ANNUAL REPORT

2022

THE EUROPEAN COUNCIL OF ACADEMIES OF APPLIED SCIENCES, TECHNOLOGIES AND ENGINEERING

30 years of collaboration of academies of engineering and technologies
Established in 1992, The European Council of Academies of Applied Sciences, Technologies and Engineering (Euro-CASE) is an independent, non-profit organisation of national academies of applied sciences, technologies and engineering from 23 European countries. Euro-CASE exists as a permanent forum for exchange and consultation between European institutions, industry, and research. Through its affiliated academies, Euro-CASE has access to top expertise (more than 6,000 of Europe’s most eminent engineers and technologists) and provides impartial, independent, and balanced advice on technological issues with a clear European dimension to European institutions, national governments, companies, and organisations.

Patrick MAESTRO, Fellow of the National Academy of Technologies of France, was elected as Secretary General of Euro-CASE at the Board meeting on 14 June 2021.

The Euro-CASE Board includes Presidents and Honorary Presidents of individual national member academies:

- Miklós BENDZSEL, Hungary (HAE)
- Torbjørn DIGERNES, Norway (NTVA)
- Benoit DUBUIS, Switzerland (SATW)
- Sebastião FEYO DE AZEVEDO, Portugal (PAE)
- Mihai MIHAITA, Romania (ASTR)
- Vedran MORNAR, Croatia (HATZ)
- Mark PLESKO, Slovenia (IAS)
- Tuula TEERI, Sweden (IVA)
- Jan WÖRNER, Germany (acatech)

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Vice Chair
Real Academia de Ingenieria (RAI) Spain
www.raing.es

Petar B. PETROVIC
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Slovenian Academy of Engineering (IASE) Slovenia
www.iase.si

Jan WÖRNER
Invitee
National Academy of Science and Engineering (acatech) Germany
www.acatech.de

EURO-CASE staff:
- SAPEA Scientific Policy Officer, Marie FRANQUIN
- Euro-CASE Executive Assistant, Nadia PIPUNIC
EDITORIAL
by Tuula Teeri and Patrick Maestro

EURO-CASE: 30 YEARS OF COLLABORATION OF ACADEMIES OF ENGINEERING AND TECHNOLOGIES

In 2022, we celebrated the 30th anniversary of Euro-CASE. This was an opportunity to reflect upon the many achievements of this prestigious organisation over the past decades, as well as look to the future and how Euro-CASE can fulfil its mission in supporting society to overcome the challenges of tomorrow.

From its very beginning, the mission of Euro-CASE has been to pursue, encourage and maintain excellence in the fields of engineering, applied sciences and technology, and promote their science, art and practice for the benefit of the citizens of Europe.

From 1995 to 2006 Euro-CASE organised the European ICT Prize. At this time, it was the most distinguished award for innovative products and services that represented the best of European innovation in ICT.

Since 2016 Euro-CASE has become one of the partner academy networks in the SAPEA consortium (Science Advice for Policy by European Academies) which is part of the Scientific Advice Mechanism (SAM) to the European Commission. The SAM provides independent scientific advice to the College of European Commissioners to support their decision making. SAPEA brings together the outstanding knowledge and expertise from over 110 academies, young academies and learned societies in over 40 countries across Europe, spanning the disciplines of engineering, humanities, medicine, natural sciences, and social sciences.

It has been our great privilege and a very enriching experience to be able to participate in this consortium and work alongside all the involved academy networks (Academia Europaea, ALLEA, EASAC, FEAM and YASAS).

In this context, Euro-CASE led the production two SAPEA evidence review reports “Novel carbon capture and utilisation technologies: research and climate aspects” and “A systemic approach to the energy transition in Europe”, 2 of the 13 reports published so far by SAPEA.

Since its creation in 1992, Euro-CASE was led by:
- 7 Chairs of the Board from 6 different member countries
- 5 Secretaries General, who organised our association’s activities.

On behalf of Euro-CASE, we thank all of them for their invaluable contributions to make Euro-CASE what it is today.

Our ambition for the future of Euro-CASE is to continue pursuing our mission to inform policies at the European level, notably through our participation in SAPEA. We also strive to develop and implement a communication strategy to increase the visibility, reach and impact of Euro-CASE in Europe and particularly in member countries.

