



DR. JULIA L. SHAMSHINA

Assistant Professor,
Plant & Soil Science

“*Uncovering potential industrial uses of biopolymers in high-value materials will ultimately lead to the elimination of synthetic plastics.*”

RESEARCH EXPERTISE

- Ionic liquids
- Green chemistry processes
- Pilot prototyping and scale-up
- Separations
- Biomass deconstruction, biopolymers isolation, biorefinery, biofuels
- Biopolymer chemistry & biopolymeric materials

PROFESSIONAL PREPARATION

- B.S. D. Mendeleev University of Chemical Technology of Russia, 1995
- M.S. D. Mendeleev University of Chemical Technology of Russia, 1997
- Ph.D. The University of Alabama, 2008

FAVORITE ARTICLE

Shamshina, J. L., & Abidi, N. (2021). Cellulose nanocrystals from ionic liquids: A critical review. *Green Chemistry*, 23(17), 6205-6222. <https://doi.org/10.1039/D1GC02507D>

This is my favorite article published during my 2-year work at TTU. It allowed me to both contribute to the scientific community and discover opportunities for my own research, while learning something new.

WHAT MAKES THE DAVIS COLLEGE GREAT?

Our college has several distinctive programs and brings together people with different backgrounds and experiences that allow for collaboration and creating new knowledge; essential because one area of expertise is not enough to tackle our complex world. I appreciate that the college offers the opportunity for students to engage into research projects at an early point in their educational journey. And, personally, The Davis College has given me a chance to do something I truly enjoy – working on the development of novel technologies, ensuring that both the products and processes leading to them are safe and sustainable.