

Managing Research Infrastructure metadata in a Current Research Information System

Challenges and Benefits

Sharing information about research equipment....

For researchers:

- Try out different equipment and accessories
- Share user experiences
- Receive advice on best handling and pitfalls

For the university:

Cost savings via

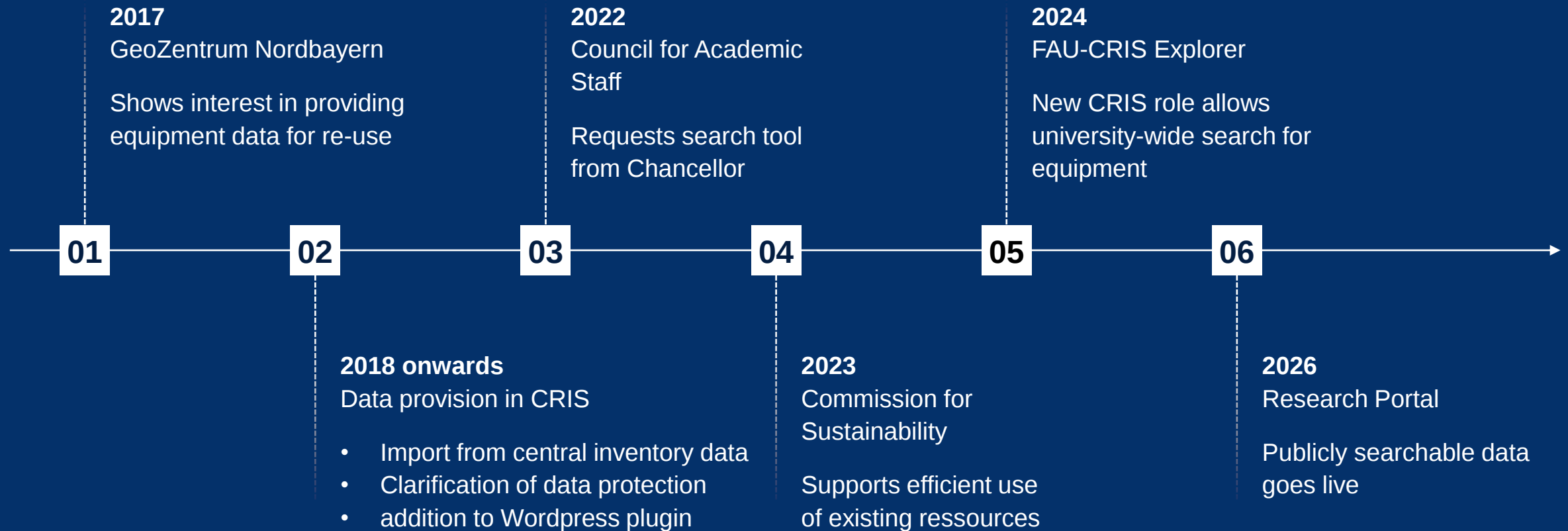
- Increased utilization
- Identifying promising hardware
- Avoiding unnecessary acquisitions

For new organizational units:

Awareness of and access to existing equipment can provide a jump start to new research programs

... using CRIS as the platform

- Well-established Converis system that already imports a lot of centrally-stored information (organizational structure and personnel)
- Highly configurable by the university
- Data visibility controlled by responsible users
- Pre-existing channels for making information publicly visible (via research portal and Wordpress plugin)
- Equipment data can be easily joined with information about scientific activities (research projects, qualification theses, publications and patents), providing a structured overview of its utilization



Automatically generated data entries for equipment with an acquisition cost of at least 100,000 €

Included information:

- Equipment name
- Manufacturer
- Physical location
- Responsible organizational unit
- Date and cost of acquisition
- Date of commission
- DFG Instrumentation classification

Micro computer tomograph (General Electric: Phoenix v|tome|x s 240)
Lehrstuhl für Paläoumwelt

Visible in research portal Internal visible Visible for all (public) Admin Info

Basic data * Inventory administration sheet

Inventory number
16-053329

Equipment description
Mikro-Computer-Tomograph vtomex s 240

Quantity
1

Serial number
304816

Comment

Manufacturer (IVS)
GE Inspection Technologies

Organization (FAUorg)
1413121500

Implementation

Enriched by responsible organizational unit



Basic data *

Inventory administration sheet

Research equipment *

Name *

Please enter a general name like "Sonic screwdriver 4000X". Enter more detailed information to the model, manufacturer, etc. in the form below.

