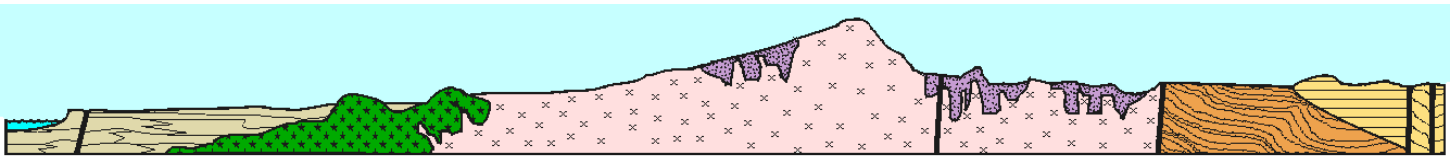


SAN DIEGO ASSOCIATION OF GEOLOGISTS

www.sandiegogeologists.org

SDAG MEETING ANNOUNCEMENT

WEDNESDAY, August 17, 2016

The Important Contribution that the Linear Marine Magnetic Anomalies made to the Discovery of Seafloor Spreading, and then to the Neogene Plate Tectonics of Southern and Baja California

Presented by:
Monte Marshall

Where: Andres Restaurant **See map on next page**
1241 Morena Blvd, San Diego, CA 92110

When: 5:30 pm - Social Hour
6:30 pm - Dinner
7:30 pm - Program

Directions: FROM INTERSTATE 5: Take Exit 21 or Sea World Drive/Tecolote Road and head east. Make a right onto Morena Boulevard and head south for approximately 0.2 miles. The restaurant is on the left (or east side of the street) (see the Map).

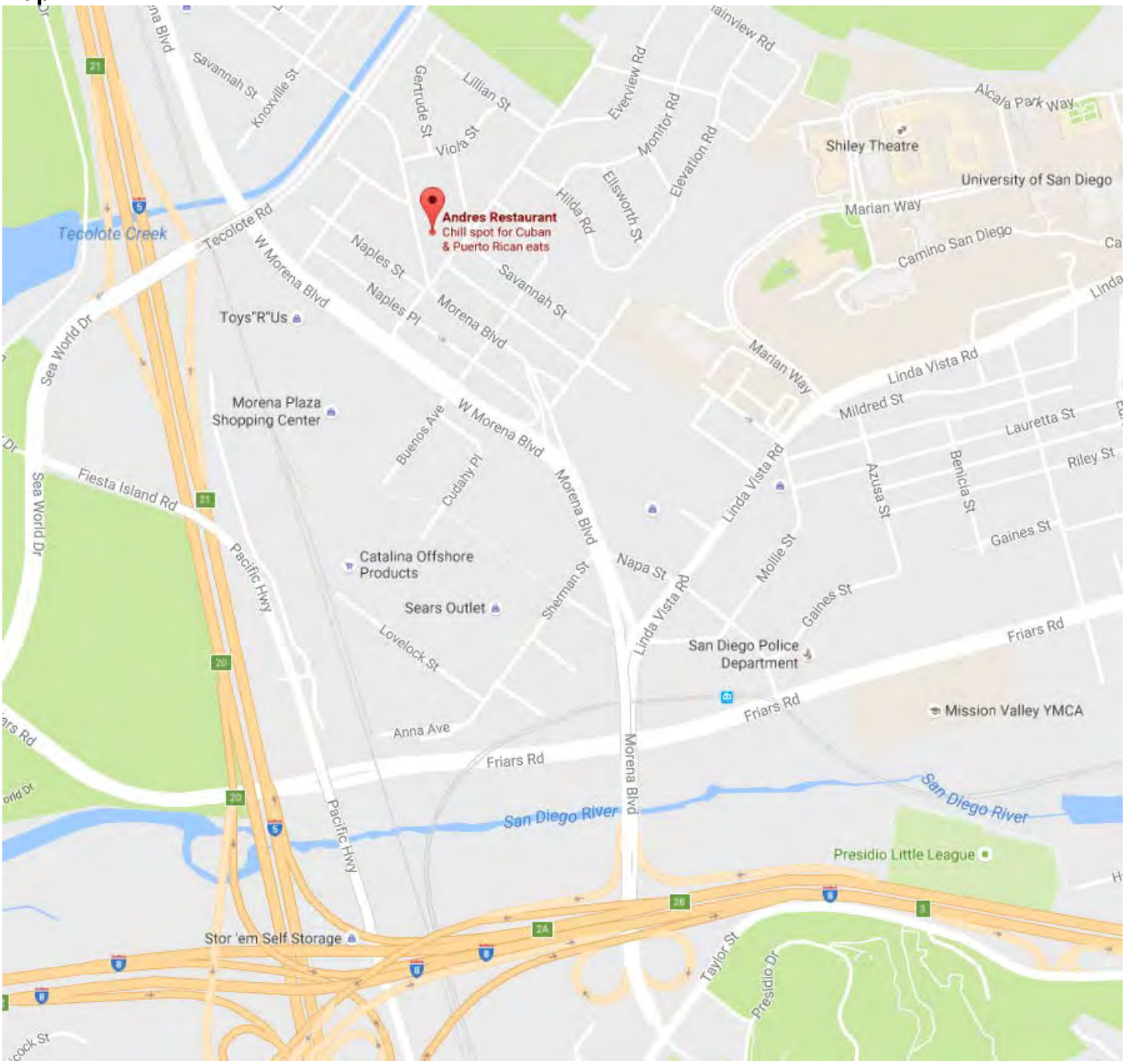
FROM INTERSTATE 8: Take Exit 2C Morena Boulevard prior to getting to Interstate 5. Make a right onto Morena Boulevard and head north for approximately 0.7 miles. The restaurant will be on the right (or east side of the street) (see the Map).

