

Geology Continuing Education Series: GIS Applications in Geology and Groundwater Studies

March 4, 2006

co-sponsored by

Inland Geological Society

Association of Environmental and Engineering Geologists, Inland Empire Chapter

Geosciences 825.B (.7 CEU)

This short course on GIS emphasizes analytical applications in geology and groundwater studies. It briefly describes GIS as a tool for geosciences and compares two mainstream GIS systems. The fundamentals behind USGS geologic mapping with GIS in Southern California are covered. A demonstration on how GIS can be used in geomorphological investigation of faults and debris flows as well as in the exploration and management of oil and gas fields is also included. Speakers demonstrate various 3D views with GIS on the subsurface structure and water quality as well as related GIS database to groundwater modeling with practical field examples.

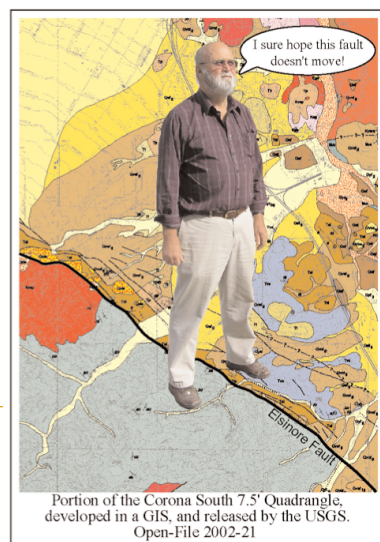
PROGRAM COORDINATOR: TIEN-LEE, Ph.D., Professor of Geophysics, UC Riverside

Date/Time: Sat. 9 am-5 pm, March 4.

Location: UC RIVERSIDE: Extension Center, 1200 University Ave.

Fee: \$65 / \$60 each for members of the IGS or AEG / \$10 each for students (includes lunch, materials and parking, 1 meeting)

☐ **Reg #053-SCF-F55**



AGENDA

- 9 am **Welcome / Introduction**
- 9:10 am **The GIS Behind the Geologic Maps of the USGS**
Kelly Bovard, U.S. Geological Survey
- 9:40 am **GIS and Spatial Distribution of Rainfall Associated With Debris Flows in Southern California**
Russ Campbell, U.S. Geological Survey
- 10:20 am **Morphology of Fault Bounded Mountain Fronts and Debris Flow Susceptibility**
Rachel Alvares, U.S. Geological Survey
- 11:00 am **Advances in Applying GIS to Oil and Gas Exploration and Production**
Dr. John D. Grace, Earth Science Associates
- noon Lunch – included
- 1:00 pm **GIS as a Geotechnical Tool**
Woodrow L. Higdon, Geo-Tech Imagery International
- 1:30 pm **Surface Water and Groundwater Interaction Studies — Integrated Management of Clean Water and Water Reuse**
Les Chau, Kennedy/Jenks Consultants
- 2:30 pm **Managing Groundwater in the Bunker Hill Basin**
Raymond Brown, San Bernardino Valley Water District
- 3:30 pm **GIS Methods to Estimate Ambient Water Quality in Groundwater**
Andy Malone, Wildermuth Environmental, Inc.
- 4:00 pm **Discussion** (free forum)
- 5:00 pm **Adjourn**

All talks include 10-15 minutes of discussion.

UNIVERSITY of CALIFORNIA **Riverside**

Extension
Learn for Life

PROGRAM INFORMATION:

Phone: (951) 827-5804
Fax: (951) 827-7374
E-mail: sciences@ucx.ucr.edu
Web Site: www.extension.ucr.edu

PARKING AT THE UC RIVERSIDE EXTENSION CENTER, 1200 UNIVERSITY AVE.: Daily until 10 pm, vehicles must display a visitor permit or a quarterly evening/weekend permit. Parking is available in the parking structure south of the Center. **Parking regulations are enforced from 8 am-10 pm daily in the UC Riverside Extension Center parking lot and parking structure.**

TO ENROLL:

By Phone: If you use VISA or MasterCard, you may complete enrollment by calling (951) 827-4105 or toll-free (800) 442-4990.

By Fax: For credit card or purchase order registration, fax completed enrollment form to (951) 827-7273, Attn: Student Services.

By Mail: Enclose your check or VISA/MasterCard authorization and mail to: UC Riverside Extension
1200 University Avenue
Riverside, CA 92507-4596

In Person: At the UC Riverside Extension Center, 1200 University Ave., Riverside.

IMPORTANT: We do not accept enrollments by e-mail, as it is not a secure method of communicating personal information.

ENROLLMENT FORM

W06

I wish to enroll in:

Geology Continuing Education Series: GIS Applications in Geology and Groundwater Studies

Geosciences 825.B **Reg #053-SCF-F55**

\$65 \$60 each for members of the IGS or AEG \$10 each for students

Full Name (please print) _____ Social Security No. (Provide if using tuition for tax credit) _____

Home Address (street, apt. no.) _____

City _____ State _____ ZIP Code _____

Daytime Phone _____ E-mail Address _____

Are you a U.S. Citizen: Yes No If no: Permanent Resident Type of VISA _____
(International student fees may apply.)

TO PAY BY CHECK: Enclose check made payable to REGENTS-UC in the amount of \$_____ to cover _____ enrollment(s) and parking permit.

TO USE YOUR CREDIT CARD:

VISA/MasterCard No. _____ Expiration Date _____

Authorizing Signature _____

PLEASE USE A SEPARATE SHEET FOR ADDITIONAL ENROLLMENTS. THANK YOU.