



ICEG FIELD EXCURSION – 19 OCTOBER 2023

GEO-ENGINEERING PROPERTIES OF CARBONATE BEDROCKS OF AL-AIN, UAE

FIELD TRIP ITINERARY – 19 OCTOBER 2023

8:20 AM	Assemble at Crescent Building, El Maqam University Campus
8:25 AM	HSE briefing and field introduction by Field Trip Leaders
8:30 AM	Depart from Crescent Building, El Maqam University Campus
12:30-1:30 PM	Snacks and drinks at the summit of Jabal Hafit
2:00 PM	Finish the field trip at the summit of Jabal Hafit, return for lunch at Crescent Building, El Maqam University Campus

FIELD TRIP TO THE AL AIN AREA

Karstic cavities are common structural features in the limestone bedrocks of Abu Dhabi Emirate, especially in the Dammam and the overlying Asmari Formations in Al Ain city. These cavities constitute hazards for the stability of building foundations. This tour will visit areas affected by karstic cavitation and also other more recent features of bedrock weathering. **Field Trip Leaders:** Prof. Hasan Arman, Prof. Abdel-Rahman Fowler, Dr. Osman Abdelghany and Dr. Mahmoud Abu Saima.

STOP 1- ROAD CUTTING ALONG THE EASTERN LIMB OF JABAL HAFIT

The beds here are steeply dipping fossiliferous limestones and soft marls of the Middle to Upper Eocene Dammam Formation. There are numerous fault structures and fibrous gypsum veins. The beds here apparently slipped over each other during the folding of the Hafit Anticline.

STOP 2- AL MUBAZARA AREA (FOOT OF JABAL HAFIT)

In the Al Mubazara area (foot of Jabal Hafit) we pass through Middle Eocene nummulitic limestones and into the deepest unit in the Hafit Anticline – the Lower Eocene Rus Formation. This formation consists of fine-grained nodular structured limestones and limestones with chert nodules. A major strike-slip fault cuts through Lower-Middle Eocene rocks and may have been a conduit for hot spring waters in the past.

STOP 3- ALONG THE ROAD TO THE TOP (JABAL HAFIT SUMMIT)

Along the road to the top (Jabal Hafit Summit) we pass through the Lower Eocene Rus Formation, to see a general overview of the Green Mubazara area.

STOP 4- SINKHOLES (NEAR AL AIN ZOO) ON THE WESTERN SIDE OF JABAL HAFIT

Sinkholes and other karstic features of the Dammam and Asmari limestone formations will be viewed on the western side of Jabal Hafit. The limestones in this area show recent surface cavitation (honeycomb) weathering related to wind and salt effects in an arid climate. Soluble gypsum/anhydrite is an important component of rocks in the Al-Ain area.

A LIST OF RECOMMENDED ITEMS TO BRING ON THE FIELD TRIP

- Strong field shoes
- Sun Protection – high SPF & sun glasses since sun is intense at high altitudes
- T-shirt, for protection (due to the weather condition).
- One sweater/jacket to protect yourself from A/C condition.
- Hat/Cap to protect yourself from sun

FIELD TRIP FEE

FREE OF CHARGE for a maximum of 30 persons (on first come first served basis).

Field Trip includes transportation, tour guides, snacks and drinks at four stops.

REGISTRATION PROCEDURES

Participant must be registered for the ICEG 2023 in Al Ain, UAE before registering for the field trip. A maximum number of 30 participants can be accommodated due to limited space, registrations will be on a first-come basis. To register, please email **Adrienne Maxine Lara** at alara@seg.org and ICEG2023@uaeu.ac.ae

All registrations must be received by 18 October 2023. No late registrations will be accepted. Acceptance confirmation will be sent by email.

ACKNOWLEDGEMENT OF FIELD TRIP PARTICIPANT RESPONSIBILITY, EXPRESS ASSUMPTION OF RISK, AND RELEASE OF LIABILITY

I understand that during my participation in this Field Trip. I may be exposed to a variety of hazards and risks, foreseen and unforeseen, which are inherent in each Field Trip and cannot be eliminated without destroying the unique character of the Field Trip. These inherent risks include, but are not limited to, the dangers of serious personal injury property damage, and death (Injuries and Damages) from exposure to the hazards of travel and the meeting organizers have not tried to contradict or minimize my understanding of these risks. I know that injuries and damages can occur by natural causes or activities of other persons, animals, trip members, trip leaders and assistants or third parties, either as a result of negligence or because of other reasons. I understand that risks of such Injuries and Damages are involved in adventure travel such as this Field Trip and I appreciate that I may have to exercise extra care for my own person and for others around me in the face of such hazards. I further understand that on this Field Trip there may not be rescue or medical facilities or expertise necessary to deal with the Injuries and Damages to which I may be exposed. In consideration for my acceptance as a participant on this Field Trip, and the services and amenities to be provided by the Meeting Organizers in connection with the Field Trip, I confirm my understanding that:

- I have read any rules and conditions above applicable to the Field Trip made available to me; I will pay any costs and fees for the Field Trip; and I acknowledge my participation is at the discretion of the Organizers.
- The Field Trip officially begins and ends at the location(s) designated by the Meeting Organizers. The Field Trip does not include transportation, or transit to and from the Field Trip pick up and drop off location, and I am personally responsible for all risks associated with this travel.
- If I decide to leave early and not to complete the Field Trip as planned, I assume all risks inherent in my decision to leave and waive all liability arising from that decision. Likewise, if the Meeting Organizers have concluded the Field Trip, and I decide to go forward without the leader, I assume all risk inherent in my decision to go forward and waive all liability arising from that decision.
- This Agreement is intended to be as broad and inclusive as is permitted by law. If any provision or any part of any provision of this Agreement is held to be invalid or legally unenforceable for any reason, the remainder of this Agreement shall not be affected thereby and shall remain valid and fully enforceable.
- To the fullest extent allowed by law, I agree to WAIVE, DISCHARGE CLAIMS, AND RELEASE FROM LIABILITY the Society of Exploration Geophysicists and partnered societies, the field trip organizers, its officers, directors, employees, agents and leaders from any claims, damages, injuries while a participant on the field trip. I understand and intend that this assumption of risk and release is binding upon my heirs, executors, administrators and assigns, and include any minors accompanying me on the Field Trip.
- I have read, I understand, and I agree to the Field Trip Reservation.

Name: _____

Signed: _____

Date: _____

Outing Name: _____ Outing Date(s): _____

FIELD TRIP REGISTRATION

Field Trip Fee: **FREE OF CHARGE**

Name: _____

Address: _____

City: _____ State/Province: _____

Postal Code: _____ Country: _____

Email: _____ Phone: _____

REGISTRATION WILL NOT BE PROCESSED WITHOUT THE SIGNED WAIVER.

Email: alara@seg.org

I HAVE SIGNED THE FIELD TRIP WAIVER