Dinner: **Pollo a la Plancha (grilled marinated chicken and onions), Ropa Vieja (shredded beef with onions, green peppers & tomatoes), rice, black beans, green salad, with Cash Bar**

Cost: $30 per person, $5 discount for members, STUDENTS and PROFESSORS: $15. Add $5 if you did not make a reservation.

Reservations: Make your reservation **online** at www.sandiegogeologists.org **no later than noon, Monday August 15th**. Reservations cannot be guaranteed after Monday at noon; but are always preferred over walk ins. Reservations well before the deadline are MUCH appreciated.

Map:



ABSTRACT AND BIO

The Important Contribution that the Linear Marine Magnetic Anomalies made to the Discovery of Seafloor Spreading, and then to the Neogene Plate Tectonics of Southern and Baja California

Presented by: ***Monte Marshall***

This talk is a special one for me. As time slips more and more quickly by, I realize that there are fewer and fewer geologists remaining whose careers have spanned the great plate tectonic revolution of the late nineteen sixties. And there are even fewer left whose research involved this revolution. Since I am one of them, I want to share with the audience a personal trip down the memory lane of one of the greatest paradigm shifts in earth sciences.

When I was in my last undergraduate year at SDSU, we were taught that Wegener's proposal that the Atlantic Ocean had formed by the spreading apart of the adjacent continents was "stupid". Just three years later, in December of 1968, I was sitting in the audience at the annual meeting of the American Geophysical Union in San Francisco. Marine geophysicists were showing slides of the linear marine magnetic anomalies that they had measured over all the world's oceans. Those squiggly lines, by their symmetry, worldwide sameness, and, most importantly, perfect match to the recently developed geomagnetic reversal timescale, proved without a doubt that the seafloor did spread away from the oceanic ridges and rises and, in the case of the Atlantic Ocean, carried the adjacent continents with them. We all sat there stunned—realizing that Wegener was basically right! Two powerful new words were added to the geologic vocabulary: "plate tectonics". But, it's the whole upper 100 kilometers of the earth, i.e., the plates that move around, not just the continents. This was the part of the story that Wegner had gotten wrong--and that became a stumbling block for most geologists for almost 50 years.

As mentioned above, the most convincing proof for seafloor spreading was the match between the marine magnetic anomaly pattern and the pattern in geologic time of the just-discovered geomagnetic reversals. As the newly created oceanic crust cools and spreads away, it acts just like a double headed tape recorder and forms alternately normally and reversely magnetized strips parallel to the ridges and rises. Because the reversals are random, a true barcode is created. Much of the definition of the geomagnetic reversal time scale (GRTS) for the last 4 My was done in the 1960ies by a team of three USGS scientists in Menlo Park, CA. Allan Cox was the brilliant theoretician, Dick Doell was the master instrumentalist who designed the magnetometers that measured the direction of magnetization in oriented rock cores, and Brent Dalrymple was a pioneer of K-Ar radiometric age dating. Allan Cox left the USGS about 1967 and joined the faculty of the geophysics department at Stanford, and became my thesis advisor. Because he had not yet set up his paleomagnetism lab at Stanford, he made it possible for me to use the facilities at his former USGS lab. In the course of my research I found that the seafloor pillow basalts were much more strongly magnetized than subaerial basalts, and that they are the major source of the marine magnetic anomalies.

The next step was to date and number the squiggles (bars in the code) recorded by the ship-towed magnetometers so that the marine magnetic anomalies could be used to determine when

various parts of the Atlantic and other oceans formed. One of the first persons to apply these new insights to the Pacific Ocean was a graduate student at Scripps Institute of Oceanography, Tanya Atwater, in a classic paper in 1970. Using the magnetic anomaly profiles collected by Scripps over many years in the northeastern Pacific off the coast of North America, she was able to show that subduction off our coast ended about 30 Ma in the vicinity of Los Angeles, when a projection of the Pacific-Farallon spreading center came into contact with the North American Plate. This point of contact lengthened into a line/plate boundary with largely strike slip relative motion, until at about 5 Ma the southern end reached Cabo San Lucas/Puerto Vallarta and the Baja Peninsula was rifted from mainland Mexico, and the modern San Andreas system was born. Three years later, she and Peter Molnar showed that there has been about 1000 km of relative motion between the Pacific and North American Plates. Since the current San Andreas has only about 250 km of offset, their 1000 km estimate gave rise to a still-unresolved debate about the other 750 km—offshore faulting, Basin and Range extension, etc.?

