

CURRICULUM VITAE DR. S. KOKKALAS
STRUCTURAL GEOLOGY-NEOTECTONICS/MICROTECTONICS



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Education

1990-1995 B.Sc in Geology at the University of Patras.

1995-2000 Ph.D. in Structural Geology (Neotectonics-Microtectonics), Department of Geology-University of Patras.

Appointments

2019-present **Associate Professor** in Neotectonics-Microtectonics at the Univ. of Patras, Department of Geology, Greece.

2017-2019 **Associate Professor** in Structural Geology at **Khalifa University**, Department of Earth Sciences, *Abu Dhabi, UAE*.

2014-2017 **Associate Professor** in Structural Geology at the **Petroleum Institute**, Department of Petroleum Geoscience, *Abu Dhabi, UAE*.

2013-2014 **Associate Professor** in Neotectonics-Microtectonics at the Univ. of Patras, Department of Geology, Greece

2008-2013 **Assistant Professor** in Neotectonics-Microtectonics at the Univ. of Patras, Department of Geology, Greece

2006-2007 **Visiting researcher** at the *Geological and Environmental Dept.-Stanford University*, California-USA in the Rock Fracture Group Laboratory (sabbatical leave, one semester).

2003-2008 **Lecturer** in Neotectonics-Microtectonics at the Univ. of Patras, Department of Geology, Greece

Field trip leader

- **2003-2013:** Leading two field trips annually (total 11 days each academic year) training students in Geological mapping techniques (HP-metamorphic rocks in Cyclades islands in Greece) and Geotectonics of Greece (average of 70 students each academic year).

- **2014-2017:** In PI two field trips every year for 4 days in areas of eastern and northern Emirates (Jebel Hafeet, Jebel Faya, Hatta), for the courses Geological Maps and Structural Geology.
- **2015-2019:** One (1) day field trip for the Geomechanics course for SLB (Deep Blue3 Geomechanics fixed-step training program of SLB Middle East training center) and 6-days for the Field Structural Geology BlueEdge 2 Schlumberger training program, MLC. Extensive experience in Geological mapping of various tectonic settings (Apennines, Italy, Carboneras, Almeria, Spain, Arabian platform, UAE-Oman, Kruja-Budva zones, Montenegro).
- Organize 1-day field trip in Dibba area (UAE) for the *2nd EAGE Bootcamp* with the participation of 21 international students.
- **Taught courses for Schlumberger (2015-2019) Field Structural Geology-Geomech.BlueEdge2** (2days taught course in MLC, Abu Dhabi and 4 days field trip in Jebel Hafeet, Ras Al Khaimah and Dibba field areas)

Research projects

- 1998** Research assistant in research program of *Enterprise Oil Exploration Ltd.* "Relations of faults and folds in the Cretaceous Limestones of the Ionian zone".
- 2002** *Geological surveillance in research drilling in Trizonia Island (3F project with IFP France).* Scientific coordinator: Prof. F. Cornet
- 2015**
- Petroleum Institute:** RIFP Project 15312: "Fracture characterization and fold-fracture relationships from the combination of LiDAR high resolution topographic data and outcrop analogue data: the Jebel Hafit anticline (UAE) as a case example. "PI Research Initiation Funding Program. Principal Investigator: Dr. Sotirios Kokkalas
- Petroleum Institute:** RIFP Project 15309: "Scaling effect of fracture distribution on heterogeneity and anisotropy in carbonate rocks" PI Research Initiation Funding Program. Principal Investigator: Dr. Sandra Vega
- 2015-2018** **Petroleum Institute:** Oil Subcommittee (PI) "Magnetic Nanoparticles (MNPs) for Reservoir characterization" Principal Investigator: Dr. Saeed Al Hassan (PI), Demokritos Research Center (Greece), UoI (Greece), KBSI (S. Korea), Vanderbilt (USA), funded by ADNOC.
- 2019-2020** «Reservoir characterization from outcrop analogues in Montenegro coastal area» (Geospatial Research Ltd. PI's : S. Kokkalas and R. Jones)

Professional Affiliations-Conferences Committees-Invited talks

- Organizing Committee member and Chair of session 5-Role of Geomechanics in tight reservoirs and unconventional (J. Verdon and S. Kokkalas) in EAGE/SPE Workshop on Integrated Geomechanics in E & P (23-26 Oct 2016) Abu Dhabi, UAE.
- Proposal evaluation committee member for the KNOC/KIGAM R&D workshop (Korean National Oil Company).
- Invited Speaker in Emirates Society of Geosciences (ESG): Modern Digital Technologies for Characterization of Fracture Networks and Mechanical Stratigraphy in Reservoir 3-D outcrop analogues. ADNOC HQ (6th Feb 2019), Abu Dhabi, UAE.
- Invited speaker in KAUST Research Conference: Recovery of Difficult Hydrocarbons. Session 4-Hydro-mechanical coupling in fractured & tight reservoirs. Ali Al-Naimi Petroleum Engineering Research Center (Feb 2018)
- Organizing Committee member in EAGE/SPE Workshop Geomechanics 2018 and EAGE 2020 Abu Dhabi, UAE.

