



February 2004

Los Angeles Basin Geological Society Newsletter

February Meeting: Robert E. Crippen – NASA

**Will Speak on The First High-Resolution Near-Global Digital Elevation Model:
Applications of the Shuttle Radar Topography Mission**

Speaker Synopsis / Abstract

Robert E. Crippen is a Research Scientist in the Terrestrial Science Research Element at JPL. His academic training is in the geological sciences and in geographic analysis, and he earned an interdisciplinary Ph.D. in Earth Science Remote Sensing from the University of California, Santa Barbara in 1989.

Highlights of his career include several innovative image-processing methods for enhanced information extraction from earth observation data sets. He demonstrated the ability to obtain sub-pixel measures of terrain displacements (e.g. earthquake strain fields and sand dune migration).

His recent work includes development of methods to suppress vegetative, snow, and atmospheric haze features in remotely sensed imagery to better reveal the underlying bedrock, as well as methods of analyzing digital elevation data, particularly for tectonic analysis. Dr. Crippen is currently a principal investigator for Shuttle Radar Topography Mission (SRTM) and a member of the SRTM Real Time Science Team.

Dr. Crippen has been with the JPL as a Research Geologist for more than 17 years. He is also serving as Adjunct Faculty at the SDSU

The Shuttle Radar Topography Mission (SRTM) has achieved its goal of producing the most-complete high-resolution map of Earth's landforms. Radar measurements over 80 percent of Earth's landmass, home to nearly 95 percent of the world's population, were collected during a single 11-day Space Shuttle mission in February 2000. These data were then processed to create the SRTM

digital elevation model (DEM). The data are being released continent by continent through 2003 and 2004.

Nearly every natural process at Earth's surface and most human activities are affected by the altitude, slope, and shape of that surface, making the SRTM elevation model is an important input to scientific research and for planning many human endeavors. In particular, topographic expression of rock type and geologic structure can now be visualized in 3-D as an input to geologic mapping and analysis across the globe.

"When I began my career in the 1970s, we had simple crude images to work with. Now we're seeing the Earth in ways we've never seen it before. We always wanted more detail, more spectral bands. Now from space we can see small ground movements and can identify minerals and plants by their distinctive 'colors' in visible and invisible light. A lot of what we dreamed about 20 years ago has come true," said Crippen. "This is the golden age of Earth observation from space."

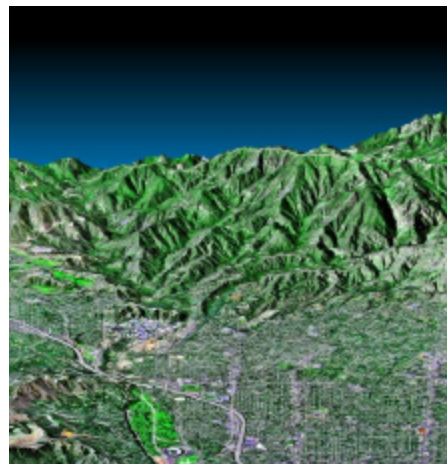


Image of Pasadena, CA - Perspective View

Time & Place

Time:

February 26, 2004

Typical Meeting Agenda

Lunch Served: 11:30 AM to 12:00PM

Announcements: 11:50 AM to 12:15 PM

Guest Speaker: 12:15 PM to 12:45 PM

Place:

The Grand at Willow Street Conference Center located at 4101 East Willow Street, Long Beach, CA. (562-426-0555). Take Lakewood Boulevard south from the San Diego Freeway (405), turn west onto Willow Street and turn right onto Grand Avenue at the sign for the Center. Park free in the garage structure.

Cost

Cost:

Lunch and Speaker: \$17.00 with reservations

\$20.00 without reservations

Student: \$ 5.00 (Lunch and Speaker)

Reservations:

Make your reservations using our web site at www.labgs.org, emailing iaburto@breitburn.com or calling Ivan Aburto at (213) 225-5900 ext. 234. **Reservations must be made prior to Tuesday** before the meeting.

LABGS Future Meetings

Lunch meetings are held at *The Grand at Willow Street Conference Center*. Lunch starts at 11:30 AM

2004 Winter Speaker Schedule

February 26, 2004 – **Dr. Robert Crippen - NASA**
Space Shuttle Radar Topography and it's Application
A 3D presentation

March 25, 2004 – **Mike Mulhern – City of LA**
Avoiding Geologic Hazards in Los Angeles' Largest
Tunneling Project

Announcements / Information

LABGS T-Shirts NOW ON SALE

The Board has decided to sell LABGS T-Shirts to generate additional funds to help support our scholarship and field trip activities. Up to now, T-shirts with our new logo have only been available to those winning our luncheon meeting raffle. The shirt will display the LABGS logo on the Back with the words "LA Rocks" on the Front. The Price for shirts will be \$15.00 and available only at our luncheon meetings. Sizes will be limited to Medium, Large, and Extra Large. **Buy one at the February Meeting!**

WE'LL BE THERE



Epoch is one of the energy industry's leading suppliers of wellsite data gathering systems. Our drilling instrumentation products, wellsite reporting software and mud logging services are industry leaders, and myWells.com allows you to access that information anytime, anywhere. That means you can make more timely decisions that deliver efficiency and economy. If real time, accurate wellsite information is important to you, call Epoch. We'll be there.