The marine magnetic anomaly pattern offshore of the two Californias and in the Gulf has continued to be studied and refined by Tanya and others. Probably the most significant refinement for us is the finding that some of the thin, leading edge of the North American Plate overrode the Pacific Plate. Then, as the Pacific Plate continued to move to the northwest, it rifted and rotated parts of this crustal slab. This is the tectonic model proposed by Atwater and others for the rotation of the Transverse Ranges and the deformation and widening of the former continental margin beginning at about 18 Ma and extending from Point Conception to the Vizcaino Peninsula—which is why it has been given the special name of “continental borderland”.

SPEAKER BIO

I was born on a pre-plate tectonic day in San Diego, CA. I received my BS in geology and geophysics from SDSU in 1966, and my PhD from Stanford in 1971. My PhD research involved determining what rocks in the oceanic crust cause the marine magnetic anomalies. After several years of research at the USGS in Menlo Park, I returned to San Diego and to SDSU in 1975. I taught courses in structural and petroleum geology, geophysics, and paleomagnetism and plate tectonics—as well as an occasional “rocks for jocks”. My research with my students involved using paleomagnetism to study the plate tectonics of the Southwest, and detailed gravity surveys to study faults, especially in the San Diego metropolitan area.

I retired, theoretically, in 2005 and since then I have been heavily involved in geologic community service—giving talks, leading field trips, teaching volunteers at the SD Natural History Museum, writing articles, advising students, etc.. And, on occasion, I travel to other parts of the world to learn about their cultures and rocks! :>)

UPCOMING MEETINGS

Meetings are usually held on the 3rd Wednesday of the month but may change to accommodate the speaker and meeting place schedules. Check the SDAG web site for updates.

Sep 14 or 21, 2016	Peter Gold - Precursor to the SDAG Field Trip – The Agua Blanca Fault
October 22-24, 2016	THE 2016 SDAG Field Trip – Northern Baja, California
November 16, 2016	TBD

2016 SDAG EXECUTIVE COMMITTEE

PRESIDENT - Randy Wagner; Ph: (760) 877-3490 **randallwagner@live.com**

VICE PRESIDENT - **Rupert Adams, rsa_sdag@geoconinc.com**

SECRETARY - Chris Livesey, secretary@sandiegogeologists.org

TREASURER - Ken Haase, kenwhaase@gmail.com

PUBLICATIONS – Lowell Lindsay; *Sunbelt Publications*; Ph: (619) 258-4911, x111; fax:(619) 258-4916; **llindsay@sunbeltpub.com**

WEBMASTER – Carolyn Glockhoff; *Caro-Lion Enterprises,* Ph: (858) 549-3396; **carolyn@caro-lion.com**

2016 SDAG Field Trip **OCTOBER 22-24, 2016**

GEOLOGY AND GEOHAZARDS OF NORTHWESTERN BAJA'S GOLD COAST AND THE AGUA BLANCA FAULT

The 2016 San Diego Association of Geologists annual field trip will explore the many fascinating stops and stunning vistas along Highway 1 to Ensenada, travel inland to the Santo Tomas and Agua Blanca Valleys, and return via Highway 201 to see recent road cuts exposing excellent examples of Cretaceous deltaic sedimentary systems. The second day of this year's trip is generously sponsored by Geocon Incorporated. The highlight of the second day will be a recently excavated fault trench through Holocene alluvial fan deposits derived from a right-laterally offset drainage along the Agua Blanca Fault.

Field trip leaders include John Minch and Jim Ashby, who have both performed extensive research and consulting work in Mexico for many years, and Peter Gold (PhD Candidate, University of Austin, Texas) who is studying the mechanics and slip rate of the Agua Blanca Fault. Tom Rockwell, SDSU professor, will also be lending his expertise for planned fault trench and fault related discussions. We are also very fortunate to have the support of several staff members from CICESE University in Ensenada, who contributed several papers on local geology and will be accompanying us for different portions of the trip. Highlights of the trip include many outstanding fault exposures, deep seated coastal landslides, including a stop at the recently repaired landslide on Highway 1, fault related geomorphic features, subsurface fault features in a fault trench to be dug in early October, and faulted road cuts showing complex relationships between proximal and distal fan deposits in Cretaceous sediments.

The planned trip will be by bus and personal vehicles. The trip cost includes this year's guidebook and T-shirt, transport by bus (for the first 50 people), all meals, drinks and snacks and camp site fees.

ITINERARY: The planned trip is three full days, beginning Saturday October 22 at 5.30am, ending Monday October 24, at 6pm

October 7: Last day to sign-up. Bus limited to 50 passengers (first come, first serve seat allocation).

