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## Review / Praca przeglądowa

# 20 years of the IPOEX international scientific conference – exceptional people and unlimited opportunities 20 lat międzynarodowej konferencji naukowej IPOEX – wyjątkowi ludzie i nieograniczone możliwości

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**Abstract:** The paper presents the uniqueness of the IPOEX International Scientific Conference, which - as the only one in Poland and since its very beginning in 2004 - connects the entire field dealing with explosives in Poland. The paper presents the achievements of the 20 occurrences of the IPOEX conference by showing how many people and institutions have been involved in its functioning in the discussed period.

**Streszczenie:** W pracy przedstawiono wyjątkowość Międzynarodowej Konferencji Naukowej IPOEX, która - jako jedyna w Polsce i to od samego początku w 2004 roku - łączy całe środowisko zajmującego się materiałami wybuchowymi w Polsce. W pracy przedstawiono dorobek 20-tu edycji konferencji IPOEX poprzez pokazanie, jak wiele osób oraz instytucji angażowało się w jej funkcjonowanie w omawianym okresie.

**Keywords:** scientific conference, explosives, IPOEX

**Słowa kluczowe:** konferencja naukowa, materiały wybuchowe, IPOEX

### Supporting material

Title pages of the IPOEX conference programs for 2004-2025 are presented in Supplementary Information (SI) in Figure S1.

## 1 Introduction

In Poland, several conferences are held every year, in which at least one session is devoted to explosives. Recently, we have been able to observe how one of these conferences, the Armaments Conference [1], has increased its status by transforming into a congress [2]. Congresses taking into account the subject of explosives are also held in the area of civil applications [3]. In 2025, the 13th World Conference on Explosives and Blasting Krakow2025 [4] was held in Krakow, organized by the European Federation of Explosives Engineers (EFEE), in cooperation with the Association of Polish Blasting Engineers [5].

Usually, these events are dedicated to specific areas, e.g. miners meet mainly at conferences organized by the Central Mining Institute – National Research Institute [6, 7], and the military at conferences organized by the Military University of Technology and the Military Institute of Armament Technology [1, 2]. Centers dealing with propulsion systems used in space technologies participate in conferences organized, among others, by the Łukasiewicz Research Network – Institute of Aviation, the Warsaw University of Technology and the Polish Space Agency [8]. In this group, the International Scientific Conference IPOEX occupies a unique place. It is the only conference in Poland devoted exclusively to explosives. In addition, the thematic scope of the IPOEX conference covers virtually all thematic areas related to explosives. – from basic research, through application research to industrial implementation – both in relation to civilian and military use. The 20th IPOEX conference covered the following areas [9]:

- chemistry and technology of explosives manufacture,
- applications of explosives,
- the use of explosives in military, mining and materials engineering,
- safety of industrial processes,
- disposal of explosives,
- anti-terrorism,
- blasting techniques and blasting safety,
- applicable regulations on the production, transport, storage and use of explosives.

The aim of this paper is to present basic data on the organization and direction of the IPOEX conference. The involvement of the entire explosives community in Poland in building and maintaining its position, is presented.

## 2 Conference formula

The IPOEX International Scientific Conference has been held annually since 2004, with a break in 2020 and 2021 due to the COVID-19 pandemic. The organizers of the IPOEX conferences to date have been:

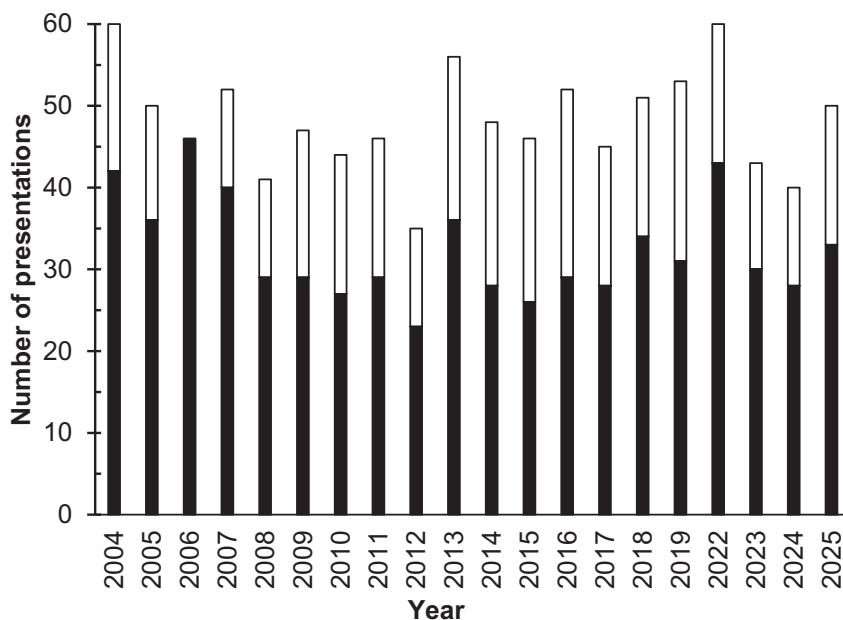
- 2004-2018: Institute of Industrial Organic Chemistry (IPO),
  - 2019-2025: Łukasiewicz Research Network – Institute of Industrial Organic Chemistry (Łukasiewicz-IPO).
- Łukasiewicz-IPO was created as a result of the IPO being incorporated into the Łukasiewicz Research Network in April 2019. This structural change did not create changes in the way the conference was conducted or in the composition of the Scientific and Organizational Committees.

