CAETS Council meeting September 2018: Events and Activities

Input from AcTI, The Netherlands

- **Five academy meetings per year** with an average attendance of 1/3 of all fellows. The Academy has 95 fellows. These meetings are a combination of formal academy meetings and topical meetings. The meetings rotate between member locations (university, research institute or companies). The Agenda Committee together with the host create the program of the academy meetings. The host introduces his/her organization and its R&D activities, and a guided tour of the research facilities. This is followed by a content-rich session involving external experts on a specific topic of interest. This is followed by the formal academy meeting for the fellows, which is prepared by the AcTI Office under guide of the Executive Board. The meeting ends with drinks offered by the host and dinner in a nearby restaurant. We consider networking among fellows an important ingredient of academy meetings.
- Innovation Conference. Since 2003, AcTI has been organizing an annual Innovation Conference, at which decision makers from industry, universities, other knowledge institutes and the government discuss the latest developments in the field of science, technology and innovation that are relevant to society and have a focus on creating economic and societal value. The Innovation Conference has a high profile and enjoys the participation of a Cabinet Minister as keynote speaker or the presence of a member of the Royal House (in XX, the King attended our Innovation Conference). In 2017 there no Innovation Conference was organized. In 2018 we will organize a conference with the theme: Mission-driven innovation.
- Joint thematic mini-symposia with the Royal Academy of Sciences. Starting in 2017, AcTI organizes joint mini-symposia on a specific current topic where science and innovation come together. These symposia are organized together with the Royal Academy of Sciences. In 2017 AcTI organized two mini-symposia: 1) Off-shore Wind and 2) Water Management. In 2018 we have organized a symposium on Carbon Capture and Use, in which SAPEA was a partner. We envision to organize one more symposium in the Fall of 2018 on the topic of Personalized Health. All symposia have been held in Amsterdam.
- Advice to the Dutch government on innovation and entrepreneurship policy (June 2018). The Netherlands Ministry of Economic Affairs and Climate Policy has invited AcTI to advise the ministry on the new topsector and innovation policy in which societal challenges are leading. AcTI has delivered and presented the advice to the ministry. The advice highlights: 1) continuity in government policy, 2) bring science and innovation agendas and instruments together in mission-driven innovation, 3) facilitate and more actively involve innovative SMEs and startups in societal challenges/missions 4) focus on knowledge & technology transfer and new business creation and invest more in exact sciences and technology 5) increase the budget for thematic innovation (societal challenges).
- Advice of Euro-CASE innovation platform. As a member of Euro-CASE, AcTI has been heavily involved in the Euro-CASE Innovation Platform II which has produced the report on *Barriers to innovation and scale up of innovative SMEs (November 2017)*. AcTI has organized a high-level stakeholder meeting with representatives of government, knowledge institutes and government in the Netherlands to discuss this report. Currently AcTI is involved in the Euro-CASE Innovation Platform III, which is preparing a report on innovation agendas and landscapes in different European countries. The report is expected early Fall 2018.

• Young Innovators. In 2017 AcTI launched its Young Innovators initiative aimed at binding young innovative talents to the Academy. At the moment this is focused on young (below 40 years of age) innovative and successful entrepreneurs that have played a dominant role in developing a new company based on scientific and/or technological innovation. Currently 9 young innovators have been granted two-year fellowships of the Academy. AcTI will evaluate the initiative in the Fall and with a positive outcome will seek a new batch of about 8 young innovators.

ACADEMIA NACIONAL DE INGENIERÍA



República Argentina

ACADEMIA NACIONAL DE INGENIERÍA - ARGENTINA SUMMARY OF KEY EVENTS AND ACTIVITIES 2017

During the past year, 2017, the National Academy of Engineering of Argentina, ANI, played a significant role by participating in the discussion of topics of national interest, being also enrolled in the deliberation of issues of common awareness.

