Molly Shoichet, University of Toronto Distinguished Woman of Chemistry

Professor Molly Shoichet was honoured to be named as an International Union of Pure and Applied Chemistry (IUPAC) 'Distinguished Woman in Chemistry or Chemical Engineering'.

The purpose of the awards programme, initiated as part of the 2011 International Year of Chemistry celebrations, is to acknowledge and promote the work of women in chemistry and chemical engineering worldwide.

C&I spoke to Professor Shoichet about what being a woman in science means today and where she sees chemistry heading.

Congratulations on being named '2019 Distinguished Woman in Chemistry or Chemical Engineering', how do you feel about winning the award?

I'm thrilled to be included in this list of truly distinguished scientists in chemistry and chemical engineering. It's a lovely honour.

As someone who works at an intersection between chemistry and biology, how important do you think it is for scientists to do more crossdisciplinary research?

I really love working at the intersection of different disciplines. There are so many great questions to answer and problems to solve. As I'm not bogged down with dogma, I am comfortable asking the naïve questions that others wouldn't ask. We approach questions from such a different perspective that enables us propose new ways of thinking and new solutions. It is exhilarating to be in the learning seat and to find new solutions.

Which female scientists have inspired you?

I have been inspired by women and men all the time. Right now, I'm inspired by Frances Arnold – the first American woman (and the first chemical engineer) to win the Nobel Prize in Chemistry.

Chemistry has come a long way since IUPAC's inception. What do you think the future of chemical research looks like and what are the upcoming trends in chemical research?

The intersection of different disciplines is definitely where there are the most opportunities to make a difference, whether this is in health, energy or the environment. In our research, we are driven by the biological questions and propose solutions that are based in chemistry and engineering. Thus, all of our inventions are in polymer chemistry and these are used to solve biological problems.

What are the biggest barriers and challenges for female scientists and those in your field?

It really depends where you are in the world. In many countries, women are not allowed to pursue an education. In others, they are actively discouraged from pursuing a career. In Canada and the USA, the barriers are harder to see, but there is clearly an unconscious bias in society (by men and women) that results in men being promoted more often than women and that gives men the benefit of the

doubt on peer review panels for grants and papers submitted for publication. Importantly, men are beginning to engage in this conversation and leaders

are actively seeking change.

How important is science communication to the furtherment of scientific research?

I run Research2Reality, a social media initiative that engages the public in research – what it is and why it is important. One cannot value what one does not know, so our goal has been to engage the public so that they can better understand the rich resource that we have in research. At Research2Reality, we connect the dots between innovative research and what it means to people today and tomorrow. The research and people are fascinating – we take advantage of the power of film to tell these stories.

What advice would you give to a young scientist starting out today?

Nothing in life is easy, but with passion and perseverance, you can truly make a difference in your own life and for those around you. With research, you have the opportunity to invent the future. It's hard to imagine anything more exciting!

• SCI NEWS AGM 2019: nominations are now open

SCI is continuing to focus on its renewed sense of purpose, as a multi-science and multi-disciplinary society, serving the diverse sectors in the modern chemistryusing industry.

Its charitable objective is to work at the interface between science and industry, supporting and promoting innovation and industry for the benefit of society.

To achieve this, SCI needs the support and involvement of its active and dedicated members. If you feel you have relevant experience and a passion for promoting scientific innovation – and if you would be willing to help SCI build its future in the space where science meets business – please do consider standing for election. The board of trustees is keen to ensure diversity of representation across gender, race and age.

- The following positions are available: • Board of Trustees
- Chair of the Finance and Investments Advisory Committee (FIAC)
- FIAC
- Membership Committee
- Publications Committee
- Early Career Committee
- Nominations are now open and will close at 9am on Monday 13 May 2019.

Please complete and return the nomination form with your CV and a photograph of yourself to email to: AGM@soci.org before this deadline.



For nomination forms and full details on the election process, please email agm@soci.org, or visit bit.ly/SCIAGMinfo