



The strong and united voice of universities
of science and technology in Europe

BUILDING THE STRONG AND UNITED VOICE OF UNIVERSITIES OF SCIENCE & TECHNOLOGY IN EUROPE

ANNUAL REPORT 2019

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MESSAGE FROM THE PAST PRESIDENT

It has been a tremendous privilege for me to act as President of one of Europe's most important, influential and widely respected university associations.

Two years ago, we agreed our goals, activities and deliverables in a biennial work plan, profiling CESAER as 'the strong and united voice of universities of Science and Technology (S&T) in Europe'. The overall focus was on: reinforcing and enhancing CESAER's distinctive profile and position; providing clear and unique strategic propositions; and, adding value to our Members through acceleration of our development, engagement with external bodies and collaborative activity with each other. These aims and activities were clustered to enable more flexible and targeted delivery around four strategic themes, each under the leadership of a Vice President and a coordinating committee. These themes were research, education, innovation and impact and leadership and sustainability.

Our collaborative activities would not be possible without the invaluable work of hundreds of volunteers and leaders from our Members who have dedicated their time to our committees, task forces and governing bodies. I would particularly highlight the authors and contributors to the white papers and publications that we have generated which are influencing policy at the European level, and which provide invaluable support to our members by developing best practice recommendations in a wide range of areas from benchmarking to research infrastructures.

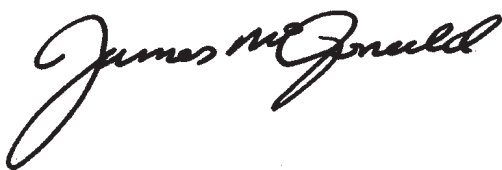
We were welcomed warmly by the many institutions who have hosted task force meetings and workshops, especially by our colleagues in Bucharest and Paris who hosted two very successful CESAER Annual Meetings which covered topics of vital interest to our Members. I was particularly impressed by the impact of our students in Paris who demanded a new type of education that could prepare them to tackle climate emergency we face.

CESAER's influence is also shown by the regular and constructive dialogue with European institutions such as the Commission, amongst many other strategic engagements with Commissioner Carlos Moedas on the plans for Horizon Europe, and Commissioner Corina Crețu on regional development funds.

Our association has also gone through many changes in the last two years, most obviously through changes to our staff, and we are delighted to have appointed such a dynamic, talented and hard-working team, led by David Bohmert. Our association is going from strength to strength.

I feel truly honoured and privileged to have served as the President of CESAER and I am pleased to hand over the association to my successor, Rik van de Walle. I remain fully committed to our strategic mission and founding principles and look forward to working closely with all my friends and colleagues in CESAER, not least through my new role as President of the Royal Academy of Engineering.

Thank you all for the support, guidance and commitment you have provided to me and our association over the past two years. It has been a wonderful experience working with you.



Professor Sir Jim McDonald
President of CESAER 2018-2019
Principal & Vice Chancellor University of Strathclyde



FOREWORD BY THE SECRETARY GENERAL

2019 was crucial in setting the course for both Europe and our association for the coming years.

The European Parliament on 27th November elected the von der Leyen Commission with a convincing majority and proved the doomsayers foreseeing the end of the European Union wrong, for this time at least. The new Commission entered office on 1st December and 'our' Mariya Gabriel's title has been changed to 'Research, Innovation, Education, Culture & Youth'.

Meanwhile, the thirty-second General Assembly on 18th October unanimously elected Rik van de Walle (Rector of Ghent University) as our new President from 2020 to 2021. Thereafter, we led the co-design of our next biennial work plan with a strong focus on the contribution our Members to sustainability and special attention to shaping the future of the European Research Area (ERA).

The events organised by our task forces during the CESAER Annual Meetings (CAM) 2019 kindly hosted by Université Paris-Saclay underlined the engagement of our Members to 'learn from each other'. The publication of our position on the future of the ERA, the appointment of Ernst Schmachtenberg as our ERA Envoy and our answer on the adoption of the European Research Area Committee (ERAC) Opinion on the future of the ERA demonstrate that we have grown to become one of the foremost European university associations able to 'advocate' on behalf of our Members. The publication of a discussion paper on 'S&T education for twenty-first century Europe' by Aldert Kamp (Director of Education for TU Delft Faculty of Aerospace Engineering) testified our growth towards becoming a thought-leader to 'inspire' our Members and beyond. In short, we are consistently building our network as 'the strong and united voice of universities of science and technology in Europe'.

