CSChE President’s Report
Todd Pusgley, P. Eng., MCIC, Suncor Energy Inc.

Dear CSChE Members, it is a pleasure to gather with you virtually at this 2022 CSChE AGM. This has been a very busy and eventful year, all playing out against the ongoing backdrop of the Covid-19 pandemic. Since the last AGM, we experienced two more very difficult waves associated with the delta and omicron variants, but now we are seeing steps towards normalcy again. It is worth remembering, as we gather for the AGM of our Society, the roles that chemical engineers are playing in the development and production of the vaccines that are helping us get back to normal. As we know, a chemical engineering degree opens opportunities to work in a range of industrial sectors, and this is but one example where we can contribute to society in an impactful way.

New Executive Director. I want to start out by welcoming Dr Josephine Tsang as our new Executive Director. As you may know, this position had been occupied most recently by an interim-Executive Director who replaced the previous Executive Director who had held the position for a very short time. The Executive Director is the leader responsible for managing the day-to-day operations and administration of the Society as laid out in our Bylaws. A permanent Executive Director is vital to the implementation of the direction given by the Board and filling this role was a top priority in the past year. Josephine is a chemist by training (BSc Calgary and PhD Queen’s) and has held several leadership roles in community-based organizations and non-profits. Most recently she was the Founder of ChangentYYC, an experiential learning program for youth to instill a belief that everyone can be a change agent. I am very pleased that Josephine has joined us in this important role. Please join me in welcoming her to the Society!

Board Meetings. Four CSChE Board meetings were held between October 2021 and April 2022: November 22nd, 2021; December 7th, 2022; February 16th, 2022; and April 20th, 2022. The November meeting was an Emergency meeting of the Board to address the health of the Canadian Journal of Chemical Engineering. These issues were able to be resolved as described later in this document. The remaining meetings were regular meetings, starting with December where the main item was review and approval of the 2022 Budget. The February and April Board Meetings involved typical business related to the various Directors’ portfolios, which I will leave to the Directors to update you on in their reports. Key items included strengthening the Conference, as described below and initiatives of the Process Safety Management (PSM) Subject Division.

Canadian Chemical Engineering Conferences. CCEC 2021 was held from October 24th to 27th, 2021 with the theme “Molecules to Enterprise”. The archived program may be found at the CSChE website. Like the 2020 CCEC in Ottawa, CCEC 2021 was entirely virtual. However, unlike the situation with Ottawa, the Organizing Committee and the Board had the benefit of time and were able to take the decision to make the event fully virtual early in the planning process. This allowed us to cancel the hotel and conference venue in Montreal without financial penalty and turn everyone’s attention to the development of a professional virtual platform. I would like to send my sincerest thanks and ‘kudos’ to the team at the National Office who worked diligently to establish this platform. Having attended many sessions and talks myself, I can vouch for how well it was done.

Looking forward to this year’s CCEC 2022, I am pleased to say that the conference will be held in beautiful Vancouver, BC from October 23rd to 26th and it will be an in-person event. The Conference Chair is Dr. Naoko Ellis and the co-chair is Dr. Savvas G. Hatzikiriakos, both from UBC. There are several initiatives I am aware of that the CIC National Office and the local organizing committee are working on that will make this conference great, so please mark your calendars today! I encourage all of you to visit the conference website frequently for updates, to submit an abstract and encourage your colleagues to do so the same, and to plan on attending the conference in October.
Membership  It would be unfair to draw conclusions about membership numbers today, given the annual cycle of registrations associated with conference attendance. However, declining membership is a recurring message over the past several years, and remains a focus for the Board of Directors, particularly in regard to making the society relevant to a greater cross-section of chemical engineers across Canada and throughout careers. Given the strong correlation between membership and conference attendance, the relevance of the conference on an international scale will continue to be critical going forward. As mentioned above, there are initiatives in the works for this year and in addition, Dr Michael Cunningham, your incoming CSChE President has established a small working committee, with the support of the Board, to come up with a long-term strategy that ensures the stability, quality, and growth of our flagship conference. This is in the very early days and there will be more to share with you over the course of 2022.

