NAME: GYÖRGY (GEORGE) BÁNVÖLGYI

SUMMARY OF EXPERIENCE

Senior Process Consultant with more than 47 years experience in the alumina industry. His expertise covers processing of bauxites of different types and grades using the low or high temperature digestion processes, process modelling, material and energy conservation of the alumina production. Specialises in on-site techno-economic evaluations leading to process concepts, Feasibility Studies and de-bottlenecking proposals. Further specialties are the environmental aspects, valorisation of bauxite residue, prevention and removal of scales, also co-ordination and conducting of research and development projects. Travelled extensively in Brazil, Canada, China, France, Guinea, India, Kazakhstan, Russia, Spain, UK, USA, Venezuela and Vietnam. Published several papers, gives lectures at various symposia and workshops. Principal inventor and driver of the Improved Low Temperature Digestion (ILTD) Process for manufacturing alumina in an environmentally sustainable manner and significantly improving its profitability. Holds the Commemorative Medal of ICSOBA.

PERSONAL DATA

BIRTH: April 23,1948. Budapest, Hungary

EDUCATION:

- Patent Attorney, Postgraduate Institute of Budapest University of Economics, 1992
- MSc. in Chemical Engineering, Veszprém University of Chemical Engineering, Veszprém, Hungary, 1972

LANGUAGES: Hungarian, mother tongue
Good English command
Russian, fair

CITIZENSHIP: Hungarian

PROFESSIONAL AFFILIATIONS:

- Bán-Völgy Ltd, Technical Director
- International Congress for Study of Bauxites, Alumina and Aluminium (ICSOBA), www.icsoba.org

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EXPERIENCE (PROJECT TYPES, ACTIVITIES)

Workshop on Resource Efficiency and Circular Economy in Aluminium Production: Better use of bauxite residues (red mud) 18-20 Sept, 2019

Attended the EU-India Meet on the Resource Efficiency Initiative. Held 2 lectures in Delhi and another 2 in Nagpur on the bauxite residue, achievements of the Zero-waste Valorisation of Bauxite Residue (Red Mud) project, the dam failure at Ajka and the ILTD Process.

European Training Network for Zero-waste Valorisation of Bauxite Residue (Red Mud) 2015-2019

As an External Process Consultant, member of the Supervisory Board participated in the network-wide events, provided ongoing help for the 15 Early Stage Researchers to fulfil their obligations, review their manuscripts, etc. (http://etn.redmud.org/project/)

Concept Study on the ILTD Process 2013-2014

Subsequent to a fact finding mission in an alumina refinery in Brazil, a Concept Study was prepared along with BOKELA GmbH, Germany, on the implementation of the ILTD Process Concept, with very good payback period. The Concept Study was presented to the Principal with success.

Due diligence of an alumina refinery 2012

As a member of a small group of Senior Consultants of ACE Group, participated in a due diligence of an alumina refinery in Azerbaijan. Responsible for the detailed assessment of the process status, material and energy conservation and also for outlining the conversion of the quality from the so-called floury to sandy type product. The task included the quick assessment of the red mud disposal site to improve its current status.

Reporting, follow up of the red mud dam failure at the Ajka alumina plant 2010-2018

I was requested by the international professional community to report what happened and explore why the failure may have happened. As an expert of bauxite processing I was interviewed by the Hungarian and international media on the issue. Delivered a keynote lecture at the XVIIIth International Symposium of ICSOBA in Zhengzhou, China on November 25, 2010 and another lecture on the dam failure and subsequent developments at the International Seminar on Bauxite Residue (Red Mud) of ICSOBA, in Goa, India, October 17-19, 2011. Provided consulting assistance for a Member of the European Parliament and the Chairman of the Committee for Sustainable Development of the Parliament of Hungary. A further lecture was presented on the ICSOBA about the latest findings at the Conference in Belém, Brazil on 28 October, 2018.

