

Working with AROLD. What is the ARchaeological Organic residues Literature Database?

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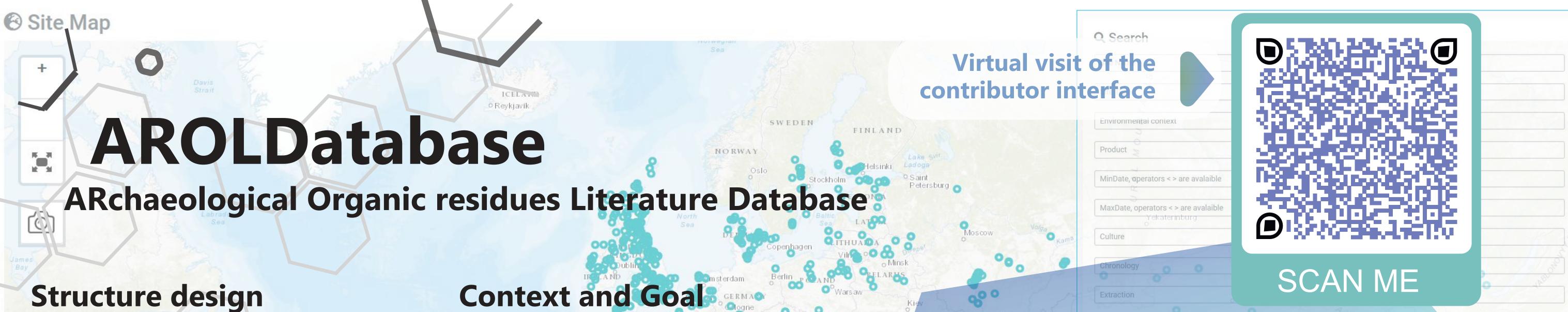
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Definition of the project

Extraction of various data

Selection of the fields

Associating fields together

Linking fields together

Improved interoperability

Categorize the links

Improved valuation

Improved thesaurus

Improved navigation

First data analysis

Adding secondary data

Improved valuation

Setting up a public

viewing interface

Request for

open collaboration

Thesaurus standardisation

Massive import of new data

350 articles

Identify the needs

Reading of published literature

Matching data together

Creation of the operable

Testing the deliverable

Making a request

Data and structure

Database query, validity check

Evaluation of sensitive data

Selection of operable data

Trial run

Paper publication

reinforcement

structure

Defining of the data structure

Research on the characterisation of organic residues applied to archaeology has been rapidly expanding since the 1980's. The field is continuously growing with newly discovered biomarkers, additional extraction techniques and further method development. Nowadays, publications are numerous and readers are challenged to compile and extract information from various studies on sample sets that can be studied several times using additional approaches and/or in response to new questions.

We hereby present the ARchaeological Organic residues Literature Database (AROLD) which aims to provide a extendable and collaborative solution by following an open science FAIR (Findability, Accessibility, Interoperability, and Reuse) data census resulting in a sharable tool. Datasets are deposited in the perennial Nakala directory of Huma-num services (French national storage). The structure, operation and functionality of this tool was published in Archaeometry in May 2023 (doi:10.1111/arcm.12869). Thus far, the database content comprises a compilation of published data of peer-reviewed articles.

AROLDatabase is accessible via two interfaces, through the official public website and the restrictedaccess Filemaker web solution, offering 3 ways of interactions:

- Public access via the website: https://www.cepam.cnrs.fr/datas/arold.php
- Contributor access available on request: contact the team
- Developer contribution: contact the team (inbox@arold.sendboard.com)

Up to date, the AROLDatabase includes over 420 articles, 1329 sites, 1752 sample lots and 24005 samples.

All sites are integrated into a global coordinate system (DMS), either by exact location or nearest city.

This allows to edit maps, referencing studies by type of 'identified products' and/or 'amount of extracted lipids' for a given region and/or a time period.