The Canadian Journal of Chemical Engineering  publishes cutting edge chemical engineering research relevant to Canada, including original research articles, new theoretical interpretations or experimental findings, and critical reviews in the practice of chemical and biochemical processes. It continues to realize strong performance with a high impact worldwide and makes significant financial contributions to our Society. It is also a vehicle to recognize authorship with the Lectureship Award and Best Graduate Student Paper. The journal is published monthly by Wiley Interscience. The Journal Editor is Professor João B.P. Soares from the University of Alberta who I can assure you is a tireless champion of the Journal on behalf of the Society. One thing I have realized in my year as CSChE President is the passion João has for the journal and making it great, and I want to be sure to thank him here for his commitment.

The journal did experience some challenges this year in terms of publication backlogs of submitted papers due to chronic under-staffing and staff turnover. João brought this to the Board’s attention, and we were able to stabilize that situation relatively quickly. I would like to acknowledge the support of the CIC Board and particularly its Chair, Dr Cathleen Crudden for their support on this. I believe the Journal can move forward from here with stability and under excellent leadership.

Awards  are also managed by the Society to recognize students and professionals who have made or are making, outstanding contributions to chemical engineering through innovation, industrial design, systems and control engineering, and process safety management in Canada. At the time of my writing of this report, I do not have the complete list of 2022 award winners; this will be shared at the CCEC in October. I can share today that the 2022 Award for Best Graduate Student Paper Published in the Canadian Journal of Chemical Engineering (sponsored by The Canadian Journal of Chemical Engineering) for outstanding published work by a graduate student has been awarded to Ms Tiffany Dang of the University of Calgary for her paper entitled, “Computational fluid dynamic characterization of vertical-wheel bioreactors used for effective scale-up of human induced pluripotent stem cell aggregate culture”. Congratulations to Tiffany!

As mentioned in last year’s Report of the President, the Jules Stachiewicz Medal has returned in 2022, sponsored jointly by the Canadian Society for Chemical Engineering and the Canadian Society for Mechanical Engineering. It will recognize contributions in the field of heat transfer, including design, research, manufacturing and teaching in Canada.

Finally, I would like to highlight a new award for 2022, the John R Grace Award. This award is presented to a person who, as a Canadian citizen or an individual working in Canada, has made an exceptional contribution to chemical engineering, particularly in the fields of particle technology, clean energy, greenhouse gas mitigation, and novel applications that enhance quality of life.

I am very pleased to have been President of the Society in the year when this award came into effect. I had the pleasure of knowing and collaborating with John for many years in the research area of gas-solid fluidization and it is wonderful that his commitment to excellence will be remembered through this award. I am particularly grateful to his colleagues at UBC who approached us with this initiative in 2021.

Board Transition.  Executive and Directors transitions will occur at the end of June, as opposed to the traditional historical cycle during the October chemical engineering conference. We have moved from an October transition to June because the by-laws state that the AGM must occur within the first 6 months of the start of the fiscal year and typically, we have the board transition at the AGM. James Diamond will be leaving the Executive and I would like to thank him for his three years of service as Vice-President, President, and Past- President. I will transition to the role of Past-President and your incoming President will be Michael Cunningham from Queen’s University. I have had the pleasure of working with
Michael this year and I know you will be in great hands. Retiring and new Board members will be the subject of discussion at the AGM.

It has been an honor to serve as your Society President. Chemical Engineering is a discipline for which I have a great passion and contributing to its progression is Canada is something I am committed to. It has also been a great pleasure to work with my fellow members of the Board who share my commitment to the discipline. Finally, I want to share my appreciation for the National Office staff and their daily efforts to carry out the business of the Society for the benefit of its members.

Thank you and I hope to see you all in person in October at CCEC 2022 in Vancouver!

Todd Pugsley, CSChE President 2021-2022
June 3, 2022