

Production and Application of Carbon Nanomaterial Paper

What We Aimed to Do:

Carbon nanopaper based coatings are a lightweight, durable, inexpensive and abrasive resistant material that has been successfully prototyped by Ohio State. Our goal is to take this technology and develop it from 1 square foot pieces to a continuous production process. This will allow clients to utilize the material in a broad range of areas including wind, automotive, and building. Additionally our end goal will focus on producing a material that is durable and sustainable.

What We Did:

With our project research and development and private partners seeking out commercial applications, our collaborative team has worked to patent applications and pilot-scale testing of new foams and nanopaper coatings using functionalized carbon nanoparticles. The next step is to scale up production and work on optimizing both the material and process.

What's Next:

The first commercial applications of the product will be used in fencing excluding the Nanomaterial and later applications will be used in snowboards and skis with the Nanomaterial. This material is ideal for this application, easily withstanding the stresses from both mountain and rider.

To learn more about this project, contact Michael Gentil (gentil.1@osu.edu)