Study on TCA 2010

The making of tricalcium-aluminate-hexahydrate (TCA), the decisive parameters, how these parameters are adjusted, the cleaning of various pregnant liquors obtained from various bauxites, the typical TCA consumptions and costs were summarized in a Desktop Study.

Preparation of the Pilot Scale Implementation of the ILTD Process 2009-still

A Project Proposal was prepared aiming at the pilot scale implementation of the Improved Low Temperature Digestion (ILTD) Process in 2009. A Memorandum of Understanding was signed with Southern Basic Chemicals Company (SBCC), Ho Chi Minh City, Vietnam in October, 2011. Further discussions were held in October 2012 in

Belém, Pará state, Brazil during the ICSOBA Conference and also with another refinery in Alumínio, Sao Paulo State.

Literature Review of the Sintering Process 2008
A literature review was prepared for the sintering process in general and for the serial combined Bayer-sintering process in particular.

Literature Review and Process Concept for Oxalate Removal 2007-2008
The scientific and technical literature was reviewed focusing on the problem of organics of the Bayer process. Process concepts were also outlined for the oxalate removal in the context of an upgrade of a 1.5 MTPY capacity refinery in Latin America.

Evaluation of Processing Options for a Bauxite in Turkey 2007
A preliminary evaluation of the process options of a low grade bauxite in South East Turkey. The evaluation covered the Bayer Process and the Parallel Combined Bayer-Sintering Method as well in a would-be new refinery and in the existing alumina refinery in Seydisehir.

Training course 2006
A short training course was held for a company specialized in processing wastes so that its core staff became familiar with the basic chemistry, the unit operations, principal design, operational considerations and quality control of the Bayer process.

Sangaredi Alumina Refinery, Guinea, 3.3 MTPY from April 2005- April 2007
As a member of the Owner`s team (Aluminpro) of the Detailed Design participated in the process design, preparation of the Basic Process Design Criteria, Process Flow Diagrams (PFD) and Process and Instrumentation Diagrams (P&ID). Was responsible for the co-ordination of the utilities, such as steam and water systems, lime, fuel oil, sodium hydroxide, acid, air supply and red mud disposal. The value of the project was over US$ 4 billion. The design project was carried out mainly with Technip, Paris, France. (www.globalalumina.com)

Fria Alumina Refinery, 1.4 MTPY Expansion, Bankable Feasibility Study 2004
As Lead Process Engineer responsible for the Process Technology, Process Block Flow Diagram, Process Design Criteria, Process Flow Diagrams, Process Descriptions and Process Control Philosophy, Process and Instrumentation Diagrams (P&IDs), Data Sheets for principal equipment, preparation of the Laboratory Testing Programme, co-ordinating of its execution and assessment of the results. The Bankable Feasibility Study for the US$ 650 million project was carried out mainly in Sankt Petersburg, Russia.

Friguia Scoping Study 2003
As Lead Process Engineer was responsible for modelling of the existing operations, outlining the process concept for five different capacity options, conducting conceptual material and heat balance calculations, providing data for equipment sizing, making the process block flow diagram and process description, elaborating the material and energy consumptions for the financial assessment.

Jamalco Expansion Project 2002
Lead Process Engineer for the Precipitation Area of the expansion of the Clarendon Alumina Plant (Jamalco). The objective of the expansion was 25% increase of the 1 million ton per year capacity refinery. Nearly 50% of the project total cost of US$ 110 million was invested in the Precipitation Area. Was responsible for the Project Design

Criteria, Process Flow Diagrams, Data Sheets, Process and Instrumentation Diagrams (P&IDs), Functional Specifications, data supply for the mechanical, process instrumentation and civil engineers, preparation of quotations and evaluation of bids. The project was executed with full success, on time and within budget.

OJSC Aluminy Kazakhstana, Technical Due Diligence 2001-2002
Responsible for auditing of the process design of the expansion and product quality improvement of the alumina refinery for an international bank. The value of the investment programme was US$ 77 million.

