this session, although a novel arrangement in the history of ICSOBA meetings, was found to be very useful in rendering possibility for intensive personal discussions among the participants interested in particular problems.

Three field trips were organized: one to the Bauxite Prospecting Company in Balatonalmádi presenting its permanent exhibition on the geology of Hungarian bauxite deposits; another to a bauxite mine in the Bakony region, to visit either an open pit or an underground mine, and a trip to the Ajka Alumina Plant and Smelter.



Region of the symposium and excursions

MAIN BAUXITE, ALUMINA AND ALUMINIUM FACILITIES OF HUNGARY



PHOTOGRAPS OF SOME EVENTS OF THE MEETING



A group of participants





*Visit to the
Bauxite
Prospecting Co.
Balatonalmádi*

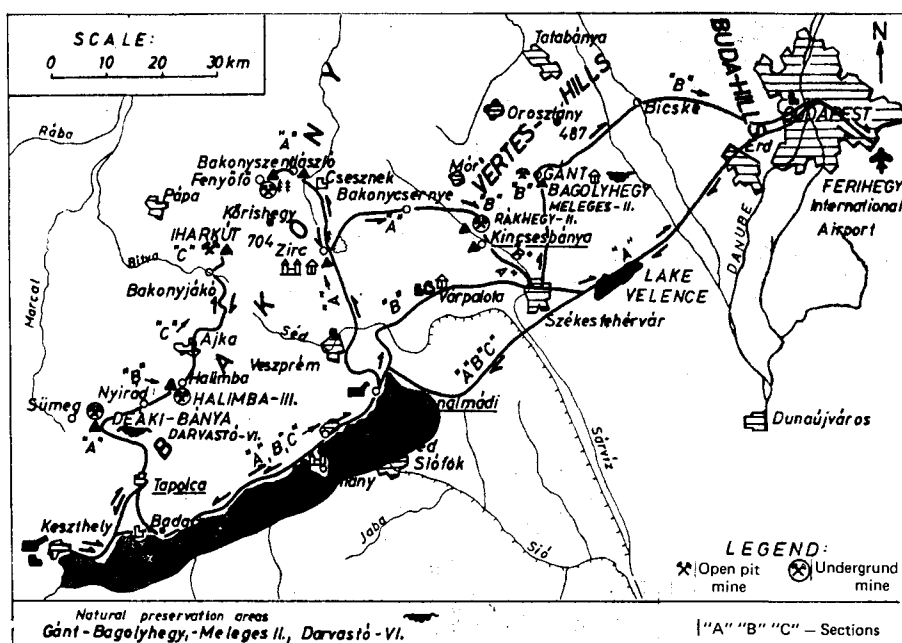


X. INTERNATIONAL SYMPOSIUM OF ICSOBA
 "Bauxite Prospecting and Mining"
 2-5 October, 1985. Tapolca, HUNGARY

The VIII. International Symposium of ICSOBA on "Bauxite Prospecting and Mining" was held 2-5 October, 1985 at Tapolca and Balatonalmádi, Hungary. It was organized by the Hungarian National Committee of ICSOBA (set up within OMBKE, the Hungarian Mining and Metallurgical Society) and by three companies of HUNGALU: the Bakony Bauxite Mines, the Fejér County Bauxite Mines and the Prospecting Company, Balatonalmádi. Chairman of the organizing committee was J. Gebhardt, director of mines of HUNGALU.

There were 146 participants at the Symposium from the following 21 countries:

Algeria 1, Australia 3, Austria 2, Brazil 2, Czechoslovakia 1, France 7, Fed. Rep. Germany 4, German Dem. Rep. 1, Greece 8, Hungary 79, Italy 2, Jamaica 3, Netherlands 1, Rumania 1, Suriname 1, Switzerland 1, United Kingdom 1, USA 2, USSR 7, Venezuela 1, Yugoslavia 18.



Routes excursions
 X. INT. ICSOBA Symposium, Tapolca, Hungary
 2-5 October, 1985.

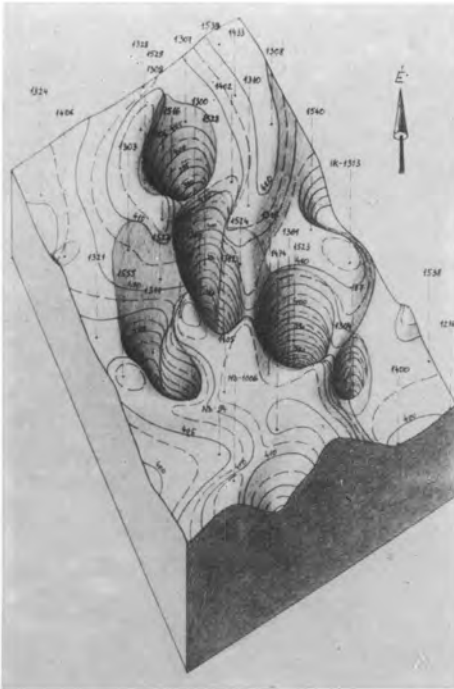
Visit to the Iharkút Bauxite Mine,
HUNGALU Bakony Bauxite Mines Co.



Karstic cones of dolomite in IHARKUT No.5 deposit



A portion of IHARKUT No.2 bauxite deposit excavated



Block diagram of a “sinkhole filling type” bauxite deposit at Iharkút



Open pit mining in a deep sinkhole filled with bauxite at Iharkút, 1985.

46 lectures were presented on the following topics:

- bauxite geology, mineralogy and geochemistry,
- bauxite prospecting and exploration,
- geophysical prospecting and remote sensing,
- open pit and underground bauxite mining,
- computerization and geostatistics.

Abstracts of all lectures were handed over to the participants at the beginning of the Symposium. On October 2 and 3 lectures were delivered at the Educational Center of the Bakony Bauxite Mines at Tapolca. In the same building posters were presented by the participants. The Eötvös Lóránd Geophysical Institute organized an exhibition of their instruments used in bauxite prospecting and displayed geophysical case histories on bauxite deposits.

On October 4 the Symposium continued at Balatonalmádi, at the center of the Hungalu Prospecting Company. The lectures were delivered in the conference rooms of Hotel Aurora. A set of posters gave here review on the activities of the Prospecting Company.

Half – day field trips were organized on October 3 in two groups for visiting open pit bauxite mines of the Iharkút – Németbánya region and the Nyirád – Deáki underground mines. Full day excursions were organized on October 5 in two groups. One group visited the Prospecting Company at Balatonalmádi and a bauxite prospecting area at Fenyőfő, while the second group went to Kincsesbánya to the Hungalu Fejér Country Bauxite Mines.