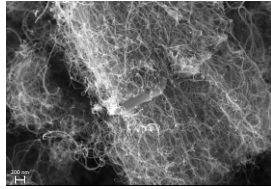
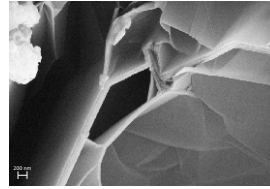


Nanocomposites and blends based on thermoplastics and nanoscale carbon allotropes

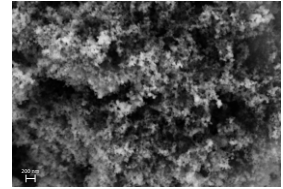
Allotropes of Carbon



Carbon nanotubes

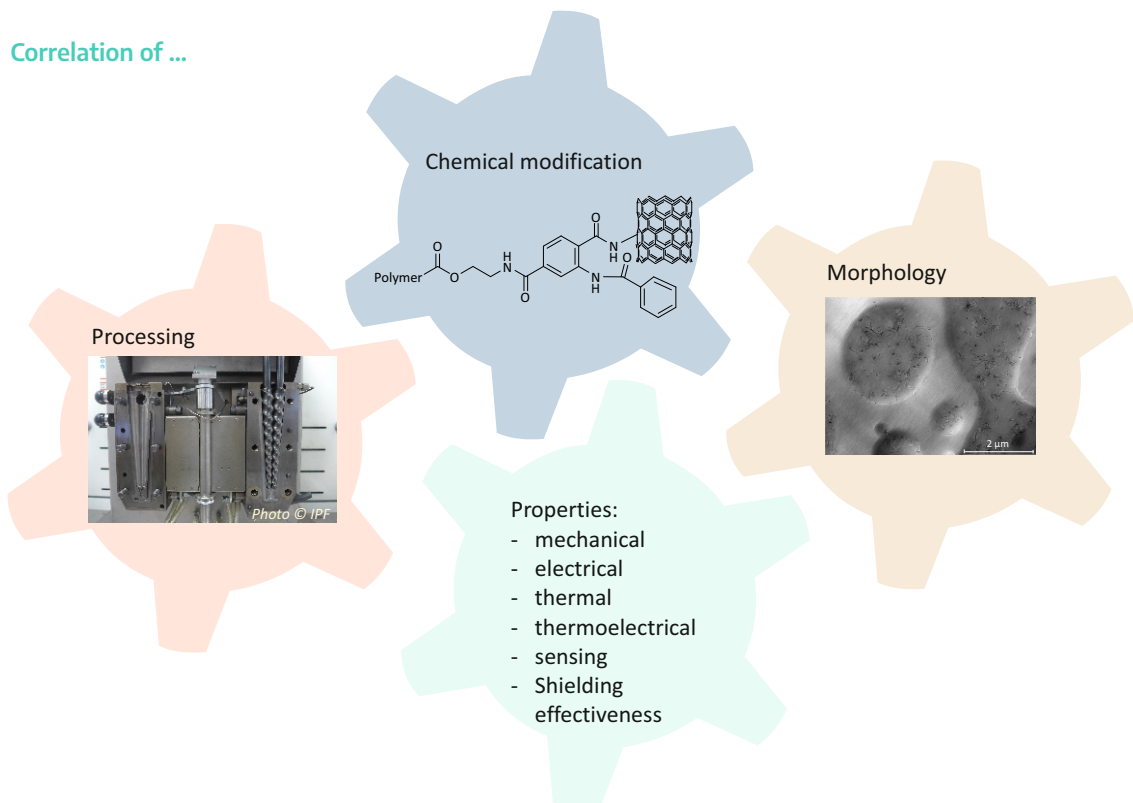


Graphite derivatives

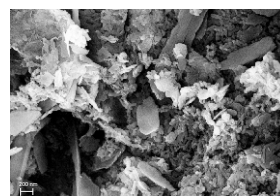
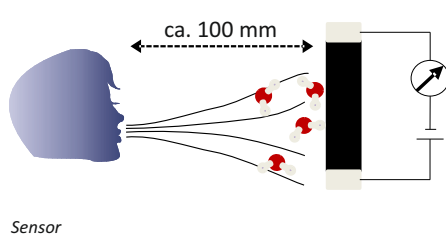


Carbon black

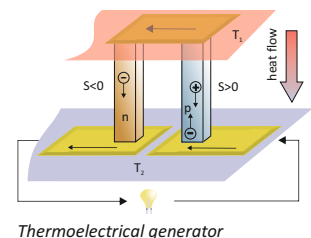
Correlation of ...



Examples of functional applications of electrically conductive composites



Super capacitor



Heat exchanger



Bipolar plate

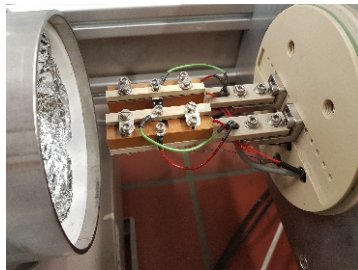
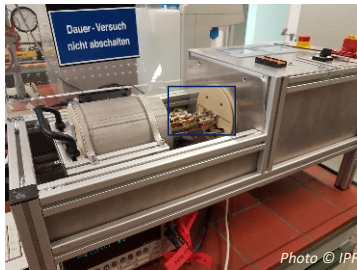


Electrostatic paintability



Electromagnetic shielding

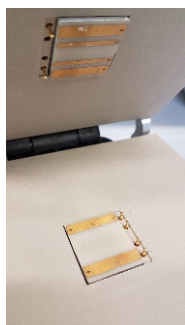
Special techniques



Thermoelectric measuring device (self-made IPF) for the measurement of the temperature-dependent Seebeck coefficients, the electrical conductivity, the power factors and the figure of merit.



Powder conductivity measuring device (self-made IPF) for the measurement of the pressure-dependent electrical conductivity of powders and pastes (pressure up to max. 30 MPa)



Adjustable temperature measuring device (self-made IPF) for measurement of the directional electrical conductivity



GNOMIX PVT apparatus (GNOMIX Inc, USA) to determine changes in the specific volume of solids and liquids depending on pressure (0.1 MPa to 200 MPa), temperature (RT - 400 °C) and time ($t \rightarrow \infty$)

- Phase state equations
- Phase transitions
- Chemical changes

Contact

Leibniz-Institut für Polymerforschung Dresden e. V.
 Department Functional Nanocomposites and Blends
 Dr. Petra Pötschke
 E-Mail: poe@ipfdd.de
 T +49 (0)351 4658 395
 F +49 (0)351 4658 565
 Hohe Straße 6 . 01069 Dresden . Germany
www.ipfdd.de