

Colorado Scientific Society

*In pursuit of the promotion of knowledge,
understanding of science,
and its application to human needs.*

October Presentation

FAMILY NIGHT

THE EXPLORATION OF MARS

Bruce Jakosky

Department of Geological Sciences and
Laboratory for Atmospheric and Space Physics
University of Colorado at Boulder

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Tuesday October 16, 1997

Reception in Geology Museum: 6:00 p.m.; Dinner: 6:30 p.m.; Talk: 8:00 p.m.
In Metals Hall, Green Center, Colorado School of Mines, Golden, Colorado

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May Speakers' Abstracts

THE EXPLORATION OF MARS

Bruce Jakosky

**Department of Geological Sciences and Laboratory for Atmospheric and Space Physics
University of Colorado at Boulder**

Our nation has recently embarked on a program of exploring the planet Mars with spacecraft during the coming decade. The beginning of this exploration took place in 1997 with the successful operation of the Pathfinder lander and rover and the Mars Global Surveyor orbiting spacecraft. The goal of these missions is to search for evidence that would tell us whether life ever existed on Mars or might exist today.

Although there is some evidence that life might have existed on Mars, found within meteorites that came from the martian surface, that evidence is at best ambiguous and uncertain. The missions over the next decade will culminate in the return to Earth of rocks from the martian surface, and their analysis in laboratories here for evidence pertaining to life.

The question of whether there is life on Mars, and the broader question of whether there is life elsewhere in the universe, is one that is of immense interest to everybody. It touches the core of how we view ourselves as individuals and as a society. As with the issue four hundred years ago of whether the Earth goes around the Sun or vice versa, answering this question will help us to understand our place in the universe; this is the case even though the answer may not change our day-to-day behavior.

Should we continue this exploration? Our ongoing exploration of ourselves, the solar system, and the universe, is one of the hallmarks of our existence as a society. As a society, we all remember the last time in history that we did not search out the world around us to understand it better—that was the middle ages, also known as the dark ages, a period whose ending we celebrate as the Renaissance!

I will discuss the role of exploration in our society, the scientific issues surrounding the search for life elsewhere, and the recent and ongoing exploration of Mars.

Family Night--A visit to the Red Planet

On Thursday, October 16, the Colorado Scientific Society will offer both an out-of-this-world dinner and an "out-of-this-world" speaker. Dr. Bruce Jakosky from CU will take us on a voyage to Mars—the Red Planet. Dr. Jakosky is an expert on the geology and remote sensing of planetary surfaces and is currently involved with the Mars Global Surveyor mission. A very intriguing part of Dr. Jakosky's many interests lies in his search for extraterrestrial life, and next year Cambridge University Press will publish his book, entitled "The search for life on other planets." In his talk, as Dr. Jakosky has conveyed to me he will discuss what the latest Mars mission "means scientifically, how it fits into the broader picture of Mars exploration and the search for life, and what it means to explore." It will be a fascinating presentation for young and old alike and I hope that as many of you as possible will be able to attend; a signup form for the dinner is on the next page.

Speaking of young people, I have a special request. I would like to see this Family Night be a truly family affair, with as many kids (and grandkids) as possible attending. I confess to having an ulterior motive for making this request: my own son, Kris, who is 12 and a budding scientist, refuses to come unless he knows there will be other kids his age there too! So, mark October 16 on your calendar and get ready for an unforgettable visit to Mars.

Karl Kellogg, President

FAMILY NIGHT DINNER SIGNUP FORM

Place: Colorado School of Mines Geology Museum

Time: Thursday, October 16, 1997

6:00 p.m. drinks; 6:30 p.m. dinner

8:00 p.m. guest presentation, Metals Hall, Green Center, CSM campus

Menu: Caesar Salad, 2 types of pasta, Lasagna with 2 types of sauces (one meatless), Italian vegetables, garlic bread, Cappuccino cake, iced tea or coffee. Vegetarian menu available on request.

Cost per person: \$17.00 (includes beer, wine, soft drinks, and all gratuities)

-----**Detach here**-----

Please send this portion to Karl Kellogg by October 6*. Make checks payable to the Colorado Scientific Society

Name _____
Number of people in party _____ **Total amount remitted** _____
Telephone (and/or e-mail) _____

* Colorado Scientific Society
P.O. Box 150495
Lakewood, CO 80215-0495

or: USGS, Mail Stop 913
Federal Center
Lakewood, CO 80225

1997 Student Night

On Tuesday, November 4, 1997, the Colorado Scientific Society will host a special night highlighting geoscience work of students from Front Range colleges and universities. The program will consist of five 15-minute talks and will be held on the campus of the Colorado School of Mines. Cash prizes ranging from \$200 to \$50 will be given to all students chosen to participate. All participants will also receive honorary annual membership in the Society. This student night provides a fine opportunity for students to showcase their research before a knowledgeable yet friendly audience. Students are welcome to repeat talks from the GSA national meeting of the preceding week.

Interested students should send abstracts to Mark Hudson (U.S. Geological Survey, MS 913, Box 25046, Denver, CO 80225, mhudson@usgs.gov, 303-236-7446) by October 1, 1997. Email submissions are preferred. Please limit abstracts to 400 words and include a complete return address, phone number, and email address. Submitted abstracts will be ranked by a panel of Colorado Scientific Society members and the top five candidates will be notified by October 8, 1997.

