

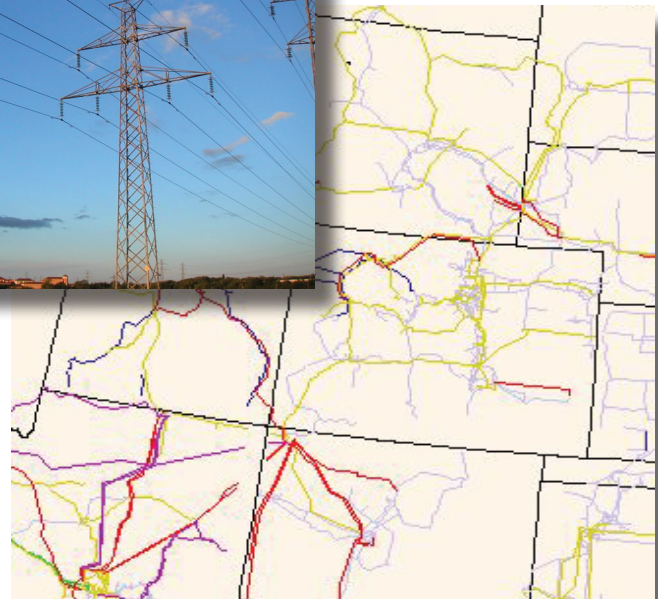
Colorado Scientific Society

*The objective of the Society is to promote
the knowledge and understanding of Earth science,
and its application to human needs*

47th Annual S.F. Emmons Lecture

The Future of Electricity: Future Trends in Electrical Delivery, Demand and Generation Systems

*Tom Plant, Director,
State of Colorado Governor's Energy Office*



Thursday, January 22, 2009

Colorado School of Mines—Green Center, Metals Hall
924 16th St. (between Illinois and Arapahoe), Golden, CO
Social half-hour—7:30 p.m. Meeting time—8:00 p.m.

The Future of Electricity: Future Trends in Electrical Delivery, Demand and Generation Systems



By Tom Plant, Director, State of Colorado Governor's Energy Office



This month's talk is the 47th annual S.F. Emmons Lecture of the Colorado Scientific Society. The first Emmons Lecture was given in 1962, in honor of Samuel Franklin Emmons, founder of the Colorado Scientific Society. This annual lecture is a highlight of the year's program and has in the past featured speakers who are recognized nationally or internationally as being in the forefront of research in some important facet of Earth science.

This year's S.F. Emmons Lecture will be given by Tom Plant, Director of the State of Colorado Governor's Energy Office. The focus of Tom's talk will be about the future of electricity. Tom will address the changing nature of our electrical delivery, demand and generation systems, and the resulting necessary changes in our electricity infrastructure. Tom will review some of the current developments at the State and Federal level to push us toward the envisioned changes. Tom's discussion of the future of electricity is very timely due to the new administration's inauguration two days prior to the talk and the debate that will be raging throughout January on the economic stimulus bill, as well as the potential re-opening and authorization of the Energy Act of 2005.

Tom Plant is the Director of the State of Colorado Governor's Energy Office. In 2007, Colorado Governor Bill Ritter, Jr., re-created the Governor's Office of Energy Management and Conservation (originally created in 1977 to promote energy conservation in Colorado) as the Governor's Energy Office (GEO). The GEO's mission is to lead Colorado to a "New Energy Economy" by advancing energy efficiency and renewable, clean energy resources. The GEO works with communities, utilities, private and public organizations, and individuals to promote renewable energy such as wind, solar, and geothermal, and energy-efficient technologies in commercial and residential buildings. The New Energy Economy embraces a broad mission to meet the goals of expanding renewable and clean energy resources and opportunities for the state's economy, environment, and energy independence.



President's Message *by Don Sweetkind*

It is an honor to be your president for 2009. We have a number of exciting events in the works for this year, beginning with January's Emmons lecture featuring Tom Plant, the Director of the Governor's Energy Office. We are tentatively planning a one-day field trip to Cripple Creek in May, and a two-day symposium and field trip for the fall. Plus, we already have some interesting talks lined up for our monthly meetings.

