

AIRIE PROGRAM, COLORADO STATE UNIVERSITY: RE-OS PUBLICATIONS

Holly Stein (Founding Director, Senior Research Scientist and Professor)

Judith Hannah (Professor)

Aaron Zimmerman (Lab Manager and Research Associate)

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Vineet Goswami and Nicole Hurtig (Post-Docs)

Jenna DiMarzio and Marisa Boraas-Connor (Recent Graduate Students)

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**Refereed Journal Papers:**

Scarlett, A.G., Holman, A.I., Georgiev, S.V., Stein, H.J., Summons, R.G., and Grice, K. (in review) Multi spectroscopic, elemental and Re-Os characterization of southern Australian asphaltites: *Organic Geochemistry*.

Georgiev, S.V., Stein, H.J., Hannah, J.L., Yang, G., Markey, R.J., Dons, C.E., Petersen, J-H., di Primio, R. (in review) Comprehensive evolution of a petroleum system in absolute time: the example of Brynhild, Norwegian North Sea: *Chemical Geology*.

Febbo, G.E, Kennedy, L.A., Nelson, J., Savell, M., Campbell, M.E., Creaser, R.A., Friedman, R.M., van Straaten, B.I., and Stein, H.J. (submitted) The supergiant Mitchell Au-Cu giant porphyry, northwest BC: effect of syn-mineral structures and alteration on deformation and strain localization: *Economic Geology*.

Hurtig, N.C., Georgiev, S.V., Stein, H.J., and Hannah, J.L. (2019) Re-Os systematics in petroleum during water-oil interaction: The effects of oil chemistry: *Geochimica et Cosmochimica Acta*, v. 247, p. 142-161. <https://doi.org/10.1016/j.gca.2018.12.021>

Boomeri, M., Moradi, R., Stein, H.J., and Bagheri, S. (2019) Geology, Re-Os age, S and O isotopic composition of the Lar Cu-Mo deposit, southeast Iran: *Ore Geology Reviews*, v. 104, p. 477-494. <https://doi.org/10.1016/j.oregeorev.2018.11.018>

Kouhestani, H., Mokhtari, M.A.A., Chang, Z., Stein H., and Johnson, C. (2018) Timing and genesis of ore formation in the Qarachilar Cu-Mo-Au deposit, Tethyan metallogenic belt, NW Iran: Evidence from geology, fluid inclusions, O-S isotopes and Re-Os geochronology: *Ore Geology Reviews*, v. 102, p. 757-775. (<https://doi.org/10.1016/j.oregeorev.2018.10.007>)

Molnár, F., Middleton, A., Stein, H., O'Brien, H., Lahaye, Y., Huhma, H., Pakkanen, L., Johansen, B. (2018) Repeated syn- and post-orogenic gold mineralization events between 1.92 and 1.76 Ga along the Kiistala shear zone in the Central Lapland Greenstone Belt: *Ore Geology Reviews*, v. 101, p. 936-959. (<https://doi.org/10.1016/j.oregeorev.2018.08.015>)

Tripathy, G.R., Hannah, J.L., Stein, H.J. (2018) Refining the Jurassic-Cretaceous boundary: Re-Os geochronology and depositional environment of Upper Jurassic shales from the Norwegian Sea: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 503, p. 13-25. (<https://doi.org/10.1016/j.palaeo.2018.05.005>)

- Georgiev, S.V., Zimmerman, A., Yang, G., Goswami, V., Hurtig, N., Stein, H.J., and Hannah, J.L. (2018) Comparison of chemical procedures for Re-isotopic measurements by N-TIMS: *Chemical Geology*, v. 483, p. 151-161. (<https://doi.org/10.1016/j.chemgeo.2018.03.006>)
- Goswami, V., Hannah, J.L., Stein, H.J. (2018) Why terrestrial coals cannot be dated using the Re-Os geochronometer: Evidence from the Finnmark platform, southern Barents Sea and the Fire Clay coal horizon, central Appalachian basin: *International Journal of Coal Geology*, v. 188, p. 121-135. (<https://doi.org/10.1016/j.coal.2018.02.005>)
- DiMarzio, J., Georgiev, S.V., Stein, H.J., and Hannah, J.L. (2018) Residency of rhenium and osmium in a heavy crude oil: *Geochimica et Cosmochimica Acta*, v. 220, p. 180-200. (<https://doi.org/10.1016/j.gca.2017.09.038>)
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- Lu, X. Kendall, B., Stein, H.J., and Hannah, J.L. (2017) Temporal record of osmium concentrations and isotopic compositions in organic-rich mudrocks: Implications for evolution of the seawater Os reservoir: *Geochimica et Cosmochimica Acta*, v. 216, p. 221-241. (<https://doi.org/10.1016/j.gca.2017.06.046>)
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