

Curriculum Vitae Dr. Stefan Folle

Name: Dr. Stefan **Folle**
Date of Birth: 27.12.1957
Nationality: German
Profession: Geologist
Languages: German, English



Professional Experience:

Since July 2005: **STORCONSULT**-Managing Partner, Consulting Geoscientist
1989 – June 2005 **Kavernen Bau- und Betriebs-GmbH, Hannover**
Chief Geologist, proxy since 2003
Centre of Excellence within **Schlumberger** (Holding Company)
1984 – 1989 **Technical University Clausthal**, Institute of Geology and Palaeontology,
Department of Petroleum Geology, serving as Scientific Assistant

Professional Education:

1983 – 1987 **Technical University Clausthal**
Doctorate studies, graduated 1987 (Dr.rer.nat/Ph.D.)
1977 – 1983 **Technical University Clausthal**
Geological studies, graduated 1983 (Diploma/M.Sc.)

Areas of Expertise:

- Long-term safety analysis of the disposal of radioactive waste in deep underground formations (human intrusion, gas formation mechanism, contamination of groundwater)
- Planning and supervision of site exploration and site expansion programs (seismic, gravimetry, drilling)
- Geologic evaluation of aquifers and salt formations for the storage of gas
- Geological evaluation of salt formations for brine production
- Compilation and supervision of geological lab investigation programs
- Investigation of overburden density for optimization of gas pressure
- CO₂ disposal - site investigation
- Feasibility studies (oil and gas, solution mining, underground disposal)
- Technical due diligence (gas storage, mines)

Curriculum Vitae Dr. Stefan Folle

Selected Tasks and Projects

- Exploration of a gas storage cavern project in rock salt in central Iran
- Evaluation of potash deposits (Saudi Arabia)
- Systematic acquisition of geoscientific literature (national, international) for a special federal library systems
- Site selection of potential CO₂ storage (aquifer) locations in Mecklenburg-Vorpommern, Brandenburg and Lower Saxony as well as adjacent offshore areas
- Evaluation of cavern storage sites (Germany, The Netherlands, Denmark)
- Technical due diligence studies for a salt mine (Germany) as well as gas and crude oil salt cavern storage sites (Germany, Great Britain)
- Investigation of gas formation mechanisms and human intrusion regarding a radioactive waste repository and associated impacts on managing the proof of final disposal safety (Germany)
- Geological project coordination of drilling of 5 gas storage wells (Portugal)
- Geological project coordination and assessment of 3 wells for brine production (Abu Dhabi)
- Underground disposal; site selection of suitable salt formations, risk assessment (Israel)
- Disposal of low and middle radioactive waste, mine filling with insolation fluid under pressure, preliminary design (Germany)
- Underground waste disposal; long term safety of a flooded mine (Germany)
- Underground storage of natural gas in salt caverns; geological planning, supervision and assessment for 8 cavern wells (Germany)
- Conversion of 9 crude oil storage caverns into gas storage caverns; appraisal of geological conditions (Germany)
- Crude oil storage in salt caverns; geological planning, supervision and assessment of 7 wells (Germany)
- Long term safety assessment of an underground disposal site for toxic waste (Germany)
- Underground disposal of hazardous waste in salt caverns; geological evaluation (Germany)
- Laboratory investigations and radiometric in situ investigations for the determination of parameters characterizing a barrier system in a radioactive waste disposal site in rock salt (Germany)
- Brine production, feasibility study, planning of a cavern well (The Netherlands)
- Geological planning, supervision and assessment of gas cavern storage wells (13) in Germany for several clients
- Aquifer gas storage; geological planning, supervision and assessment of a horizontal well (Germany)
- Potash mining; assessment of saliferous horizons (Thailand)

Curriculum Vitae Dr. Stefan Folle

- Investigations of samples taken in repository limit drillings as well as pre-shaft drillings of nuclear waste disposal mine (Germany)
- Brine production; planning and assessment of cavern wells (3); geological supervision and project consulting (Spain)
- Investigation of overburden density for optimization of gas storage pressure at locations in Germany & Denmark