The leadership of our President from 2018 to 2019 Sir Jim McDonald (Principal & Vice-Chancellor of University of Strathclyde) and his team were pivotal in advancing our association to the next level. We transmit our highest feelings of gratitude to him and his colleagues for their guidance and friendship at the organisational, professional and personal levels. We are dedicated and armed to defend the interests of our British Members as Brexit has occurred and the UK's association to Horizon Europe is at stake.

All in all, 2019 marked a new and optimistic drive for Europe and our association. In the words of the President of the European Council Charles Michel at the commemoration of the tenth anniversary of the Lisbon Treaty: "Avancer et progresser en vue d'un nouvel élan européen".

Last, but certainly not least, we warmly welcomed the University of Belgrade as our new Member on 1st January 2020. Also on behalf of my colleagues Anas, Calum, Indrè and Mattias - I thank the over six hundred volunteers and leaders involved in all our bodies for their tremendous efforts, support and engagement.



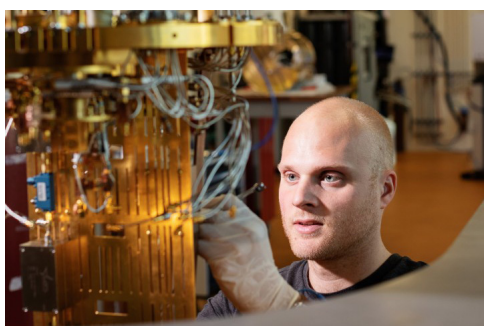
David Bohmert
CESAER Secretary General



Our Members educate just over

1 million students

of which over 180,000 (17%) are international



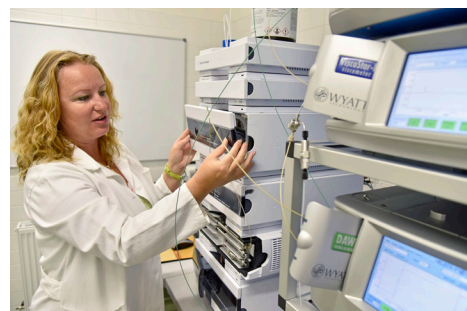
We unite and employ over

88,000 academic staff

Our Members were awarded

3.1 billion euros

worth of European research projects



Including

463 ERC Projects

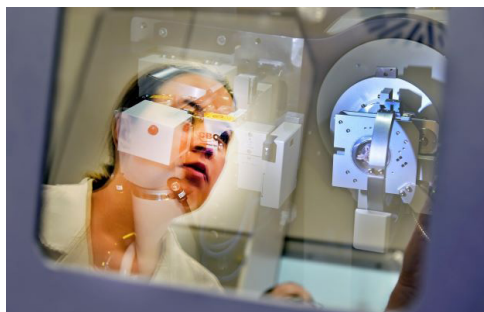
1,156 MSCA Fellowships

4,146 Collaborative Projects



Our General Assembly adopted a

Declaration on Equality, Diversity and Inclusion



Task Force Human Resources published an

Equality Survey 2018

as a white paper presenting data from our
Members

34% of Vice-Rectors are Female at our Members

We pledge to seize and accelerate the momentum to foster equality, diversity and inclusion, increase awareness and overcome internal resistance



24% Women in Academic Management at our Members

We pledge to increase gender balance in all decision-making levels and advisory boards to
at least 30%

MISSION, ACTIVITIES AND BENEFITS

MISSION

The mission is structured around five aims:

- **Learn from each other:** share information and best practice in areas of higher education, research, innovation and university leadership;
- **Influence key bodies:** aid policy-makers and funders to shape European strategies, policies and funding programmes;
- **Boost participation in European funding programmes;**
- **Promote our strengths globally:** support Members in displaying their excellence and distinctiveness in Europe and beyond;
- **Advance debate on key issues:** promote reflection and understanding of role of science and technology in knowledge societies.