Boké Alumina Corporation, Pre-feasibility Study 2001
Responsible for outlining of the process concept and the Basic Design Criteria of the 2.6 MTPA alumina refinery. Supervised the material and heat balance calculations, the overall process flow diagram, sizing of the principal equipment and determination of the specific material and energy consumptions. Elaborated the process description. Prepared the laboratory testing program, co-ordinated the execution thereof. Prepared quotations and evaluated the proposals and bids.

High Solid Anaerobic Digestion, Feasibility Study 2000-2001
Outlined the process concept, site selection and conducted negotiations between Ajka Municipality, Hungary, Alpha Gamma Inc, Raleigh, USA, and AP International, USA/Hungary. Responsible for the technical aspects of the Feasibility Study for the treatment of the municipal solid waste of Ajka town, Hungary by anaerobic composting. Directed the on-site sampling, co-ordinated the analyses, and carried out reporting. The project was co-sponsored by the Trade Development Agency of USA.

Fria Expansion Study 1998-1999
Responsible for checking of the process engineering tasks of the brown-field expansion of the Fria Alumina Refinery from 0.640 MTPA to 1.2 MTPA. Co-ordinated the activities of the process, mechanical, civil and electrical engineers. The task was executed in Puerto Ordaz, Venezuela and in Budapest, Hungary.

Reducing of the Silica Problem, Bauxilum Alumina Plant, Venezuela 1997-1998
Directed an on-site audit to find out the reasons of serious silica scales in the digestion heat exchangers of the 1.8 MTPA alumina refinery. Based on the findings of the on-site visit and some laboratory tests outlined concepts how to cope with the silica scale problem. Responsible for the negotiating, project management, fact-finding, laboratory testing, assessment of the plant data and reporting. Directed liquor tests with spent liquor and concentrated spent liquor at temperatures of 100^{o}C and 145^{o}C in presence of different amounts of DSP seed.

Conversion of DSP (desilication product) to zeolites 1997-2005
Participated in a research process that was elaborated for the conversion of sodalite (desilication product, DSP) to various value added zeolites via a new economic process route. Three different zeolites were produced in the laboratory. The process (called Szeged Process) was patented in 8 countries. The pilot plant scale verification and commercialization of the process is outstanding.

Alumina Plant Audit, FRIGUIA, Guinea 1996
Process Consultant in a Plant Audit (Due Diligence) of the Friguia Alumina Plant (600 ktpy) in the frame of ATF (Alumina Task Force). Responsible for the fact-finding, data analyses, reporting and negotiating.

Plant audit of Volkhov Factory Complex, Russia 1996
Process Consultant in the plant audit (Due Diligence) of the Volkhov Factory Complex, Russia. Fact-finding, assessment, reporting.

Total Reclamation Plant, H.H. Wardle, UK 1996
Provided consulting services for a secondary smelter in the frame of a project which aimed at processing of aluminium dross. Directed the laboratory tests in Whitchurch, UK. Witnessed the pilot scale tests for the dross processing in Valladolid, Spain.

Making of red mud based artificial soil for agriculture 1993
In the frame of a joint project of Aluterv-FKI, Keraprogress Intersilicate, both Budapest, Hungary and INDAL, India, responsible for a site visit in the Muri Alumina Refinery, Bihar state, India, collecting samples, coordination of their analyses and reporting.

Environmental audit of the aluminium industry in Hungary 1994-1995
Responsible for the environmental aspects of the alumina process technology. The project was sponsored by the European Union, a PHARE Project.

Development of an Improved Low Temperature Digestion (ILTD) Process 1986-still
As a consequence of the understanding the interactions of the basic reactions of gibbsite and kaolinite in the Bayer process liquor, an Improved Low Temperature Digestion (ILTD) Process was patented in nine major alumina producing countries. The process makes possible among other benefits, to save about 15% in cash costs when a typical bauxite from Brazil (Trombetas) is processed. A bauxite residue with an extremely low combined soda content and DSP (desilication product) as a new by-product are obtained. G. Bánvölgyi is the principal inventor and driver of the development.