Through an invitation from the Ministry of Energy of Argentina, the Academy was able to give its opinion about the Study on the Environmental Impact of Hydroelectric Exploitation on the Santa Cruz River elaborated by Emprendimientos Energéticos Binacionales S. A., EBISA. In a scenario with the global need to reduce the emission of greenhouse gases and the domestic need to meet the growing demand for electric power, the energy issue is currently one of the most complex challenges from the economic, environmental and social point of view as well as from the perspective of public policies and medium and long-term strategic planning. Although Argentina needs to consolidate its power sources, the various existing options to do so must be carefully evaluated, assessing the number of impacts they cause. The Members of the Academy that took part of the Public Audience held in order to debate about this issue were Ing. Luis U. Jáuregui, First Vice President of the Academy, and Ing. Osvaldo J. Postiglioni.

http://www.represaspatagonia.com.ar/files/EIA%20PRESAS%20SC%20-%20Resumen%20Ejecutivo%20-%20Rev0.pdf

From September 13 to 15, the Academy appointed its Titular Member, Ing. Javier Fazio, to be a part of the Scientific Committee at the Latin American Engineering Conference 2017, CLADI. This Congress was held by the Facultad Regional Paraná of Universidad Tecnológica Nacional and the discussions during its sessions regarded the following thematic areas: University Policies and Management; Projects of Technological and Social Development; Engineering Education; Regional Development, University, Business and State Linkage; Sustainable Engineering Energy, Transportation, Environmental Management and Climate Change; Works and Engineering Projects; Problems in the Professional Exercise of Engineering as well as International Scope in Engineering.

On October 31, ANI along with other National Academies of Argentina, participate of the Sixth Interacademic Meeting, held on the subject of "Universities and Research for the Argentina of Tomorrow". The idea of this Meeting was that each Academy, from its perspective, would raise the need to increase the research and development processes that allow easier access to the processing and transmission of information, thereby stimulating the flow of knowledge.

http://www.acadning.org.ar/Libro%20academias%202017%20baja.pdf

On November 2 and 3, 2017, the Inter-American Network of Academies of Science (IANAS) held the Annual Meeting of Focal Points of its Science Education Program at the city of Córdoba, Argentina. Within the framework of this meeting, IANAS, the National Academy of Exact, Physical and Natural Sciences (Argentina) and the National Academy of Sciences (Argentina), organize the "International Congress on Teaching of Natural Sciences, Technology, Engineering and Mathematics". For this occasion, the Academy appointed its Corresponding Member Ing. Ricardo Rocca to participate in this meeting. www.ianas.org

ACADEMIA NACIONAL DE INGENIERÍA

Member Council of Academies Council of Academies of Engineering and Technological Science

República Argentina

Regarding ANI's Institutes, issues of national interest were discussed during its monthly meetings. The Institutes will continue to debate about these main topics during 2018.

The Institute of Transport considered the situation of specific matters such as Paseo del Bajo; Regional Express Network (RER); Road safety; Illia Highway and Naval Industry in Argentina. http://www.acadning.org.ar/instituto_transporte.htm

The Institute of Energy discussed about the scenarios in Energy up to 2025, actions carried out to date on the project of the two dams of the Santa Cruz River and the agreement with China for the construction of two nuclear power plants IV and V, plus the life extension works of the Embalse plant, which is in full realization. One particular matter referred to the impact of Renewable Energies in the Development of Vaca Muerta. http://www.acadning.org.ar/instituto_energia.htm

The Institute of Environment considered relevant topics having in mind the growing concern about environmental issues worldwide. The main areas of discussion were: 1. Institutional strengthening of environmental organizations. Collaboration with these organizations in the optimization of the applicable legal framework; 2. Reassessment of the importance of environmental parameters associated with each particular situation in order to obtain permanent and based on internationally recognized standards restrictions; 3. Management of waste in general, with particular observance of special waste; 4. Sanitary and environmental security of the nuclear segment. http://www.acadning.org.ar/instituto_ambiente.htm

Finally, the Institute of Constructions and Structures focused on the treatment of CIRSOC Bridge Regulations, a Project which is in public discussion and whose development was made based on the document AASHTOLRFD Bridge DesignSpecifications-2012- of the American Association of State Highway and Transportation Officials (USA). http://www.acadning.org.ar/instituto_construcciones.htm

SUMMARY OF KEY EVENTS AND ACTIVITIES 2017-18

BACAS (BELGIAN ACADEMY COUNCIL OF APPLIED SCIENCES)

Since 1938 Belgium's royal academy of sciences and arts is subdivided in a Dutch-speaking academy (KVAB) and a French-speaking academy (ARB). Technical sciences (engineering) belong to the field of the "class of technical sciences" in KVAB and of the "class of technology and society" in ARB. BACAS is the common council through which these two classes are represented in international organisations such as CAETS. Some 50% of the members of the two classes work in industry, 50% in academia.