ACTIVITIES

We carry out the following activities connected with our five aims:

- Share experiences, identifying best practice and providing guidance
- Deploy task forces and workgroups
- Organise events, such as meetings, workshops and conferences
- Monitor European policies and programmes and inform Members about them
- Undertake consultations and surveys amongst Members and represent their collective interests
- Publish press releases, input statements and white papers
- Liaise with European institutions and other stakeholders
- Support Members' communication activities in Europe and beyond
- Liaise with Members and encouraging embedding of activities within their institutions
- Improve functioning of association



BENEFITS

We provide the following benefits to our Members:

- Unrivalled access to and exchange with over 600 volunteers and leaders from 53 leading universities of science and technology
- Connections to and influence on over 1,000 policy-makers, politicians and funders at European level and increasingly also at regional and national levels
- Direct support to take forward collaboration in 8 task forces which strengthen our collective position in relation to learning and teaching, research excellence and innovation, leadership, and strategic influence
- Influential voice on behalf of Members covering 26 countries, which takes account of range of needs and positions
- Collective representation on key issues such as the European Research and Education Areas and EU funding programmes to senior policy-makers and funders at heart of (European) decision-making
- Stewardship and professional support by 5 FTE at Secretariat for only €12,000
- Attractive range and programme of events such as CESAER Annual Events and over ten workshops per year
- Access to intelligence and resources in Extranet exclusively for Members



CESAER ANNUAL MEETINGS 2019

Leaders representing 86 leading universities of S&T from 33 countries on four continents gathered in Paris to address the challenges of S&T education and training in the 21st century.

About 300 participants were united by the parallel annual meetings of the CESAER and T.I.M.E. associations, warmly welcomed by our kind hosts *Université Paris-Saclay* and *CentraleSupélec*. The central theme was the **novel approaches in education and training required to tackle the societal challenges of the 21st century**, such as climate change and ensuring citizens' health, wellbeing and security.

The meeting of both associations in parallel allowed universities to make strategic international collaborations and partnerships, strengthens academic networks, facilitates exchanges of best practices, and create new connections among students and staff alike.

At a time when democracy and academic freedom of thought are threatened across the world by trends such as nationalism and alternative facts, we stood together as a global community of universities of S&T committed to developing the human capital needed to embrace the challenges and opportunities of our time.

The high-level conference 'Novel approaches in S&T education and training tackling the challenges of the 21st century' was the showpiece event of CAM 2019. Frédérique

Vidal (French Minister of Higher Education) addressed us via video message and renewed the French government's commitment to international cooperation. Valérie Masson-Delmotte (*Université Paris-Saclay* and co-chair of IPCC working Group I) passionately pleaded for universities to act as lighthouses for the transformation to climate action, asking "if not us as universities, who? If not now, when?". Vanessa Debiais-Sainton (Head of Unit Higher Education, European Commission) presented the European Commission's vision for the European Education Area, inviting us to imagine a European Union (EU) in which any student can access the best possible education across the continent and have their diploma recognised in all EU countries.

Our task forces held six workshops, allowing them to advance their work, and providing an ideal opportunity for our Members to network. The workshops were:

- Research Data Management at Universities of S&T and Challenges and Way Forward of Open Access
- S&T Education for the 21st Century and European Universities
- Tools for Responsible Research, Education and Innovation
- Contribution of Universities of S&T to United Nations Sustainable Development Goals
- Student Mobility from a Strategic Perspective
- University-Industry Relations

OUR MEMBERS IN 2019

Aalborg University - Denmark
Aalto University - Finland
Brno University of Technology - Czechia
Budapest University of Technology and Economics - Hungary
Chalmers University of Technology - Sweden
Communauté Université Grenoble Alpes - France
Czech Technical University in Prague - Czechia
Delft University of Technology - Netherlands
Ecole Polytechnique Fédérale de Lausanne - Switzerland
ETH Zurich - Switzerland
Gdańsk University of Technology - Poland
Ghent University - Belgium

Graz University of Technology - Austria
Institut National des Sciences Appliquées Lyon - France
Instituto Superior Técnico - Portugal
Istanbul Technical University - Turkey
Karlsruhe Institute of Technology - Germany
Kaunas University of Technology - Lithuania
KTH Royal Institute of Technology - Sweden
KU Leuven - Belgium
Leibniz Universität Hannover - Germany
Lund University - Sweden
Norwegian University of Science and Technology - Norway
Paris Institute of Technology - France
Politecnico di Milano - Italy
Politecnico di Torino - Italy