Saturday, October 22: Meet at parking lot next to Las Americas Premium Outlets starting at 5.30am (Map to be provided). Check in and continental style breakfast. Bus and convoy departs promptly for the border at 7.30am. Travel the coastal toll road (Hwy 1D) to Villarino Camp Ground, via multiple stops. Lunch will be at La Fonda at noon, dinner will be catered at the camp ground. Evening discussions planned.

Sunday, October 23: Catered breakfast. Convoy leaves at approximately 9am, heading south through the Santo Tomas and Agua Blanca Valleys to explore multiple stops along the Agua Blanca Fault. Lunch in the field. Return to camp site at El Palomar in Santo Tomas Valley. Catered dinner at local winery including whole pig cooked over coals in a pit.

Monday, October 24. Catered breakfast. Convoy departs around 9am. Possible stop at coastal overlook depending on time. 9-mile transit along Highway 201 to examine outstanding exposures of Cretaceous aged, faulted deltaic sediments. Cross border and return to vehicles at approximately 6 to 7pm.

2016 SDAG Field Trip

OCTOBER 22-24, 2016

RECOMMENDED EQUIPMENT: Short hikes are planned, but are anticipated to be less than a mile. Bring hat, sunscreen, walking stick, sturdy boots and personal field gear. Bring camping equipment: tent, sleeping bag, folding chair, coffee mug, binoculars, etc. Campsites are equipped with hot water for showers.

COST: $275 per person. Discount for SDAG members and students. Fee includes guidebook, T-shirt, bus transportation, camping, eight meals, snacks, and beverages (water, soda, beer etc). Fees are non-refundable. All ages welcome.

TRAVEL DOCUMENTS AND EXCLUSIONS: A valid passport, US passport card is mandatory to return to the United States from Mexico. Your passport should valid for at least 6 months past the date of the field trip. The following items are not included in the trip cost:

1. Car or personal travel insurance in Mexico
2. Toll Fees for personal vehicles (approximately $1.50 /toll, 3 toll stations between Tijuana and Ensenada)
3. Drinks purchased from the bar at La Fonda (Lunch stop, Day 1)
4. Wine purchased from the Winery in Santo Tomas (Dinner, Day 2)
5. Costs for hotels. Small hotels are available adjacent to both campgrounds. Contact Information has been provided herein.

RESERVATIONS: Reservations are on a first-come, first-serve basis. Bus transportation is likely limited to the first 50 people unless demand is high. If you intend to bring your own car, please indicate if you are willing to provide car pool services.

QUESTIONS: Contact SDAG VP Rupert Adams at: adams@geoconinc.com or 858-260-1214

2016 SDAG FIELD TRIP REGISTRATION FORM ***TODAY'S DATE*: _____, 2016**

Name(s): _____

Address: _____

City/State/Zip: _____

Mobile Phone(s): _____

Email: _____

T-Shirt Size: ▪ **□Small □Medium □Large, □Xtra Large**

Food: ▪ **□Vegetarian. Allergy: □Yes □No Please Describe:**

Transport: ▪ **□Bus □Personal Vehicle □Carpool**

TOTAL NUMBER AND FEE FOR YOUR PARTY

___ $275/ea. Non-members: $ _____

___ $255/ea. SDAG member discount: $ _____
Member spouse cost w/o field trip guidebook

___ $ 130/ea. Students (1st 10) $ _____

TOTAL ENCLOSED: $ _____

MAIL FORM AND CHECK (**payable to SDAG**) TO:

SDAG Field Trip Registration
c/o Rupert Adams
Geocon Incorporated
6960 Flanders Drive
San Diego, CA 92121

San Diego Geological Society, Inc. and San Diego Association of Geologists
General Release and Save Harmless Waiver

The undersigned is advised that dangers and hazards may include but are not limited to uneven ground, steep trails, heat and cold stress, poisonous reptiles and insects, open flames, uncertain and possible extreme weather conditions, floods, earthquakes, and landslides on the San Diego Association of Geologists field trip planned for October 22 through 24, 2016, and does hereby assume any and all risks involved in connection with the field trip and does hereby save and hold harmless San Diego Geological Society, Inc., and its board of directors, its committees including the San Diego Association of Geologists and its officers and members, and other participants, all claims, losses and damages (including attorneys fees and any costs involved because of said claims) on account of injury, illness, death, property damage, and inconvenience or loss of money due to delay that may arise, by reason of my participation in the field trip. I understand that I am responsible for carrying my own medical and liability insurance.