We will also provide support to our Greek and Italian colleagues for the on-going creation of Academies of Engineering and Technologies in their respective countries.

On the occasion of this 30th anniversary celebration, each member academy of Euro-CASE, as well as the past Chairs and Secretaries General present on that evening, have received the engraved medal that was commissioned for this occasion.

We extend our warmest thanks to all Euro-CASE members for their active and unwavering support.

MANY FORMER CHAIRS AND SECRETARIES GENERAL OF Euro-CASE HAVE EXPRESSED THEIR SUPPORT FOR THE ASSOCIATION BY ATTENDING Euro-CASE’S 30TH ANNIVERSARY.
The SAPEA project began in 2016 with funding from the EU’s Horizon 2020 framework programme and has since continued its activities with funding from the Horizon Europe framework programme. SAPEA comprises Academia Europaea, ALLEA, Euro-CASE and FEAM, and welcomed into the consortium the network of young academies (YASAS) in 2022, thus representing over 110 Academies in over 40 European countries.

SAPEA reports present the best available and most up-to-date scientific and technical evidence, including highlighting of all uncertainties, gaps, and contradictions in scientific knowledge to ensure trust and accuracy. The Evidence Review Reports (ERRs) are prepared by fellows and experts from member academies of the SAPEA networks and feature robust and contemporary scientific content.

In 2022, SAPEA published two Evidence Review Reports with the support of its member academies. Euro-CASE was involved in one of them. Euro-CASE also took leadership in launching the process of updating the SAPEA quality assurance guidelines, which ensure the excellency, independency, and transparency of the approaches to prepare these reports, and of the scientific advice provided to the Commission. Details are given below.

**HIGHLIGHTS OF PUBLICATIONS 2022**

**IMPROVING CANCER SCREENING IN THE EUROPEAN UNION**

The evidence review report Improving cancer screening in the European Union has been officially launched on 2 March 2022. The evidence gathering process was overseen by two project chairs. Three expert workshops were organised and three corresponding rapid literature reviews were undertaken by Cardiff University. Organized cancer screening programmes save lives. The earlier a cancer is diagnosed, the greater the chances of treating it successfully and straightforwardly. This report explores the underlying principles, governance and feasibility of organized cancer screening programmes, and how existing programmes for breast, colorectal and cervical cancer could be improved throughout the EU. It also covers the evidence for extending organized, population-based screening to other cancer types, notably lung and prostate, along with recent advances in targeting the type and frequency of testing according to the level of individual risk.

**STRATEGIC CRISIS MANAGEMENT IN THE EU**

The evidence review report Strategic crisis management in the EU has been officially launched on 22 November 2022. The following three candidates, members of Euro-CASE academies, were selected for membership in the Working Group:
- Claudia Eckert (acatech – Germany),
- Kristian Lauta (ATV – Denmark), and
- Ortwin Renn (acatech – Germany).

The European Union is confronted with an increasing number of crises with growing complexity, causing suffering and other devastating consequences. Improving crisis management has become an essential issue for protecting and enhancing present and future wellbeing in the EU and globally. In response to this challenge, the Scientific Advice Mechanism to the European Commission are presenting policy recommendations to improve crisis management frameworks.

**CONFERENCE: SCIENCE ADVICE UNDER PRESSURE**

This major public conference organized by the Scientific Advice Mechanism Unit brought together policymakers, science advisors, researchers and other professionals on 27-28 April 2022 in Brussels. A series of panels and workshops provided participants with deeper insights and an opportunity for discussions about science advice and the challenges it faces today. Best practice and knowledge were exchanged by speakers across sectors.

Recordings are available on the conference website.
UPCOMING TOPICS AND PROJECTS

INTERACTIONS BETWEEN ACADEMIES AND SHARING BEST PRACTICES

In 2022, SAPEA set up a working group and a staff task force aiming to (i) organize a series of best practice workshops for academies to share best practices on science for policy; (ii) develop a survey gathering information about the academy landscape in Europe.

Euro-CASE is leading this effort for SAPEA and appointed Elin Elliot, IVA head of the external relations unit, as working group chair. These activities take advantage of the SAPEA network to both better understand the diversity of the academy landscape in Europe and provide opportunities to academies to exchange practices and experience on several topics related to science advice.