Poznan University of Technology - Poland

Riga Technical University - Latvia

RWTH Aachen University - Germany

Tallinn University of Technology - Estonia

Technion - Israel Institute of Technology - Israel

Technische Universität Berlin - Germany

Technische Universität Braunschweig - Germany

Technische Universität Darmstadt - Germany

Technische Universität Dresden - Germany

Tomsk Polytechnic University - Russia

TU Wien - Austria

Universidad Politécnica de Madrid - Spain

Universidade NOVA de Lisboa - Portugal

Universitat Politècnica de Catalunya - Spain

Universitat Politècnica de València - Spain

Université Catholique de Louvain - Belgium

Université Paris-Saclay - France

University College Dublin - Ireland

University of Porto - Portugal

University of Sheffield - United Kingdom

University of Strathclyde - United Kingdom

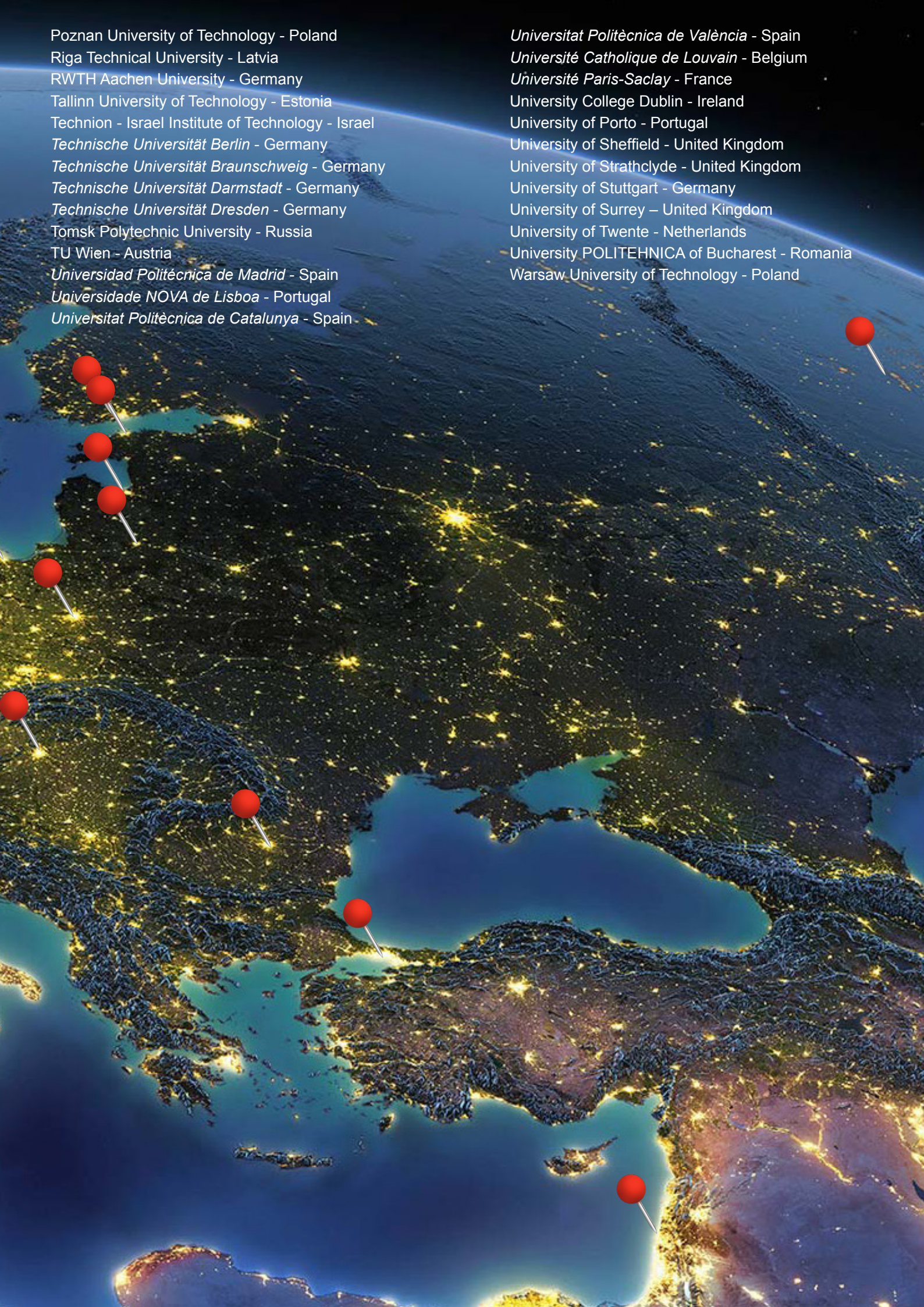
University of Stuttgart - Germany

University of Surrey – United Kingdom

University of Twente - Netherlands

University POLITEHNICA of Bucharest - Romania

Warsaw University of Technology - Poland



PRESIDENCY 2018-2019

The Presidency was composed of the President and five Vice Presidents. One of the Vice Presidents acted as Treasurer. The Presidency is responsible for the ongoing affairs of the association and the preparation and implementation of the decisions by the General Assembly and the Board. The members of the Presidency are also members of the Board of Directors. The Presidency was composed of:

Sir Jim McDonald



President
Principal & Vice Chancellor of
University of Strathclyde

Sigbritt Karlsson