Kinetic modelling of gibbsite dissolution and conversion of kaolinite to DSP 1984-1989
Directed a research and development project for the better understanding of the basic reactions of gibbsite and kaolinite in the Bayer liquors. Developed a comprehensive kinetic model and reaction scheme as a result of the project. Directed the development of a computer program for solving multiple differential equations and parameter estimation of kinetic models using the principal component analysis. The latest status of the program called PEST is in Pascal language.

Opportunity Study on processing diasporic bauxite in Iran 1988
The responsibility was to be the team leader and process engineer in charge of the 200kt/year refinery for processing of diasporic bauxite at Jajarm. The project was financed by UNIDO (United Nation Industrial Development Organization).

On-site training project of the Bauxite Research Centre in Vietnam 1988
Provided training for material and heat balance calculations and using of the computer model of the Bayer Process made by Dr Péter Siklósi. During the training elaborated a Case Study for optimisation of the process technology for processing gibbsitic bauxites of Vietnam, jointly with Mr Doung Thanh Sung. The project was financed by UNIDO.

Plant testing of tubular heat exchangers, China 1986
Process engineer in charge for a pilot scale testing of the tube digester heat exchangers in ZhengZhou Alumina Plant, China. The project, sponsored by UNIDO aimed at processing of diasporic bauxites. Responsible for the on-site process design of the plant experiments.

Techno-economical assessment projects, Feasibility Studies 1975-1989
Several projects covered the techno-economical assessments of the operation of various alumina plants which led to proposals for energy conservation and decrease of the production costs. In the Feasibility Studies participated as process engineer (for Jamaica, Vietnam, Greece, etc.).

Upgrade of the precipitation and hydrate washing of MOTIM Works 1983-1984
As process engineer in charge, responsible for the detailed process engineering design, developed the design criteria, co-ordinated the engineering design of the implementation of the process technology of non-metallurgical grade alumina.

Implementation of the tube digestion in MOTIM Works 1977-1982
As process engineer in charge, responsible for the detailed process engineering of the plant scale tube digester in Hungary with a capacity of 120 m^3/h, operating up to 250ºC. Developed the project criteria, co-ordinated the preliminary and detailed design, prepared operating manuals for the facilities within the areas of responsibility. Participated in the start-up of the tube digester.

Birac Alumina Plant Design Project, Yugoslavia 1973-1975
As staff process engineer, participated in the detailed process engineering of the Birac alumina plant of 600 ktpa capacity (now in Bosnia-Herzegovina). Developed project criteria, elaborated and co-ordinated the preliminary and final design, prepared operating manuals for the facilities within the areas of responsibility.

EMPLOYMENT HYSTORY

BÁN-VÖLGY Bt, Limited Partnership, October 2001 – still
Technical Director
Provided consultancy services for Hatch Associates (Mississauga, Canada) in the frame of a one-year retainer, from July 2007 to June 2008. Between April 2005 and April 2007 was a Senior Process Consultant for the Global Alumina Corporation (a project in Guinea, West Africa) via Aluminpro. Provided consultancy and process engineering services for Hatch Associates from October 2001 to December 2004.
Kaiser-Aluterv Ltd, then Budapest office of Hatch Associates, Nov. 1996 – October 2001
Senior Process Specialist
Siklósi & Co. Engineering and Consulting Ltd., Executive Jan.-Nov. 1996
Aluterv-FKI Ltd., Senior Process Engineer 1975-1995
(Hungalu Engineering and Development Centre)
Aluterv, staff process engineer 1972-1975
(Hungalu Engineering and Design Co.)