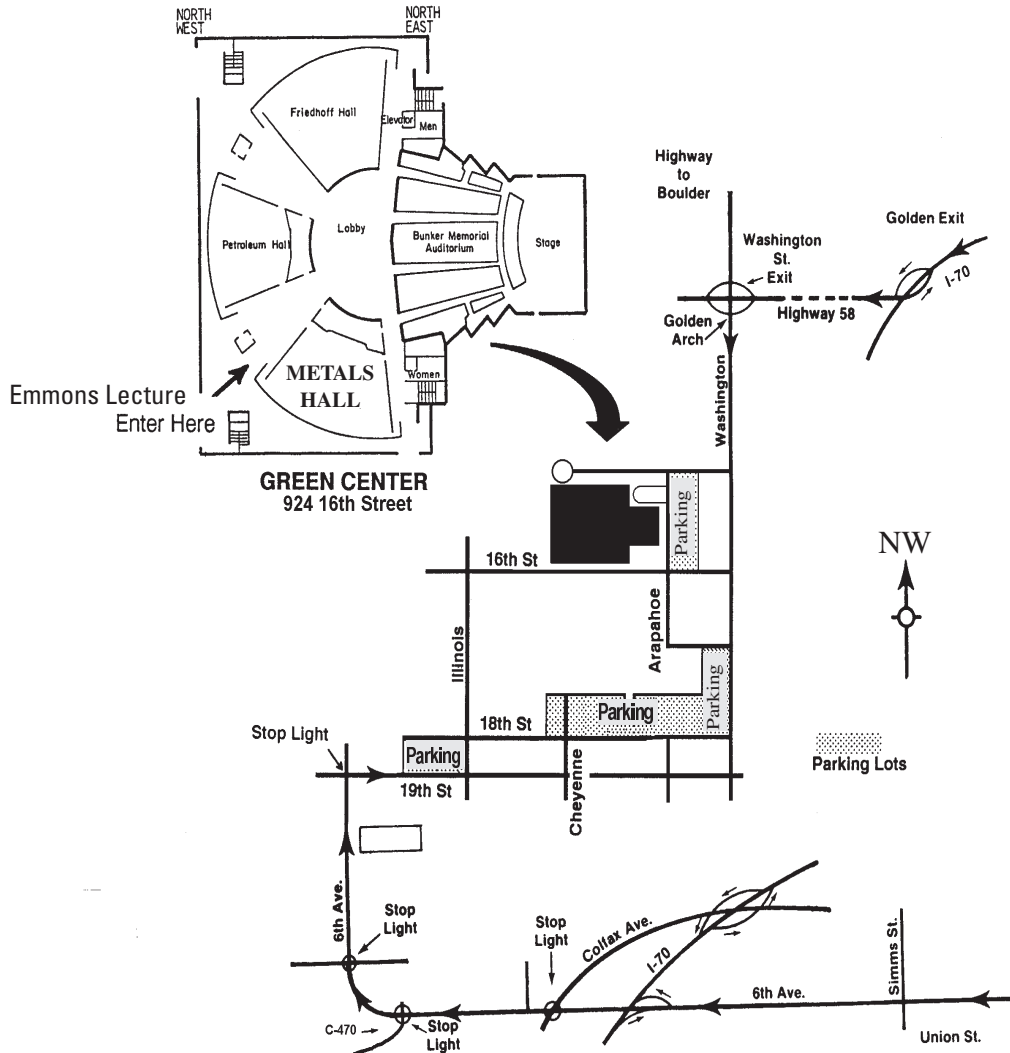
There will be a few changes this year; most notably we will be moving the location of our evening talks to the geology building on the Colorado School of Mines (CSM) campus. CSM has extended a gracious welcome to us and beginning in February this new "home" will allow us to cut our fixed costs. In addition, we hope the new room will be a bit more conducive to socialization than the auditorium seating at the Mountaineering Center. More details in the February newsletter!

The Colorado Scientific Society continues to function as a result of the time donated by volunteers. This spring there are opportunities to

help the Society in the following areas: you can be a part of the Program Committee and help line up speakers for our monthly meetings; or, join fellow member Chuck Weisenberg and assist him as a judge at the State science fair competition. The History Committee could use help scanning Society proceedings and historical documents, and, for some truly dedicated person, we could really use a new Treasurer so I can stop wearing two hats. The names and contact information for people currently running any of these activities (and more) are given on the last page of this newsletter and on our web site. I encourage you to get involved and give a little bit of your time and energy to this Society.