Literature

Samples lots/sites (with product(s)) Occupation

A Home

Site Occupation Map

Hamanaka 2, Lot_4 Hamanaka 2, Lot_4

Hamanaka 2, Lot_3

Hamanaka 2, Lot_3 Nong Hua Rae, Lot_1

Luxmanda, Lot_1

Ban Non Wast, Lot_1

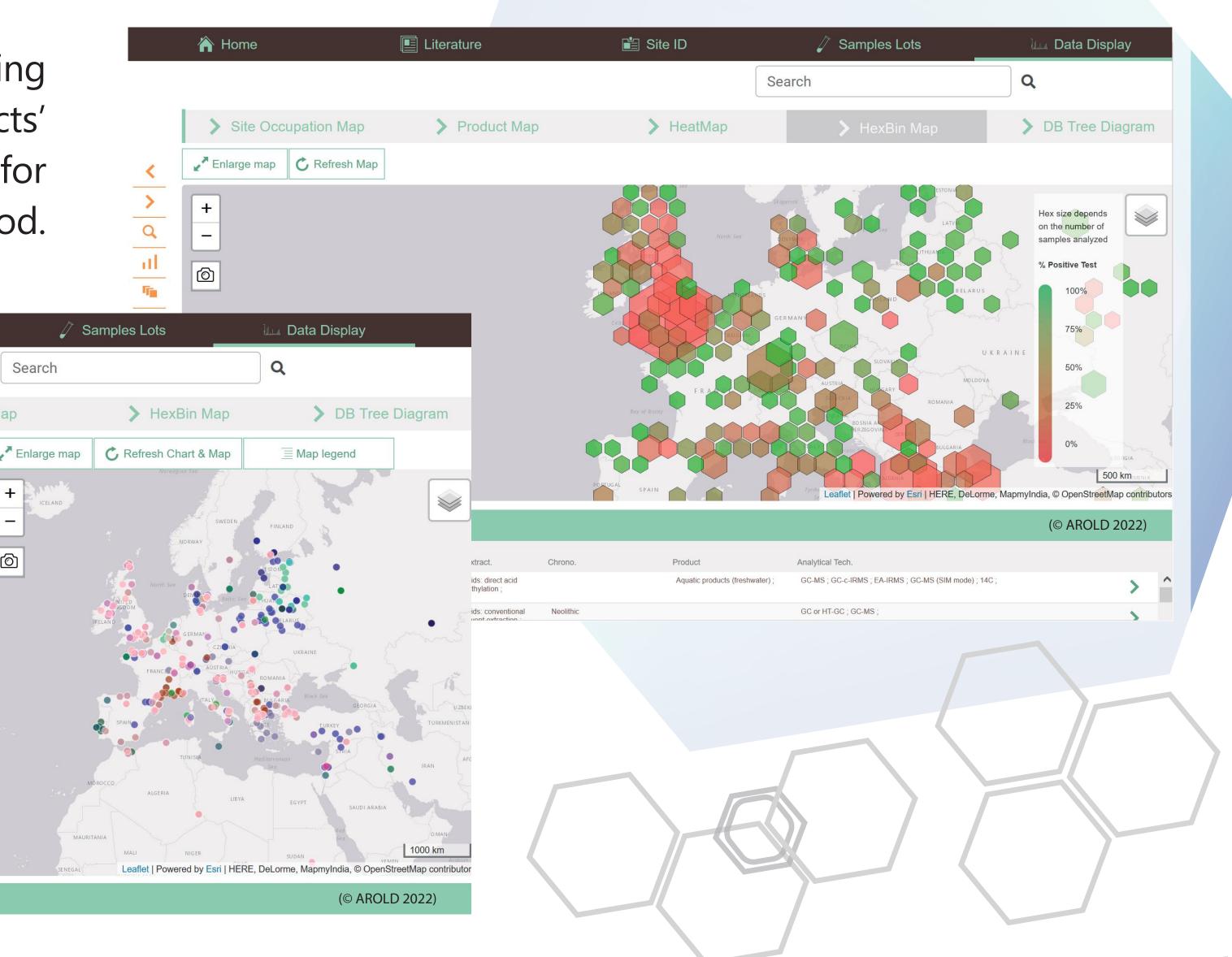
PLES LOTS LIST

Chart on fullscreen

Site ID

750 **I** 950 550 | 750

550 750



Recommendations for future literature

Accurate and transparent description of:

- location of the sites
- published material (e.g. origin, types, numbers)
- extraction and analytical methods
- systematic chronological referencing

If you are interested in collaboration, fell free to contact us!

Current developments and outlook

World map visualisation:

distribution of lipid quantities against artifacts (object, from, culture) and various extraction methods.

We also aspire to include other types of studies via collaborations, and to open up a discussion between researchers on the reliability of the compiled data