Publications:

1. Siklósi, P. and Bánvölgyi, Gy.: Timföldgyárak energiafelhasználásának csökkentése. (Energy conservation in the Bayer alumina production) Bányászati és Kohászati Lapok, Fémkohászat, 111, (1978), 7, pp 335-339. (in Hungarian)
2. Bánvölgyi, Gy. and Wärmer, Zs.: Főberendezések optimális ciklusidejének meghatározása (Determination of optimum operating cycle times of principal equipment) Magyar Kémikusok Lapja, XXXIX, (1984), 3, pp 97-102 (in Hungarian)
3. B. Gy. (Bánvölgyi György): A Pechiney innovációs tevékenységének jellegzetességei. (Features of the innovation activity of Pechiney) Hungalu MAT Híradó, 1987/9
4. Bánvölgyi, Gy., Valkó, P, Vajda, S. and Fülöp, N.: Bepárló stacionárius modelljét befolyásoló paraméterek becslése: a főkomponens analízis megközelítés. (Estimation of influential parameters in a steady-state evaporation model: the principal component approach) Bányászati és Kohászati Lapok, **Kohászat**, 119, (1986), 9, pp. 414-417 (in Hungarian)

5. Bánvölgyi, Gy.: Lerakódások képződése timföldgyári feltáró berendezésekben, a lerakódások megelőzése és csökkentése. (Formation of Scales in the Digestion Systems of Alumina Refineries, Prevention and Reduction of Scales). Aluterv-FKI, Budapest, April 1987 (in Hungarian, manuscript)
6. Bánvölgyi, Gy., Valkó, P, Vajda, S. and Fülöp, N.: Estimation of influential parameters in a steady-state evaporation model: the principal component approach. Computer and Chemical Engineering, Vol. 12 (1988) No 2/3, pp 117-122.
7. Bánvölgyi, Gy. and Sung, Duong Thanh: Report on selection of the optimum process parameters for manufacturing alumina from lateritic bauxites in Socialist Republic of Vietnam. Bauxite Research Centre, Bien Hoa, Vietnam, December, 1988, UNIDO Project: DP/VIE/85/006
8. Bánvölgyi, Gy., Csordás-Tóth, A. and Tassy, I.: In situ formation of sodium aluminium hydrosilicate from kaolinite. Light Metals 1991, pp 5-16.
9. Bánvölgyi, Gy., Molnár, E, Porkoláb Zs. and Szabados É.: Some aspects of engineering in a development project: a case study. UNIDO Workshop on Co-products and By-products of the Bayer Alumina Production, Budapest, Hungary, 1991, pp 290-312.
10. Bánvölgyi, Gy.: Az ötlettől a megvalósulásig??? Egy szolgálati találmány születése, a szabadalmi oltalom megszerzése és a piacra vitel tapasztalatai. (From the idea until the commercialization? The experiences of the genesis of a service invention, obtaining patents and marketing.) Manuscript, theses. Budapest, April, 1992 (In Hungarian)
11. Bánvölgyi, Gy.: Mit kezdjünk egy leállított timföldgyárral? (What can we do with a mothballed alumina refinery?) Műszaki Kémiai Napok ’93, Veszprém, 27-29 April, 1993