The conference was located in two parts of the city of Ustroń. In Ustroń - Jaszowiec (in the years 2004-2008) the conference was held in the Jawor Hotel. In Ustroń - Zawodzie (in the years 2009-2023), the conference was held at the „Jaskółka” hotel, and from 2024 at the „Diament” hotel. The city of Ustroń is located in south-western Poland, 14 km from the city of Cieszyn, close to the Polish-Czech border. The conference always lasts 3 days. Usually, the participants are greeted and the conference opened, by a representative of the Institute - the Director, Deputy Director or Chairman of the Scientific Committee of the Conference (Figure 1). Since the first conference, the Chairman of the Scientific Committee has been Prof. Andrzej Maranda. In 2025, the conference participants were welcomed by the President of the Łukasiewicz Research Network, Hubert Cichocki [9].



**Figure 1.** Prof. Andrzej Maranda opens the IPOEX2025 conference [9]

The presentations last 15 to 20 minutes and are conducted in Polish or English; the presentations by participants from abroad being in English. The remaining sessions are conducted in Polish. Multiple sessions are never held at the same time, i.e. all participants have the opportunity to attend all the presentations. The oral sessions end with a 15-minute discussion. The poster session lasts about 1 hour. The possibility of continuing the discussion behind the scenes is facilitated by coffee breaks organized after almost every session. The share of oral and poster presentations over the years is presented in Figure 2.



**Figure 2.** Number of oral (•) and poster (□) presentations in individual year

The first day of the conference consists of two sessions, which are intended for presentations by the foreign participants and as many representatives of leading national centers as possible. In recent years, some speakers have presented online. The second day of the conference consists of 3 sessions devoted to oral presentations, a meeting of the Center for Advanced Technologies „High Energy Materials - Environment - Safety” and a poster session. Oral presentations on this day of the conference mainly concern:

- synthesis of explosives,
- blasting works – both in relation to techniques and explosives used in these works,
- properties of explosives,
- rocket fuels and gun propellant,
- commercial presentations.

On the second day of the conference, there is usually an hour-long meeting of representatives of the national explosives communities. In 2005, a meeting of the Consortium „High Energy Materials - Environment - Safety” [10] was held at this convention. In the years 2006-2014 and 2016-2019, the meeting of the Center for Advanced Technologies „High-Energy Materials - Environment - Safety” [11-28] was usually held at this time. The meetings of the Consortium and the Centre for Advanced Technologies were attended only by representatives of institutions and companies belonging to these bodies. However, this is not wasted time for other participants of the conference. The time is used to explore the area and talk to other attendees. At the Centre’s meeting held in 2023, a meeting with representatives of science and industry was organized which was open to all conference participants to discuss the possibilities of cooperation within project consortia [27], and in 2025 a discussion panel entitled „Sovereignty - Polish ammunition programs and the possibility of involving Łukasiewicz institutes in cooperation with national scientific and economic institutions in their implementation” [9].

