

## Workshop "Digitalisation with reference to analytics on environmental samples at UFZ - Where we are and what could we change?"

*Thursday 2 November 2023 12:30 (2 hours)*

We are often annoyed about the status of digitalisation in the German public sector, but are we better as environmental analysts?

If we are honest, we have to realise that even at the UFZ, with regard for example to the management and analysis of environmental samples, there are mostly local developed solutions at the moment. This makes it very difficult or in some cases laborious to manage samples and use data, at least on a UFZ-wide scale. At present, this may seem to be a sufficient and in some cases satisfactory digital solution for many scientists to carry out their own work.

In the future, activities on the environmental research science will produce and require usage of interdisciplinary, large data sets – "big data". This will only be successful for us at the UFZ if, in addition to externally accessible data, for example we can use a data pool related to data from environmental samples that has been fed by all scientists UFZ-wide over a period as long as possible. This is also important in the view of needed increased inter-departmental co-operations and projects.

So far, only partial use has been made of the UFZ's own Data management portal (DMP) in this regard, and a one-to-one sample identification of all UFZ environmental samples does not exist.

During the workshop, ideas and approaches are to be discussed with all interested scientists in order to strengthen the usage of the DMP by starting to enable a one-to-one sample identification for all environmental samples in the near future (general barcoding approach). This will be the basis for all colleagues at least to receive information which samples were analysed when and how.

It may be seen as "extra work" but the benefit lies within the future ease of data exchange, faster usage and thus a better way of open-access cooperation within the UFZ. This is something we should work on.

Beyond the introduction of a UFZ wide barcode for environmental samples, information will be provided about other already used data management systems such as the free, safe and open source electronic laboratory book (elabFTW) available at the UFZ and the LIMS with internal service charging that has been implemented at the central Laboratory for water analytics Magdeburg for more than 20 years.

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**Session Classification:** Breakout Session