

SAN DIEGO ASSOCIATION OF GEOLOGISTS

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SDAG MEETING ANNOUNCEMENT

Wednesday, May 15, 2024

Where: Marina Village

Catalina Room 1936 Quivira Way San Diego, CA 92109 When: 6:00 pm - Social Hour

7:00 pm - Dinner 8:00 pm - Program

Dinner: Mediterranean Buffet

Cost: \$ 60.00 Member; Non-Member \$65.00; Student \$ 30.00

Reservations: Make/Pay your reservation online through the SDAG website, by 10:00pm

Friday, May 10. (*Please note beginning January 2024 all meeting reservations will require on-line pre-payment due to venue costs, venue*

contracts, and loss of money due to no shows.)

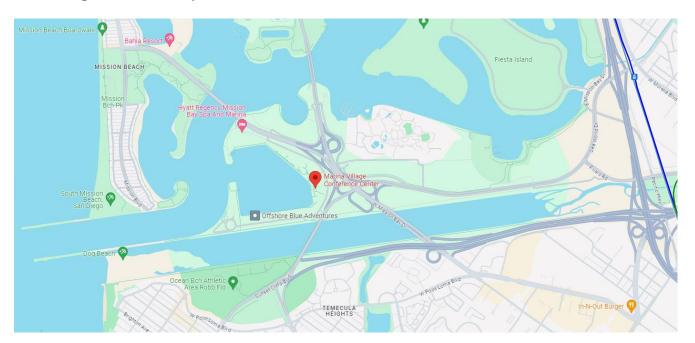
Speakers: Don Barrie & William Buckley

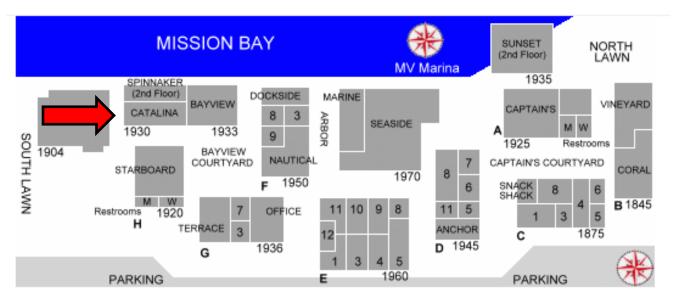
Talk Title: Exploring Iceland's Geological Wonders: From a Regional Perspective to a

Hiking Expedition

For the May Meeting, we return to the Catalina Room at Marina Village, for the speaking duo of Don Barrie & William Buckley to detail their overland trek of Iceland and the Mid-Atlantic Ridge. This will be more than a mere travelogue as they will take you on their cross-country hiking expedition for a close-up look at the still-erupting tectonic plate boundary and discuss Iceland's unique geology in detail. Please join us at the Walawender Bar and enjoy this exciting presentation.

Meeting Location Map:





Directions:

From I-5:

- 1. Exit Sea World Drive. Turn RIGHT if you have exited going south, turn LEFT if you have exited going north.
- 2. Continue on Sea World Drive for about 2 miles.
- 3. West Mission Bay Drive will be on your right, just beyond the lanes marked with arrows to Sea World's entrance.
- 4. Stay in the right-hand lane, continue around loop to right.
- 5. After loop, merge all the way to the furthest left lane.
- 6. At signal for Quivira Road, turn left.
- 7. Go left again immediately (Quivira Way).
- 8. Continue about a half mile.
- 9. Destination is large parking lot on the right-hand side, past Seaforth.

From I-8:

- 1. Take 8 West to the "Beaches" exit, past I-5. Exit to West Mission Bay Drive, turn right.
- 2 After the bridge ends, West Mission Bay Drive continues on about 100 yards UNDER the overpass, stay in right lanes and curve in the loop to the right. Do NOT continue straight on Ingraham.
- 3. After loop, merge all the way to the furthest left lane. At signal at Quivira Road, turn left.
- 4. Go left again immediately (Quivira Way).
- 5. Continue about a half mile, destination is large parking lot on the right-hand side, past Seaforth.



