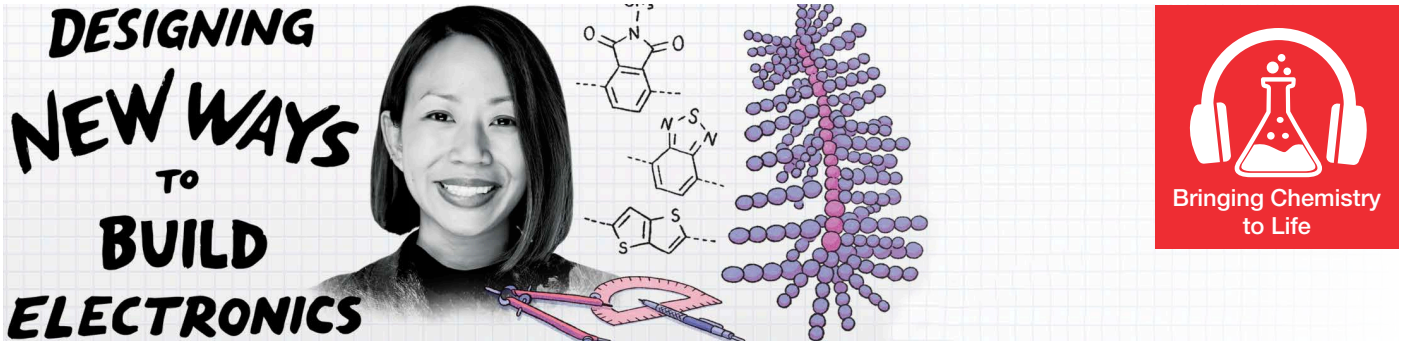
Bringing Chemistry to Life podcast series

Season 4: **Expanding Chemistry Perspectives**
Episode 6: **Electronics for the human body**



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Episode abstract

The modern revolutions of electronics and biotechnology are changing the world in dramatic ways. The incredible progress of electronics is changing the world external to our body, while biotechnology/genetics is promising to change it “internal” to our bodies. While these two revolutions have not quite met, chemistry is what could link them up.

Imagine completely novel materials for interfacing electronics and the human body in a harmonious way. Be bold and open to new ideas, such as organic electronics with little or no use of semiconductors. Bio-electronics that can self-assemble, biodegrade after use, and leave no toxic trace behind. Imagine what this could mean for new generations of medical devices, diagnostic medicine, as well as robotics and other applications.

Exploring these ideas takes an inquisitive, enthusiastic, and creative polymer chemist with ambition, vision, a passion for science communication, and an incredible drive to succeed. Helen Tran is all of this and more. She speaks about her science and her desire to give back as much, or more, than she has received. Hear her views on the importance of mentorship and how having fun doing meaningful work remains a simple, powerful way to achieve something meaningful in life.

About our guest

Helen Tran, PhD

Assistant Professor, Department of Chemistry, University of Toronto

Helen’s group site: https://helen-t.com/

Helen’s Recent Publications:

- Conductive and elastic bottlebrush elastomers for ultrasoft electronics
- Biobased, Degradable, and Conjugated Poly(Asomethine)s
- A Field Guide to Optimizing Peptoid Synthesis

Helen’s Content Recommendations:

- Adrien M & Claire B, one of Helen’s favorite artists
- Everything Everywhere All at Once, Helen’s current favorite movie
- 99% Invisible, Helen’s favorite podcast
- Pachinko, a novel by Min Jin Lee

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