12. Bánvölgyi, Gy.: Reactions of gibbsite and kaolinite in the Bayer liquor: a comprehensive kinetic model and an improvement of the low temperature digestion. Proceedings of the 7th ICSOBA (International Congress for Study of Bauxites, Alumina and Aluminium) Conference, held June 22-26, 1992, Balatonalmádi, Hungary, Travaux ICSOBA, Vol. 23, (1996), No 25, pp. 155-171
13. Bánvölgyi, Gy., Szablyár, P. and Hajnal, J.: A hulladék hasznosításának vizsgálata a változó hazai alumíniumiparban. (Study of the waste utilization in the restructuring of the domestic aluminium industry). Bányászati és Kohászati Lapok, Kohászat, 128, (1995), 11-12, pp 459-466. (in Hungarian)
14. Bánvölgyi, Gy.: A gibbsites bauxitok feldolgozásának újabb irányai. (Recent trends in processing of gibbsitic bauxites) AL-TOGETHER PHARE Program, Magyar Zeolit Társaság, József Attila Tudomány Egyetem, Szeged, October 7, 1996. (in Hungarian)
15. Bánvölgyi, Gy.: Újabb eredmények a vörösiszap hasznosítása terén. (New results on the utilization of the red mud.) Műszaki Kémiai Napok ’96, Veszprém, 23-25 April, 1996
16. Bánvölgyi, Gy.: An Improved Low Temperature Digestion (ILTD) Process for Processing Gibbsitic Bauxites. Proceedings of 8th International ICSOBA Conference, April 16-18, 1997, Milan, Italy. Travaux ICSOBA, Vol. 24, (1997), No 28, pp. 214-228
17. Bánvölgyi, Gy. and Siklósi, P.: The Improved Low Temperature Digestion (ILTD) Process: an economic and environmentally sustainable way of processing gibbsitic bauxites. Light Metals, 1998, pp. 45-53 (The paper was reprinted in the “Essential Readings in Light Metals, Vol. 1, Alumina and Bauxite”, TMS-Wiley, 2013, pp. 362-370)
18. Fejes, P., Kiricsi, I., Kukovecz, A., Kovács, K., Lázár, K., Marsi, I., Oszkó, A. and Bánvölgyi, Gy.: Vas beépítése szodalitok szerkezetébe és átalakulásuk más, vasat tartalmazó zeolitféleségekké. (Incorporation of iron into sodalite structure and their transformation to other kinds of zeolites, where iron is incorporated) Magyar Kémiai Folyóirat, 107, 2001, 3. pp. 107-115 (in Hungarian)
19. Bánvölgyi, Gy., Fejes, P., Hannus, I., Kiricsi, I., and Siklósi, P.: Production of zeolites from DSP by-product of alumina refineries: the Szeged Process. Proceedings of XVIth International Symposium of ICSOBA, Nagpur, India, November 28-30, 2005, pp. 293-302
20. Kótai, L., Sajó, I. E., Gács, I., Papp, K., Bartha A., and Bánvölgyi, Gy.: An Environmentally Friendly Method for Removing Sodium in Red Mud. Chemistry Letters Vol. 35, No. 11 (2006), CL-060870
http://sciencelinks.jp/j-east/article/200621/000020062106A0853999.php
http://cat.inist.fr/?aModele=afficheN&cpsidt=18447381

