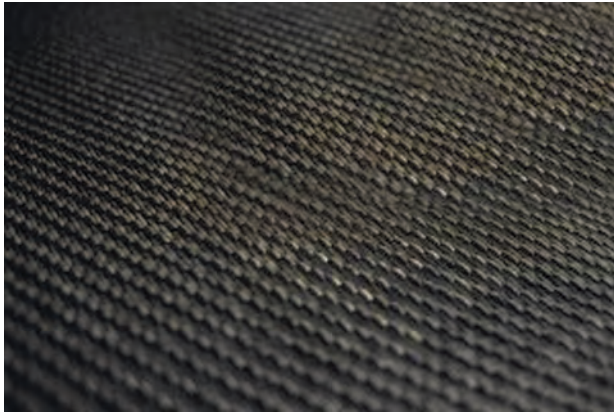
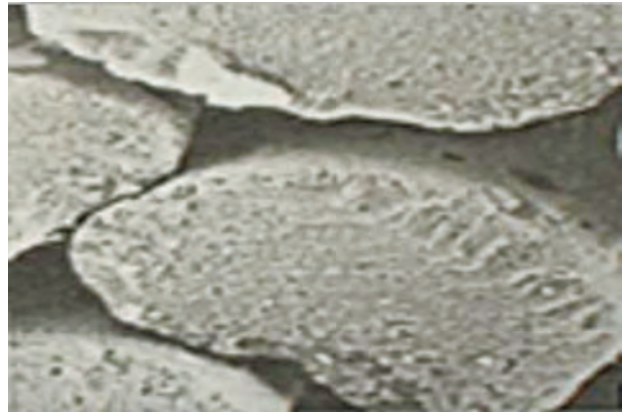


NANOSTRUCTURED CARBON FIBER ACTIVATED SORPTION MATERIALS FOR TECHNICAL APPLICATION



Carbon fiber nanostructured materials for engineering application



Filter for water purification

Areas of Application

The material can be used as electrode for super capacitors; as filter for water and air purification from hard metals, phenol, chlorine, and isotopes; as screen for protection from ultrahard radiation of control systems in robotics, rocket and nuclear power engineering

Specification

Specific surface area, m ² /g	1500–2800
Sorption, %	98.8 Al; 99.0 Cu; 97.0 Sr; 94.0 Co; 84.0 Cs
Oxidation stability on an air, °C	700–773

Advantages

The offering has 2–3 times higher sorption kinetics and sorption capacity as compared with the world analogs. The use of various types of structure and shapes (fibers, tubes, threads) broadens the possibilities of sorption purification of water and air from pollutants. Using this offering as protection from hard gamma radiation in aerospace engineering, robotics, and surveillance systems of atomic power plants enables to employ 10 times lighter shields as compared with the steel ones and 9 times lighter than the concrete ones, which have the same protection properties

Stage of Development. Suggestions for Commercialization

IRL3, TRL4
Manufacture of small batches.
Seeking partners for industrial production

IPR Protection

IPR2

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