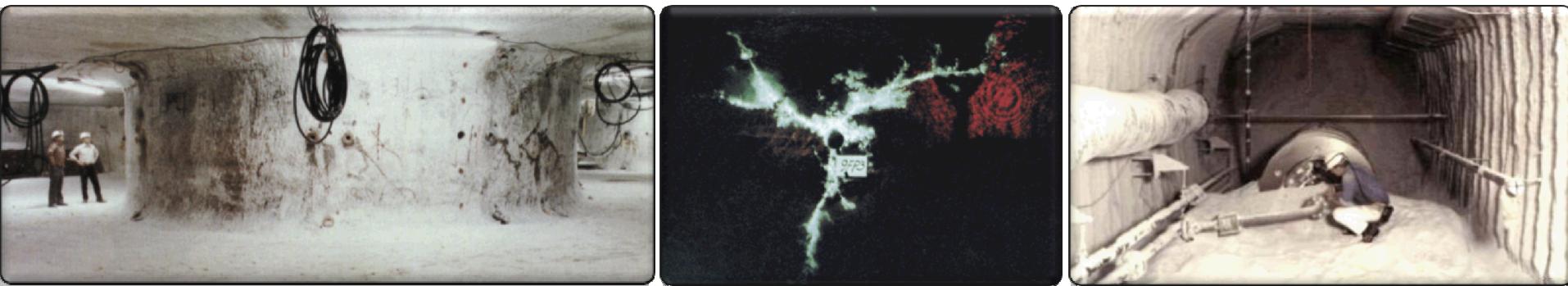


Exceptional service in the national interest



Salt Club: Salt Knowledge Archive

NEA Salt Club Meeting

Berlin, Germany: 16 September, 2013

Kristopher L. Kuhlman

Sandia National Laboratories, Carlsbad New Mexico



Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000. This research is funded by WIPP programs administered by the Office of Environmental Management (EM) of the U.S. Department of Energy. SAND NO. 2013-XXXXP

Salt Knowledge Archive

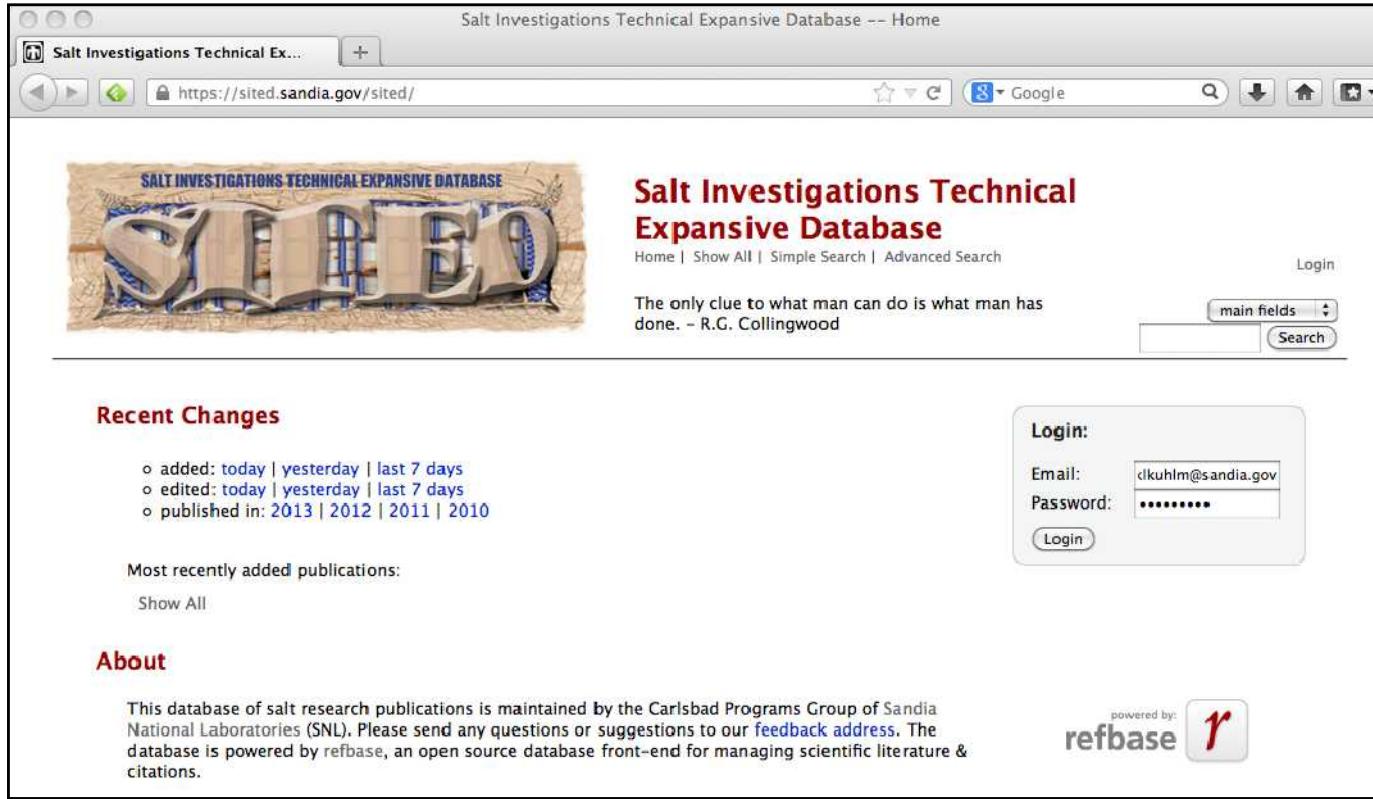
- Extensive reports/studies/papers on salt (50+ years)
- Knowledge archive will contain references to documents on radioactive waste disposal in salt formations
- References include digital copies of documents
- Documents also include metadata:
 - A unique document identifier
 - Document type
 - Document abstract/summary
 - Citation/reference
 - Ranking from a list of keywords
 - Text field for additional short description or notes