_____ _____

Signature Date

MENU:

1. Day 1:

    a. Continental Breakfast – Muffins, Croissants, Tea and Coffee, etc.

    b. Lunch at La Fonda - Beef taco with chile relleno, rice, beans, soup. Cash Bar

    c. BBQ at Campsite - Carne Asada, grilled sausage, grilled chicken, grilled vegetables, corn and flour tortillas, salsa, guacamole, tortilla chips, beans

2. Day 2:

    a. Full Breakfast – Scrambled Egg with chilies, vegetables, potatoes, beans cheese; chilaquiles, tortillas, milk, juice, coffee, seasonal fruit and pan dulce

    b. Lunch in the field – Machaca Burrito, fruit, pasta salad.

    c. BBQ at local winery - Whole Pig cooked 'La Grulla Style' (over coals in covered pit), beans, salsa, guacamole, tortillas

3. Day 3:

    a. Full Breakfast – Omelets, seasonal fruits, pan dulce, hot chocolate, tea and coffee, juice

    b. Lunch in the field – Burrito, fruit etc.

The menu has been set up to provide several options for vegetarians, including many fruits, cooked vegetables and breakfast cereals. Please **clearly indicate** if you have any specific allergies so that this information can be passed on to our catering service.

LIBATIONS AND SUNDRIES:

Water, soft drinks and bottled beer will be available throughout the trip. We also hope to have beer on tap at the campsites provided by a local craft brewer in Ensenada called Wendlandt Cerveceria. The Margarita Bar will also be available in the evenings, and the 'snack bucket' will make the rounds at field stops. Wine will be available for purchase during dinner on the second night from the winery.

HOTELS:

1. Night 1: La Jolla Beach Camp: +52 (646)-154-2005 or +52 (646)-154-2004
    a. Camp ground has 6 rooms across the street, each with 2 double beds. $40 per night for two people, $5 extra for each additional person. Bathrooms, showers, hot water available.
2. Night 2:Hotel El Palomar: +52 (646)-153-8071 or +52 (646)-153-8002
    a. 2 rooms with one double bed – Approximately $21 per night
    b. 2 rooms with 2 doubles and one single – Approximately $32 per night
    c. 6 rooms with 2 double beds – Approximately $27 per night
    d. A house that sleeps 10 people– Approximately $160 per night

$5 deposit per person. Bathrooms, showers, hot water available.

Earthquake Engineering Research Institute (EERI)

The Earthquake Engineering Research Institute (EERI) San Diego Chapter, the University of California San Diego (UCSD) Extension and the GeoInstitute San Diego Chapter are organizing the 2nd Workshop on Geotechnical Earthquake Engineering with the topic "Dealing with the Consequences of Liquefaction" on Wednesday-Thursday, March 29-30, 2017 in UCSD campus, San Diego, California. As you may remember, the first workshop in 2014 was a success with almost 300 attendees (https://sandiego.eeri.org/?p=203).

The second workshop will honor the lifetime achievements and contributions of Prof. Kenji Ishihara to the field of geotechnical earthquake engineering. The afternoon session of the second day of the workshop (Thursday, March 30, 2017) will be entirely devoted to honor Prof. Ishihara and the session will be hosted by Prof. I.M. Idriss. We will have distinguished speakers from US, Japan, New Zealand, Europe and South America sharing with us their experiences with liquefaction mitigation, recent major earthquakes and highlighting the contributions of Prof. Kenji Ishihara. We are in the process on preparing the final program and the website for the workshop. A one-day short course before the workshop on Tuesday, March 28 is also in the plans.

We would much appreciate your participation in this workshop. Please mark your calendars and save the dates.

Hope you will be able to join us and be part of this big event.

If you have any question, feedback or wish to sponsor this event, please feel free to contact the Chair of the Organizing Committee, Dr. Jorge Meneses, at jmenesesl@gmail.com

Thanks and looking forward to seeing all of you in beautiful San Diego,

Jorge

President, EERI San Diego Chapter

Prof. Kenji Ishihara

1934 to "Still Going Strong!"

Prof. Kenji Ishihara was born in Chiba, Japan in 1934. He started his studies in Civil Engineering at the University of Tokyo, obtaining BS-degree in 1957, MS-degree in 1959, and Ph.D-degree in 1963. During one-year period from 1966 to 1967, he was a Visiting Research Associate at the University of Illinois in Urbana, U.S.A. under the guidance of late Professor R. B. Peck. He has been affiliated with the University of Tokyo since then, taking the position of professorship in geotechnical engineering since 1977. On his retirement from the University of Tokyo in 1995 he took up the position of Professor of Geotechnical Engineering at the Tokyo University of Science and then at Chuo University in 2001.

He served for ISSMFE as secretary of the Japanese National Committee for the period of 7 years between 1970 and 1976 during which time he attended the Executive Committee meeting of ISSMFE in Sydney, 1971 as a voting member representing the Japanese National Society. Since then, he often represented Japan in several Executive Committee Meetings of ISSMFE and those of Asian region. He acted as Vice-President of Asian region of ISSMFE during the period of 1989-1993.

His major research interest covers problems in soil dynamics associated with earthquakes, such as liquefaction of sandy deposits, and seismic stability of slopes and earth structures. He wrote about 250 papers on these subjects.