The main activities of BACAS consist of preparing position papers on actual societal issues for the government. In addition, thinkers' programs are organised in order to benefit from the expertise of foreign researchers. Classes convene on a regular base to discuss progress of working groups preparing position papers or thinkers' programs, and to attend lectures of experts in different scientific fields.

In 2017-18 lectures were held about the following topics:

- Tine Baelmans (University of Louvain): thermal energy technology
- Reinhart Ceulemans (University of Antwerp): fluxes of greenhouse gases between the biosphere and the atmosphere within the European ICOS (Integrated Carbon Observation System) infrastructure
- Wim Van Paepegem (University of Ghent): composite materials for engineering applications ritual or virtual testing
- Paul De Bruyker (Indaver): circular economy, more than recycling targets
- Egbert Lox (Umicore): Umicore material technologies and services for sustainable mobility
- Yolande Berbers (University of Louvain): entrepreneurship for students of the faculty of engineering of the University of Louvain
- Guy Marin (University of Ghent): laboratory of chemical technology in a nutshell

Together with the class of natural sciences, members visited the ICOS site in Brasschaat (Antwerp) and imec (R&D in nanoelectronics and digital technologies) (Louvain).

Position papers

- Artificial Intelligence: in co-operation with the class of natural sciences a position paper has been published about the future and the challenges of AI in Belgium and in Europe. Can Europe compete with the US and China? What will be the impact of AI on our welfare and our view on humanity?
- Art, science and technology: interaction among these three fields are due to lead to new insights both in arts and in science and technology.
- Corporate digital responsibility: in May 2018 the EU's GDPR (General Data Protection Regulations) have become effective. Companies and organisations will have to adapt their treatment of personal data. At the same time, AI, deep learning, internet of

- things... are in the process of opening up huge new opportunities of which some experts think they will trigger a fourth industrial revolution.
- Mobility: at the crossroads of European trade routes a densely populated country like
 Belgium is confronted with enormous problems regarding road traffic and its impact
 on health and environment (quality of the air). Smart cities are considered to be a
 solution to these problems.
- Role of natural gas in the energy transition and storage of electricity: papers published by the academy's permanent reflection group on energy. Like all European countries, Belgium is in the process of examining ways to reduce CO2 emissions in the energy sector, without impairing supply security for industry and the general public.
- **Learning analytics**: analysis of experiences from both students and teachers regarding education in Belgium; potential of new instruments such as MOOCs and SPOCs.

Thinkers' program

Within the framework of the academy's "thinkers' programs" foreign experts are
invited to spend some time in Belgium in order to examine challenges in different
fields. This year, the class of technical sciences organised a thinkers' program about
food. Foreign thinkers were prof. Tinny Van Boekel (University of Wageningen,
Netherlands) and Margareth Bath (Kellogg Company, USA). The thinkers met different
stakeholders and researchers: a conference on food security was organised in June
2018.

Science agenda

A broad survey was organised in Flanders (Dutch-speaking part of Belgium) asking the
general public which topics they would like to be studied by universities and research
institutes. Over 8,000 questions were received from the Flemish population. The
academy has been invited by the Flemish government to contribute to the analysis of
these questions, and to help examining how the Flemish academic world could offer
an answer to the expectations of the population.

Issues of concern

Chinese Academy of Engineering (CAE)

1. The 14th CAE General Assembly

The 14th CAE General Assembly convened in Beijing in early June. Chinese President Xi Jinping attended the opening ceremony and delivered a keynote speech. After the General Assembly, the new leadership of CAE took the office.

2. CAE's role as an engineering think-tank in advising the nation's planning and policymaking by implementing consulting projects:

- 1) Addressing grand challenges and bottleneck issues in relation to the country's economic and social development in the process of industrialization and urbanization. Selected projects include: Strategic study on supporting the Belt and Road Initiative with engineering science and technology; Study on several strategic issues on eco-civilization construction; Study on the sustainable development of city building in China; etc.
- 2) Addressing major engineering and technologic issues in industries. Selected projects include: Study on innovation and the development of emerging industry; Study on food safety in China; Strategic study on coal mine safety in China; Study on the implementation of the Rural Revitalization Strategy; Strategic study on the cultivation of medical and healthcare talents in China; etc.