On the last day of the 2025 conference, there was only one oral session. This session concerned mainly security topics, with each topic being discussed during its duration. The conference was closed by the Chairman of the Scientific Committee of the Conference – Andrzej Maranda, PhD, Assoc. Prof., Eng., Prof. The program of the conference is not rigid. It is adapted to meet extant needs, e.g.:

- in 2006 there was no poster session [12],
- in the years 2011-2013, before the beginning of the first session, introductory lectures took place:
  - (i) in 2011: entitled „Directions of development of projectile explosives in the aspect of the requirements of future firearms”, the authors of which were Zbigniew K. Leciejewski, PhD, DSc, Eng., Prof. WAT and Stanisław Cudziło, PhD, Assoc. Prof., Eng., Prof. [17],
  - (ii) in 2012: the guest of honour of the conference, General Mirosław Hermaszewski, gave an introductory lecture entitled „Energetic propellants in rocket space technology” (Figure 3) [18],
  - (iii) in 2013: the guest of honour of the conference, Prof. Piotr Wolański, PhD, DSc, Eng., gave a lecture entitled „Development tendencies of space propulsion” [19],
- in 2015, a trip was organized [21],
- in 2022 and 2023, informally, one session on the second day of the conference was intended mainly for young scientists and students; the conference organizers allowing them to actively participate in the conference on that day, free of charge.

Between 2004 and 2014, each session was led by only one chairman, and in 2013, for the first time, one session was led by two chairmen. They were Szymon Modrzejewski, PhD, Eng., from POLTEGOR and Jacek Sobala, PhD, Eng., from the Central Mining Institute [19]. Since 2015, each oral session has been led by two chairmen. In the years 2004-2015, the poster session was conducted by one chairman. In subsequent years, the number of poster session chairmen varied (1 or 2).

*Szanowni Państwo,*

*Miło nam jest poinformować, że wykład wprowadzający na konferencji IPOEX 2012, pt. „Energetyczne materiały pędne w raketowej technice kosmicznej” wygłosi specjalny gość **gen. Mirosław Hermaszewski**.*



*Mirosław Hermaszewski – urodzony 1941 r. generał brygady Wojska Polskiego oraz kosmonauta - jedyny Polak, któremu udało się odbyć lot w przestrzeń kosmiczną. Przygodę z lotnictwem Hermaszewski rozpoczął w 1960 r., kiedy to zaczął latać na szybowcach we wrocławskim Aeroklubie. Uczył się w Szkole Orląt w Dęblinie, gdzie opanował sztukę pilotażu samolotu TS-8 Bies. Hermaszewski dostał uprawnienia do pilotowania samolotu odrzutowego MIG-15. Kiedy ukończył szkołę, przydzielono go do pulku obrony powietrznej w Poznaniu. Mirosław Hermaszewski kontynuował naukę na Akademii Sztabu Generalnego w Warszawie. W latach 1964 - 1978 służył w wojskach obrony powietrznej kraju. W 1976 r. rozpoczął szkolenie w Gwiezdnym Miasteczku pod Moskwą. Wybrano go na kandydata do lotu kosmicznego, który miał odbyć się w ramach międzynarodowego programu Interkosmos. Mirosław Hermaszewski wystartował w przestrzeń kosmiczną 27 czerwca 1978 r. z kosmodromu Bajkonur na statku Sojuz. W 1987 r. został komendantem Wyższej Szkoły Oficerskiej Sił Powietrznych. Funkcję tę pełnił do 1990. Potem był zastępcą dowódcy Wojsk Lotniczych i Obrony Powietrznej. Od 1995 r. Mirosław Hermaszewski pozostaje na stanowisku inspektora ds. Sił Powietrznych w Sztabie Generalnym Wojska Polskiego.*

*(źródło: <http://biografia24.pl>)*

**Figure 3** Insert to the conference program IPOEX2012 (in Polish)

### 3 Organizers

In the history of the conference, there have been 3 co-organizers. The IPOEX conference was organized by:

- Explosives Section at the Polish Chemical Society - in 2004 [11],
- Centre for Advanced Technologies „High Energy Materials - Environment - Safety” - in 2005 [10].
- JAKUSZ Sp. z o.o. - in the years 2014-2016 [20-22].

12 people took part in the work of the Organizing Committee of the conference. They were (in alphabetical order):

- Bogdan Florczak, PhD, Assoc. Prof., Eng., Prof. IPO,
- Krzysztof Bajdor, PhD, Eng.,
- Andrzej Orzechowski, PhD, Eng.,
- Dorota Powała, PhD, Eng.,
- Tomasz Sałaciński, PhD, Eng.,
- Joanna Szczygielska, PhD, Eng.,
- Iwona Waszkiewicz, PhD, Eng.,
- Rafał Bogusz, MSc, Eng.,
- Przemysław Jakusz, MSc, Eng.,
- Urszula Wyrzykowska, MSc, Eng.
- Agnieszka Lewandowska, Msc.,
- Adam Rurański.