He has served on various occasions as consultant or adviser to UNESCO projects (Balkan region, India) and UNDP project (Chile, India, Iran). He has participated in the geotechnical investigations of earthquakes worldwide such as those in Romania (1977), Yugoslavia (1979), Chile (1985), Mexico (1985), Ecuador (1986), Soviet Armenia (1988), Soviet Tajik (1989), Philippines (1991) and Iran (1991). He is the author of the book “Fundamentals of Soil Dynamics” (1974) and the textbook “Soil Mechanics” (1988) both in Japanese. He recently published from Oxford Press an English book entitled “Soil Behaviour in Earthquake Geotechnics”

He has received the honor by being assigned on many occasions to deliver lectures worldwide including the theme lecture in the 11th ICSMFE in San Francisco and the 33rd Rankine Lecture of the British Geotechnical Society in 1993. He acted as chairman of the Technical Committee TC4 on Earthquake Geotechnical Engineering in ISSMFE for the two tenures of office from 1985 to 1993. His incessant endeavor in TC4 has led to the periodical holding of the International Conference on Earthquake Geotechnical Engineering of which the first in a series was held in Tokyo in 1995 and the second in Lisbon in 1999. He has also received honor by being awarded the H. B. Seed Gold Medal in 1998 from the American Society of Civil Engineers. For his significant contribution, title of Honorary Doctorate was given to him from Technical University of Bucharest, Romania in 1995 and from Istanbul Technical University, Turkey in 1999. In 2000, he was honored by being bestowed the most prestigious Japan Academy Prize. In 2010, he was elected to Foreign Associate of the United States Academy of Engineering.

In commemoration of his long-time contribution to the profession, the International Conference on Earthquake Geotechnical Engineering held in Istanbul by the efforts of Professors A. Ansal and M. Sakr, published two volumes of selected papers containing major publications by Prof. Kenji Ishihara.

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Jorge F. Meneses, PhD, PE, GE, D.GE, F.ASCE

Obituary of Arthur "Dick" Brown

Dick Brown
18 September 1936 – 25 July 2016

The following eulogy was written by Chris Baker, president of the South Coast Geological Society, minor edits were made to arrange content. I could not have written a better edition.

Arthur "Dick" Brown sadly has passed away. To my (Chris Baker's) knowledge, he passed peacefully, and without pain. I (Chris Baker) did not have the great pleasure of knowing Dick well outside of SCGS meetings and events, but he left a very positive and great impression on me how great a man he was from the time I spent with him. Dick Brown left a great impression on SCGS, and a number of other societies such as LABGS. In these groups, he has organized multiple field trips, edited multiple guidebooks, and was the chief editor of the 2007 PSSEPM volume on the Palos Verdes Hills. He was in the geologic field for over 40 years, consulting both domestically and internationally, where he was the Geotechnical Manager of the feasibility study for the Athens Metro Project (which is now a reality), and a Quality Assurance Supervisor for a site investigation and safety analysis for a proposed nuclear power plant in Baatan, Philippines.

Upon his return to the U.S. he worked for multiple firms in the O.C. and L.A., before starting his own practice in 1979. Dick was the President of SCGS in 1981, and led the 9th Annual Field Trip: Geology of the San Jacinto Mountains.

On a personal note, Dick was a very forwards thinking and progressive member of SCGS. He always gave great advice to officers and students. In his time as an officer of the group, he had accomplished many great goals with the group, from sustaining the society, to leading field trips, to expanding our publications outreach. Dick also helped to spearhead and start the student poster session in 1997, which is still running through this day, and which he has given us a great many pointers on how to operate and improve. He was a great voice for students and knew they were our future, and pushed them to better themselves by talking with members at our meetings, and presenting with us. He was never afraid to approach a new member and offer them a warm welcome to our group, and was one of the first members I met when I first joined.

Dick is survived by his wife Genny, and three children Charlie, Andrea, and Susannah.

Dick will be missed by his friends and family. Dick was truly a great man and geologist. Our condolences, thoughts, and prayers go out to his family.

At the SCGS August meeting we will present his family with a framed gift and card, from projects he had previously worked on. If you would like to sign the frame and give a message in the card to the family, along with the rest of us, please join us at our August meeting.

Funeral service details:

Date: Tuesday, 23 August 2016
Time: 10:30 AM
Location: St. Anne's Catholic Church, Seal Beach
Address: 340 10th St, Seal Beach, CA 90740
website: www.stannesealbeach.org

Reception to follow the funeral service. More information is provided at the rear of the news letter (map, parking notes, and contact information).

Again our deepest thoughts and condolences go out to the Brown family.