Following several working group meetings and inputs from the task force, a workshop plan was determined by SAPEA consisting of 6 workshops to be organized by the SAPEA networks in 2023 and 2024. A draft survey was also produced by the task force. Once approved by the working group, the survey will be conducted in 2023 and the results summarized in a report to be published in Summer 2023.

UPDATE OF THE SAPEA QUALITY ASSURANCE GUIDELINES

In 2022, SAPEA set up a working group and a staff task force aiming to evaluate, revise and further develop its existing quality assurance guidelines. Euro-CASE is leading this effort for SAPEA and appointed Jan Wörner, President of acatech, as working group chair.

The guidelines guarantee the excellence and independence of the scientific advice provided by SAPEA through high levels of transparency. Following several working group meetings and inputs from the task force, the guidelines are planned to be published in Summer 2023.

UPDATE OF THE SAPEA SUSTAINABILITY PLAN

In 2022, SAPEA set up a working group and a staff task force dedicated to the strategic development of SAPEA. Euro-CASE has appointed Patrick Maestro, Secretary General, to represent Euro-CASE in the working group.

The task force has met in December to start the internal review. This will be followed by a wider consultation with key stakeholders of SAPEA and the development of a new strategic development plan in 2023.

As a reminder, a summary of SAPEA Evidence Review Reports and other scientific inputs submitted to the European Commission is given below:

1) CYBERSECURITY IN THE EUROPEAN DIGITAL SINGLE MARKET: Scientific Opinion delivered by GCSA to the European Commission on 24 March 2017, following a request by the Commission Vice President Androulakakis and Commissioner Oettinger.


4) AUTHORISATION FOR PLANT PROTECTION PRODUCTS IN EUROPE: Request from Commissioners Andriukaitis and Moedas, GCSA opinion and SAPEA Evidence Review Report published June 2018.

5) MICROPLASTICS IN NATURE AND SOCIETY: This report has been proposed as a bottom-up topic by the Group of Chief Scientific Advisors and was published in January 2019.

6) TRANSFORMING THE FUTURE OF AGEING: This report has been proposed as a bottom-up topic by SAPEA and in particular FEAM, who was the Lead Network for this ERR published in June 2019.

7) MAKING SENSE OF SCIENCE FOR POLICY: This report has been proposed as a bottom-up topic by the Group of Chief Scientific Advisors and was published in July 2019.


9) BIODIVERSITY OF PLASTICS IN THE OPEN ENVIRONMENT. Request from Commissioner Karmenu Vella (Environment, Maritime Affairs and Fisheries) and Commissioner Carlos Moedas (Research, Innovation and Science).

10) THE ENERGY TRANSITION: There are many possible pathways towards a carbon-neutral future. Achieving it by 2050 is possible, but this requires urgent action.

11) IMPROVING CANCER SCREENING IN THE EUROPEAN UNION: How can cancer screening programmes be improved throughout the EU?

12) STRATEGIC CRISIS MANAGEMENT IN THE EU: Improving crisis management has become an essential issue for protecting and enhancing present and future wellbeing in the EU and globally.
In 2020, a Euro-CASE Working Group chaired by the Royal Academy of Engineering (UK) was appointed to carry out a scoping exercise on how the Euro-CASE network can enhance its engagement with ECPs, as the emerging experts and leaders within science, technology, and engineering. The Working Group presented its recommendations in November 2020, including data on current levels of engagement, successful initiatives and mechanisms for engagement, and recommendations on how Euro-CASE itself and its member academies can enhance or scale up their approach.

On 20 September 2022, a workshop session for Euro-CASE stakeholders, focusing on one or more aspects of the recommendations, was organised. The aim of this workshop was to bring academy representatives together to share knowledge, lessons, and good practices for engaging with ECPs. This builds on details of many existing academy initiatives revealed in the 2020 survey. Following this workshop, Euro-CASE will decide on follow-up actions to be undertaken to integrate ECPs more effectively in its work and member academies.

The workshop particularly included a discussion session which considered:

- What can Euro-CASE do to support ECPs?
- The roles of Young Academies.
- The various models of senior Academies to include ECPs.
- Redefining Research Excellence.