English *

German

Micro computer tomograph

Model *

Phoenix v|tome|x s 240

Manufacturer *

General Electric

Equipment description

Description of usage and type of device, like "Unlocking or locking doors, detection, ultra-sonic effects, tighten and loosen screws".

English

German

B I x₂ x²

Gerät zur zerstörungsfreien Untersuchung von Proben aus unterschiedlichsten Disziplinen:

- Paläontologie
- Geologie
- Biologie
- Archäologie
- Medizin
- Mineralogie
- Materialwissenschaften
- Metallurgie
- Ingenieurwissenschaften

More detailed and informative description

Construction year

2016

Useful life (months)

72

Features / Special equipment / Methods

English

German

B I x₂ x²

Dual source: 240 kV & 180 kV

Acquisition value

Amount in Euro without VAT.

409000

Inventory number

16-053329

Location

Erlangen

Link

<https://www.gzn.nat.fau.de/palaeontologie/ausstattung/computer-tom>

Usage type *

For external users too

Additional features and availability

Research projects

Research projects in which this equipment is used

	Project name	Responsible person
1	FOR 2332: Temperature-related stresses as a unifying principle in ancient extinctions (TERSANE)	Prof. Dr. Wolfgang Kießling
2	Size reductions during hyperthermal events: early warnings of environmental deterioration or signs of extinction? (EarlyWarn)	PD Dr. Kenneth de Baets
3	Exploring the potential of coralline algae as climate proxy and for climate model evaluation: a Southern Hemisphere case study of New Zealand	Dr. Sebastian Teichert

Publications

Publications that used the equipment

	Title
1	Die moderne Computer-Tomographie (Modell v tome x s 240 von GE/Phoenix) am Lehrstuhl für Paläoumwelt (GZN, Erlangen) – Methodik und Anwendungsbeispiele
2	Rostrum size differences between Toarcian belemnite battlefields
3	The reefs of the Arctic - photoautotrophic ecosystem engineers endangered by microplastic and climate change?
4	What is boring? - Arctic reef structures as a habitat for boring organisms
5	A Piranha-like pycnodontiform fish from the Late Jurassic
6	A new Pycnodontid (Actinopterygii) in the late Jurassic of the Soihofen Archipelago
7	Ultrastructure of the epidermal gland system of Tetranchyroderma suecicum Boaden, 1960 (Gastrotricha: Macrotricha) indicates a defensive function of its exudate
8	Microplastic pollution as a possible threat for an arctic reef system and its association of ecosystem engineers
9	Decoding sea surface and paleoclimate conditions in the eastern Mediterranean over the Tortonian-Messinian Transition
10	Morphological characters and ontogenetic development of deep-sea species of the genus Caryophyllia
11	Reef Fish Beware! Aggressive Mimicry in a Pycnodontid?
12	A rare find: protoconch in Cretaceous nerineid "gastropod dinosaurs"
13	3D morphological analysis of cement over the first 24 hours of hydration by holographic and near-field ptychographic

Linked projects and publications

Friedrich-Alexander-Universität Erlangen-Nürnberg

19. Mai 2026 6

Responsible FAU member / Contact person

The person you enter here will be notified via email. An opt-in for displaying their name in the research portal or via Plug-In is necessary.

	Person	Organisational unit	Public viewable
1	Responsible and Contact person Christian Schulbert	Lehrstuhl für Paläoumwelt	Approved

Organizational units can link to the specific persons responsible for individual equipment. Those persons themselves (and only them) then decide about their own public visibility.