Thank you for your time,

Chris Baker

President

South Coast Geological Society

South Coast Geological Society 2016 Field Trip:

South Coast Geological Society is now accepting reservations for the 2016 field trip. The field trip will explore the geology along some of the great Californian Faults. We will travel along the San Andreas, explore the contact with the Garlock and other faults along the Tejon Pass, and the uplift and geology of the Temblor Range. We will also visit the Monterey Formation in the Carrizo Plains, Soda Lake, and some petroglyphs at Painted Rock. During this trip we will look at the overall geology of the region, the tectonic development, fault interactions with the aqueduct, mineralogy, and other related topics (potentially even a Trekkie movie set stop at Vasquez Rocks). For more information visit the SCGS website: http://southcoastgeo.org/?page_id=25

SDSU-AAPG Student Chapter:

Jennifer Luscombe (current student M.S. student at SDSU) and the SDSU-AAPG student chapter officers are beginning the 2016/2017 academic year. Their intention is to support student interest in petroleum and geology related fields. The AAPG student officers are currently organizing an event to stockpile the students with geology supplies and funds to attend the AAPG event in Las Vegas and GSA event in Denver. Details of the event will be forthcoming. Additional information is provided on the flyer attached to the rear of the news letter.

CALL FOR ARTICLES

SDAG invites members to submit articles on their current research or an interesting project they are working on for publication in the monthly newsletter. The article should be no more than 1 page in length. Photos are welcomed; too. Please submit articles to the SDAG secretary via email.

SDAG RESEARCH TOOL

SDAG RESEARCH TOOL - A comprehensive listing of all papers published by SDAG, whether as annual field trip guidebooks or special publications, is now available on our website. Entries are sorted by primary author, or chronologically by date of publication, from our first guidebook in 1972, up the San Luis Rey River in 2013, from Coast to Cactus in 2014, and finally over the edge to the Coyote Mountains in 2015. These can be accessed or downloaded as .pdf files. They are fully searchable in Adobe Reader or Acrobat, so if you are researching a topic, "tsunami" for example, you can search for that keyword. This listing will be updated as new books are published. Thanks to Greg Peterson and Hargis + Associates, Inc., for making this possible. See the links below:

http://www.sandiegogeologists.org/SDAG_Pubs_authors.pdf

http://www.sandiegogeologists.org/SDAG_Pubs_chronological.pdf

THE GEOLOGICAL SOCIETY OF AMERICA®

The 2016 GSA Annual Meeting will be September 25 - 28, 2016
in Denver, Colorado

The SIPES (Society of Independent Professional Earth Scientists) is planning their annual conference in San Diego on August 1-4, 2016 at the Omni Resort and are looking for people to give presentations and for potential field trip stops that represent the local geology of any type, so the scope of the presentations and field trip is fairly open. The SIPES is a national group, consisting mostly of independent geoscientists. Their website is https://sipes.org. Speaker presentations will take place on August 2 & 3 and the field trip is set for the 4th. Any person giving a presentation receives free registration to attend all functions, and can join the networking group for free. The presentations should be approximately 25 minutes in length and have a PowerPoint presentation, if possible. They find the applicability and interest in most geological and geophysical parameters to be appropriate for the conference. However, diversity is greatly sought as well.

SDAG MONTHLY PHOTO COMPETITION

Modern Day Pompeii?

These 4 photos were taken by Monte & Diane Murbach on July 5, 2016:

Montserrat is a small island in the Caribbean. The island is approximately 300 miles east-southeast of Puerto Rico and 30 miles southwest of the island of Antigua. After 350 years the Soufriere Hills volcano located in the southern half of the island came back into life in 1995 and started to build a new lava dome. The volcano is named for the French word *soufrière*, meaning “sulphur outlet.” About two-thirds of the islands population was forced to relocate, as an exclusion zone was imposed over the southern part of the island due to potential pyroclastic activity. On July 18, 1995 the Soufriere Hills volcano changed its status from dormant to active. Andesitic volcanic eruptions soon buried the island's capital City of Plymouth, destroyed its airport and docking facilities, and rendered the southern part of the island uninhabitable. Today this stratovolcano has been relatively quiet since 2010 and continues to be closely monitored. The northern part of Montserrat was barely affected by the volcanic activity, and remains lush and green. As the island’s economy works at recovering, a new airport and docking facilities have been built in the northern area.

2009 ash and steam plume, Soufrière Hills Volcano. Grey deposits that include pyroclastic flows and volcanic mudflows are visible extending from the volcano toward the coastline (NASA ISS photo, October 11, 2009, a view from the NE looking SW).

The song and album are named for the then dormant Soufriere Hills volcano on the island of Montserrat in the British West Indies where Buffett recorded the album in May 1979 at AIR Studios (Wikipedia).

Written by Diane Murbach

Geology Institutions

We have heard from many upcoming geologists at our recent meetings, all of whom are seeking work opportunities here in San Diego. Included herein, in no particular order, are bio's and contact information of our members looking to gain a foothold in the local professional community

Geographic Information Systems Professional Seeking Job Opportunity

I have completed my coursework for a GIS Certificate from San Diego Mesa College and am looking for an internship or full/part-time position as a GIS Analyst or Technician.

