



SAN DIEGO ASSOCIATION OF GEOLOGISTS

1996 EXECUTIVE COMMITTEE

PRESIDENT Anne Sturz Univ. San Diego Marine/Environmental Stds Alcala Park San Diego, CA 92110-2492 (619) 260-4096	VICE-PRESIDENT Tissa Munasinghe Univ. San Diego Marine/Environmental Stds Alcala Park San Diego, CA 92110-2492 (619) 260-4099	SECRETARY Werner Landry Development Services Dept. City of San Diego 1222 First Avenue, ms 401 San Diego, CA 92101-4154 (619) 236-7251	TREASURER Lowell Lindsay Sumbelt Publications 1250 Fayette St. El Cajon, CA 92020 (619) 258-4911
---	--	---	--

MEETING NOTICE JOINT MEETING SDAG/ASCE WEDNESDAY, OCTOBER 16, 1996

SPEAKER: William F. Kane, Ph.D., P.E.
University of the Pacific/Neil O. Anderson and Associates
Stockton, CA

TOPIC: Using Time Domain Reflectometry for Slope Monitoring

PLACE: Tom Hamms Lighthouse
2150 Harbor Island Drive
San Diego, CA
(619) 291-9110

TIME: 6:00-Social Hour
7:00-Dinner
8:00-Program

DINNER: Buffet: turkey, seafood newburg, pasta primavera, rice, vegetable, coffee and tea.

COST: \$20.00

RESERVATIONS REQUIRED by noon Monday October 14th. Please phone in your reservation to Werner Landry at (619) 236-7251. Leave name, number in party and affiliation. Please call Werner if you need to cancel your reservation. If you have special diet requirements, contact Anne Sturz by Monday October 14th.

ABSTRACT

Time domain reflectometry (TDR) was originally developed to find breaks in power and communication cables. When a coaxial cable is deformed, the impedance characteristics of the cable change. Changes in impedance are noted as changes in the characteristic TDR signature of the cable. This technology has been adapted to monitor slope and embankment movements. Coaxial cables are placed in boreholes and slope movements monitored by a cable tester and computer at the site, or remotely by with a data logger and cellular phone. Several sites in California were monitored using TDR and the data compared with conventional inclinometer monitoring. Results show that TDR can reliably determine the depth and location of shear planes.

The advantages of TDR are that: 1. Cumbersome equipment need not be brought to, or maintained at, the site to monitor movement; 2. Economical installation and monitoring; and 3. Slope monitoring can be done from any location with a modem and computer. The result is increased safety, and a considerable cost savings.

Biographical Summary

Dr. William F. Kane received in B.A. (1975) in geology from Jame Madison University, and his M.S. (1981) and Ph. D. (1985) degrees in Civil Engineering from Virginia Tech. He serves as Professor of Civil Engineering at the University of the Pacific in Stockton, California. Dr. Kane has

also taught at the University of Alabama in Huntsville and the University of Tennessee where he founded and served as the first director of their Institute for Geotechnology. In addition, he is part-owner of Neil O. Anderson & Associates, a geotechnical consulting firm in Lodi, California.

Dr. Kane has consulted and done research in the areas of rock and soil mechanics, subsidence, and slope stability. He has worked on geotechnical problems for such organizations as the California Department of Transportation, Illinois Mine Subsidence Insurance Fund, State of Tennessee Technology Foundation, U.S. Army Corps of Engineers, and the U.S. bureau of Mines. He has authored or co-authored approximately 80 technical papers and reports.

Professionally, Dr. Kane is registered as a professional engineer in California and a professional geologist in the State of Tennessee. He is a member of several professional organizations, including American Society of Civil Engineers and the Association of Engineering Geologists.

ANNOUNCEMENTS

* **SOUTH COAST GEOLOGICAL SOCIETY 1996 FIELD TRIP** Please see attached announcement.

