CSC Director of EDI Candidate – Tricia Breen Carmichael

Statement of Interest

My work in Equity, Diversity, and Inclusion is motivated by my own experiences as a woman in chemistry, but mostly by the experiences of my students and those of my teenaged kids. I use my privilege as a white, tenured full professor to advocate for equity and inclusion of multiple groups including – but not limited to – Black, Indigenous, and people of colour (BIPOC) communities, women, persons with disabilities, and members of the LGBTQ2S+ community. Over the past few years, I have actively used my privilege to advance EDI. I co-organized the first LGBTQ+ in STEM conference in Canada. With the conference team, I developed the program and events, invited speakers, and fundraised. We went on to organize the first 2SLGBTQ+ in Chem symposium for CCCE 2020 (rescheduled for CCCE 2021). At UWindsor, I am now the Chair of the EDI Taskforce, a multidisciplinary team of social and natural scientists who use various assessment strategies to gain insight into EDI in the Faculty of Science. We use a research-based approach to make evidence-based policy and program recommendations to the Dean to advance EDI, and provide educational opportunities and resources for students, staff, and faculty. I am also passionate about bringing EDI into teaching activities. As an example, this year I had students write Wikipedia pages about scientists from underrepresented groups in materials chemistry and engineering. Given the opportunity, I am excited to use my personal experience and EDI leadership to contribute to the national chemistry community and work with the WIDE committee to translate EDI ideas into action.

Biography

Tricia Breen Carmichael is a Professor in the Department of Chemistry and Biochemistry at the University of Windsor. After receiving her PhD from the University of Windsor with Professor Douglas W. Stephan, she spent two years as an NSERC postdoctoral fellow in the lab of Professor George M. Whitesides at Harvard University where she pioneered new methods for the 3D self-assembly of electrical connections. She then took up the position of Research Staff Member at the IBM T. J. Watson Research Center in Yorktown Heights, New York from 1999-2005, where she developed patterning methods for organic electronic devices and new soluble organic semiconductors, including a soluble pentacene derivative that established an important new direction in the field. She currently leads an interdisciplinary research program at the University of Windsor on stretchable and wearable electronic devices. Highlights of her research include new stretchable and conductive textile-based wearable electronics (e-textiles), electroluminescent fabrics, stretchable light-emitting devices and transparent conductors, and the first transparent butyl rubber for next-generation stretchable electronics. Dr. Carmichael is the co-director of the NSERC Green Electronics Network, a national strategic network developing new functional materials and printing methods for smart packaging. She holds more than 25 worldwide patents and has won numerous awards. She is an Editorial Board Member of the journals Flexible and Printed Electronics (Institute of Physics), Chem, and Matter (Cell Press). Along with her materials science research, Dr. Carmichael is the Chair of the Equity, Diversity, and Inclusion Taskforce in the Faculty of Science at UWindsor. Dr. Carmichael leads the taskforce to make EDI policy and program recommendations to the Dean and provide educational opportunities and resources for students, staff, and faculty. In her capacity as Taskforce Chair, she is also a member of the Anti-Black Racism Campus Roundtable.