There was only one person in the Organizing Committee outside of the IPO or Łukasiewicz-IPO. This was Przemysław Jakusz, MSc, Eng. from JAKUSZ Sp. z o.o. The participating members of the Organizing Committee in the years 2006-2025 is given in Table 1. The conference programs in 2004 and 2005 did not mention the members of the Organizing Committee. It can only be assumed that these were people who were active in the Organizing Committee in 2006.

It should be emphasized that people from outside the Organizing Committee helped in the running of the conference. These people helped especially at the stage of conference implementation, i.e. they secured the operation of the conference in terms of IT and logistics, as well as helped in the registration of participants.

## 4 Scientific Committee

The composition of the IPOEX Conference Scientific Committee varied over the conferences and ranged from 18 people (in 2008) to 25 (in 2023). In total, the Committee consisted of 57 people, including 6 from abroad. The share of people in individual years is presented in Table 2. Unfortunately, due to the extensiveness of Table 2, it has been necessary to omit their academic qualifications. It is worth noting at this point that several people obtained a higher academic qualification during their participation in the Scientific Committee. As a rule, it is assumed that the Scientific Committee may include persons with at least a doctoral degree who is active in the field of explosives. The trends in the participation of scientists with academic qualifications during the conferences are well reflected in the composition of the Scientific Committee of the IPOEX2025 conference, i.e. people with the title of professor accounted for 29%, people with the title of university professor accounted for 46%, and people with the titles of PhD, DSc, Eng. being represented by the same number of people, i.e. their share was 13% each. In terms of personnel, the Committee in 2025 consisted of the following (in alphabetical order) [9]:

- Agnieszka Stolarczyk, PhD, DSc, Eng., Prof. (University of Silesia),
- Stanisław Cudziło, PhD, Assoc. Prof., Eng., Prof. (Military University of Technology),
- Jolanta Biegańska, PhD, Assoc. Prof., Eng., Prof. Prof. (AGH),
- Andrzej Maranda, PhD, Assoc. Prof., Eng., Prof. (Łukasiewicz – IPO) – Chairman,
- Waldemar A. Trzcíński, PhD, Assoc. Prof., Eng., Prof. (Military University of Technology),
- Svatopluk Zeman, PhD, Assoc. Prof., Prof. (University of Pardubice),
- Ján Lokaj, Prof. Ing. CSc. (Slovak University of Technology),
- Blažej Pandula, Prof. (Technical University of Košice),
- Bożena Kukfisz, Brigadier, PhD, Eng., Assoc. Prof., Prof. SGSP,
- Rafał Bazela, PhD, Assoc. Prof., Eng., Prof. WITU,
- Andrzej Biessikirski, PhD, Assoc. Prof., Eng., Prof. AGH,
- Tomasz Gołofit, PhD, Assoc. Prof., Eng., Prof. PW,



**Table 1.** Members of the Organizing Committee in the years 2006-2025 (colored field indicates participation in the committee in a given year)

Member of the Organizing Committee	Year																	
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2022	2023	2024	2025
Krzysztof Bajdor																		
Rafał Bogusz																		
Bogdan Florezak																		
Przemysław Jakusz																		
Agnieszka Lewandowska																		
Andrzej Orzechowski																		
Dorota Powała																		
Adam Rurański																		
Tomasz Sałaciński																		
Joanna Szczygielska																		
Iwona Waszkiewicz																		
Urszula Wyrzykowska																		

- Jan Kindracki, PhD, Assoc. Prof., Eng., Prof. PW,
- Zbigniew Leciejewski, PhD, Assoc. Prof., Eng., Prof. WAT,
- Paweł Maksimowski, PhD, Assoc. Prof., Eng., Prof. PW,
- Lech Starczewski, PhD, Assoc. Prof., Eng., Prof. WITPiS,
- Waldemar Tomaszewski, PhD, Assoc. Prof., Eng., Prof. PW,
- Roman Zakusyło, PhD, Eng., Prof. SSU, (Shostka Institute of Sumy State University),
- Daniel Buczkowski, PhD, Eng., Assoc. Prof. (Łukasiewicz – IPO),
- Tomasz Jarosz, PhD, DSc, Eng. (University of Silesia),
- Piotr Mertuszka, PhD, DSc, Eng. (KGHM CUPRUM, Research and Development Centre),
- Bartłomiej Kramarczyk, PhD, Eng. (NITROERG),
- Muhamed Suceşka, PhD, Eng. (Brodarski Institut),
- Mateusz Szala, PhD, Eng. (Military University of Technology),

## 5 Sponsors, partners and patrons

Information about companies financially supporting the conference and about institutional and media patrons is provided in the conference materials. Since 2011, this information has also been provided on the front cover of conference materials (see SI, Figure S1). This information is available on the conference website [9], in the tabs dedicated to each edition.