1st Vice President for Leadership & Sustainability
President KTH Royal Institute of
Technology in Stockholm

Orla Feely



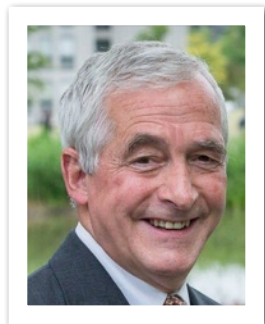
Vice-President for Resources & Treasurer Principal
Vice-President for Research,
Innovation and Impact at University
College Dublin

Wayne D. Kaplan



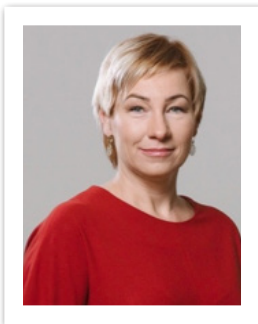
Vice President for Innovation & Impact
Executive Vice President for
Research of Technion - Israel
Institute of Technology

Karel Luyben



Vice President for Research
Rector Magnificus Emeritus of Delft
University of Technology

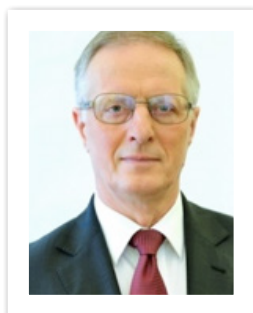
Jurgita Šiugždinienė



Vice President for Education
Advisor to Rector on Education
Kaunas University of Technology

BOARD OF DIRECTORS 2018-2019

Our association is governed by the Board consisting of Directors which are elected from amongst the Members. The Board enacts the decisions of the General Assembly and is vested with the widest powers with regard to the steering of the association not reserved for the General Assembly. Our Board was composed of the following Directors:



Rajmund Bacewicz

Director 2016-2019

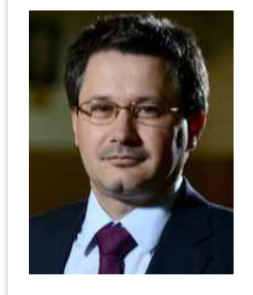
Vice-Rector for Research
of Warsaw University of
Technology



**Guillermo Cisneros
Perez**

Director 2016-2019

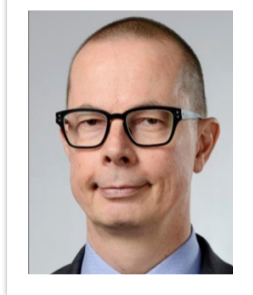
Rector Magnificus of Technical
University of Madrid



Mihnea Costoiu

Director 2018-2021

Rector of University
POLITEHNICA of Bucharest



Anders Hagström

Director 2016-2019

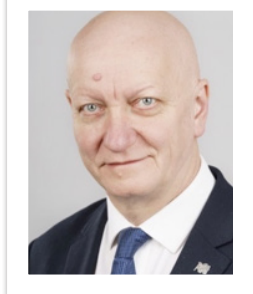
Director Global Education Affairs
at ETH Zurich