Set status

Visible only for own organisation

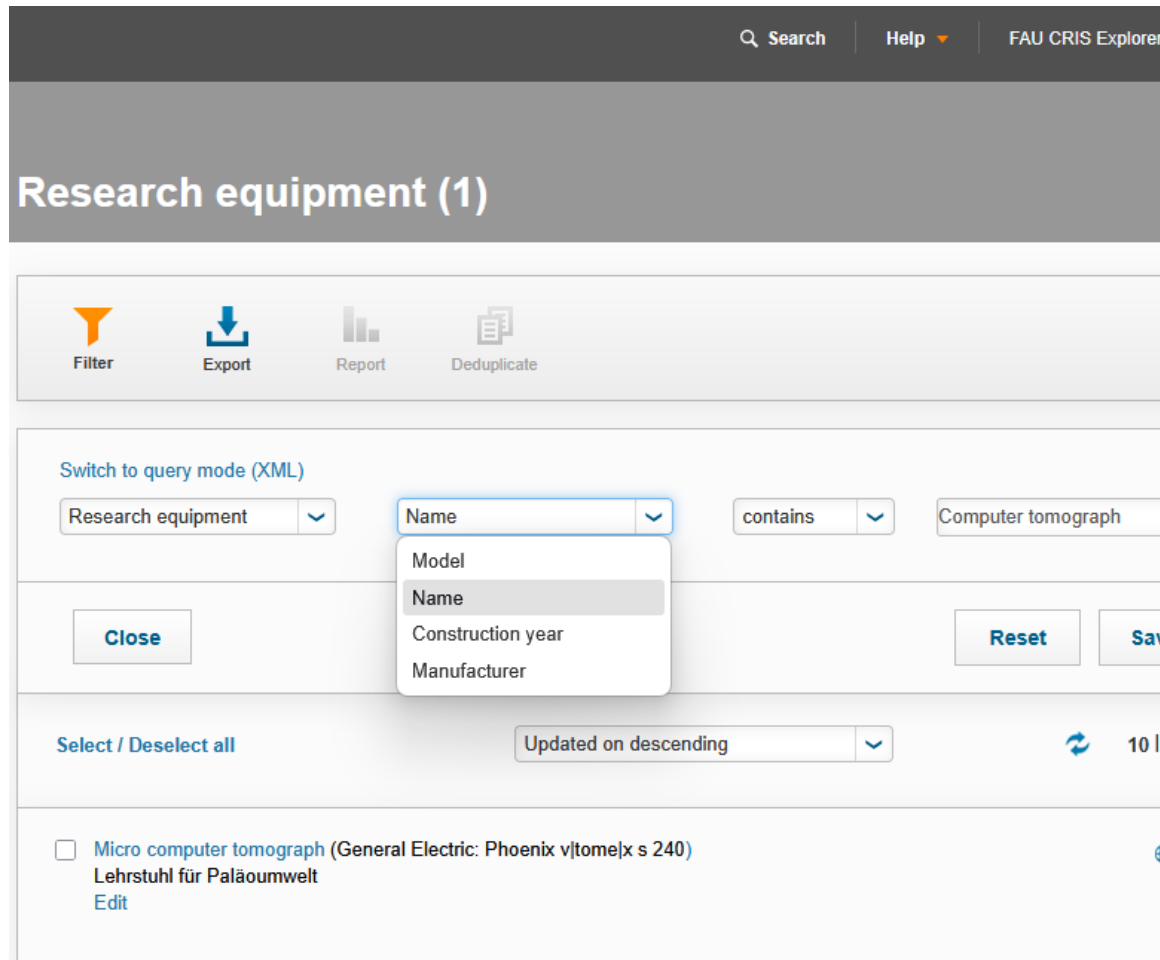
Visible only for FAU

Visible for all (public)

Cancel

Confirm

The responsible persons or a subunit CRIS admin sets the visibility of the equipment data.



The screenshot shows the FAU CRIS Explorer search interface. At the top, there is a search bar with a magnifying glass icon, a 'Search' button, a 'Help' dropdown, and the text 'FAU CRIS Explorer'. Below this is a header section titled 'Research equipment (1)'. Under the header, there are four icons: 'Filter' (funnel), 'Export' (download), 'Report' (bar chart), and 'Deduplicate' (document with X). Below the icons, there is a section for switching to query mode (XML). It includes a dropdown menu for 'Research equipment', a dropdown for 'Name' (which is open, showing options: 'Model', 'Name', 'Construction year', 'Manufacturer'), a dropdown for 'contains', and a text input field with 'Computer tomograph'. There are 'Close', 'Reset', and 'Save' buttons. Below this, there is a section for 'Select / Deselect all', a dropdown for 'Updated on descending', a refresh icon, and a count of '101'. At the bottom, there is a list of results, starting with 'Micro computer tomograph (General Electric: Phoenix v|tome|x s 240)' and 'Lehrstuhl für Paläoumwelt', with an 'Edit' link.

