

Hello SDAG Members!

I hope you are all happy and healthy!

Thanks so much to everyone who made it out to the meeting last month! We had a packed house at Casa Guadalajara to see Dave Kimbrough do his thing. It really is such a joy to watch him share geology with people. And to all of the contributors to Gordon's map, what luck to have so many of you come and share your experiences during those field seasons.

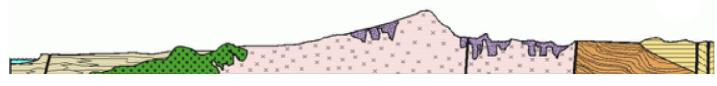
This month we welcome Candace Kohl to the SDAG stage!

She is a chemist who got her undergraduate degree in Minnesota before achieving a PhD in Cosmochemistry at UCSD. She has been an integral part of meteorological study since, working on craters in Arizona, Australia, Greenland, and Antarctica. To top all of that of, Minor Planet 4899 was designated "Candace" in honor of Dr. Kohl.

Her talk is titled "Geology Beyond the Earth: Rocks From Space" and we are happy to have her. She will also have hand samples. Looking forward to seeing everybody!

Lastly, Please fill out and send in your membership forms if you haven't already (and sponsorship forms, too).

Cheers, Luke Weidman President, 2023





# WEDNESDAY SEPTEMBER 20th

- 6:00 pm Happy Hour
- 7:00 pm Dinner
- 7:45 pm Announcemnets
- 8:00 pm Program/Questions
- · 9:00 pm Meeting Adjourns

## REGISTER

\$40 Members

\$45 Non-members

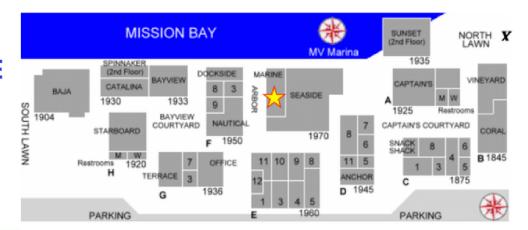
\$30 Students

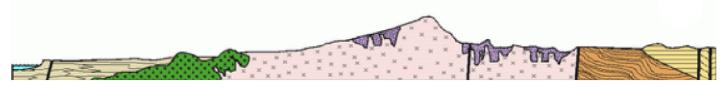
## **DEADLINE: TUESDAY 9/19 12 PM**

Please help us by submitting your RSVP/CANCEL early so we can provide our venues the best estimate possible. Also, please keep in mind that we still have to pay for no shows.

# MARINA VILLAGE Marine Room

1936 Quivira Way San Diego, CA.









#### SPEAKER:

#### Cadance Kohl, Ph.D.

Independent Research Professional International Volunteer: Promoting Women in Space

READ MORE ABOUT OUR SPEAKER: DEL MAR TIMES 2009 ARTICLE CLICK HERE

#### **BIOGRAPHY:**

Dr. Candace Kohl received a BA in chemistry from Carleton College in Northfield Minnesota in 1969 and a PhD in cosmochemistry from UCSD in 1975. Her experimental work centered on measurements of cosmic ray produced radioactivity in lunar material and meteorites to investigate the constancy of the solar cosmic rays, the rates and extents of various processes on the lunar surface, and the exposure histories of meteorites. Her work lead directly to the extension of these techniques to date terrestrial landforms including obtaining the age of formation of Meteor Crater in Arizona. This technique has proved to be an important tool for the study of geomorphology and investigations of climate change. She has performed fieldwork on many of the impact structures in Australia, spent a field season hunting for meteorites on the Antarctic ice and a field season on top of the Greenland ice cap helping to obtain a 10,000-footlong ice core.

Candace has served on a number of committees for the Meteoritical Society. She is active in science outreach, is on the board of several fund-raising organizations for science scholarships and she volunteers with international science efforts and organizations promoting women in science.

Candace has been honored by the designation of Minor Planet 4899 Candace.





## Title: Geology Beyond the Earth: Rocks from Space

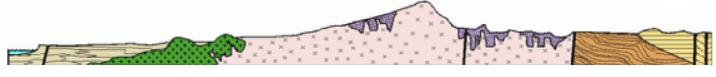
Meteorites and impact events have played a crucial role in forming the earth and solar system as we know it. Except for some lunar rocks and soil, and a few other bits of material meeorites are the only samples we have in hand to study the other bodies of our planetary system. All the other information we have is from some form of remote sensing.

Meteorites are the oldest solid material we have from the formation of the solar system and tell the story of those early days in ways that no terrestrial rock can. Some of the mineral grains in these samples predate the ignition of our sun as a star and were actually formed in other stellar systems. Meteorite impact events on earth have had a huge effect on its geologic and biologic history and are still a hazard. Was the moon formed by a giant impact early in the solar system history? Was the water we have on earth brought in by meteorites? How about the earliest organic molecules that could have led to life? Were the dinosaurs killed off by an impact?