Holger Hanselka

Director 2018-2021

President of Karlsruhe Institute
of Technology



Vojtěch Petráček

Director 2016-2019

Rector of Czech Technical Univer-
sity in Prague



**Arlindo Manuel
Limede de Oliveira**

Director 2018-2021

President of *Instituto Superior
Técnico*



Rik Van de Walle

Director 2018-2021

Rector of Ghent University



Marc Zolver

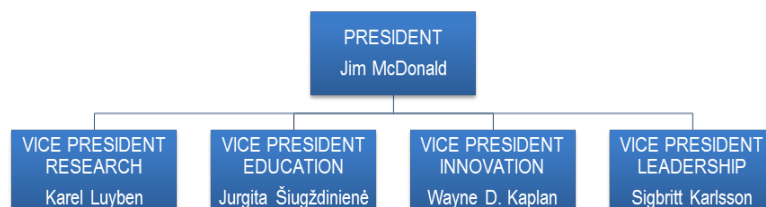
Director 2016-2019

Vice President for International
Affairs at CentraleSupélec for
Université Paris-Saclay

FOUR STRATEGIC THEMES

Our work was structured within four strategic themes each led by a Vice President:

1. Research
2. Education
3. Innovation and Impact
4. Leadership and Sustainability



1. RESEARCH

Excellent research is at the core and focus of our association. There has been a renewed focus on impact and addressing societal challenges. Universities of S&T are uniquely positioned as ‘bridges’, connecting fundamental and pragmatic research, and curiosity- and utility-driven approaches. Our work under [Research](#) was focused on four areas:

1. Research & Innovation Infrastructures
2. S&T in the 21st Century
3. Open Science
4. Address Key Research Policies and Programmes

TASK FORCE RESEARCH & INNOVATION INFRASTRUCTURES

The Task Force Research & Innovation Infrastructures supported our Members in affirming and furthering the role of universities of S&T in research and innovation infrastructures. Lars Börjesson (Chalmers University of Technology) chaired this task force. It published its white paper [‘Universities of S&T as engines of excellence, talent and innovation’](#). Our association is also strongly involved in the development of the [European Open Science Cloud](#), with our Vice President Karel Luyben as Co-Chair of the EOSC Executive Board.

TASK FORCE S&T IN THE 21ST CENTURY

The Task Force S&T in the 21st Century has successfully prepared the foundations for an upcoming joint interna-

tional conference with the Royal Academy of Engineering on ‘Imagining S&T in 2050’. The task force was chaired by Marleen Stikker (Waag) and Arlindo Oliveira (Instituto Superior Técnico).

TASK FORCE OPEN SCIENCE

The Task Force Open Science was co-chaired by Wilma van Wezenbeek (TU Delft) and Karel Luyben (TU Delft), and advanced the understanding and implementation of open science by our Members. Priority areas included open access to scientific publications (including helping to shape [‘Plan S’](#)) and research data management. A white paper on ‘Advancing research data management in universities of science and technology’ was published in early 2020. Our association also contributed to the [Open Science Policy Platform](#).

ADDRESSING KEY RESEARCH POLICIES AND PROGRAMMES

Our association is one of the original European Research Area Stakeholder Organisations and remains committed to this topic: we published a position on the [‘Future of the European Research Area \(ERA\)’](#). Our association was also involved in the [#EUInvestInKnowledge campaign](#) advocating for an ambitious Horizon Europe budget.

2. EDUCATION

Our activities in [Education](#) aimed to support and facilitate our Members in realising the priorities of European Education Area (EEA) and the European Higher Education Area (EHEA). We put particular attention on assuring human capital in S&T for the 21st century; enabling student mobility; employability and addressing key educational policies and programmes.

Our work under [Education](#) was focused on three areas:

1. S&T Education for the 21st Century
2. Mobility
3. Address Key Education Policies and Programmes

TASK FORCE S&T EDUCATION FOR THE 21ST CENTURY

The Task S&T Education for the 21st Century supported our Members in developing relevant, innovative strategies for learning and teaching to meet the needs of business, industry and society at large. Ralph Bruder (TU Darmstadt) chaired this task force. During 2019, the task force held several meetings and workshops that stimulated the exchange of ideas and approaches to the future of S&T education. The outcomes of this work fed into the [discussion paper](#) on 'S&T education for 21st century Europe' written by Aldert Kamp (Director of Education for TU Delft Faculty of Aerospace Engineering) in collaboration with the task force. The paper explores the trends in engineering sciences and technology, education and society, and provides orientation on how universities of S&T and our association can change education in Europe for the better.