In the years 2023-2025, the conference was held under the honorary patronage of the AGH University of Science and Technology AG-H in Krakow, the Silesian University of Technology, the Military University of Technology and the State Mining Authority. In 2025, the honorary patronage of the conference was also accepted by the Ministry of National Defence, the Fire University and the President of the Łukasiewicz Centre, Hubert Cichocki. In 2023 and 2024, the honorary partner was the Central Mining Institute – Research Institute.

NITROERG – KGHM Group was the main partner of the conference in 2025, while in 2024 it was a partner of the conference. Other partners of the conference in 2024 were nano[sec] and WB Group. In 2023, the conference partners were Forcepol and OZM Research.

Integration meetings (dinner party and bonfire social meeting) organized on the first and second day of the conference were very important for the consolidation of the society. Information on who financially supports a given meeting was given orally at the beginning of the meeting, but, as a rule, this information was not provided in the conference materials.

## 6 Participants

A total of 64 scientific centres have taken part in the conferences – universities, polytechnics, academies and scientific institutes. About 100 people took part in individual conferences, most of them as an active participant (see Figure 4). Virtually all participants took an active part in the conference. Figure 5 shows a photo of the IPOEX2019 conference participants published on the conference website [9].



**Table 2.** Members of the Scientific Committee (coloured box indicates participation in the committee in a given year)

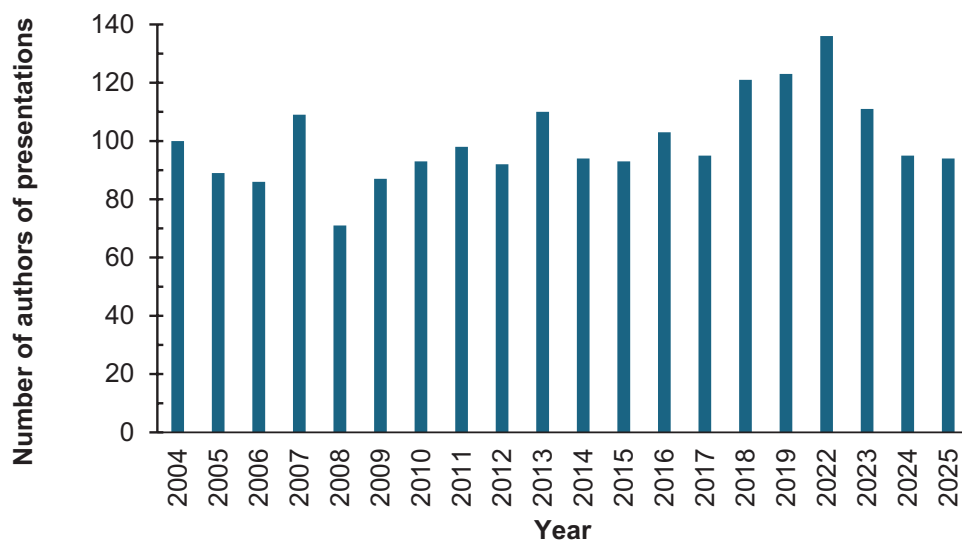
Last name and initial of the first name	Year															
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Batko P.																
Bazela R.																
Biegańska J.																
Biesiakiński A.																
Borkowski J.																
Buchalik K.																
Buczkowski D.																
Cudziło S.																
Cybulski K.																
Czajka B.																
Florezak B.																
Foltynowicz Z.																
Gołofit T.																
Hoppe J.																
Jakusz P.																
Jarosz T.																
Jędrzejewski W.																
Kasztelewicz Z.																
Kindracki J.																