Salt Knowledge Archive

- Permitted document types:
 - Reports
 - Journal Articles
 - Conference Proceedings
 - Conference Posters
 - Dissertation or Thesis
 - Project memos and personal communications
 - Archived electronic data (zipped-up)
 - Scans or digital copies of experiment/project photos

SITED: Salt Report Database

- Online (password-protected) digital report archive
 - Sandia-hosted secure server (<https://sited.sandia.gov/sited>)
- Based on open-source bibliographic database “refbase”
 - Standard open-source technology (PHP + MySQL)



The screenshot shows the homepage of the SITED database. The title bar reads "Salt Investigations Technical Expansive Database -- Home". The address bar shows the URL <https://sited.sandia.gov/sited/>. The main content area features a large banner with the text "SALT INVESTIGATIONS TECHNICAL EXPANSIVE DATABASE" and a stylized "SITED" logo. To the right of the banner, the text "Salt Investigations Technical Expansive Database" is displayed in red, followed by links to "Home", "Show All", "Simple Search", and "Advanced Search". Below this is a quote: "The only clue to what man can do is what man has done. – R.G. Collingwood". A search bar with dropdown options for "main fields" and a "Search" button is also present. The left sidebar contains a "Recent Changes" section with links for "added", "edited", and "published" items, and a "Most recently added publications" section with a "Show All" link. The bottom left has an "About" section with text about the database's maintenance and its powered by "refbase". The bottom right features the "refbase" logo with a red 'r' inside a white square.

SITED: Salt Report Database

- Developed for US DOE office of Nuclear Energy in 2012
- Database initially populated with pdf copies of reports from:
 - WIPP Project Records Center (WIPP reports)
 - Sandia Technical Library database query (WIPP reports)
 - Oak Ridge National Laboratory library (Salt Vault reports)
 - US Geological Survey library (general salt geology reports)
 - US DOE “OSTI Bridge” online database (all DOE-funded reports)
 - European Union online bookshop database (Asse reports)
- Continually adding to database
 - Scanning old reports
 - Adding new reports

SITED as Salt Knowledge Archive?



- SITED is a working database
 - Quickly learned what is important/unimportant
 - Topic-specific archive has different needs/goals from a library
 - Relatively small SQL database (few 100 MB)
 - Large amounts of space for pdf documents (> 100 GB)
 - Full-text document search not currently implemented
- SITED can be used directly as Salt Club database
 - adapted to include additional needs of Salt Club
- Data in SITED can be “cloned” for separate Salt Club database
 - Salt Club database could be based outside US or Sandia
 - Salt Club database could have different access requirements (SNL hosting leads to strict requirements)

Thank You.

Discussion?