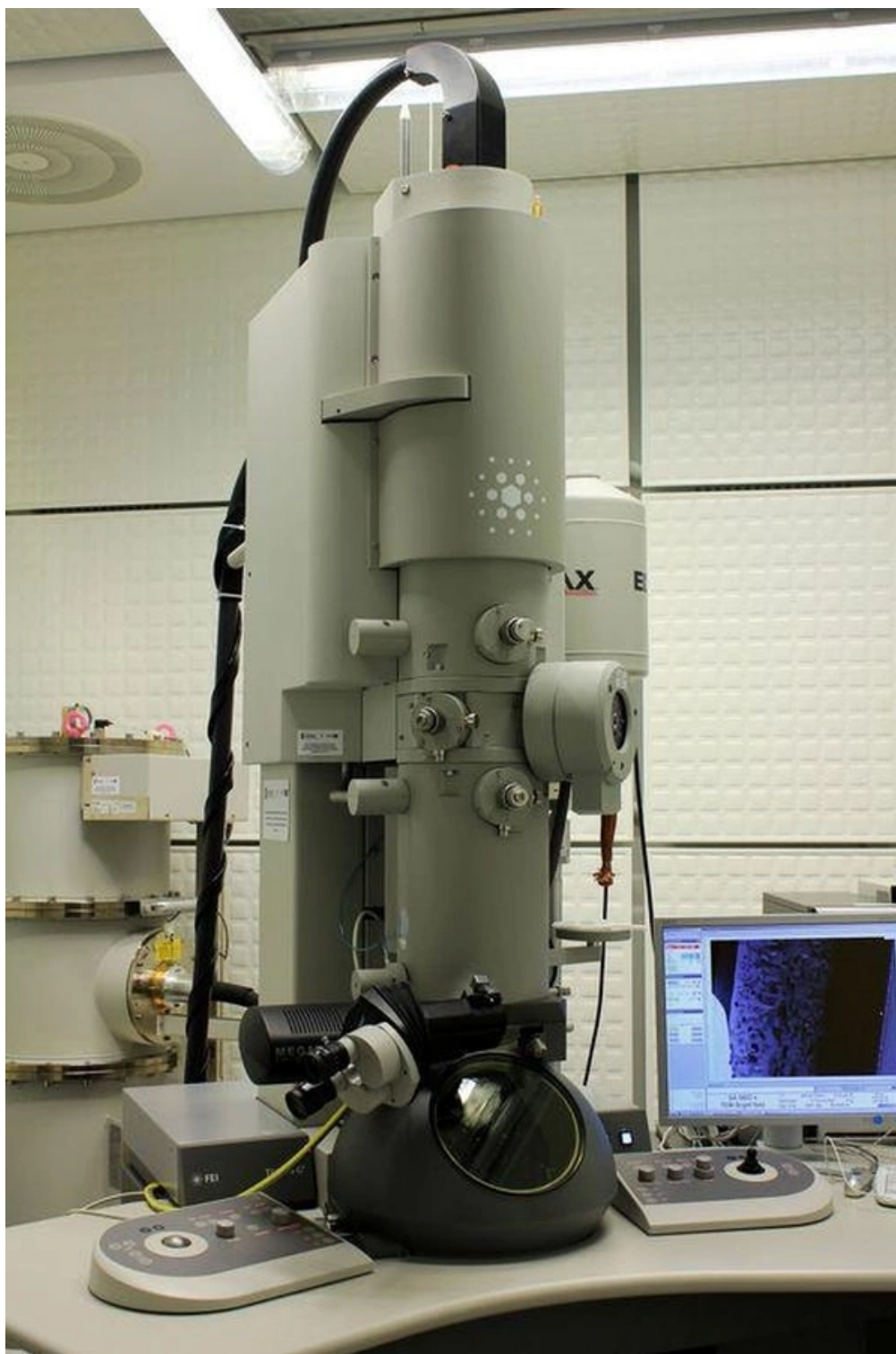


Transmission electron microscope



Technical description:

FEI Tecnai G2 20 TWIN is a transmission electron microscope that is an auxiliary device for initial analysis, quality of samples and preliminary structural tests. It is equipped with an electron gun with a LaB6 cathode and allows operation in the acceleration voltage range from 20 kV to 200 kV. The Tecnai G2 analytical electron microscope is equipped with the STEM - HAADF detector, the EDX TIA microanalysis system, the DigiStar electron diffraction precession system and the ASTAR system for automatic analysis of grain orientation and phase maps in nanoareas (NanoMEGAS).

Trade name: Tecnai G2 20 TWIN (FEI)

More details: </equipment/transmisyjny-mikroskop-elektronowy/>

Access type: External

Type of accreditation / certificate: Not applicable

Contact person: Kruk Adam

Contact person url: <https://skos.agh.edu.pl/osoba/adam-kruk-1679.html>

Responsible body: Faculty of Metals Engineering and Industrial Computer Science

Group / laboratory / team: Department of Physical Metallurgy and Powder Metallurgy. Centre of Electron Microscopy for Materials Science

Last update date: Aug. 30, 2023, 9:49 a.m.

Year of commissioning: 2012

IDUB research areas:

(PRA 5) Materials, technologies, and processes inspired by nature: biotechnology, bioinspirations in engineering and materials science, biosensors, bioenergetics, biocatalysis, biocomputers, and biocomputation

(PRA 7) Design, production, and testing of modern materials and the technologies of the future based on a multidisciplinary approach combining materials engineering with chemistry, physics, mathematics, and medicine

Research capabilities:

TEM, BF-TEM, STEM, HAADF-STEM, STEM-EDX, analysis of grain orientation and phase maps in nanoareas.

Measurement capabilities:

Chemical composition studies, phase analysis of precipitates, analysis of grain orientation and phase maps in nanoareas at the nanoscale.

Conditions for providing infrastructure:

On terms agreed with the Head of the Laboratory - dr hab. Eng. Adam Kruk, prof. AGH