TASK FORCE MOBILITY

The Task Force Mobility facilitated the exchange of best practices and strategies among our Members to strengthen the cooperation and promote student mobility. The task



force organised several workshops, addressing still existing barriers and developing recommendations on how to overcome them. The task force contributed to the shaping of European Universities by providing input for two positions that outlined recommendations for the development and upscaling of the initiative. The task force was co-chaired by Ravindranathan Thampi (UCD) and Monika Sester (Hannover).

ADDRESSING KEY EDUCATION POLICIES AND PROGRAMMES

Our association actively contributes to the shaping of European Universities initiative. We published a [position](#) and advocated for generously funded, balanced, open and inclusive European Universities. We carried out a broad consultation amongst our Members to gather more detailed information about their involvement in the initiative and the factors of their failure and success, and provided training and guidance to ensure active participation and better performance in the next calls.

3. INNOVATION AND IMPACT

As we unite universities of S&T, our association has a distinct profile with our Members recognised as natural partners to many societal, industrial and non-academic actors. Foundational for this is our Members' strong focus on delivering tangible economic and societal impact, including the talent and skills needed for the 21st century. Building on our 2018 white paper '[Role of universities of science and technology in innovation ecosystems: Towards mission 3.1](#)', our association remained a strong voice and a trusted partner in the ongoing developments of the European innovation and impact agenda, including the European Innovation Council and related European Commission efforts around innovation ecosystems.

Universities need to evaluate the impact of their innovation on society, and establish mechanisms to maximise this impact. The real issue to address is how to create value together with industry, public services and society at large. Collaboration between different entities in research and innovation cycles is therefore crucial. Universities are the main source of knowledge and training of professionals, researchers and entrepreneurs of tomorrow, and are therefore central in this area.

Our work under [Innovation & Impact](#) was focused on two areas:

TASK FORCE INNOVATION

The Task Force Innovation supported our Members by addressing the strategic positioning of universities of S&T in innovation ecosystems, and their relation with industry and governments. Tim Bedford (University of Strathclyde) chaired this task force. It has developed a model on university-industry relations, which was refined at several meetings during the year, including workshops hosted by Universitat Politècnica de Catalunya and Technische Universität Braunschweig, and at the CAM 2019.



TASK FORCE IMPACT & OUTREACH

The Task Force Impact & Outreach was chaired by Christine Ahrend (Technische Universität Berlin). The task force supported our Members in maximising impact and providing training in core research and innovation competences. It worked on increasing our Member's visibility and their capacity-building in innovation, impact, research and communication management. An example is a workshop hosted by Technische Universität Berlin on embedding education towards innovation and entrepreneurship, and on fostering collaborations between companies and scientists.

4. LEADERSHIP AND SUSTAINABILITY

The work on [Leadership & Sustainability](#) underpinned efforts and issues faced by universities in [Research](#), [Education](#) and [Innovation & Impact](#). It supported our Members' abilities to reach their full potential, shared success stories and facilitated their capacity to influence stakeholders, focusing on strengths and strategies.