Table 2. continued

Last name and initial of the first name	Year															
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Korza T.																
Kostecki A.																
Kostrow R.																
Kramarczyk B.																
Kravets V.																
Książczak A.																
Kukfisz B.																
Leciejewski Z.																
Lokaj J.																
Maksimowski P.																
Maranda A.																
Mertuska P.																
Milewski E.																
Modrzejewski S.																
Morawa R.																
Orzechowski A.																
Pandula B.																
Papliński A.																
Rońda J.																

Table 2. continued

Last name and initial of the first name	Year															
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Skupiński W.																
Sobala J.																
Staniszewski L.																
Starczewski L.																
Stolarezyk A.																
Sućeska M.																
Szala M.																
Szczepiński J.																
Tomaszewski W.																
Trębiński R.																
Trzcinski W.A.																
Wachowski L.																
Wiśniewski A.																
Witkowski W.																
Wojewódka A.																
Wolszakiewicz T.																
Zakusyło R.																
Zalewski R.																
Zeman S.																



**Figure 4.** Number of active participants



**Figure 5.** Group photo of the participants of the IPOEX2019 conference [9]

Of this group, 32 research centres took part in the conference only once or twice. 21 centers participated from 3 to 9 times. In addition to IPO and Łukasiewicz-IPO, the top ten scientific institutions which participated in the conferences the largest number of times include:

- Jarosław Dąbrowski Military University of Technology, Warsaw: 17 times,
- Military Institute of Armament Technology, Zielonka: 17 times,

- Warsaw University of Technology, Warsaw: 16 times,
- Central Mining Institute / Central Mining Institute – National Research Institute, Katowice/Mikołów: 16 times,
- Oil and Gas Institute / Oil and Gas Institute – National Research Institute, Cracow: 14 times,
- Silesian University of Technology, Gliwice: 13 times,
- Adam Mickiewicz University, Poznań: 13 times,
- Institute of Industrial Chemistry, Warsaw: 12 times,
- Institute of Non-Ferrous Metals / Institute of Non-Ferrous Metals - Poznań Branch and Łukasiewicz Research Network - Institute Non-Ferrous Metals: 12 times,
- AGH University of Science and Technology in Cracow: 11 times.

Based on the lists of affiliations included in the conference program, it can be assumed that the Conference was attended or co-authored by people from 21 foreign centers:

- Brodarski Institute - Marine Research & Special Technologies, Zagreb, Croatia,
- Brno University of Technology, Brno, Czech Republic,
- DSTL, UK,
- Explosia a.s., Pardubice, Czech Republic,
- ISTROCHEM, Bratislava, Slovakia,
- Joint Research Centre, European Commission,
- Igor Sikorsky Kyiv Polytechnic Institute, National Technical University of Ukraine,
- LLC „Lagran”, Ukraine,
- Ludwik Maximilian University of Munich, Germany,
- Metler-Toledo GmbH, Germany,
- National Academy of Sciences of Ukraine,
- OZM Research, Hrochuv, Tynec, Czech Republic,
- Scandiflash AB, Sweden,
- Shostka Institute of Sumy State University, Ukraine,
- Slovak Society for Drilling and Blasting Technique, Slovakia,
- Slovak University of Technology, Bratislava, Slovakia,
- Technical University, Kosice, Slovakia,
- UstavGeovied F - BERG TU, Kosice, Slovakia,
- University of Pardubice, Czech Republic,
- University of Science and Technology of Lille, France,
- WESTSPRENG, Germany.

In addition, during the 20 years of the conference, representatives of 13 mines, including coal, lignite, raw rock materials and from KGHM, also appeared. The conferences have been attended by representatives of 25 companies producing explosives and articles, including service providers and foreign representative offices in Poland. The conference has also been attended by companies working with the explosives industry. There were 42 such companies. The conferences were also attended by associations, including:

- Brotherhood of the Chanterelles of the Zabrze Castle – Association,
- Shooting Brotherhood, Gdynia,
- Association of Mining Engineers and Technicians, Kielce Branch,
- Association of Polish Shot Engineers, Cracow.

An important role in building the rank of the conference was played by the participation of representatives of the Department of Defence Affairs of the Ministry of Economy.