The following key points were raised during the discussions:

- Considering its own role, purpose and profile, in which direction does Euro-CASE wish to proceed, both in terms of its own activities, and in enabling knowledge sharing/capacity building within its network of member academies?
- Opinion and agreement on actions to be undertaken as a follow-up to recommendations made at the workshop:
  - Euro-CASE will from now on require the inclusion of ECPs as speakers and as guests in all of its annual conferences.
  - Euro-CASE will also add the materials and work that has already been done about ECPs on the website to showcase these activities and their outcomes.
  - Euro-CASE will host workshops similar to this one to continue the conversation. The annual meetings can be a good option to host the next workshops (one every two years?).
  - Euro-CASE should also explore how ECPs can inform and support the aims and direction of the Communications Working Group.
  - Euro-CASE’s engagement can take place at the organisation level but also at the national level within each of the member Academies.

A complete information (including presentations) is available on the Euro-CASE website.
CHALLENGES FOR SCIENCE AND TECHNOLOGY DRIVEN INNOVATION IN EUROPE

At the initiative of Erol Gelenbe, ARB-NATF-PAN, a working group has been setup to discuss
‘Challenges for Science and Technology in the post-COVID period’.

This group was composed of:

- Erol GELENBE, ARB, NATF, PAN
- Olivier APPERT, NATF
- Guy BRASSEUR, ARB
- Yves CARISTAN, Secretary General Euro-CASE & NATF
- Luc CHEFNEUX, ARB
- Peter COCHRANE, RAEng
- Véronique DEHANT, ARB
- Anna FABIJANSKA, PAN
- Véronique HALLOIN, ARB
- Jean-Paul HATON, ARB
- Michel JUDKIEWICZ, ARB
- Vladimir MRŠA, HATZ
- Ignacio J. PÉREZ-ARRIAGA, RAI
- Bernard RENTIER, ARB

The Working Group had the opportunity to make some key recommendations regarding significant changes in the way we organize and conduct our scientific and technical production and exchanges in the future.

The recommendations were the following:

- Strengthening Industry-University-Research Interactions,
- Strengthening the EU University Research Base,
- Accelerating transfer from Horizon Research and Innovation to Industry & Business,
- Developing fiscal incentives for cross-EU investments in technology start-ups,
- A Responsible Innovation principle should be introduced to counterbalance the “Precautionary principle”.

The recommendation paper is available on the Euro-CASE website.
Since 2010, Euro-CASE and the US National Academy of Engineering (NAE) have jointly organised meetings under the umbrella of Frontiers of Engineering (FOE). The objective of FOE Symposia is to bring together the next generation of leaders in engineering and create an early-career professionals network, to facilitate transatlantic engineering/technology collaboration and the transfer of new techniques and methods across four topics of major societal interest. Invited participants are selected among engineers, scientists and technologists below 45 years old including 60 representatives from both Europe and the United States.

The 2023 EU-US Frontiers of Engineering Symposium (EU-US FOE) scheduled for 15-18 October, will be hosted by Nokia Bell Labs in Murray Hill, New Jersey.

The selected topics are:
- The Quantum Era Challenge,
- The Computational Era in Life Sciences,
- Clean Hydrogen and
- Future Challenges in Additive Manufacturing.

On behalf of Euro-CASE, the Slovenian Academy of Engineering, supported by several sponsors, organized the 2022 EU-US Frontiers of Engineering symposium, on 19-22 October in Bled, Slovenia. 60 of the most promising early career engineers from the US and EU met for an intensive 2-1/2 day symposium to discuss cutting-edge developments in four topic areas:
- Prosthetics and AI;
- Supply Chain/Logistics;
- Post Lithium-Ion Batteries;
- and Zero-Carbon Buildings.

The event facilitates international and cross-disciplinary research collaboration, promotes the transfer of new techniques and approaches across disparate engineering fields, and encourages the creation of a transatlantic network of world-class engineers.

A detailed programme and presentations from the symposium are available on the NAE website.
**2022 ANNUAL CONFERENCE, 19 September, Brussels (Belgium)**

The Euro-CASE Annual Conference 2022 took place in Brussels on 19 September. It was organised in the prestigious Academies Palace by the Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique (ARB) and the Royal Flemish Academy of Belgium for Science and the Arts (KVAB).

The theme was: "From open science to Innovation; an engineering challenge for Europe."