Earth Science Meetings

Colorado Scientific Society's regular meetings are held the 2nd Tuesday of the month (unless otherwise advertised). Social time begins at 7:00 p.m. and program is at 7:30 p.m. Contact Karl Kellogg at 236-1305 for information.

Denver International Petroleum Society (DIPS) meets the 2nd Friday of each month at the Wynkoop Brewing Co., 18th and Wynkoop Streets. Reception begins at 11:30 a.m., luncheon at 12 p.m., program at 12:30 p.m. Make reservations (required) by calling GRI Information Center Office, (303) 575-9030. Reservations accepted after 8 a.m. on Friday until 10:30 a.m. on Wednesday prior to the meeting. Cancellations accepted until 11:00 am Wednesday prior to the meeting. Cost: \$13 for lunch; talk only is available for \$2 (make checks payable to "DIPS"). Contact Keith Murray at (303) 986-8554 for information.

Denver Region Exploration Geologists' Society (DREGS) meets in the Mutual Consolidated Water Building, 12700 West 27th Avenue, Lakewood. Social hour 6:00-7:00 p.m. Technical presentation at 7:00 p.m. Meetings are normally scheduled for the first Monday of each month. For information contact Jim Cappa, 866-2611.

Denver Mining Club meets Thursdays from 11:30 a.m. to 1:00 p.m. at the Denver Federal Center, Building 41 Cafeteria (south entrance) in Lakewood. For more information contact Dick Beach at (303) 986-6535.

October 9 π Tim Buxton, CERLA Project Leader, US Forest Service, "Bonanza Mining District: History and Rehabilitation"

October 16 π Michael Wilson, Exploration Geologist, "Correlation of El Niño Events with Profit Cycles in the U.S. Natural Gas Industry: Mid-1997 Update"

October 23 π Don Sherwood, Attorney-at-Law, Denver, "Discovery of as Valuable Mineral Deposit: The Latest Word"

October 30 π To be announced

November 6 π Matt Sares, Program Geologist, Colorado Geological Survey, "US Forest Service Abandoned Mine Land Inventory Background, Progress, and Preliminary Findings"

Colorado School of Mines Van Tuyl Lectures

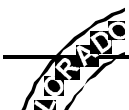
For information call the Dept. of Geology at 273-3800.

Colorado State University Geology Lectures

All presentations are at 4:00 p.m. in room NR 316, with the exception of the AAPG Distinguished Lecture, which will be at NOON. For information, contact Eric Erslev at (970) 491-6375.

Museums, Internet, News

Friends of Dinosaur Ridge...for information call 697-DINO. Visitors' Center is located at 16831 West Alameda Parkway (north side of Alameda, just west of the C-470 overpass). Open 9 a.m. to 4 p.m. weekdays and weekends. Fireside chats are held at the Morrison Town Hall, 110 Stone Street in Morrison starting at 7 p.m.



Morrison Natural History Museum...is open 1-4 p.m., Wednesday through Sunday. The Museum is located on State Highway 8, _ mile south of Morrison. Fireside chats are cosponsored periodically by Friends of Dinosaur Ridge (see above).

Women in Mining...the local chapter and the Colorado Section of SME/GEM Committee are helping Denver's Young Americans Bank and Education Foundation refurbish their science and nature exhibit in Cherry Creek. The bank hosts "Young AmeriTown," a bank learning experience for top students from the Metro area. Annually, more than 38,000 students pass through the exhibit along with more than 2,000 teachers. For more information, contact Guy Johnson at (303) 969-0365 or GPJ222@aol.com.

Colorado Mining Exhibit...is soliciting funds to help finance the 1997 mining and minerals education exhibit at the Taste of Colorado. Last year more than 40,000 people toured the 40ft x 80ft tent at the Taste. For more information, contact Guy Johnson.

Geological Society of America Annual Meeting

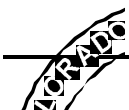
The 109th Annual Meeting of the Geological Society of America will be held October 20-23 in Salt Lake City. This year's theme is "Global Connections." GSA calls this the meeting for everyone interested in the Earth System. There will be sessions and seminars on research and applications in the geosciences, education, and the environment. For information contact: GSA Meetings Department, P.O. Box 9140, Boulder, 80301, (303) 447-2020 or 1-800-472-1988, FAX (303) 447-0648, email meetings@geosociety.org. This year's meeting will be held at the Salt Palace Convention Center.

Rocky Mountain Association of Geologists

The association has announced the publication of "Geologic History of the Colorado Front Range" by Dudley W. Bolyard and Stephen A. Sonnenberg. This book commemorates the 75th Anniversary of the RMAG. It includes 14 papers that chronologically trace the tectonic history of the Colorado Front Range from Precambrian through Late Cenozoic time. The cost is \$37.56 if picked up at the RMAG office at 820 16th Street, Suite 505, Denver 80202, (303) 573-8621.

The Small Mine Operator in Colorado Seminar

Colorado Geological Survey is sponsoring this one-day seminar on October 21, 1997, at the Green Center, Colorado School of Mines. Contact Lucinda Tripplett at 866-3520. The cost is \$20.



Colorado Scientific Society Officers, Councilors, and Chairpersons

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