## 7 Session Leaders

Oral and poster sessions were conducted by a total of 39 chairmen. These are listed below, in alphabetical order and with current academic degrees:

- Józef Borkowski, PhD, DSc, Eng., Prof.,
- Zbigniew Kasztelewicz, PhD, DSc, Eng., Prof.,
- Wincenty Skupiński, PhD, DSc, Eng., Prof.,
- Agnieszka Stolarczyk, PhD, DSc, Eng., Prof.,
- Radosław Trębiński, PhD, DSc, Eng., Prof.,
- Waldemar A. Trzciński, PhD, DSc, Eng., Prof.,
- Adam Wiśniewski, PhD, DSc, Eng., Prof.,
- Jolanta Biegańska, PhD, Assoc. Prof., Eng., Prof.,
- Przemysław Borkowski, PhD, Assoc. Prof., Eng., Prof.,
- Stanisław Cudziło, PhD, Assoc. Prof., Eng., Prof.,
- Andrzej Książczak, PhD, Assoc. Prof., Eng., Prof.,
- Andrzej Maranda, PhD, Eng. Assoc. Prof., Eng., Prof.,
- Stanisław Prusek, PhD, Assoc. Prof., Eng., Prof.,
- Leszek Wachowski, PhD, Assoc. Prof., Eng., Prof.,
- Svatopluk Zeman, PhD, Assoc. Prof., Prof.,
- Zenon Foltynowicz, PhD, Assoc. Prof., Prof.,
- Roman Dygdała, PhD, Prof.,
- Jan Lokaj, Prof. Ing. CSc.,
- Błażej Pandula, Prof. RNDr. CSc.,
- Victor Kravets, Prof.,
- Rafał Bazela, Col. PhD, Assoc. Prof., Eng., Prof. WITU,
- Paweł Batko, PhD, Assoc. Prof., Eng., Prof. AGH,
- Bogdan Florczak, PhD, Assoc. Prof., Eng., Prof. IPO,
- Tomasz Gołofit, PhD, Assoc. Prof., Eng., Prof. PW,
- Jan Kindracki, PhD, Assoc. Prof., Eng., Prof. PW,
- Zbigniew Leciejewski, PhD, Assoc. Prof., Eng., Prof. WAT,
- Paweł Maksimowski, PhD, Assoc. Prof., Eng., Prof. PW,
- Andrzej Papliński, PhD, Assoc. Prof., Eng., Prof. WAT,
- dr hab. inż. Lech Starczewski, PhD, Assoc. Prof., Eng., Prof. WITPiS,
- Waldemar Tomaszewski, PhD, Assoc. Prof., Eng., Prof. PW,
- Paweł Mertuszka, PhD, DSc, Eng., Prof. CUPRUM,
- Andrzej Wojewódka, PhD, DSc, Eng., Prof. PŚI.,
- Bogdan Czajka, PhD, DSc, Eng., Prof. IMN,
- Roman Zakusyło, PhD, Eng., Prof. SSU,
- Daniel Buczkowski, PhD, Assoc. Prof., Eng.,
- Szymon Modrzejewski, PhD, Eng.,
- Jacek Sobala, PhD, Eng.,
- Waldemar Witkowski, PhD, Eng.,
- Muhamed Suceska, PhD, Eng.

## 8 Conference materials and promotion of the conference

The title pages of the IPOEX conference programs from the years 2004-2025 are presented in SI (Figure S1). The basic form of promotion of the conference is its website[9]. Information about the IPOEX conference is present on social media, e.g. Facebook [29, 30] and on the websites of institutions supporting the conference, e.g. [31, 32].

The journal „High Energy Materials „ is the main place for publishing articles presented and discussed at the IPOEX conference. In the years 2004-2018, the publisher of the journal was IPO, and since 2019 the publisher has been Łukasiewicz - IPO. The history of the journal is presented in the paper [33].

A permanent form of promotion of the conference is international exchange on the basis of reciprocity, in which 3 representatives of Łukasiewicz-IPO take part in the „Blasting technique” conference in Stará Lesná, and 3 representatives of the Slovakian Society for Blasting and Drilling take part in the IPOEX conference.

## 9 Summary

- ◆ The IPOEX International Scientific Conference is a forum where every year since 2004, with a break due to the COVID-19 pandemic in 2020 and 2021, experiences are exchanged, achievements presented and expectations regarding the development of research and technologies related to explosives, expressed. Moreover, this applies to explosives with both civilian and military applications.
- ◆ The IPOEX conference enables the exchange of views at legislative, scientific and technological levels, as the conference is attended by representatives of state offices, universities, the military, as well as private and state-owned production plants.
- ◆ At the IPOEX conference, there is a place for students, scientists, ministerial officials, and blast miners. The conference creates an opportunity for private entrepreneurs who produce only small products to talk freely with the heads of companies producing armaments around the world.

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