The goal of this Euro-CASE conference was to learn good practices from Euro-CASE partners and to debate the challenges and opportunities created by opening science.

More information on all Euro-CASE conferences can be found on the Euro-CASE website.

The Royal Academy of Sciences, Letters and Fine Arts of Belgium (ARB) and Royal Flemish Academy of Belgium for Science and the Arts (KVAB) co-organized the 2022 Annual Conference of Euro-CASE, on the theme of “From Open Science to Innovation: An Engineering Challenge for Europe.”

The secretary and coordinator of the conference was dr. (h. c.) ir. Albert Husniaux (ARB). A steering committee composed of the following members of the ARB and the KVAB defined its content: Luc Chefnex, Albert Husniaux, Elisabeth Monard, Leopold Demiddeleer, Joos Vandewalle, Marc Acheroy, Guido Beazar, Erol Gelenbe, Michel Judkiewicz, Véronique Halloin, Isabelle Ferreras, Koenraad Debackere, Bart de Moor and Rik van de Walle.

A Euro-CASE Board meeting and Board dinner were organized the day before the conference and an Early Career Professionals workshop the day after. On top of this, the Euro-CASE 30th Anniversary dinner was hosted.

The 2022 Annual Conference of Euro-CASE addressed questions and challenges during 3 sessions:

- **Session 1,** chaired by Prof. Em Vandewalle (KVAB): Promising ways of opening science
- **Session 2** chaired by Dr. Demiddeleer (ARB): Technological and Industrial Innovation for the Prosperity of Europe
- **Session 3** chaired by Prof. Ferreras (ARB): Technological Innovation for the Common Good of Humanity

Each session was composed of presentations by experts in the field and a panel debate. Good practices, challenges and opportunities were widely discussed and debated.

Almost 200 people registered for the conference, from 17 academies out of the 23 Euro-CASE member academies. It received great interest and very good feedback, underlining the relevance and importance of the topic. The conference programme, introduction and opening session, as well as the recording of the 3 sessions are available on the Euro-CASE website.

List of speakers (in order of intervention):
- Eloy Alvarez Pelegry (standing in for Prof. Tuula Teeri) (Euro-CASE),
- Elisabeth Monard (KVAB),
- Didier Viviers (ARB),
- Mariya Gabriel (EU Commissioner for Innovation, Research, Culture, Education and Youth),
- Joos Vandewalle (KVAB),
- Luc Chefnex (ARB),
- Karel Loyijsn (ESOC),
- Murat Arıa (EARTH),
- Clarissa Angelis (ANR),
- Erol Gelenbe (National Academy of Technologies of France),
- Anne Fabianek (Leeds University of Technology),
- Safir Rahman (IEEE),
- Michel Judkiewicz (ARB),
- Leopold Demiddeleer (ARB),
- Renée Tolsa (Philips Ventures Capital Fund),
- Alex Nussm (ERIMA),
- Ric Parker (ex. Rolls-Royce),
- Leszek Legi (EIMEC),
- Rudi Coumans (IKU Leuven),
- Gabrielle Debinski (Emo),
- Isabelle Ferreras (ARB),
- Mariel Vanclooster (UCLouvain),
- Peter Towler (Rotterdam University of Applied Sciences),
- Michel Goldman (ULB).

Since 2008, Euro-CASE member academies have organised a series of annual conferences, following a tradition of a different academy hosting the event each year.
On September 25, 2023, the “Real Academia de Ingeniería” will host, in its prestigious premises in Madrid, the 2023 Euro CASE Annual Conference.

The Real Academia de Ingeniería is an institution created in 1994 at the forefront of technical knowledge, which promotes excellence, quality and competence in Spanish engineering in its various disciplines and fields of action.

The theme of this conference is:
“Energy challenges in Europe. The role of Engineering in securing supplies and technologies”

The 2023 Euro-CASE Annual Conference will explore both the development of engineering solutions and the enablers, barriers and practicalities of technology deployment. Discussions will highlight how engineers can play a valuable role in guiding decision makers on how to make the best use of technological progress in order to solve complex transitional problems with many interdependencies.

Throughout this conference, we will showcase how engineers can provide valuable insights into the implementation of effective and sustainable solutions for the Energy challenges in Europe. Europe is in a clear stage of transformation in which energy transformation and digitisation are changing slowly but surely our society.