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Catalina Schist and the Palos Verdes Peninsula Field Trip Date Set

Saturday June 26 is the scheduled date for the 2004 LABGS Annual field trip. **Dick Brown** has organized a planning committee for a trip to the Palos Verdes peninsula. A comprehensive guidebook is being put together which will include new material on the area. If you are interested in contributing to the guidebook or helping out with logistics, contact Dick at (562) 598-0595.

Nominations being taken for the 2004 LABGS Teacher of the Year Award

The Los Angeles Basin Geological Society is pleased to offer a Teacher of the Year award as a form of encouragement and recognition to those teachers who show dedication and passion to the field of Geoscience. It is our goal to spur teachers and future geoscientists on in their pursuits. If you know of any deserving teacher, you may nominate them by going to our web site, www.labgs.org for a nomination form. Nominations close February. 23, 2004 so don't delay.

Award Description and Requirements

Award for Excellence in the Teaching Of Natural Resources in the Earth Sciences

This award is intended to recognize and encourage excellence in teaching earth science at the K-12 level. It consists of a \$250 cash gift (for the teacher's discretionary use), and is given to an outstanding K-12 earth science teacher in the Los Angeles Basin area. Funding for this award comes from the Pacific Section of the American Association of Petroleum Geologists, our parent organization.

This is an annual monetary award that is presented to the Kindergarten through 12th Grade Teacher who best employs and furthers the knowledge of the earth sciences to students, or who has designed a curriculum that emphasizes the teaching of geology or related natural science subjects.

Teachers in the Elementary, Middle School (Junior High), or High School level may nominate themselves or be recommended by a colleague. The requirements are listed here:

- 1) A minimum of three full years of full-time teaching experience at any level K-12.
- 2) Teaching at least one unit per year on natural resources. Natural resources are defined as Earth materials used by civilizations past and present, such as:
 - a) Inorganic substances found in the Earth; water, mineral ores, building stone, aggregate, rocks and sediments.
 - b) Organic materials such as oil, gas, coal, and soil
- 3) Teaching should include scientific study of these resources, their origin, discovery, extraction, and historical and present uses. It should also include the preservation of the environment, reclamation and the conservation of resources.
- 4) Entries must include a statement of the teacher's philosophy of the teaching of natural resources, a description of the unit

- with outline, Vita, and two letters of recommendation: one from a colleague and one from an administrator.
- 5) The unit will be evaluated on depth and breadth of concepts (resource origin, discovery, processing, usage, and reclamation), creativity of presentation, and balanced treatment of information regarding societal needs and environmental issues.

DAVID B. DEL MAR

Consulting Petroleum Geologist California Registered Geologist # 634

Development – Thermal EOR – Property Reviews

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Mark your Calendar for the 2004 Pacific Section AAPG Meeting

The Pacific Sections of AAPG, SEPM, and SEG are planning for their annual meeting in 2004, which will be held in Bakersfield, May 8 – 12. The theme will be "More Energy from Proven Basins: Looking for More in 2004." For more information and a copy of the abstract submittal form, go to the www.psaapg.org web site and visit the "convention" tab.



Contact Us – The LABGS board

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OUR WEB SITE ADDRESS IS:

www.labgs.org



Los Angeles Basin Geological Society Membership Form

Join the LABGS and become a member of the Pacific Section AAPG all for one low price of \$12.00 per year - 2 West Coast Geoscience Organizations for the price of one



Membership Benefits

- LABGS Membership
- Monthly Luncheon Meetings with Strong Technical Programs
- Pacific Section AAPG Membership
- Pacific Section AAPG Bi-Monthly Newsletter
- Discounts for PSAAPG Bookstore Publications
- Bi-Annual West Coast Geoscience Directory - *next edition 6/03*
- Networking and Social Opportunities with Fellow Geoscientists

Current Annual LABGS/PSAAPG Dues

1 Year Option = \$12.00 \$ _____
 3 Year Option = \$36.00 \$ _____

Extended E-Mail Announcement List Fees

To receive meeting notices from SJGS and CGS
 1 Year Option = \$12.00 \$ _____
 3 Year Option = \$36.00 \$ _____

PSAAPG Foundation Contributions

B. Hacker Publication Fund \$ _____
 Martin Van Couvering Fund \$ _____
 Dibble Map Foundation \$ _____
 California Well Sample Repository \$ _____
 John Kilkenny Scholarship Fund \$ _____
 PSAAPG Foundation Trust Fund \$ _____

TOTAL PAYMENT

Total Amount Enclosed \$ _____

Essential Member Information

Last Name _____

First Name _____

Middle Initial _____

E-Mail Address _____

Mail Address _____

Res or Bus ? _____

Additional Directory Information

Employer _____

Position / Title _____

Bus Phone # _____

Res Phone # _____

Fax Phone # _____

Spouse's Name _____

Education _____ *Highest Degree* _____ *Year*

School _____

Signature _____

Annual membership is handled through PSAAPG and runs from July 1, through June 30. If you are already a current member of PSAAPG and you selected LABGS affiliation you are already a member of the LABGS.

**Please Make Checks out to PSAAPG and mail along with member form to:
 PSAAPG P.O. Box 1072, Bakersfield, CA 93302**