1605th Draft GSW meeting minutes 13 Nov 2024

This GSW meeting was held in the Powell auditorium at the Cosmos Club.

President Dan Doctor called the meeting to order at 8:06 PM with ~40 attendees present.

Five guests were announced, including scientists and students from the EPA, NSF, and the Carnegie Institution of Washington. There were no obituaries nor informal communications.

Announcements included details of our GSW fall field trip, to be held now in Corridor H in WV on 7 December, with an option for a half- or full-day. The trip participants will meet in Haymarket, VA, and the trip will be led by Alan Pitts.

1st formal talk: **Brittany Hupp** (George Mason University) presented a talk entitled: "**Deconvolving the Effects of Sediment Mixing on Microfossil Assemblages from the Paleocene-Eocene Thermal Maximum**". 23 minutes, ending 8:50 PM. IODP records from above the calcium compensation depth were the basis of this presentation, especially from Hupp et al. (2022, PNAS). Nine questions from the floor, including from J. Hammarstrom (USGS), J. Repetski (USGS, 2 questions), J. Tucker (NAS), and V. Lekić (UMD)

2nd formal talk: **Andrew Masterson** (US Geological Survey) presented a talk entitled **"Lithium in oilfield brines: Geochemistry, sources, and resources estimates".** 20 minutes. Oil field brines are the waste stream of petroleum extraction, but they, especially their contained Lithium, is also a potential resource. Eight questions from the floor, including from G. Helz (UMD), J. Hammarstrom (USGS), E. Cottrell (Smithsonian, M. Tyra, B. Hupp (George Mason), J. Repetski (USGS) and L. Rowan (CRS).

3rd formal talk: **Heidi Myers** (JHU APL) presented "**Drone-based multi-modal Geophysical techniques for the Detection and Characterization of Landmines and Unexploded Ordnance**". The speaker pointed out that tensor invariants are very useful in finding UXOs. Eight questions from the floor, including from B. Hupp (George Mason), M. Purucker (NASA), G. Helz (UMD), A. Jubb (USGS), L. Rowan (CRS), P. Carr (NGA...), and D. Doctor (USGS).

The meeting ended at 9:55 PM.

Submitted by M. Purucker (NASA), GSW meeting secretary.