Most meteorites are from the asteroid belt and tell us about conditions in this region of space, but a few special ones are from the moon and from Mars. Since we haven't brought back any Martian samples yet, these rocks can provide a critical "ground truth" for the other observations of that planet.

Meteorites fall evenly around the world. The process of hunting for them, studying them and investigating the impact craters they produce is an exciting international endeavor.

This talk will give a general overview of meteorites and meteorite studies and there will be a number of meteorites on display for close inspection. Bring questions and curiosity. In addition, I will talk a bit about current and future sample return missions. For example, 4 days from the date of this talk (on September 24, 2023) the OSIRIS-Rex mission is due to return its collected sample from asteroid Bennu.







## MARK YOUR CALENDAR

**OCTOBER** is **FIELDTRIP MONTH** - YAY!!! No meeting this month.

Our **NEXT MEETING** will be **Wed. NOV 15** 

## **EXECUTIVE COMMITTEE**

PRESIDENT: Luke Weidman.
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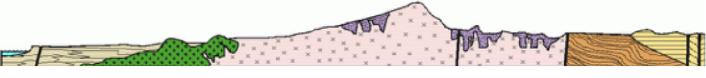
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PLEASE SEND YOUR PHOTOS! SHARE YOUR ADVENTURES!





## 2023 MEMBERSHIPS



#### PLEASE RENEW YOUR MEMBERSHIPS!

We ask that you take the time to renew your membership for 2023 and if you have not renewed it in a while, this is a great time to resume!

We have made it even easier for you to renew! - now you can fill the form on our website and submit payment electronically! So, if you are anything like me (hardly ever make it to the mailbox) this just makes it so convenient!

If you prefer to to renew with a check, there are 2 ways:

- 1. We will have forms at the check in table at our next meeting.
- 2. You can download the form using the link below and mail it or bring it to the meeting.

Your membership dues help fund scholarships, publications and, on occasion, cover some of the cost of the meetings. Your contributions are so important to us!

ELECTRONIC MEMBERSHIP RENEWAL



DOWNLOAD PDF FORM (





### RESEARCH TOOL

A comprehensive listing of all papers published by SDAG, whether as annual field trip guidebooks or special publications, is available on our website. Entries are sorted by primary author, or chronologically by date of publication, starting with our first guidebook in 1972 to Southeast San Diego, as far out as Calico and the Mojave Desert in 2018, and finally up to San Diego's Back Country in 2022-23.

The papers can be accessed or downloaded as .pdf files. They are fully searchable in Adobe Reader or Acrobat, so if you are researching a topic, "oikocryst" for example, you can search for that keyword. This listing will be updated as new books are published. Thanks to Greg Cranham and Hargis + Associates, Inc., for making this possible. See the links below:

### **SEARCH BY AUTHOR**

#### SEARCH CHRONOLOGICALLY



## **CALL FOR ARTICLES**

SDAG invites members to submit articles on their current research or an interesting project they are working on for publication in the monthly newsletter.

The article should be no more than 1 page in length. Photos are welcomed; too. Please submit articles to the SDAG secretary via email.





## SDAG PUBLICATIONS

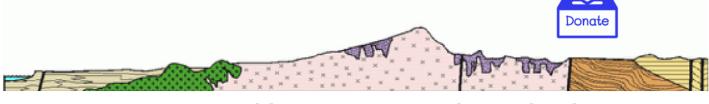
We many wonderful publications available for sale! Please visit the **SDAG WEBSITE** for more details.

## **SPONSORSHIPS**

San Diego Geological Society, Inc. (SDGS), is a public benefit 501(c)3 nonprofit educational corporation. You donations are tax deductible.

Your Sponsorship will include a complimentary SDAG membership, and delivery of the monthly SDAG newsletter and announcements to the email address given.

Your donation will further the SDGS mission to promote geology and related fields in the greater San Diego region, operating through the San Diego Association of Geologists (SDAG), a committee of SDGS. To achieve our primary educational objective, we organize frequent field trips and maintain a program of monthly meetings featuring speakers on current geological topics. We also publish field trip guidebooks and other publications related to geology and natural history. We encourage scholarship and research by awarding scholarships from the elementary through graduate levels.













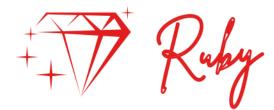








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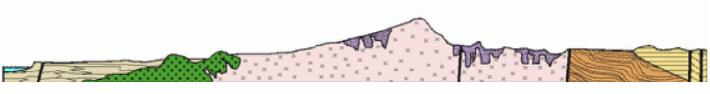
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