* **CORPORATE AND INDIVIDUAL SPONSORSHIPS UP! MANY THANKS TO:** Joe Coronas; William J. Elliott, Consulting Geologist, Dr. Blayne Hartman and TEG; Hargis & Associates, John Hoobs and Geocon Inc.; Ralph Jeffery and American Geotechnical; Barbara Johnston; Mike Palmer; Robertson Geotechnical, Inc.; Tony V. Sawyer, Consulting Hydrogeologist; Bob Smillie and Group Delta Consultants; David and Jan Steller; Dr. Anne Sturz; Carole Ziegler. **THANKS-THANKS-THANKS-THANKS- THANKS-THANKS THANKS-THANKS THANKS!**

Corporate and individual support above and beyond normal membership dues enhances our ability to provide student scholarships, provide complimentary dinners to students at our monthly meetings, and provide extra beverages at the picnic and field trip.

* **DEADLINE** for announcements to be included in the November SDAG newsletter is Oct. 25th, 1996. Please submit your items in writing to Anne Sturz, 6466 Bonnie View Dr. San Diego, CA 92119 or by fax at 619 461-2644.

* **TETRA TECH TECHNICAL SERVICES** is an incorporated subsidiary of Tetra Tech, Inc., which provides contract technical and professional level staff to Tetra Tech, its five subsidiaries, and other environmental and engineering consulting firms. Tetra Tech Technical Services is currently accepting resumes of qualified environmental scientists in all disciplines, including geologists, engineers, technicians, industrial hygienists, toxicologists, etc., for temporary or as-needed assignments. Candidates should have one or more years of experience in the environmental consulting industry, a valid California drivers license, and current OSHA HAZWOPER training. Resumes should be sent in confidence to Tetra Tech Technical Services, Attention: Phil Rosenberg, 565 Pearl Street, Suite 200, La Jolla, CA 92037. **NO PHONE CALLS PLEASE!!**

**SOUTH COAST GEOLOGICAL SOCIETY 1996 FIELD TRIP
OCTOBER 19 AND 20
ANZA-BORREGO STATE PARK
TAMARISK GROVE CAMPGROUND
REGISTRATION FORM**

Name _____

Street _____

City, State, Zip _____

Phone No. (Work or Home) _____

Carpooling Yes No

Others in Your Carpool _____

Need a Ride Yes No

Registration Fee (Guidebook, Camping, Breakfast, & Beverages)	\$45.00 _____
Saturday Lunch	\$ 7.00 _____
Saturday Dinner (Catered Barbecue)	\$15.00 _____
Sunday Lunch	\$ 7.00 _____
TOTAL	_____

Meals are Optional, Select Any Combination

Special Student Rate (Guidebook, Camping, Breakfast, & Beverages) \$30.00 _____

(Students please bring your own food, and/or select from the meals above and add to the \$30.00)

(Verification Required, Submit Photocopy of Student ID or Recent Report Card)

(cut here)

(return upper portion with check)

REGISTRATION FORMS MUST BE POSTMARKED BY OCTOBER 11!!!

MAKE CHECKS PAYABLE TO:

SCGS

P.O. Box 10244

Santa Ana, California 92711

Directions: (From Orange County) Drive south on Interstate 5 to Highway 78 east. You will drive through Ramona and Julian. Tamarisk Grove campground is approximately 20 miles northeast of Julian at the Intersection of Highway 78 and S3.

Weather: Anticipate hot conditions, probably in the 90's. Bring sunscreen, hats, extra fluids, folding chairs, and cool thoughts. Wind storms are a slight possibility.

Other Accommodations:

Julian Chamber of Commerce (619)-765-1857

(Make your own reservations)

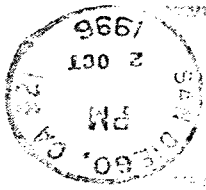
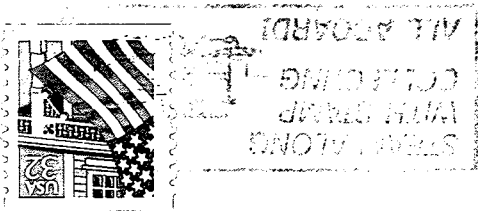
Borrego Springs (Hacienda Del Sol 619-767-5442,

Oasis Motel 619-767-5409)

Questions? Call Dave Seymour @ 714-433-2000, ext 360



Tanges, Susan E.
 1465 E. Lexington Ave. #7A
 El Cajon, CA 92019



San Diego Association of Geologists
 /o Werner Landry
 Development Services Department
 City of San Diego
 1222 First Avenue, MS 401
 San Diego, CA 92101-4154