Speaker: Don Barrie San Diego Mesa College

Don Barrie is a geology professor (partially retired) at San Diego Mesa College. His passion is to make geoscience accessible to diverse audiences. Prior to joining the Mesa College faculty fulltime in 2004, he taught geology, physical geography, oceanography, and natural disasters at Mesa, Cuyamaca, Grossmont, and MiraCosta colleges and at San Diego State University. professional geologist (PG) and a certified engineering geologist (CEG), he has over 14 years of professional experience managing geotechnical and environmental investigations in the U.S. and abroad. Before becoming an educator, he worked as a geologist with AMEC Earth & Environmental where he managed field projects in southern California, Arizona, Hawaii, and Guam. He holds a B.S. in geology from Cal Poly Humboldt and an M.S. in geology from the New Mexico Institute of Mining and Technology. He currently serves as a board member at the Anza-Borrego Desert Natural History Association and regularly leads geologythemed trips to Iceland and New Zealand.



Speaker: William Buckley Geocon

Will Buckley is a dedicated geologist currently employed at Geocon, Inc. With over nine years of experience in the geotechnical industry, he specializes in conducting geological geotechnical investigations across a diverse range of projects. His particular interests involve hazard studies, where risks are evaluated and assessed for proposed and existing developments in areas prone to faults and landslides. He holds a B.S. degree in Geology from California State University. San Bernardino, and an M.S. degree in Geological Sciences from San Diego State University. Prior to his professional development as a geologist in the geotechnical industry, he cultivated a unique passion for understanding geological processes through undertaking backpacking expeditions in various climate systems. This passion has taken him across much of the western U.S. and beyond, providing firsthand experience with different geological and geomorphic processes.

<u>Abstract</u> Exploring Iceland's Geological Wonders: From a Regional Perspective to a Hiking Expedition

Don Barrie, San Diego Mesa College

Iceland is a large oceanic island developed at the intersection of two regional submarine structures, including the Mid-Atlantic Ridge and the Greenland-Iceland-Faeroes Ridge. The origin and evolution of Iceland since early Miocene time have largely been controlled by the localization of subaerial ridge segments atop the Iceland plume, followed by ridge migrations and jumps. Plate divergence occurs along the North, East, and West Volcanic Zones; oblique divergence occurs along the Reykjanes Volcanic Belt—the site of current eruptive activity near Mt. Fagradalsfjall and the town of Grindavik. Ridge-ridge transforms include the South Iceland Seismic Zone and the Tjörnes Fracture Zone. With its ~30 active volcanic systems, Iceland hosts a diverse array of volcanic landforms, including shield volcanoes, scoria/spatter cones, stratovolcanoes, calderas, cone/crater rows, rootless cones, and subglacial volcanic landforms. Icecap margins are currently experiencing rapid post-glacial isostatic rebound at rates of up to several cm/yr.

Will Buckley, Geocon

Geologic and geomorphic characteristics of Iceland were observed during a ~580 km (~360 mi) self-supported hiking expedition spanning from the southernmost to the northernmost points of the island by linking together a combination of hiking trails, road networks, and cross-country navigation. The route closely followed the tectonic plate boundary between the North American and Eurasian Plates, where the two plates are spreading at a rate of approximately 2 cm/yr. Starting in southern Iceland at Black Sand Beach in Vík, the route navigated across remnants of past eruptions which most notably included the 2010 volcanic events at Eyjafjallajökull. These volcanic events occurred over a span of several months and caused significant disruption to air travel across the western portion of Europe. The route then traversed near Mýrdalsjökull, a distinctive glacier that caps one of Iceland's largest active volcanoes known as Katla. Katla is considered to be one of Iceland's most hazardous volcanoes due to its frequent eruptions and potential for large-scale events, with its most recent major eruption having occurred in 1918. The route then led into Iceland's interior – a barren volcanic desert, also known as The Highlands, where water is typically scarce, vegetation is sparse, and is characterized by extensive lava fields, calderas, and geothermal activity. One of the notable features observed in The Highlands included a volcanic complex of nested calderas referred to as Askja, which last erupted in 1961. The route finally traverses through northern Iceland, a region characterized by mountains, fjords, kettle lakes, and coastal plains, and ultimately led to Iceland's northernmost point, the Hraunhafnartangi Lighthouse. Despite the challenges posed by severe weather conditions during this expedition, the journey ultimately confirms the unrivaled rewards gained from navigating across the captivating landscapes in Iceland, where interaction between geologic and geomorphic processes, both past and present, have shaped the island's topography and creates an exceptional environment for exploration and study.

