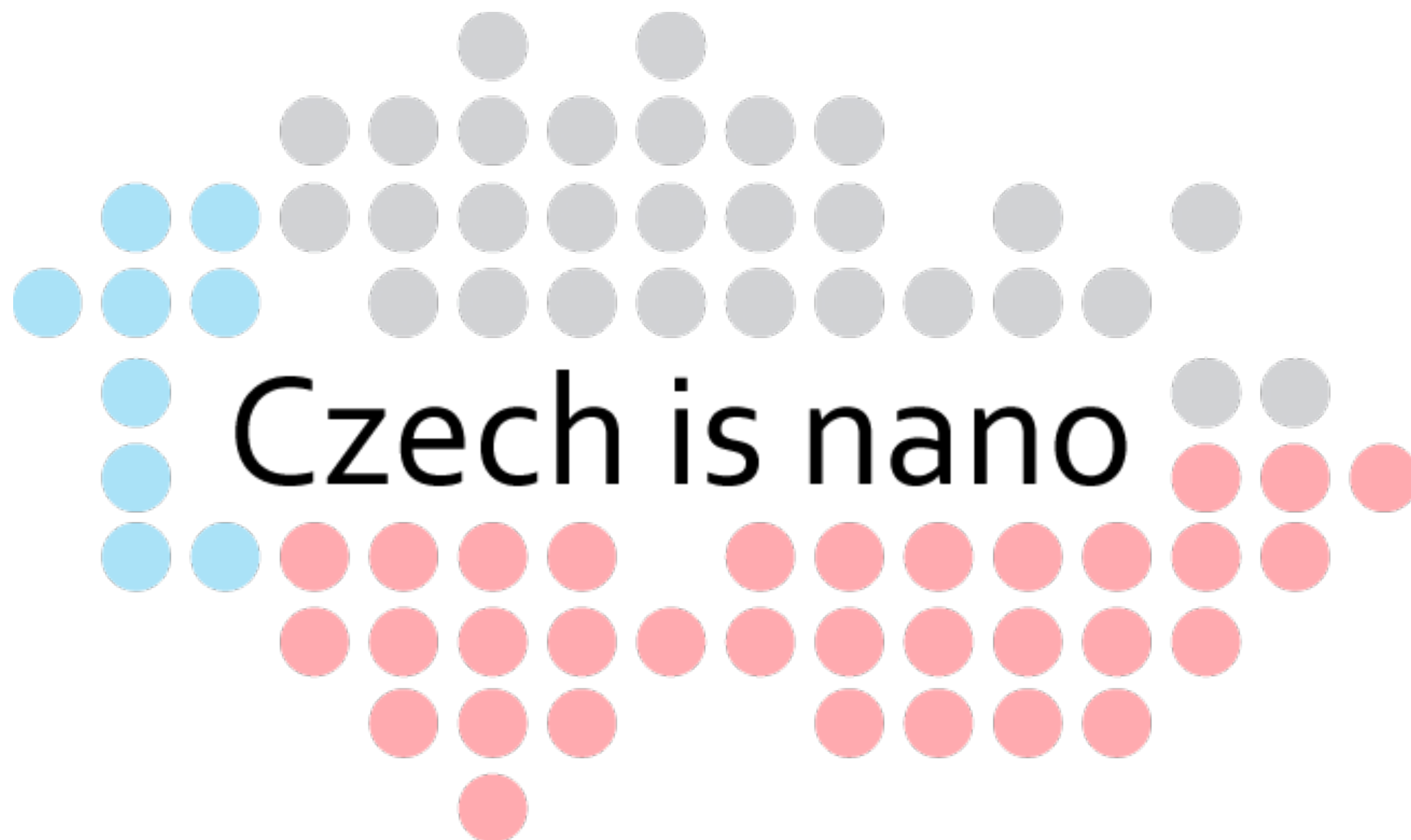




**nano** asociace

ASOCIACE NANOTECHNOLOGICKÉHO PRŮMYSLU ČR



JIŘÍ KŮS

*Czech Nanotechnology Industries Association*





**We stand on the threshold of a new  
industrial revolution**





**1959**     **Richard Feynman**

**1981**     **Scanning tunneling microscope STM**

**1986**     **Atomic force microscope AFM**

**1986**     **Eric Drexler Engines of Creation**

**1991**     **Carbon nanotubes**

**1997**     **First nano company Zyvex in USA**

**2000**     **Start of commercial applications of nanotechnology, NNI**

**2004**     **Czech nanospider technology for industrial nanofibres production**



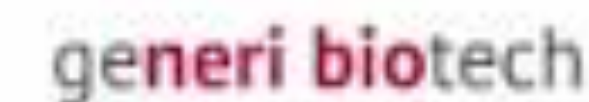
The image is a composite of two distinct textures. The left half features a dense, intricate web of fine, blue, thread-like structures, representing nanofibers. The right half shows a vertical cross-section of a tree trunk, with the outer bark layer peeling away to reveal a lighter, fibrous interior. A semi-transparent dark grey horizontal band spans the middle of the image, containing yellow text.

**Nanofiber is thousand times thinner than a human hair**





Czech is nano





# DRINKING WATER FOR ASTRONAUTS

**Czech nanotechnologies can produce drinking water even from faeces and urine of astronauts on long space missions.**

**But also help on earth with water purification from radioactivity or Ebola virus.**





# NANOTECHNOLOGY HELPS ALLERGIC PERSONS

PURE **SPACE**  
→ solution

The first concept in the world of hypoallergenic interior based on nanotechnology.

Nanofibre barrier bedding is an innovative way how to protect against dust mites and their allergens







# REPLACEMENT HUMAN ORGANS

Czech nano3D printer builds an artificial scaffold around which the stem cells in the laboratory complete the human organ.

Innovative bone fillings that can fully recover your bone tissue. The recovered bone tissue is indistinguishable from your original tissue and the recovery process is much faster.



# NANOPARTICLES PURIFY THE AIR

Titanium dioxide nanoparticles in a clever photocatalyst coating purify the air from all organic contaminants, including viruses and bacteria.

Smart coating also prevents dirt depositing on the facade.





# STORAGE OF RENEWABLE ENERGY

**3D nano battery is 100% safe. It can much faster recharge and discharge than a conventional battery.**

**3D nano battery can be used as a rapidly available energy source in distribution network and also for the electromobility.**



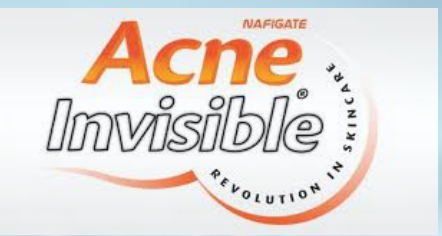
# NANOTECHNOLOGY FOR EVERYDAY LIFE

Tie with hydrophobic anti-smudge surface will stay cleaner for longer.

Nanocosmetics for complete treatment and protection of the car.

Nanofiber accelerates the healing of acne.

Antibacterial clothes and linens with nanosilver increases the prevention of skin diseases and unpleasant odors.



nanosilver®



**ČESKO JE NANO!**



**Czech is nano!**