

Instrument-specific annex – Zeiss Xradia 520 Versa

June 2022

Instrumentation and services

The Zeiss Xradia 520 Versa X-ray microscope, hereinafter referred to as XRM, is a scientific instrument operated in the MAPEX Core Facility for Materials Analytics (MAPEX-CF).

The services include scanning, reconstruction of the measurement data, and short-term provision of the data to the users. Additional scientific work can be included upon mutual agreement between the user and the Application Scientist.

Equipment, responsible personnel, and contact details

The resources present at the XRM are specified in the MAPEX instrument database. The responsible application scientist is Dr. Wolf-Achim Kahl and the Principal Investigator is Prof. Lucio Colombi Ciacchi.

| Contact for inquiries | Instrument location |
|--|---|
| Dr. Wolf-Achim Kahl MAPEX Center for Materials and Processes University of Bremen Am Fallturm 1, D-28359 Bremen Phone: +49 421 218 64581 wakahl@uni-bremen.de | University of Bremen LION building, room 0.210 Klagenfurter Straße 5, D-28359 Bremen Germany |

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

In general, the XRM is operated under service operation, as defined in section §4(2) of the *MAPEX-CF General user rules and guidelines*. In agreement with the responsible application scientist, application operation is possible within the framework of extensive collaborations. For this a two-day basic training course, at the cost of 1900 €, is required. Only full days can be booked in the application operation mode.

| Category | Description | Usage share | Cost of equipment usage per day | | Cost of equipment usage per hour | Additional technical or scientific support per hour |
|----------|---|-------------|---------------------------------|-----------------------|----------------------------------|---|
| | | | Service operation | Application operation | | |
| T | Teaching personnel and students in the framework of study programs of the University of Bremen. | 2% | 0 € | 0 € | 0 € | -- |
| A | Members of the groups directly running the instruments for method development, testing, and preliminary project work. | 15% | 0 € | 0 € | 0 € | -- |
| B | Members of the University of Bremen. | 45% | 600 € | 450 € | 53 € | 60 € |
| C | Members of external institutions using MAPEX-CF in the context of publicly-funded research projects. | 35% | 700 € | 470 € | 53 € | 105 € |
| D | Members of private institutions using MAPEX-CF for commercial purposes. | 3% | Upon request | -- | Upon request | Upon request |

The usage costs in service operation include sample and instrument preparation, measurement, and data preparation (reconstruction). Data evaluation is charged on a time and material basis. A maximum of three working hours by the application scientist (or team) is included in the total cost of the daily rate for service operation. For use in category C and D, the costs do not include the currently valid sales tax.