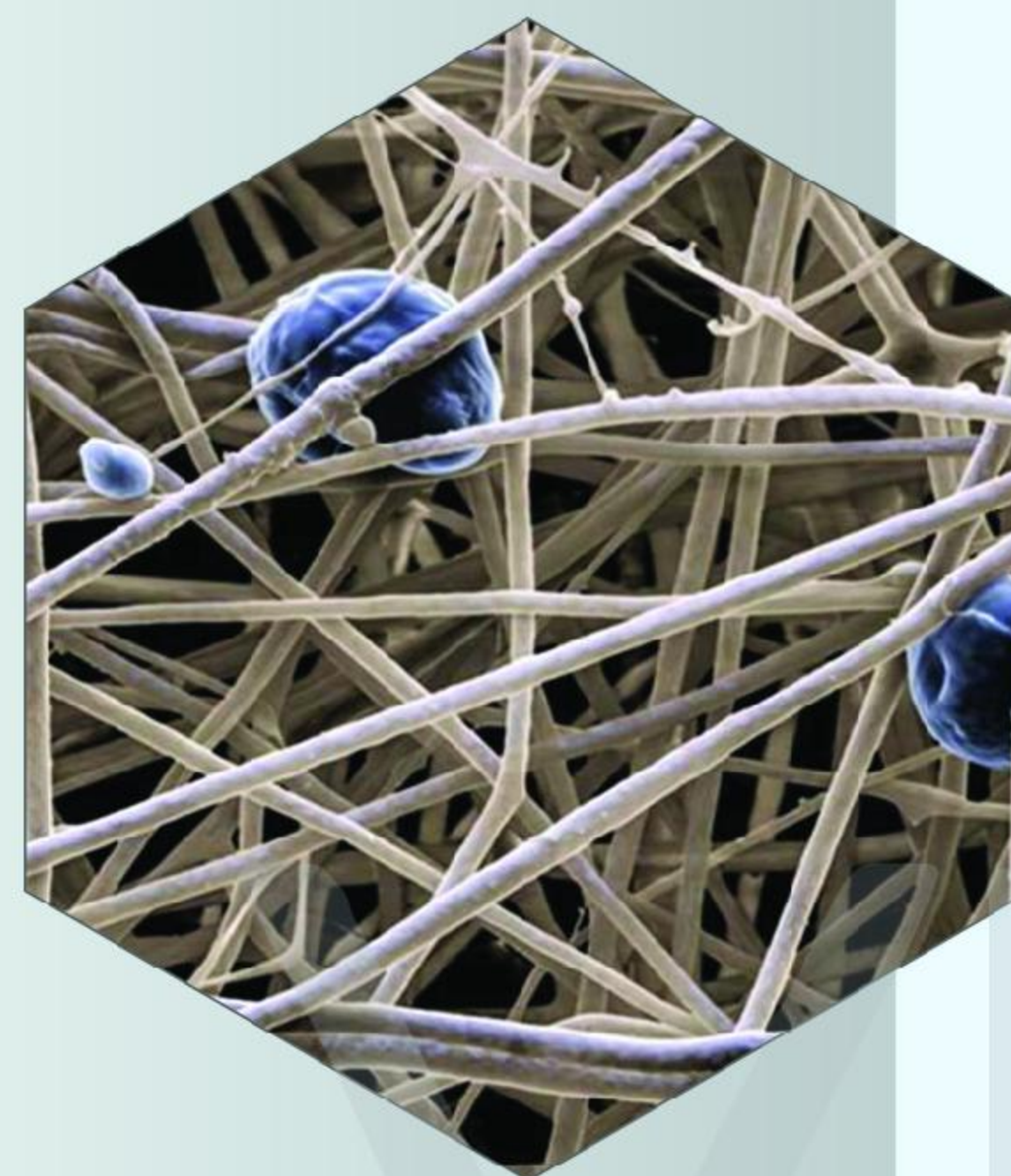




Au
Nanoparticles



Nanofibers

Nanomaterials Services:

Vista Exir provides highly monodisperse (uniform) and stable nanoparticles and nanofibers, with low batch-to-batch variability together with accurate characterization of their shape, size distribution and charge.

A. Custom synthesis of nano scale materials:

- **Nanoparticle and nano powder:** Gold, Silver, Zinc Oxide,... nanoparticles
- **Nanofibers:** Electrospinning of natural and synthetic polymers
- **labelled compounds:** Gold nanoparticle conjugated immunoreagents
- Optimization of synthetic routes

B. Nano-Material and Nano-Particle Characterization

- Analysis of particle size and morphology using electron microscopy (SEM and TEM)
- Particle size determination using light scattering techniques
- Application of image analysis to generate quantitative information on size and shape distributions
- Zeta potential measurements for nanoparticle interactions to aid formulation development
- Surface area and porosity measurements by BET isotherm
- Crystal morphology by powder X-Ray Diffraction

C. In-vitro services

- **Blood interaction tests:** To evaluate critical interactions between foreign materials and different components of blood by in vitro hemolysis, Protein adsorption, Coagulation system activation and Platelet response to a test material.
- **Cell toxicity tests:** To evaluate toxic effects of extract or test material on cells at specific time intervals by MTT, LDH and neutral red.
- **Antibacterial test:** To investigate the antibacterial effects of test material on different strains of bacteria by MIC, MBC and ...OR To measure the effectiveness of the antibacterial function by MIC and MBC test
- **Molecular tests:** To evaluate the ability of a test material to cause mutation or chromosomal damage by RT-PCR, western blot and electrophoresis.
- **Flow cytometry analysis:** To analyze apoptotic and necrotic cells, cell cycle, DNA content and cell surface markers.

*We support
our clients' nanotechnology innovation
with nanomaterial chemical testing,
risk assessment and safety consulting.*

D. In Vivo Testing Services

- **Implantation test:** To assess the local pathological effects on living tissue of a sample of a material that is surgically implanted by H & E staining and...
Implantation tests are conducted in rabbits, rodents, or other animals.
Subcutaneous Implant
Nerve guide Implant
Bone Implant
- **Tumor models:** Providing well-characterized and fully validated preclinical in vivo models to evaluate your therapy.

Cellular tests



**In-vivo
services**

since
2018