Skills and Experience

- 4 ½ years' experience with ESRI ArcGIS Desktop 10.x software.
- 3½ years' experience as a GIS Specialist in Environmental Consulting.
- 6 years' experience as a Geotechnical and Environmental Geologist.
- Collect, process and import GPS survey data into ArcGIS.
- Georeference data, maps and aerial photos.
- Geodatabase design and management, geospatial data analysis.
- Excellent communication skills, able to multitask and work independently.
- Effective team-player, works well with people in multidisciplinary environment.
- Client/Customer service oriented, able to translate needs of non-GIS personnel into effective solutions.
- Strong computer skills including automation of tasks (Python/Perl) and scientific programming.
- Excellent mathematical background and technical writing skills.

For resume and references please contact Chris Lynch, (619) 302-1152, mrprbgeo@gmail.com

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REQUEST for 2016 SDAG/SDGS and PUBLICATION SPONSORS

On behalf of the San Diego Geological Society, Inc. (SDGS), a public benefit 501(c)3 nonprofit educational corporation, we would like to request tax deductible Donations for our San Diego Association of Geologists (SDAG) group. The list of paid Sponsors and the forms to become a Sponsor are located on the SDAG web site at: http://www.sandiegogeologists.org/Sponsors.html.

Your donation will further the SDGS mission to promote geology and related fields in the greater San Diego region, operating through the San Diego Association of Geologists (SDAG), a committee of SDGS. To achieve our primary educational objective, we organize frequent field trips and maintain a program of monthly meetings featuring speakers on current geological topics. We also publish field trip guidebooks and other publications related to geology and natural history. We encourage scholarship and research by awarding scholarships from the elementary through graduate levels. With your $100 "EMERALD" donation, your name/business will be listed as a sponsor on the SDAG web site (http://www.sandiegogeologists.org/) and in the monthly SDAG meeting newsletters. With your $500 "RUBY" or $1,000 or more "DIAMOND" level donation, your business card will also be included on the SDAG web site and in the monthly SDAG meeting newsletters. In addition, as a "$1,000 or more DIAMOND" level donation you will be presented with a thank you plaque.

Should you have any questions regarding a Sponsorship, please contact our non-profit SDGS Secretary (Diane Murbach) at 619-865-4333.

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Contact: ***Dr. David R. Hargis***

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Contact: Louise Adams or Suzie Nawikas

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Contact: ***Dave Bloom***

Contact: **Rupert Adams, CEG**

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Contact: Brian Olson

http://www.cruxsub.com/

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- Marty and Sherry Bloom – mbloom@san.rr.com
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Add yourself to this list - Sponsors, Corporate Sponsors, and Patrons provide a significant portion of SDGS's and SDAG's operating and scholarship budgets. SDGS is a 501(c)3 public benefit nonprofit educational corporation. For more information, please see our Sponsorship Form.

AAPG Student Chapter

American Association of Petroleum Geologists

Student Chapter of San Diego State University

5500 Campanile Dr., San Diego State University, San Diego, Ca 92182-1020
Website: **aapg.sdsu.edu**

2015-2016 Highlights

March 12, Joint AAPG/AGS Mojave field trip
March 18, AAPG distinguished lecturer, Barney Issen, 3D sismic interpretation
April 1, AAPG Pacific Section IBA competition
April 15-17, Bakersfield Petroleum Field Trip
June 23, PSAAPG Young Professional Networking
Summer Internships: Diane Cheung (Aera), Neil Seitz (Chevron), Elizabeth White (USGS), and Nicole Fenton (USGS).

2016-2017 Plans

Fundraising for student conference and short course travel
Weekly meeting refreshments
AAPG Distinguished Lecturer
Faculty and Alumni presentations and skills workshops
Student abstract presentation practice
Annual field trip
Annual tailgate party

Fundraising Plans

Campus Mineral Sale

Items will be purchased from Jewel Tunnel and must be paid upfront.

Opportunity Drawing: Beginner Geologist Kit

Donations Needed!

Rock hammer • Hand Lens • Brunton • Thermos • Nalgene • Field Notebook • Cooler • Hydroflask, etc.

Funeral Mass for Arthur R. “Dick” Brown

Date: Tuesday, 23 August 2016

Time: 10:30 AM

St. Anne’s Catholic Church, Seal Beach

340 10th St, Seal Beach, CA 90740

www.stannesealbeach.org

Reception at St. Anne’s Hall to follow

Please Note:

Final burial will be at Riverside National Cemetery in a private ceremony on Wednesday.

If any questions, please contact:

Charlie: (562) 999-4292; supbrow@gmail.com

Andrea: (562) 448-4779; andreamonet@gmail.com

Dick Brown

18 September 1936 – 25 July 2016

St. Anne's Catholic Church Seal Beach

Address:

340 10th St, Seal Beach, CA 90740

(On PCH Southbound, after crossing Main St, look for 10th Street, and turn right)

www.stannesealbeach.org

Parrish Office: (562) 431-0721

Parking:

There is a small Church Parking lot

You can also park on the street, but please check the signs for street sweeping times.

You May also choose park across the street at the Pavillions parking lot.