2024 SDAG Field Trip Update, by VP Heather Reynolds

Exciting things are brewing for the upcoming SDAG Field Trip 2024! For anyone who hasn't already heard, our field trip this year will be exploring the San Andreas Fault tectonic history within the San Gabriel Mountains, near Wrightwood, CA.

- Dates: Last weekend of September from Friday 27th through Sunday 29th.
- We'll be staying at beautiful Table Mountain Campground, 10 minutes from Wrightwood (a hiking and ski resort town).
- Miles Kenney will be our primary field trip guide/speaker, who did his dissertation in this
 area when he was at the University of Oregon. He completed his undergrad at SDSU.
- Monte Marshall will give a little talk on a paper he's been working on, titled "The Evolution of Our Understanding of the San Andreas Fault."
- A geologic map specifically for this field trip is being prepared. We are planning to include it with the guidebook.
- We are actively figuring out our field trip stops.

Thanks, Heather

Call For Papers

Heather Reynolds and SDAG are inviting all who want to contribute their work to the Official Guidebook for the 2024 Field Trip to the Transverse Ranges in the Wrightwood / Valyermo area. Articles in all areas of geology-related disciplines and/or the cultural history of the area are welcome. Contact Heather for details at heath88@vt.edu

UPCOMING 2024 SDAG MEETINGS

*June 17, 2024	SDAG/SCGS joint meeting: Susan Hough on 1994 Northridge Earthquake. Meeting at El Adobe in San Juan Capistrano.
July 17, 2024	Chuck Houser. Meeting at Sunbelt Publications.
August 21, 2024	Dr. Pat Abbott with a "Kick-Ass Presentation": Upper Cretaceous Through Lower Eocene Strata in San Diego: Messages for the End-Cretaceous impact, Extinctions, and Paleoclimates. At the Bali Hai Hawaiian Village.
*September 27-29, 2024	SDAG Annual Field Trip to the Transverse Ranges. (No meeting this month)
October 16, 2024	Mike Ziegler on gravitation. Meeting at Sunbelt Publications.
*November 6, 2024	Joint Meeting with AEG Inland Empire Section / Jahn's Lecturer Cynthia Palomares in Fallbrook.
December 18, 2024	Traditional Holiday Celebration at the NAT with Tom Demere.

^{*}Departure in regularly scheduled meeting date (Highlights)

Job Announcement:

Past president Brian J. Olson is now actively looking to fill at least one Project Engineering Geologist Position for a very exciting and rapidly growing company: Energy Services West. The current position is advertised for a new office we are currently populating in Sandy Utah, here: https://careers-quanta.icims.com/jobs/3837/project-geologist/job?in_iframe=1, Options may exist in Spokane Washington, Scottsdale Arizona, Rancho Bernardo CA, Blacksburg Virginia and Las Vegas Nevada.

SDAG PUBLICATIONS

https://www.sandiegogeologists.org/Publications.html

JOB ANNOUNCEMENTS

https://www.sandiegogeologists.org/Jobs.html

2024 SDAG MEMBERSHIP

Renew or become a new SDAG Member - 2024 Member Dues are Due!

On-line Payment (\$25 Member; \$5 Student):

https://www.sandiegogeologists.org/MemberForm.pdf

Mail in or Bring FORM to Meeting:

https://www.sandiegogeologists.org/MemberForm.pdf

DID YOU KNOW THAT SDAG HAS A FACEBOOK PAGE?

Here is a link to the SDAG Facebook page:

https://www.facebook.com/sandiegogeologists.org

Photos from last month's meeting at Sunbelt Publications









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https://www.sandiegogeologists.org/Sponsors.html

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