



International Centre of Electron Microscopy for Materials Science

AGH University of Science and Technology



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MC: Prof. Dr Aleksandra Czyrska-Filemonowicz

Sub-MC: Dr Urszula Stachewicz

Working Group: WG1 and WG2

Staff: experienced scientists and engineers in advanced electron microscopy techniques

Research topics: Metallic implants, ceramic coatings, polymer scaffolds, electrospinning

Researchers expertises: characterization with advanced microscopy and 3D tomography SEM, TEM, EDS, HRTEM, HRSTEM, FIB-SEM; production of polymeric scaffolds and ceramic coatings

Website: http://www.tem.agh.edu.pl/main_new/index.php/en/

Expected benefits and activities during participation in BIONECA:

- Collaborations with groups more experienced with cell culture including stem cells
- Exchanging knowledge and experience within materials production and characterisation methods



Titan3 G2 60-300 (FEI)

Probe Cs corrected S(TEM) with ChemiSTEM system for analytical resolution (70pm) electron microscopy

Tecnai G2 20 TWIN (FEI)

- STEM-HAADF detector
- EDX microanalysis system TIA
- Precession electron diffraction DigiStar and ASTAR system for automatic analysis of grain orientations and phase mapping in nano-areas (NanoMEGAS)

Merlin Gemini II (ZEISS)

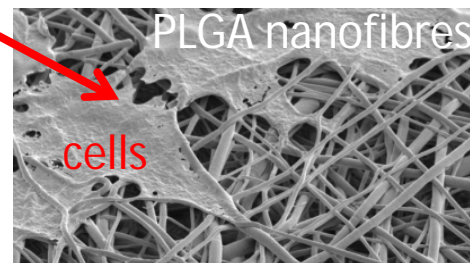
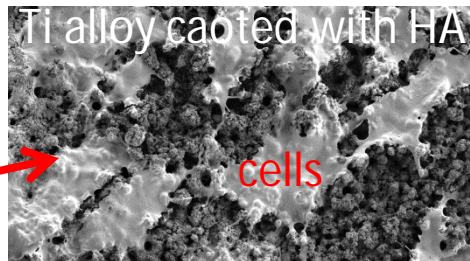
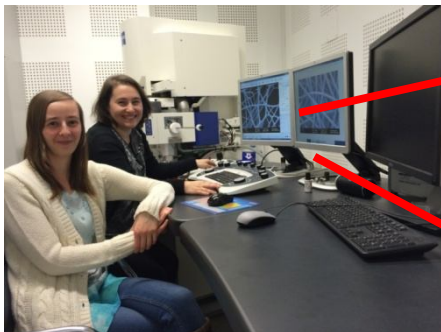
high resolution electron microscope equipped with:

- FEG electron gun
- EDX detector with Quantax 800 (Bruker) microanalysis system
- EBSD detector with Quantax CrystAlign 400 (Bruker) microanalysis system

NEON CrossBeam 40EsB (ZEISS)

electron microscope equipped with:

- FIB column
- FEG electron gun
- SEM column with SE, EsB and BSE detectors
- EDX detector with Quantax 400 (Bruker) microanalysis system



More details about the lab equipment at our website:
http://www.tem.agh.edu.pl/main_new/index.php/en/