CRIS provides a search interface that is accessible to every FAU scientist that allows them to filter equipment listed by a number of data fields:

- Name
- Model
- Construction year
- Manufacturer
- DFG Instrumentation key
- Responsible FAU organization

Consistent data display

across multiple access points



Q SearchHelpFAU CRIS Explorer: Schanne, Pirmin

ail view

Micro computer tomograph

Manufacturer: General Electric

Construction year: 2016

Model: Phoenix v|tome|x s 240

Usage type: For external users too

Location: Erlangen

Link: <https://www.gzn.nat.fau.de/palaeontologie/ausstattung/computer-tomographie-labor/>

Equipment description:
Gerät zur zerstörungsfreien Untersuchung von Proben aus unterschiedlichsten Disziplinen:

- Paläontologie
- Geologie
- Biologie
- Archäologie
- Medizin
- Mineralogie
- Materialwissenschaften
- Metallurgie
- Ingenieurwissenschaften

Probengröße bis maximal 25 x 35 cm bei bis zu 10 kg Masse.
Die erreichbare Auflösung hängt u.a. von der Probengröße ab und geht bis etwa 0,8 µm.

Responsible FAU member / Contact person:
→ Schulbert, Christian (Email)

Organisation:
→ Lehrstuhl für Paläoumwelt / FAU.ORG-Nr: 1413121500 (Email)

Funding source / Funding program:
→ Deutsche Forschungsgemeinschaft (DFG)

Research projects:
→ Exploring the potential of coralline algae as climate proxy and for climate model evaluation: a Southern Hemisphere case study of New Zealand
Dr. Sebastian Teichert
(01/02/2021 - 30/09/2024)
→ Size reductions during hyperthermal events: early warnings of environmental deterioration or signs of extinction? (EarlyWarn)
PD Dr. Kenneth de Baets
(01/12/2019)
→ FOR 2332: FOR 2332: Temperature-related stresses as a unifying principle in ancient extinctions

Micro computer tomograph

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Related Research Projects:

- [Exploring the potential of coralline algae as climate proxy and for climate model evaluation: a Southern Hemisphere case study of New Zealand](#)

Manufacturer: General Electric (2016)

URL: <https://www.gzn.nat.fau.de/palaeontologie/ausstattung/computer-tomographie-labor/>

Location: Erlangen

Usage: For external users too

Details	Projects (3)	Publications (30)
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DFG Key: [3230 Computertomographen](#)

Feature(s)

Dual source: 240 kV & 180 kV

Description

Gerät zur zerstörungsfreien Untersuchung von Proben aus unterschiedlichsten Disziplinen:

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From interface for FAU scientists...

... the chair's webpage (via Wordpress plugin)...

... to the university's Research Portal

<https://www.gzn.nat.fau.eu/computer-tomographie-labor/>

<https://cris.fau.de/equipment/201106387/>

University-wide numbers:

Ca. 700 imported data entries:

- 43 publicly visible
- 26 visible to the whole university
- 30 limited to the subunit
- 5 have been decommissioned
- 593 entries remain unworked

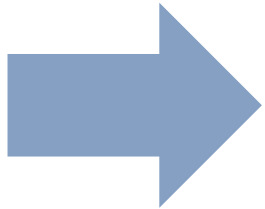
Only a few departments proved responsive:

- Department of Mechanical Engineering (mostly driven by a single chair, the Institute of Manufacturing Metrology)
- Central units (NHR@FAU and RRZE, high performance computer clusters)
- GeoZentrum (2 of 5 chairs)
- Department Chemical and Biological Engineering (mostly restricted to university members)

Connections made:

- 752 Publications
- 144 Projects

- Adoption so far is very reliant on individual interest in utilizing CRIS.
- Organizational units that have the need to publicize details about their equipment (offering it for external use) often prefer to use their own websites, without having to take the diversion through a central database that they find too restrictive.
- Benefits of metadata connections are not yet clear enough.



- Reporting support needs to be implemented that utilizes the availability of metadata linking
- Making equipment available within the university that is not for public use needs to be advertised more

**Thank you
for your attention!**