Directions to GREEN CENTER, Colorado School of Mines Campus, Golden, CO 80401



I-70 West

Take I-70 west to EXIT 265, the Highway 58/Golden exit. Go west on HIGHWAY 58 for 6 miles to the WASHINGTON street exit. Turn left (south) at the stoplight onto WASHINGTON Street. Drive about 1 miles (passing under the arch and thru downtown Golden) to 16th Street. Turn right (west) onto 16th Street. Go one block to ARAPAHOE Street. The **Green Center** will be on the right

6th Ave West

Take 6th Ave west. About 2 miles past the UNION/SIMMS exit will be the 6th AVE/I-70/COLFAX interchange. Starting with the stoplight at this interchange, go to the 4th stoplight which will be the Golden Exit. Turn right (east) onto 19th Street. Proceed on 19th Street to Washington (4 blocks past the first stoplight at 19th and Illinois). Turn left onto Washington. Go three blocks to 16th Street. Turn left (west) onto 16th Street. Go one block to ARAPAHOE Street. The **Green Center** will be on the right.

PARKING

Parking is available in the lot between 15th & 16th on Arapahoe OR by turning left (south) at Arapahoe going to the lot at 17th & Washington 17th & Washington

Cool Websites:

The Genographic Project:

<https://genographic.nationalgeographic.com/genographic/participate.html>

You are only \$100 and a cheek swab away from the anthropological story of your direct maternal or paternal ancestors—where they lived and how they migrated around the world many thousands of years ago.

Longhopes Donkey Shelter:

<http://www.longhopes.org/index.html>

Are you a ragged-ass miner with a piece of land in need of a burro or donkey friend? Go here to find rescued geldings and jennets looking for their “forever home.”

LIFE magazine photo archive:

<http://images.google.com/hosted/life>

Search millions of photographs from the LIFE photo archive, stretching from the 1750s to today. Most were never published and are now available for the first time through the joint work of LIFE and Google.

WANTED:

newsletter items. Submit newsy notes, photos, personal updates, etc., to: Lisa Rukstales, lrukstales@usgs.gov Thanks!

RareEarthtones:

<http://www.rareearthtones.org/ringtones/send.html>

Download to your cell phone a ringtone of a rare or endangered species such as Bell’s vireo, Orca, Rio Grande leopard frog, American pika, etc...

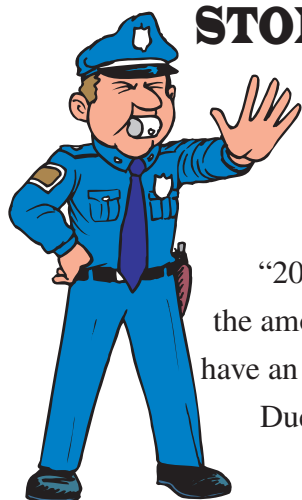
GO DIGITAL; \$AVE MONEY!!

Due to the cost of postage (upward of \$600 yearly), the CSS newsletter is going completely electronic if you have an e-mail address.

In the past, you could receive both a paper copy and a digital version of the newsletter. This practice has been discontinued. If you are still receiving a paper copy of the newsletter and YOU HAVE AN E-MAIL ADDRESS, please GO ELECTRONIC and help the CSS lower its overhead!

Send your e-mail address to Erik Oerter, our CSS database manager, at erik.oerter@state.co.us and he will include you on the electronic newsletter distribution list. Added bonus: the PDF version of the newsletter is in **COLOR**.

A big THANK YOU to those of you who submitted your email address to us in the last month.



STOP!! Time to pay your yearly dues. See page 6 for membership form or pay via PayPal by going to: www.coloscisoc.org/membership and click on the blue text at right that says, “Electronically with PayPal.”

On the subsequent page, click on one of the orange “Buy Now” buttons at left. This will take you to the PayPal website. Fill in the information at top, such as, “2009 Membership dues” and enter the amount. Click update total and it will show the amount you wish to pay. You can pay with your credit card or login (if you already have an account) and pay via other options. It’s easy-peasy and will get the Delinquent Dues cops off of your back. You can also donate to the memorial funds via PayPal. Help support the CSS and its many good causes. Thanks!!

A View through the Brown Cloud

By Lisa Ramirez Rukstales



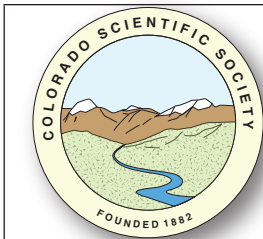
Happy New Year!! It's 2009, so try to remember that as you write checks with the wrong year on them.