21. Bánvölgyi, Gy. and Pintérné Csordás, A.: A kovasavtalanítási termék "in-situ" keletkezése. ("In-situ" formation of desilication product" Bányászati és Kohászati Lapok, **BÁNYÁSZAT**, 141, (2008), 6K, pp. 44-48 (in Hungarian) http://www.ombkenet.hu/bkl/banyaszat/2008/bklbanyaszat2008_6k_10.pdf
22. Bánvölgyi, Gy. and Trần Minh Huân: Lưu giữ và tận dụng bùn đỏ. (Disposal and utilization of red mud) Proceedings of "National seminar on bauxite and alumina development" Hanoi, 9th April, 2009, (in Vietnamese).
23. Bánvölgyi, Gy. and Trần Minh Huân: Cong nghe thai và luu bùn đỏ (Disposal and utilization of red mud) Proceedings of "The 20th National Conference on Mining Science and Technology" Vung Tau, 7th thang, 2009, pp. 419-426, (in Vietnamese)
24. Bánvölgyi, Gy. and Tran Minh Huan: De-watering, disposal and utilization of red mud: state of the art and emerging technologies. ICSOBA Newsletter, Vol. 2, December 2009, pp. 14-27. http://www.icsoba.org/downloads/newsletters
25. Bánvölgyi, Gy. and Tran Minh Huan: De-watering, disposal and utilization of red mud: state of the art and emerging technologies. Proceedings of XVIIIth International Symposium of ICSOBA, 25-27 November 2010, Zhengzhou, China, No 39. pp. 431-443.
26. Bánvölgyi, Gy: Failure of the embankment of a red mud pond in Hungary: the most serious accident of the Bayer process. ICSOBA Newsletter, Vol. 4, January 2011, pp. 36-53. http://www.icsoba.org/downloads/newsletters
27. The Kolontár Report. Causes and lessons of the red mud disaster. Editor in Chief: Benedek Jávor. The Greens. EFA in the European Parliament. Lehet Más a Politika. Budapest, March 2011. György Bánvölgyi is a contributor. http://lehetmas.hu/wp-content/uploads/2011/04/Kolontar_jelentes.pdf (in Hungarian) http://lehetmas.hu/wp-content/uploads/2011/05/Kolontar-report.pdf (in English)
28. Tran Minh Huan and Bánvölgyi, Gy: Bun Do, Luu giu, xu ly va su dung, (A brochure on disposal and utilization of red mud) Ha Noi, 2011 (in Vietnamese)
29. Bánvölgyi, Gy: The red mud pond dam failure at Ajka (Hungary) and subsequent developments. ICSOBA Newsletter, Vol. 7, June 2012, pp. 14-23. http://www.icsoba.org/downloads/newsletters
30. Bánvölgyi, Gy. and Horváth, J.: Conference Report, ICSOBA-2012, Aluminium International Today, January/February 2013, Volume 25, No 1, pp. 50-51.
31. Bánvölgyi, Gy.: Fifty years history of ICSOBA: the alumina production. Proceedings of XXXIst International Conference of ICSOBA, September 4-6, 2013 Krasnoyarsk, Russia, No 42, pp. 95-115. (in English and in Russian)
32. Bánvölgyi, Gy.: Opportunities within the Alumina Refineries to Make Bauxite Residue Easy to Downstream Use. Proceedings of the Bauxite Residue Valorization and Best Practices Conference, 5-7 October, 2015, Leuven, Belgium, pp. 89-100.
33. Bánvölgyi, Gy.: Scale Formation in Alumina Refineries. Proceedings of the 34th International Conference and Exhibition of ICSOBA, 3-6 October, 2016, Quebec City, Canada. No 45. pp. 101-114.
34. Bánvölgyi, Gy.: A Review of Zinc in Bauxites, the Bayer Process, Alumina and Aluminium, Proceedings of the 35th International Conference and Exhibition of ICSOBA, 2-5 October, 2017, Hamburg, Germany, No 46, pp. 197-204.
35. Bánvölgyi, Gy.: Project Development: Pre-investment Studies. A lecture prepared for the Network Wide Event of the Zero-waste Valorisation of Bauxite Residue Project. October 2017
36. Bánvölgyi, Gy.: Production of Bauxite Residue with Low Soda and High Iron Content: the ILTD Process Option, Proceedings of the 2nd Bauxite Residue Valorisation and Best Practices Conference, 7-10 May, 2018, Athens, Greece, pp. 67-76
37. Bánvölgyi, Gy.: The Failure of the Embankment of the Red Mud Reservoir at Ajka (Hungary), Proceedings of the 36th International Conference and Exhibition of ICSOBA, 29 October – 1 November, 2018, Belém, Brazil. Travaux ICSOBA No 47, pp. 387-399
38. Bánvölgyi, Gy.: The Lessons Learnt from the Failure of the Embankment of the Red Mud Reservoir at Ajka (Hungary), Proceedings of the International Conference and Exhibition on Aluminium (INCAL 2019), Bhubaneswar, India, 31st – 3rd Feb 2019, pp. 88-99.

39. Evans, K.- Bánvölgyi, Gy.: Opportunities and challenges in the use of bauxite residue (red mud). Mineral Recycling Forum 2019 of IMFORMED, Kraków, Poland, 4-6 March, 2019. (a lecture)