3. Supporting systems for consulting work

- 1) CAE has been providing the local governments with consultative suggestions to support the regional economic development and social progress. So far, 6 strategic study institutes have been established by CAE and provincial governments.
- 2) CAE has been working closely with leading enterprises, universities and research institutes by establishing strategic research consortia to support its consulting work. So far 12 consortia have been established focusing on innovation, aviation, aerospace, marine, IT and agriculture, etc.
- 3) CAE hosts two UNESCO Category II centers, namely the International Knowledge Centre for Engineering Sciences and Technology, and the International Centre for Engineering Education.

Activities of Interests

Chinese Academy of Engineering (CAE)

1. CAE Flagship Journals

In 2015, CAE launched its flagship journal *Engineering* (www.engineering.org.cn), the primary journal of the CAE "1+9+1" journal system, which covers various fields of engineering, and reflects current engineering development trends and progress in order to promote the exchange and exhibition of achievements. At present, among the 9 journals of frontiers which are edited by the 9 CAE academic divisions respectively, 7 are indexed by SCI or EI. The latter ONE is *Strategic Study of CAE*, in which outcomes of CAE strategic consulting projects are published.

In the past three years, 200 high-quality articles have been published, of which 60% were from outside China, and 80 were contributed by the members of CAETS member academies. In 2018, Engineering achieved its first impact factor of 2.667 and is therefore listed in the Q1 group of the Science Citation Index (SCI), which has reached the level of first-class journals in the engineering field.

Your attention or contributions to the journals are warmly welcomed.

2. CAE-RAE Leaders in Innovation Fellowship Programme

During Feb. 25 - Mar. 10, 2018, CAE sent a select cohort of 15 researchers from China to the UK, for the third year in a row, to attend the RAE's Leaders in Innovation Fellowships (LIF) programme, which is part of the Newton Fund. The programme is to build the capacity of researchers for entrepreneurship and commercialization of their research. Supported by RAE, the 15 researchers had a focused period of training, access to expert mentors, and opportunities for international networking.

As part of the LIF follow-on support programme, CAE and RAE co-sponsored the LIF China In-country Workshop in Chongqing during June 13-14, 2018, where the RAE sent coaches from the UK to join the fellows of the past three years in China to provide training on the current pressing needs of their projects.

3. The China-Korea Enterprise Network

China is fully implementing the strategy of Innovation-driven Development. CAE attaches great importance to cooperation on innovation with our counterparts. CAE and the NAEK jointly sponsored the China-Korea Enterprise Network in Shenzhen, China during May 8-12, 2018.

4. SATEC Forum on New Generation of AI and Advanced Manufacturing

On May 18, 2018, the SATEC Forum on New Generation of AI and Advanced Manufacturing was co-sponsored by CAE, China's Ministry of Science and Technology (State Administration of Foreign Experts Affairs), and American Society of Mechanical Engineers in Beijing. Over 250 participants from the industry, academia and government of China and US attend the forum, discussed and shared the application and ideas of intelligent manufacturing, and explored the trend of intelligent manufacturing and innovation.

5. Sino-French Medicine Symposium

CAE and the French National Academy of Medicine have jointly held seven medical symposia in China and France over the past few years to create a platform for the promotion of medical science exchange among Chinese and French institutions. Topics of the Symposium include blood diseases, infectious diseases, cardiovascular diseases, diabetes, and metabolic diseases.

The 8th Sino-French Medicine Symposium is scheduled to be held in Hangzhou from October 25th to 28th, 2018, with the theme of cardiovascular disease, metabolic disease and kidney disease.

6. The 20th East-Asia Round Table Meeting of Academies of Engineering (EA-RTM) and International Symposium on Smart City

During Sept. 27 - 28, 2017, the 20th EA-RTM and International Symposium on Smart City was held in Busan, Korea. The EA-RTM is the most important cooperative mechanism among the Chinese Academy of Engineering (CAE), the Engineering Academy of Japan (EAJ) and the National Academy of Engineering of Korea (NAEK). The EA-RTM has always focused on the demand of regional economic and social development, and has made fruitful achievements by facilitating exchanges and cooperation on up-to-date topics of common concerns in engineering science and technology.

The 21st EA-RTM, focusing on "The Next Generation of AI", will be held in China in October 2018.

7. Chinese-Franco Joint Study Group on Nuclear Energy

In 2016, the CAE and the French Academies (National Academy of Technologies of France and French Academy of Sciences) set up a joint Chinese-Franco study group on nuclear energy. The three partners brought their joint work to a conclusion when exposing their common views to the world nuclear community, including policy makers, at a side event during the annual General Assembly of the International Atomic Energy Agency (IAEA) in 2017.