TASK FORCE BENCHMARK

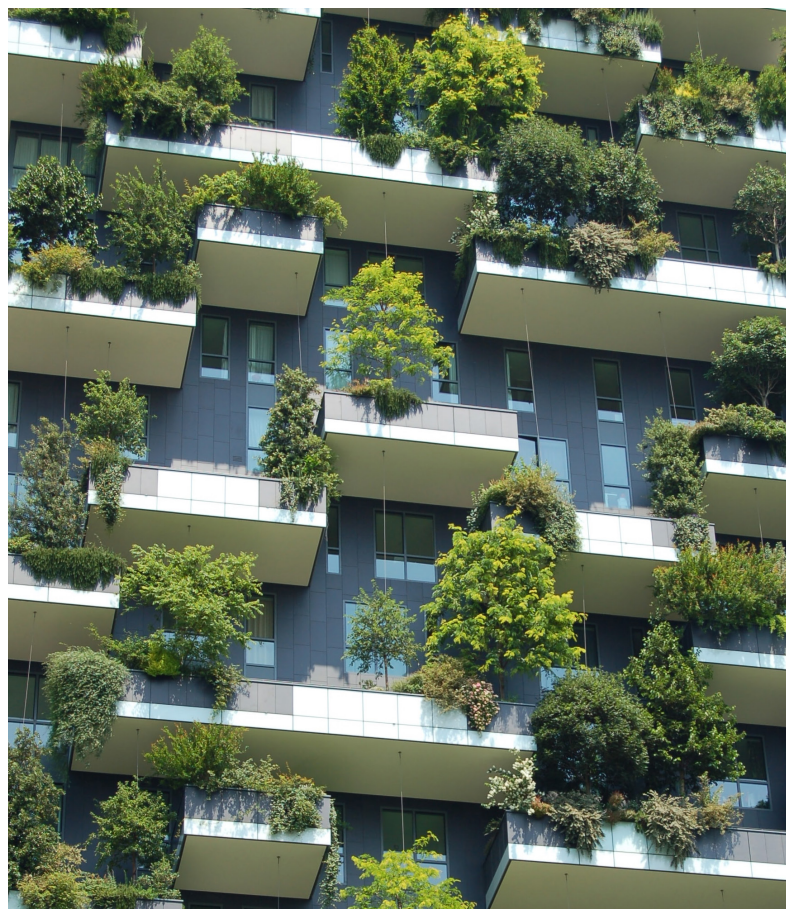
The Task Force Benchmark inspired and supported our Members, optimising the depiction of performance in important rankings and sharing experiences on and data from rankings and metrics issues. It worked with ranking organisations, worked on next generation metrics and prepared the Annual Member Monitor 2019. Mads Nygård (NTNU) chaired this task force, Rona Smith (Strathclyde) led the work on the Annual Member Monitor and Per-Eric Thörnström (Chalmers) led the work on next generation metrics.

TASK FORCE COMPETITIVE FUNDING

The Task Force Competitive Funding supported our Members in participating in and the shaping of European funding policies and programmes, with a specific focus on Horizon Europe and Erasmus. This task force acted as a 'core' of advocacy for our association with the Commission, Parliament and Council and promoted and defended our interests on all major topics in order to fine-tune their strategies. Olivier Küttel (EPFL) chaired this task force.

TASK FORCE ETHICS & VALUES

The Task Force Ethics & Values supported our Members in addressing the ethical challenges resulting from the scientific and technological developments in the 21st century. It produced a collection of promotional tools which can be used towards responsible research, education and innovation, and initiated a reflection on the historic role of universities of S&T in society. Jeroen van den Hoven (TU Delft) chaired this task force.



TASK FORCE HUMAN RESOURCES

The Task Force Human Resources inspired our Members in preparing and promoting talent for the 21st century. It published the white paper '[Equality Survey 2018](#)', and prepared a second entitled '[Boost Careers of Early-Stage Researchers](#)' for publication in 2020. Doris Klee (RWTH) chaired this task force.

TASK FORCE LEADERSHIP

Based on input from the Task Force Human Resources, the Task Force Leadership prepared a [Declaration on Equality, Diversity and Inclusion](#) which the 32nd General Assembly adopted on 18th October. Sarah Springman (ETH Zurich) chaired this task force.

RESOURCES

The annual subscription in 2018 amounted to €12,000. The Annual Account for our fiscal year from 1st October 2018 to 30th September 2019 was:

TYPE COSTS	ACCOUNT 2018-2019 (TO THE NEAREST €1,000)
INTERNAL BODIES	8,000
SECRETARIAT	56,000
EVENTS	5,000
PROJECTS	6,000
ICT	39,000
ADMINISTRATION	122,000
SALARIES	383,000
TOTAL EXPENSES	609,000
TOTAL INCOME	624,000
TO RESERVE	15,000

SECRETARIAT

The Secretariat ensures the execution and implementation of the decisions by the General Assembly, the Board and the Presidency and manages the daily operation of the association. In 2019 the Secretariat has expanded to five full-time equivalents through the addition of an Advisor for Research & Innovation, an Advisor for Higher Education and an Office Manager.

CONTACT

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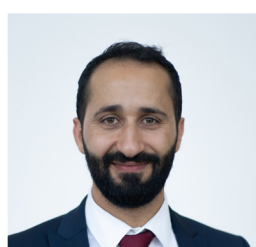
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