



## Senior Mariah Billadeau Takes 2nd Place in Innovation Challenge

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The Innovation Challenge is a chance for students at NDSU to put their creativity to the test. Their challenge is to develop a new product that solves a problem that society is facing. There are three categories in the competition: social impact, entrepreneurship, and graduate student level. Senior ARMD student Mariah Billadeau advanced the final stage of the competition with her product, EcoTex. Mariah's product fits the social impact track; her goal is to tackle environmental sustainability in the fashion industry. Mariah is working individually on her innovation; however, students can work in teams as well.

There are three rounds to the Innovation Challenge. The first round is the proposal, in which teams write a two-page document describing a problem and giving their innovative solution to solve it. The second round is the Project Showcase, where teams showcase their first prototype and present a poster that describes how their innovation works. In the Finals, students give a presentation to the judges about their innovation and share a final prototype.

Mariah's innovation focused on eliminating microplastics that are found in synthetic textiles. Her problem focused on keeping microplastics out of the water system. When we wash clothes made from synthetic fibers, microplastics are getting into our water system and cannot be filtered out due to their size. Mariah's innovation, EcoTex, uses natural fibers with a carefully blended natural wax that is intertwined with the fibers to make fabrics water-resistant for outdoor recreational purposes. The wax is at a micro level, so it will not leave a waxy film on your skin. Her fabric will be breathable, flexible, and water-resistant, and it is washer/dryer safe.

Mariah's goal is that EcoTex fabrics will be a sustainable alternative to synthetic fibers. Up to 93% of purified bottled water around the world has traces of microplastics in it and we are consuming these toxic plastics daily. EcoTex is an environmentally friendly, socially responsible, and profitable alternative. Mariah advanced to the Finals round of the Innovation Challenge with her EcoTex product. Mariah won 2nd place in the Social Impact category. Congratulations Mariah!