SALT ROT: A CENTRAL SPACE FOR ESSENTIAL RESEARCH

WHAT WAS THE PROBLEM?

Salt is essential to life: not only for the workings of the human body, but also for our cultural expression, whether in the form of buildings, statues or cars. Studies into the effects of salt and how to overcome or prevent its deteriorating effects, are numerous and are relevant to a wide range of disciplines including architecture, engineering, climate studies, art and chemistry.

There is a vast spread of research on salt, geographically, historically and even linguistically. However, we know that only a small proportion of that research is readily accessible. For example, a huge number of research results from a ten year Federal Ministry of Education and Research project in Germany was difficult to access for a non-specialist. In order to reap the benefit of years of research funding, a central access point was needed.

HOW WAS THE PROBLEM SOLVED?

This problem of unavailable knowledge goes straight to the heart of the Hornemann Institute of the University of Applied Sciences and Arts (Hochschule für angewandte Wissenschaft und Kunst) in Germany.

The institute’s primary aim is “worldwide knowledge transfer of current scientific results within the scope of conservation and restoration.”

With support from the German Research Foundation (DFG) they decided to tackle the issue of inaccessible salt research by developing two wiki platforms and a repository, together constituting a virtual research environment.

WHAT ARE THE MAIN OUTCOMES?

The two wikis on salt, one in English (http://www.saltwiki.net/) and one in German (http://www.salzwiki.de/), are written by registered specialists and improved by all users via the discussion pages. The wikis focus on salt, salt damage, and dealing with salt damage. This is easily accessed through the wiki portal which is an entry point to pages on various subjects categorized into Fundamentals, Conservation Measures, Investigation Methods, Salt Data, Deterioration patterns, Literature and Programs.
Unfortunately most of the literature these web sites refer to is not yet available online. The same holds for the extensive bibliography.

Behind the wiki, the developers have also created a repository which stores analysis data, physical and chemical constants, and also graphics, photos, short videos and unpublished literature. Digital Object Identifiers (see Wikipedia for explanation) are attributed to objects to provide a permanent and reliable means of citing the deposited data. Access to this valuable repository is limited to members of the research network.

The wikis have an international editorial board to ensure their credibility and steer their development.

### KEY LESSONS LEARNED

The developers have identified a number of challenges of using a wiki as a research tool:

- the active contribution of authors can stagnate over time
- not everybody is adept in using wikis, so the resource requires a simple interface for uploading research data, and ideally a good editor to oversee that process
- most importantly, researchers are likely to consider that publishing an article in a journal is more rewarding than contributing wiki pages

The developers are therefore considering how the wiki could be supplemented by a peer reviewed open access journal.

### FUTURE DEVELOPMENTS

The virtual research environment is currently operational and will remain so, as part of the information infrastructure of the Hornemann Institute.

It is actively used and counts 150.000 hits per year.

In the meantime the concept of a wiki is available to others, especially to smaller research areas, where a specialised tool cannot be financed and ensured by the research community.

### FIND OUT MORE

Visit Saltwiki in English

Visit Salzwiki in German

### References

Images provided courtesy of Dr Schwarz

Based on an interview with Dr.Hans-Jürgen Schwarz by Leo Waaijers on 13 January 2014.
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