Trying to get back into the swing of things today, I was surfing the web hoping to recall what I learned on a 1983 field trip to the blueschist on Mt. Hamilton, San Jose, Calif., when I came upon a paper written by a San Jose State University alum that was dedicated to the memory of my mineralogy professor, Marshall Maddock. That really took me back. "Dr. Maddock" was revered by all the students, but he was extra special to me. He wasn't a large man, a loud person, or a "call me Doctor know-it-all" type of personality, but he packed a mean punch with his quiet and thoughtful ways. First of all, he was teaching the "weed-out" class, Mineralogy 1A, and that meant eating, studying, and sleeping all things mineral. On the weekends he took us on "Maddock's Death Marches" to remote mines and mineral localities, but even though we complained about our sore feet, backs, and legs, we always came home with boxes full of specimens and heads stuffed with knowledge. He was in charge of the geology department's colloquium and when he'd look you in the eye and ask if you were going to attend that day you couldn't help but say yes. After awhile I found that I was studying so hard not only because I loved mineralogy, but because I wanted to do well so he would be proud of me and look at me that special way and not with eyes of disappointment.

I find myself wondering if professors still have this affect on their students, or is the Y2K generation of students replacing their mortal geology-Gods with cell phones, iPods, and text messaging. Are professors considered nothing more than annoying talking heads when viewed by the "I can find the information with Google so I don't need to come to class" Generation Z digital natives? The student/teacher relationship has gone seriously astray and the results can be seen by the declining wealth and health of non-profit institutions such as the Colorado Scientific Society. Membership numbers continue to decline. How can we entice students to join? How can we get them to put down that mouse and pick up that hammer? Send me your suggestions. Now...put down that mouse and pick up a good book!

Future geologists?
Students on the Colorado
Scientific Society, N. Never
Summer Range fall fieldtrip.
Generous donations to the
Pillmore Fund made their
participation possible.
(Photograph by Rune Hartkopf,
September 7, 2008)





DUES & FUNDS CONTRIBUTIONS COLORADO SCIENTIFIC SOCIETY

(Last Name) (First Name) (Initial) (current email address)

DUES: Dues are for the calendar year (January-December)

Regular Members (\$20, CO Front Range) _____

Corresponding Members (\$10) _____

Student Members (\$5, enrolled in college) _____

MEMORIAL FUNDS: These funds support earth-science research grants to graduate students throughout the nation. If your contribution is not specified, it will be distributed equally among the funds:

(A) Ogden Tweto Memorial Fund _____

(B) Steven Oriel Memorial Fund _____

(C) Edwin Eckel Memorial Fund _____

(D) Bill Pierce-Heart Mountain Fund _____

(E) George Snyder Memorial Fund _____

(F) Chuck Pillmore Memorial Fund _____

This contribution is made in the memory of: _____

ENDOWMENT FUND: This fund is used to support the Society's monthly meetings and newsletter, field trips, family night, annual Emmons Lecture, and special activities.

TOTAL CONTRIBUTIONS (DUES AND FUNDS):

Please make your checks payable to the Colorado Scientific Society
Send this form & your check to:

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



Earth Science Meetings and Talks

Newsletter items must be received by the 25th of each month.



Colorado Scientific Society's regular meetings are held the 3rd Thursday of the month at the Colorado School of Mines Geology Building in Golden (unless otherwise advertised). Social time begins at 6:30 p.m. and talks start at 7:00 p.m. For more information, contact Don Sweetkind, at 303-236-1828, dsweetkind@usgs.gov

Café Scientifique Wynkoop Brewery, evening science talks at 6:30. Free, except for beer. <http://www.cafescolorado.org>

Colorado School of Mines, Van Tuyl Lectures Thursdays from 4–5 p.m. in Berthoud Hall room 241. **Jan. 29**—Tim Collett, USGS, “Gas Hydrates the world’s largest energy resource—but should I care!” <http://www.mines.edu/academic/geology>

Colorado State University, Dept of Geosciences, Rm 320 Warner College of Natural Resources Bldg., Mondays, 4:00 pm. 970-491-5661. **Feb. 9**—Suzanne Anderson, INSTAAR, “Boulder Creek Critical Zone Observatory: A new approach to understanding the Earth’s surface.” <http://welcome.warnercnr.colostate.edu/geo-training/index.php>

DIPS (Denver Intl. Petroleum Society) Regular meetings held 2nd Friday of the month at Wynkoop Brewing Company, 1634 18th Street, Denver. Gather at 11:30 am; Lunch served at Noon; Presentation at 12:30. Lunch price: \$15.00 for members and \$18 for non-members. For reservations contact John Gold, jgold@petrohunt.com