Curriculum Vitae Dr. Stefan Folle

Selected Publications:

- FOLLE, S.; SCHMIDT, U. (2012): **Gasspeicherung in Salzformationen des Mittleren Ostens - Aussichten**
[Gas storage in salt formations in the Middle East - Outlook]
mining geo (2012) 1, Glückauf Verlag
- FOLLE, S. (2010): **Presentation of Salt Structures and Considerations about their Genesis as a Basis for the Evaluation of their Economical Use**
SMRI Spring Technical Meeting, Grand Junction/USA, 26.-27.04.2010
- FOLLE, S. (2008): **Salt structures – Exploration and Limits of Interpretation**
Z. geol. Wiss. 36 (2008) 4-5, pp.321-333
- FOLLE, S. (2007): **Middle East Salt Deposits – Distribution and Potential Use**
Oil Gas European Magazine, Vol. 33, No. 1, pp. 9-14
- FOLLE, S. (2004): **Salt Occurrence in the Gulf Region**
GeoArabia, Middle East Petroleum Geosciences, Vol.9, Number 1, Abstract and Presentation
GEO 2004, 6th Middle East Geosciences Conference and Exhibition, 7-10 March, Kingdom of Bahrain
- FOLLE, S. (2001): **Gas Storage in Salt Caverns – Geological Framework**
Proc. SMRI Fall 2001 Meeting, Technical Class, Albuquerque, NM, 07.-10.10.2001, pp. 47-86
- FOLLE, S. (2000): **Geologische Rahmenbedingungen für den Kavernenbau**
[Geological Scope of Work for Cavern Construction]
DGMK-Tagungsbericht 2000-2, Celle.
- FOLLE, S.; BEUTEL, TH. (2000): **Overview of Salt Occurrence in the Persian Gulf and Red Sea Region**
Proc. of SALT 2000 (8th World Salt Symposium), The Hague, Vol. 1, pp. 119
- FOLLE; S. (1998): **Geological aspects of the construction of caverns in salt**
Proc. SMRI Fall Meeting Rome, 04.-07.10.98, Poster Presentation, pp. 531-540
- FOLLE, S.; ROLFS, O. (1996): **Gravimeter yields rock density for cavern during operations**
Oil & Gas Journal, Jan. 22, pp. 40 - 45, Penn Well Publication, Tulsa, Oklahoma
- FOLLE, S. (1993): **Dichtebestimmungen im supradiapirischen Bereich**
[Salt Caverns: Investigation of Overburden Density]
Erdöl Erdgas Kohle 109 (1993) 10, pp. 409-412, Urban Verlag, Hamburg/Wien
- FOLLE, S. (1988): **Radiometrische Bohrlochmessungen im salinaren Gebirge und Versatz**
[Radiometric logging in salt formations and back fill]
Kali und Steinsalz 10 (1988) 1, pp. 28-34
- FOLLE, S.; KHAN, F. A. (1988): **Diagenetical transformation of pores and their influence on flow properties depending on lithology**
Oil Gas European Magazine, 14/2, pp. 22-25, Urban Verlag, Hamburg/Wien

Curriculum Vitae Dr. Stefan Folle

- FOLLE, S.; MÜLLER, K. (1988): **Kluftorientierung und -analytik an Bohrkernen**
[Orientation and analysis of core-fractures]
Erdöl Erdgas Kohle 104 (1988) 6, pp. 253-256, Urban Verlag, Hamburg/Wien
- FOLLE, S. (1987): **Laboruntersuchungen und radiometrische in situ-Messungen zur Ermittlung von Kenngrößen des Barrierensystems eines Endlagers für radioaktive Abfallstoffe im Salzgebirge**
[Investigations concerning radioactive waste disposal in salt formations]
Clausthaler Geowissenschaftliche Dissertationen, 27, 135 p., Selbstverlag des Geologischen Institutes der Technischen Universität Clausthal.

Membership:

- German Geological Society (DGGV)
- German Scientific Society for Oil, Gas and Coal (DMGK)
- Federal Association of German Geoscientists (BDG)
- German Association of Engineers (VDI)