

## Instrument-specific annex - Carl Zeiss EM 900 Transmission Electron Microscope

November 2021

### Instrumentation and services

The Carl Zeiss EM 900 transmission electron microscope, hereinafter referred to as EM 900, is a scientific instrument of the MAPEX Core Facility for Materials Analytics (MAPEX-CF).

The services include sample preparation, the acquisition of electron microscopic images, and the short-term provision of the data to the users. Additional scientific work can be carried out upon mutual agreement between the user and the Application Scientist.

### Equipment, responsible personnel, and contact details

The resources available at the EM 900 are specified in the MAPEX instrument database. The contact person for the device is PD Dr. Michael Maas, and the Principal Investigator is Prof. Dr.-Ing. Kuroschi Rezwan.

Contact for inquiries	Instrument location
PD Dr. Michael Maas MAPEX Center for Materials and Processes Universität Bremen Am Biologischen Garten 2, D-28359 Bremen Telefon: +49 421 218 64939 michael.maas@uni-bremen.de	IW3 building, room 2070 Fachbereich Produktionstechnik, Maschinenbau und Verfahrenstechnik Universität Bremen Am Biologischen Garten 2, D-28359 Bremen Deutschland

### User obligations

When results obtained in the MAPEX-CF are published, the MAPEX-CF must be explicitly acknowledged [mentioning 'University of Bremen, MAPEX Core Facility for Materials Analytics, DFG project number 434618658' as the instrument's affiliation]. Users shall inform the MAPEX-CF instrument manager about any publications or patents based on results obtained at the MAPEX-CF. This includes, but is not limited to, scientific publications, annual reports, posters, and newspaper announcements. In case of significant scientific contribution of MAPEX-CF members to a publication (e.g. data analysis and interpretation), the involved researchers must be listed as co-authors.

### Types of operation, usage groups, and costs

The operation of the EM 900 can be conducted both as service operation, as defined in §4(2) of the usage regulations for the MAPEX Core Facility for Materials Analytics, and in application operation after training. In consultation with the responsible Application Scientist, application operation is possible within the framework of extensive collaborations. This requires a two-hour basic training course, which costs 300 €.

Group	Description	Usage Share	Cost per hour	
			Device usage	Technical or scientific support
T	Teaching personnel and students in the framework of study programs of the University of Bremen.	25%	0 €	0 €
A	Members of the groups directly running the instruments for method development, testing, and preliminary project work.	40%	0 €	0 €
B	Members of the University of Bremen.	20%	40 €	80 €
C	Members of external institutions using MAPEX-CF in the context of publicly-funded research projects.	10%	40 €	80 €
D	Members of private institutions using MAPEX-CF for commercial purposes.	5%	Upon request	Upon request

The usage costs in service operation include only measurement and data preparation (reconstruction). Sample preparation and data evaluation are charged based on a time and material basis.