# Bringing Chemistry to Life podcast series

Season 4: Expanding Chemistry Perspectives Episode 9: C.R.E.A.M. – Chemistry rules everything around me



## **Episode abstract**

Some chemists just see the world around them in a different way. Where you see a pen, they see the polymer structure of its plastic body and the complex formulation of the ink. Where you see a building, they see the composite materials that make it and think about how the nano-scale structure of those materials define their macroscopic properties. Where you see a juicy burger, they see the proteins and complex chemicals that make its taste and texture so attractive.

In a nutshell, this is how Cate Levey sees the world around her. It's a fascinating perspective that has taken her professional path down some paths less traveled. Engineered wood products, plant-based meat products, and carbon-negative aggregate for concrete have nothing to do with each other if you don't look at things the way she does. To her they are they are all composite materials, where understanding and altering the chemistry at the nano, or sub-nano scale allows her to alter macroscopic functional properties to make amazing things happen. It's where chemistry meets material science and where the science can really change the world around us.

Cate explains some of her groundbreaking work, but also offers a fresh perspective on how to pursue a career in science, following a true passion, and taking unbeaten paths.

#### About our guest

#### **Cate Levey**

Research & Development Scientist Blue Planet Systems

Cate's Company Site: <u>https://www.blueplanetsystems.com/</u>

#### **Cate's Publication:**

• Anolis sagrei (brown anole) defensive behavior, Herpatological Review 42 (3), 427-428

#### **Cate's Content Recommendations:**

- Story Collider, a podcast that Cate enjoys
- <u>9-1-1,</u> Cate's favorite television show
- Station Eleven, a novel by Emily St. John Mendel
- <u>Storing CO<sub>2</sub> in the built environment</u>, an in depth look at Blue Planet Systems
- <u>Drawdown</u>, a website addressing solutions to climate change
- <u>Climate Restoration</u>, a book by Peter Fiekowsky and Carole Douglas

### **Cate's Career Recommendations:**

- For people interested in getting jobs related to climate change
- For people interested in carbon capture and carbon removal
- For people interested in food tech
- For those interested in jobs related to climate

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