Publications overview, author evaluation and Awards

- Published articles in International Scientific Journals: **44 (30 in SCI journals)**
- Abstracts in International conferences and workshops: **60**

• **Total number of citations:** 903 (**h-index=20**) (self-citations excluded): 805 (**h-index=19**) (*source: Scopus-Elsevier B.V. & ISI-Thomson Scientific-accessed 11-12-2020*)

Google Scholar Citations: 1396, h-index=24, i-10 index=28 (accessed 11-12-2020)

- **Invited article: *The Oil and Gas Year Journal 2019 Abu Dhabi invited article*** «From the ancient seas 600 million years ago to the modern deserts and sabkhas of UAE: a geological journey of the United Arab Emirates» pp.44-46.
- **Best teacher award in Petroleum Geosciences Department for 2017.**

SELECTED PUBLICATIONS

Articles in International Scientific Journals

- 1) TOMBROS, S.F., **KOKKALAS S.**, SEYMOUR, K.S., VOUDOURIS, P.C., WILLIAMS-JONES, A.E., ZHAI, D., LIU, J., FITROS, M., 2020. The Kallianos Au-Ag-Te mineralization, Evia Island, Greece: a detachment-related distal hydrothermal deposit of the Attico-Cycladic Metallogenic Massif. *Mineralium Deposita*, 1-20
- 2) FITROS, M., TOMBROS, S.F., **KOKKALAS, S.**, KILIAS, S.P., PERRAKI, M., SKLIROS, V., SIMOS, X., PAPANPYROPOULOS, K., AVGOUROPOULOS, G., WILLIAMS-JONES, A.E., ZHAI, D., HATZIPANAGIOTOU, K., 2020. REE-enriched skarns in collisional settings: The example of Xanthi's Fe-skarn, Rhodope Metallogenic Massif, Northern Greece, *Lithos* 370, 105638.
- 3) KIM, S., JANG, Y., KWON, S., SAMUEL, V.O., KIM, S.W., PARK, S.I., SANTOSH, M., **KOKKALAS, S.**, 2020. Petro-tectonic evolution of metamorphic sole of the Semail ophiolite, UAE. *Gondwana Research* 86, 203-221
- 4) S. **KOKKALAS, S.**, JONES R., WILKINSON M., DANIELS S., GILMENT S., NIZAMUDDIN, S., 2020. Comparison of fracture intensity measured in outcrop and μ CT core plugs in a carbonate reservoir analogue. *EAGE 4th Naturally Fractured Reservoir Workshop*, 11-13 Feb 2020, Ras Al Khaimah, UAE.
- 5) S. **KOKKALAS, S.** NIZAMUDDIN, S. VEGA 2019. Multi-scale Fracture Network Characteristics in a Carbonate Reservoir Outcrop Analogue: Insights from μ CT data in Core Plugs and Thin Sections. 15th International Congress of the Geological Society of Greece, Athens 22-24 May 2019, *Bulletin of the Geological Society of Greece Sp. Publ* 7. Ext. Abs GSG2019-357.
- 6) *JOUN, H., **KOKKALAS, S.**, TOMBROS, S. 2019 Recycled oceanic crust as a source for tonalite intrusions in the mantle section of the Khor Fakkan block, Semail ophiolite (UAE). *Geoscience Frontiers*, 10, 1187-1210.
- 7) JONES, R.R., **KOKKALAS, S.**, LONG, J.J., DANIELS, S.E., GILMENT, S.R., WILKINSON, M.W., OXLADE, D.M. 2018. Calibration of fracture models using multi-scale outcrop analogues-The importance of mechanical stratigraphy, In *3rd EAGE Workshop on Naturally Fractured Reservoirs*, 2018-February.
- 8) *BRUNO, P.P.G., DUROSS, C.B., **KOKKALAS, S.** 2017. High-resolution seismic profiling reveals faulting associated with the 1934 Ms 6.6 Hansel Valley earthquake (Utah, USA). *Bulletin of the Geological Society of America*, 129 (9-10), pp. 1227-1240.
- 9) *WILKINSON, M.W., JONES, R.R., WOODS, C.E., GILMENT, S.R., MCCAFFREY, K.J.W., **KOKKALAS, S.**, LONG, J.J. 2016. A comparison of terrestrial laser scanning and structure-from motion photogrammetry as methods for digital outcrop acquisition. *Geosphere*, 12 (6), pp. 1865-1880.
- 10) ***KOKKALAS, S.**, AYDIN, A., 2013. Is there a link between faulting and magmatism in south-central Aegean Sea? *Geological Magazine* 150 (2) 193-224.
- 11) ***KOKKALAS, S.**, KAMBERIS, E., XYPOLIAS, P., SOTIROPOULOS, S., KOUKOUVELAS, I., 2013. Coexistence of thin- and thick-skinned tectonics in Zakynthos area (Western Greece): insights from seismic sections and regional seismicity. *Tectonophysics*, vol. 597-598, 73-84.(in press-02/09/2012).

- 12) *JONES R.R., **KOKKALAS S.**, MCCAFFREY, K.J.W.. 2009. Quantitative Analysis and Visualisation of nonplanar fault surfaces using Terrestrial Laser Scanning ("LiDAR") - the Arkitsa Fault, central Greece as a case study. *Geosphere*, v.5, no.6, p.465-482, doi: 10.1130/GES00216.1