Denver Mining Club meets every Monday at the Littleton Country Buffet near Bowles and Wadsworth (8100 W. Crestline Ave., in the shopping center) 11:30–1:00. Purchase of lunch required. **Jan. 12**—Genevieve Young, Petroleum Geologist and CO₂ Sequestration Project Manager, Colorado Geological Survey, “Colorado Petroleum.” **Jan. 26**—Jurgen Brune, Director, Spokane Research Laboratory, NIOSH, “Overview of the National Institute of Occupational Safety & Health.” <http://www.denverminingclub.org>

Denver Museum of Nature and Science **Jan. 29**—7:00 p.m., Melting Away and on the Rise: Changes in the Arctic Ice Cover, by Konrad Steffen, CIRES and Univ. of Colo. at Boulder. Ricketson Auditorium; use Ricketson evening entrance. \$12 member, \$15 non-member. <http://www.dmns.org/main/en/General/Education/AdultProgram/Lectures>

Denver Region Exploration Geologists’ Society (DREGS) meets in the Mutual Consolidated Water Building, 12700 West 27th Avenue, Lakewood. Social 6:30–7:00 p.m. Presentation at 7:00 p.m. Meetings are normally scheduled for the first Monday of each month. For information contact Jim Piper, (303) 932-0137, or the website <http://www.dregs.org>

Denver Well Logging Society (DWLS) meets on the third Tuesday of each month, Sept. through May. Lunch and a technical talk at the Wynkoop Brewery begins at 11:20 a.m., 18th and Wynkoop Sts. in Denver. Call Sarah Voight at 720-946-1374 by prior Thursday for reservations. **Jan. 20**—Max Peeters, PETRO Peeters b.v., “A quick method to compare shaly sand evaluations and obtain input parameters.” <http://dwls.spwla.org>

Friends of Dinosaur Ridge <http://www.dinoridge.org>. Admission is free, but donations are welcome. 16831 W. Alameda Parkway. Talks at 7:00 p.m. Visitor Center (303) 697-3466 or contact Beth Simmons at cloverknoll@comcast.net for info.

Rocky Mountain Association of Geologists (RMAG) Reception at 11:30, lunch at noon, talk at 12:20. Reservations by recording at 303-623-5396 until 10:30 a.m., prior Wed. Luncheon \$30. Talk only (no res.)—\$5. Location: Marriott City Center, 17th & California. **Jan. 16**—Pete Stark, “The future of natural gas.” Upcoming: 2009 RMAG Structural Short Course by Don Stone, **Jan. 27**, 2009, 8:00 a.m., Review and Interpretation of Rocky Mountain Foreland Structures: Exploring Descriptive, Kinematic and Dynamic Analyses with Simple Tools, Models and Methodologies, and Avoiding Common Pitfalls. <http://www.rmagg.org/events>.

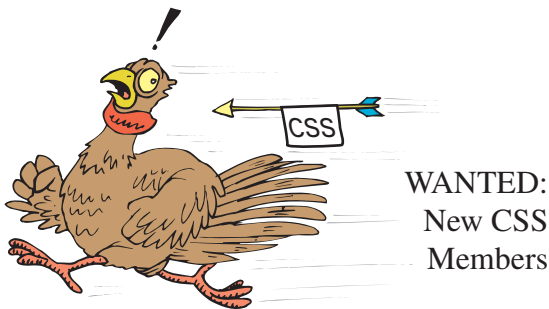
Rocky Mountain SEPM 11:30 Reception, lunch at noon, speaker at 12:30. Reservations: luncheons@rmssepm.org, before noon of preceding Friday. \$20.00 lunch, \$3 talk only. Wynkoop Brewing Company, 1634 18th St., Denver. **Jan. 27**—Lyn Canter, Orion Skinner, Mark Sonnenfeld, “Facies and Mechanical Stratigraphy of the Middle Bakken, Mountrail County, North Dakota.” <http://www.rmssepm.org/NewFiles/lunch.html>

USGS Geologic Division Colloquium Thursdays, 1:30, Foord Room, Building 20, Denver Federal Center. For more information contact: Peter J. Modreski, USGS, Denver, tel. 303-202-4766, fax 303-202-4767, email pmodreski@usgs.gov

Univ. of Colorado, Boulder, Geol. Sciences Colloquium Weds., 4:00 p.m., Rm. 380. Refreshments at 3:30 p.m. on the 3rd floor. <http://www.colorado.edu/GeolSci>

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

<http://www.coloscisoc.org>



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2009–2011:

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