

An aerial photograph of a lush green mountain ridge. Two hikers are visible on the ridge, one in a white shirt and one in a dark shirt. The sun is setting on the right side of the image, creating a warm orange and yellow glow. The sky is a mix of blue and orange. The overall scene is serene and natural.

# DEXMAT

High-performance materials  
**for a low-carbon world.**

# GALVORN

Designed for a carbon-negative future.

## WHY GALVORN

DexMat is displacing GHG-intense metals and materials with conductive carbon nanomaterial: Galvorn. Galvorn is a carbon nanotube (CNT) family of products, including fiber, yarns, films, and fabrics. Galvorn is conductive at 10 MS/m today, but its true power is the combination of historically valued properties: it's also more lightweight, more durable, stronger, soft and flameproof. Fewer trade offs mean you can reimagine the products you build.

**10X**

Stronger  
than steel.

**1/2**

The weight  
of aluminium.

**100X**

Greater flex life  
than copper.

**CONDUCTIVE**

**BIO-COMPATIBLE**

**SOFT LIKE SILK;** doesn't burn (we've tried)

**CARBON-NEGATIVE** at scale

Galvorn's unique properties can provide value across a wide range of industries:

E-Textiles | Sporting Goods & Equipment | Automotive | Aerospace | Defense | Energy

# Available for purchase

## AT [DEXMAT.COM](http://DEXMAT.COM)

Grown out of cutting-edge research and commercialization work at Rice University — and further developed with support of the National Science Foundation, U.S. Department of Energy, NASA, and the United States Air Force — Galvorn cracks the code on the promise of carbon nanotube structures.

### **Galvorn CNT Fiber**

Conductivity, MS/m: 8  
Density, g/cm<sup>3</sup>: 1.3  
Tensile Strength, MPa: 2,400  
Thermal Cond., W/(m-K): 400  
Young's Modulus: 200 Gpa  
Diameter, μm: 5 - 100  
Available lengths: 1 - 3,000 meters

### **Galvorn CNT Yarn**

Conductivity, MS/m: 5  
Density, g/cm<sup>3</sup>: 1.0  
Tensile Strength, MPa: 1400  
Thermal Cond., W/(m-K): 300  
Young's Modulus: 90 Gpa  
Diameter, μm: 150-5,000  
Available lengths: 1 - 1,500 meters

### **Galvorn CNT Film**

Conductivity, MS/m: 5  
Density, g/cm<sup>3</sup>: 1.3  
Tensile Strength, MPa: 800  
Width, cm: 1 - 5  
Film thickness, μm: 10 - 20  
Available lengths: 1 - 100 meters

### **Galvorn CNT Fabric**

Fabric thickness, mm: 0.1 - 1.0  
Fabric weight, g/m<sup>2</sup>: 10 - 500  
Sheet Resistance, Ω/sq: 0.01 - 1.0  
Available dimensions: up to 0.5 m in length/width

Ready to help us build the  
low-carbon economy of the future?

[VISIT DEXMAT.COM](https://www.dexmat.com)