The Conference addresses three main issues related to these changes, electricity mix in which electrification and renewable are playing a greater role, the minerals and metals needed for the huge investments in renewables and electrification and the inevitable transformation of the oil and gas industries.
CAETS is an independent nonpolitical, non-governmental, international organization of engineering and technological sciences academies, one member academy per country, that advances the following objectives:

- Prepared to advise governments and international organizations on technical and policy issues related to its areas of expertise;
- Contribute to the strengthening of engineering and technological activities to promote sustainable economic growth and social welfare throughout the world;
- Foster a balanced understanding of the applications of engineering and technology by the public;
- Provide an international forum for discussion and communication of engineering and technological issues of common concern;
- Foster cooperative international engineering and technological efforts through meaningful contacts for development of programs of bilateral and multilateral interest;
- Encourage improvement of engineering education and practice internationally; and
- Foster establishment of additional engineering academies in countries where none exist.

CAETS 2022
Annual meetings were hosted by the National Academy of Technologies of France from 26-30 September 2022. The technical symposium focused on “Engineering a better world – Breakthrough Technologies for Healthcare”

The aim of this conference is twofold: to communicate major international advances in health technology and to encourage the related cooperative efforts in the interest of sustainable economic growth.

The chosen theme encompasses in particular innovative treatments of diseases, drug discovery and development, contributions from the digital world, innovative imaging, neural research, restorative technologies, and finally social aspects, including ethical issues.

CAETS 2023
Annual Meetings and Technical Symposium will be organized from 9 to 11 October in Zagreb, Croatia, hosted by HATZ, the Croatian Academy of Engineering.

The symposium will address the topic of e2–mobility with the following specific issues:

- Electrification of transport and integration with energy systems
- Batteries – the core technology
- Hydrogen, Fuel Cells and electrofuels
- Autonomous driving
- Mobility modal shift – roads, railways, ships or planes? [Car sharing, Ride pooling]

THE SAPEA CONSORTIUM
Spanning the disciplines of engineering, humanities, medicine, natural sciences and social sciences, Science Advice for Policy by European Academies (SAPEA) brings together outstanding knowledge and expertise from over 110 academies, young academies, and learned societies in over 40 countries across Europe. SAPEA is part of the Scientific Advice Mechanism (SAM) of the European Commission.

Funded through the EC’s Horizon Europe framework, the SAPEA consortium comprises five European Academy networks:

1. Academia Europaea (AE),
2. All European Academies (ALLEA),
3. European Academies’ Science Advisory Council (YASAS),
4. European Council of Academies of Applied Sciences, Technologies and Engineering (Euro-CASE),
5. Federation of European Academies of Medicine (FEAM).

The Scientific Advice Mechanism provides independent scientific evidence and policy recommendations to the European institutions by request of the College of Commissioners.

It consists of three parts:

The Group of Chief Scientific Advisors, seven eminent scientists whose role is to make policy recommendations, SAPEA, whose role is to review and synthesise evidence the SAM secretariat,

A unit within the European Commission whose role is to support the Advisors and liaise between the Scientific Advice Mechanism and the European Commission.
MEMBER ACADEMIES
MAJOR EVENTS AND ACHIEVEMENTS IN 2022

AUSTRIA

www.oeaw.ac.at

In 2022 the President of OeAW, Anton Zeilinger was awarded the 2022 Physics Nobel Prize.

Future role of OeAW in Euro-CASE: To gather young scholars (less than 40 years of age) and their expertise body, a “Young Academy” named the “Collegium”, with the objective to assess the external impact of research and its potential in new applications, to gather together the new generation of researchers from various fields, to support the younger generation of scholars and to create a network of young researchers. The new Collegium will be part of the existing European Researchers’ Community. The former President of OeAW, Anton Zeilinger was awarded the 2022 Physics Nobel Prize.