In 2019, a joint Chinese-Franco workshop will be held, aiming to propagate a common position paper to distil policies and technology options, including safety and waste management, for making nuclear power generation a component of future energy mixes in countries with the appropriate potential for implementing this energy.

National Academy of Engineering of Korea (NAEK)

Beyond TIPS

NAEK has been organizing Beyond TIPS Demo Day to facilitate the follow-up investment and successful exit (M&A, IPO, etc.) of tech startups. The Tech Incubator Program for Startups (TIPS) is designed to identify and nurture the most promising startups with innovative ideas and groundbreaking technologies. Through this program, NAEK provides opportunities for startups to build collaborative networks with enthusiastic entrepreneurs and investors who are pioneering new markets, as well as some of the best engineering experts in Korea. At the end of the event, prizes are given to the teams that show outstanding achievements, and in addition, they receive a privilege to be connected with investors to help promote the investment and exit of TIPS companies. NAEK members also participate in the program as an evaluation team, advisors, or investors. As an international expansion of this project, NAEK is going to hold cooperative events comprising of pitching, training, and mentoring with enterprise hub of RAEng in the UK and Korea in October 2018.

History of Industrial Technology Development of Korea

NAEK has keen interests in accomplishing the greatest technological development in history, which can contribute to the Korean economy and society. NAEK members and related experts who have developed the key technologies have written their past stories in the record with episodes and impact on the society. This huge project was initiated in 2016 in an attempt to pass on their legacy to the next generation and share technological insight. Ten series of books by industry and a comprehensive book will be published in late 2018 and early 2019. So far, about 300 experts have been engaged in the projects actively as writers, interviewers, advisors, or supervisors. NAEK hopes that these books will be helpful resources for those who are studying industrial technology and establishing the R&D strategy for industry and government.

100 Technologies for the Year 2025

NAEK selected the 100 innovative technologies that will transform our future lifestyles in Korea and the world in the year 2025, and awarded 238 innovative engineers. The selected technologies are expected to be realized or commercialized by the year 2025, while the awarded engineers will undoubtedly become future leaders who can overcome challenges, and will eventually bring about differentiation in this respect. This project is unique in that it identifies companies focused on finding promising future technologies. Importantly, both small and medium-sized enterprises and large corporations are pursuing these technologies to develop their potentials in

commercialization. In addition, their technology development will advance in accordance with their strenuous efforts to secure top-notch researchers and experts for next-generation growth engines.

The 5th NAEK Policy Proposal

The fifth NAEK policy proposal, Opening up Opportunities for Korea: Enterprise and Innovation, was published in the midst of a Presidential election in 2017. NAEK sent the proposal to all the Presidential candidates. The contents of the proposal were mainly related to R&D policy, industrial strategy, and engineering education, which could be included in their campaign pledges. As a result, President Moon Jae-in and his administration now emphasize the importance of the entrepreneurship and innovative growth. Since the NAEK's foundation, NAEK has published a series of NAEK Policy Proposals and sent them to the presidential hopefuls. These proposals covered the agendas and action items of R&D, industry, and education, which could be referred for election pledges.



Annual Report Switzerland (SATW) 2017

Major Events

- Four public events ("TecToday") on Autonomous Driving, Big Data and two big rail projects "Leman 2030" and "Gotthard Base Tunnel".
- Two Innovation Forums (Autonomous Driving and Artificial Intelligence)
- High level workshop on Cyber Sovereignty
- First national Additive Manufacturing conference
- 10th national conference on "Encouraging young engineering talent"
- Ten "TecDays" (full day events in high schools to foster young talent in MINT)
- Launch of "Technology Outlook 2017" (strategic monitoring report on behalf of the Swiss Government, assessing the opportunities and risks of technical developments for Switzerland including Industry 4.0, Artificial Intelligence, Robotics, and New Manufacturing Processes)

Management, Board and Advisory Board

President of the Board: Willy Gehrer
CEO: Rolf Hügli
President Scientific Advisory Board: Ulrich W. Suter

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SLOVENIAN ACADEMY OF ENGINEERING

SUMMARY OF ACTIVITIES FOR CAETS COUNCIL MEETING 2018

Recent activities if IAS:

"Understanding the Innovation Process and Sustainable development": IAS is continuing a long-term analysis of the educational system in Slovenia, the analysis of Slovenia's research, development and innovative achievements. It includes recommendations for improvement on these topics. The results of the analysis have been published each year for last 10 years.

"Counselling to State Institutions": IAS cooperated with State Institutions by preparing the law for awarding engineering achievements, now equal to the awards for scientific achievements. IAS has also cooperated with the State Institutions in the twin-track railway project, in cooperation with other engineering organisations.

"Position of the Slovenian Academy of Engineering on the development of the Slovenian energy sector until 2030, with a view until 2050": The Slovenian Academy of Engineering (IAS) has found that Slovenia is in urgent need of a clear, sustainable, and development-oriented energy vision and strategy. It has formed a working group to prepare IAS positions on the development of the Slovenian energy sector. It has included its members and other experts in individual fields of energy in the working group. Within the scope of theme evenings and expert discussions, experts have demonstrated a great deal of professionalism. The exchange of opinions from different points of view has led to well-deliberated and long-term positions, opinions, and proposals, which is why IAS has expressed its willingness to see IAS members and other involved energy experts also participate in the working groups of the Government or the competent ministry in order to prepare strategic documents for the energy sector, such as the Slovenian Energy Concept (SEC) or other strategic documents.

"Statements on Technical Education in Slovenia": two workshops were organised by the IAS Working Group for Engineering Education. The statements were designed through the workshops and a round table. The statements were published on the IAS website as well as in paper version and presented to the Ministry for Science and Education for further use.

"IAS positions and initiative for the model of smart specialisation and selection of problem domains and priority (niche) project/product fields": IAS has through a process of workshops designed a position paper for state institutions for their further use.

"10th Anniversary of the Slovenian Academy of Engineering": last June, IAS celebrated the 10th anniversary since it became an academy founded by a special law. Guest at the ceremony was the newly elected Honorary Member Dr. France Rode, founder of the microprocessor for HP35, the first scientific pocket calculator.

CANADA, CAE The Canadian Academy of Engineering's recent and ongoing activities of interest include:

- The Academy's 2018 Annual General Meeting, Induction of 57 new Fellows and two International Fellows and the annual Symposium Canada in a carbon competitive world took place in Calgary, Alberta, June 18, 2018. https://www.cae-acg.ca/annual-meeting-18june-2018-calgary-ab/
- We spent a great deal of effort in the past year increasing the diversity of our Fellowship. In the most recent year, 46% of new Fellows came from industry, and 8% from government and associations. 28% of the new Fellows are women. See https://www.cae-acg.ca/fifty-ninenew-fellows-inducted-into-the-canadian-academy-of-engineering/
- The Academy completed the latest phase of our GHG reduction project in conjunction with the Conference Board of Canada. We developed an econometric model which describes the effects on the Canadian economy due to various levels of carbon taxes, showing that most levels of carbon taxes being proposed by governments will have little effect on GHG reduction, and that trillions in investment spending on clean energy infrastructure and significant changes to the way we consume energy to achieve our commitments under the Paris Agreement will be required. See https://www.cae-acg.ca/cae-conference-board-ofcanada-project-trillions-of-dollars-in-investment-needed-to-green-our-economy/
- Provided expert testimony to House of Commons Standing Committee on Natural Resources improving energy data for Canada http://www.ourcommons.ca/Committees/en/RNNR/StudyActivity?studyActivityId=9966108 and the Senate Committee on Energy, the Environment and Natural Resources on GHG reduction
- Continuing involvement with the Council of Canadian Academies (CCA); see www.scienceadvice.ca . CAE Fellows currently serve as Chairs or Panel Members on three projects: Prioritizing Climate Change Risks, Innovation Management Education & Training and Medical Assistance in Dying. CAE Fellows were involved in recently released reports on The Current State of R&D in Canada and The Value of Commercial Marine Shipping to Canada.
- We completed the first year administering two national scholarships on transportation engineering, the Belfry and Aubin Awards, https://www.cae-acg.ca/2018-cae-scholarshipwinners-announced/ and continued to sponsor the Canadian Engineering Memorial Foundation, an important scholarship for women in engineering https://www.cemf.ca/en/
- With the assistance of a national market research and public opinion firm, we undertook a comprehensive Fellow survey on demographics and aspirations and are currently evaluating the results.
- We are undertaking major redesigns of our Fellow database and website.

More details of these activities, together with associated reports, etc..., are available on the CAE website: www.cae-acg.ca. Where feasible, we provide all reports and member services in French and English.