CROATIA

www.hatrf.hr

Publication of the Academy scientific editions:

- Annual 2021 of the Croatian Academy of Engineering, 2022, Academy members’ contribution to the development of the scientific system of Croatia.
- Engineering Power, Vol. 17(1) 2022, (www.hatrf.hr), publication of HATRF comprising review articles covering different fields of engineering.
- Participation in the organization of scientific conferences, among which:
  - Conference “7th Croatian Congress of Microbiology with International Participation”, May, 2022.
- More than 40 domestic and international events have been organized under the auspices of HATRF.
- Organization of the CAETS 2023 Annual Conference

BELGIUM

www.academieroyle.be

In 2022, the Royal Academy of Belgium celebrated its 250th anniversary. Several events were organized, of which the Euro-CASE Annual Conference “From Open Science to Innovation, an Engineering Challenge for Europe”, which was a great success, almost 200 people having registered. It should also be mentioned that its Technology and Society Class organized a public session devoted to the Meadows Organization of the CAETS 2023 Annual Conference.

MAIN CONFERENCES

CZECH REPUBLIC

www.eacr.cz

The Engineering Academy of the Czech Republic participated in the US-EU Workshop on Intelligent Manufacturing organized by the Czech Institute of Informatics, Robotics and Cybernetics, Czech Technical University in Prague together with NSF USA; invited speaker: Professor Wolfgang Wahleher of the DFKI Germany, eminent expert in the field of Industry 4.0 overtalk.Diploma of the Elected Foreign Member of the Engineering Academy of the Czech Republic from Professor Petr Zuna, ECA President on this occasion.

In 2022, the SPRM and the Academy published a special issue of the Journal of Open Science (Special Issue on Open Science in the EP Research Infrastructure) for the research output of the EU-Open Science Infrastructure. The issue was well received and highly cited.

The Academy welcomed its 25th anniversary in 2022, together with the Republic’s Ministry of Education and the Ministry of Health, who also celebrated their anniversaries. Several events were held throughout the year, both in Prague and in other cities across the country. The Academy’s activities continued to focus on issues such as the development of research infrastructure, the promotion of open science, and the support of researchers. The Academy’s Board of Directors and Members played a key role in shaping these activities and ensuring their successful execution. The Academy also continued to work closely with other organizations, including the Czech Science Information Center and the National Library of the Czech Republic, to ensure that research outputs are properly disseminated and accessible to the public. Overall, the Academy’s work in 2022 demonstrated its commitment to advancing knowledge and innovation in the Czech Republic and its role as a key player in the broader European research landscape.
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IRELAND
www.iod.ie

Netherlands
www.acti-nl.org

Norway
www.ntv.a.no

Poland
www.pan.pl

PORTUGAL
www.ordemengenheiros.pt

election of Board Members:

• Prof. Sebastião José Cabral Peyes de Aveiro, President
• Prof. Laura Maria Mafra Seara Caldeira, Vice-President
• Prof. Maria da Ascenção Miranda Reis, Treasurer
• Prof. Alberto Joaquim Mihai Brito Barrosa, Vigil
• Prof. Luis Alberto Pascoal Simões da Silva, Vigil


Publications:

• Monograph of Bureau activity – coauthor: Mihai Mihăiță,
• Pages from the development of the industry of Romania, coordinator: Valeria V. Jinescu, The construction of the engine, machines and means of transport – the second part; 2022,
• Journal of Engineering Sciences and Innovation (JESI), quarterly


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• Monograph of Bureau activity – coauthor: Mihai Mihăiță,
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In 2022, RAEng’s Engineering X Safer End of Engineered Life programme, in partnership with the United Nations High Level Climate Champions (UNHLC) team, launched a multi-stakeholder partnership to mobilise African governments and municipalities to improve waste management through technology, infrastructure, finance, and behaviour change. In partnership with UN-Habitat, the report Open Burning of waste in Africa: Challenges and opportunities was published, authored by Professor Delta Mekuria and Dr Amanandh Ab节能环保

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Denmark

Anne-Lise HOEG LEJEJE, Martin BICH Danish Academy of Technical Sciences - ATV C/O BLOXHUB Forscringens Materialegarant 30 Frederiksbergvej København K 150 Munkberg Kjærskov T. +45 45 88 13 11 Tel: +45 45 88 13 70 www.atv.dk

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Greece

Stefanos KOLLA, Nikolaos PASADAKIS, Spiros KOVATIDES Hellas Engineering Academic Community - HEC School of Electrical and Computer Engineering, National Technical University of Athens Institute of Petroleum Research, FORTH Chemical Process & Energy Resources Institute, CERTH

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