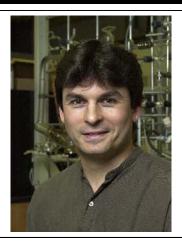


SCALACS

Website address: www.scalacs.org April 2010

A Joint Publication of the Southern California, Orange County and San Gorgonio Sections of the American Chemical Society



Southern California Section Tolman Award Dinner Tuesday, May 11, 2010

Recipient of the 2009
Richard C. Tolman Medal:
Professor Richard B. Kaner,
UCLA

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Orange County Section College Awards
Dinner Meeting
Thursday April 22, 2010
Air Quality Management in the South Coast Basin:
A Chemist's Perspective
Jason C. Low, Ph.D.

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San Gorgonio Section Meeting
Thursday, April 22, 2010
A Modern Gold Rush in Arizona:

The use of modern chemical and isotope analysis to understand the occurrence and distribution of placer gold.

Dr. Erik Melchiorre

See Page 15

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SCALACS

A Joint Publication of the Southern California, Orange County and San Gorgonio Sections of the American Chemical Society

Volume LXIII April 2010 Number 3

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SCALACS (ISSN) 0044-7595 is published monthly March through May, September and October; and Bi-monthly January/February and November/December. Published by the Southern California Section of the American Chemical Society at 14934 South Figueroa Street, Gardena CA 90248. Subscription price is \$10.00/Yr. Make checks payable to Southern California Section, ACS. Second Class postage paid at Gardena, CA 90247., e-mail: office@scalacs.org.

ADVERTISERS: Advertising rates on application. Mail COPY, CONTRACTS and CHECKS to Southern California Section, ACS, 14934 South Figueroa Street, Gardena, CA 90248.

CONTRIBUTORS: Send all copy to Editor, SCALACS, 14934 South Figueroa Street, Gardena, CA 90248, e-mail: editor@scalacs.org.

POSTMASTER: Send change of address to SCALACS, 14934 South Figueroa Street, Gardena, CA 90248.





OK, so what's truly in it for you when you volunteer? For me, it's seeing the wonder in the eye of a young child as he or she sees how a rose shatters after being frozen in liquid nitrogen or the cold water vapor streaming from their nostrils after biting off a piece of

liquid nitrogen frozen graham cracker! It is also the smile on a student who experiences the joy of actually learning the chemistry he or she failed to get in high school. There are many ways one can be rewarded for a career of rewarding work. Being recognized as a valuable member of a group like SCALACS is very rewarding! In fact, I would like to make a couple of award announcements!

Kudos go to Richard Kaner, Professor of Chemistry and Biochemistry at UCLA, as the recipient of the 2010 Tolman Award and Michael Morgan, Chemistry teacher at Francisco Bravo Medical Magnet High School, as the 2010 Outstanding Chemistry High School Teacher Award recipient. Kaner is a materials chemist who conducts cutting edge research in conducting polymer nanofibers and ultra-incompressible, hard materials while Morgan (a fellow UC Santa Cruz Banana Slug!) has been a long time pioneer in chemical education in the SoCal region and chemical philatelist (postage stamp enthusiast). More will be presented on these awards and the recipients, but might we read about you and your contributions to the SoCal chemical community? Whether you're in industry, government or academia; student or faculty, you have the potential to receive such prestigious acolades. If you know someone who you consider worthy of such recognition, then check out the nomination procedure for our Section awards (at http://scalacs.org/? page id=3).

Please don't forget to pay your \$12 local section dues as part of your ACS dues each year as your part in supporting this outstanding organization, SCALACS (it's not too late)!

- Paul Shin, Chair, alchemy@csun.edu

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Tolman Award Dinner

Tuesday, May 11th, 2010

UCLA Faculty Center California Room

University of California, Los Angeles 480 Charles Young Dr. East, Los Angeles, CA, 90095

Synthesis and Applications of Conducting Polymer Nanofibers

Professor Richard B. Kaner, 2009 Tolman Award Recipient,

Department of Chemistry and Biochemistry, Department of Materials Science and Engineering and California NanoSystems Institute, University of California, Los Angeles

6:00 p.m. Check-in & Hosted Social Hour 7:00 p.m. Dinner 8:00 p.m. Presentation

The Award: The Richard C. Tolman Medal is awarded each year by the Southern California Section of the American Chemical Society in recognition of outstanding contributions to chemistry in Southern California. The Tolman Medal recognizes broad accomplishments in chemistry rather than a single fundamental discovery. These contributions may be of several kinds, including seminal research of widely regarded influence, achievements of broad impact in chemical technology, significant contributions to chemical education, and outstanding leadership in science on a national level. To be eligible for the Medal, the recipient must have accomplished a major portion of his or her work while a resident of Southern California.

Abstract: By using either interfacial polymerization or rapidly mixing aniline, oxidant and acid, pure nanofibers of polyaniline can be produced. The key to forming nanofibers is to suppress secondary growth that results in the agglomerated particles found in conventional polyaniline synthesis. Not shaking or stirring the solutions after the initial reaction is also important. Our methods are template-free and *(Continued on Page 4)*

Tolman Award Meeting (Continued from Page 3)

readily scalable. Stable and processable colloids are now available. The synthesis of nanofibers of polyaniline derivatives has been accomplished by adding appropriate initiators. The applicability of these ideas to form nanostructures of polypyrrole and polythiophene will be discussed.

Polyaniline nanofibers exhibit an exceptional photothermal effect in which they instantaneously melt and cross-link upon exposure to a camera flash. This novel flash welding technique can be used to form patterned nanofiber films, create polymer based nanocomposites and make asymmetric polymer membranes. These asymmetric structures can act as mechanical actuators (artificial muscles) when exposed to strong acids. Polyaniline nanofibers are useful in many applications such as resistive-type sensors where their high surface area enable very rapid response times often less than two seconds. Polyaniline nanofibers can be modified to respond to many different vapors including toxic agents such as hydrogen sulfide. The key is using a metal salt such as CuCl2 that reacts with H2S to produce CuS and HCl. This process converts a weak acid (H2S) into a strong acid (HCl) that in turn can be readily detected at very low concentrations. Polyaniline nanofibers can be decorated with metal nanoparticles which not only can enhance sensor response, but also leads to molecular memory devices and catalysts.

Menu and Cost: There is a choice of dinner entrée of Herb and Sea Salt Crusted Black Angus Prime Rib of Beef or Portobello Mushroom Ravioli Gigante (with wilted spinach, wild mushroom fricassee and white Italian truffle oil). The cost is \$40 including wine with dinner, tax, and tip (cash or check at the door).

Reservations: Please call Nancy Paradiso in the Section Office at (310) 327 – 1216 or email office@scalacs.org by Tuesday, May 4, 2010 with your choice of entree. *Note: Please honor your reservation. If you make a reservation and do not attend, you will be liable for the cost of the dinner.*

Directions are available at http://facultycenter.ucla.edu/directions.htm. **There is a \$10 parking fee.**

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Professor Richard B. Kaner 2009 Tolman Award Recipient

Richard B. Kaner received a Ph.D. in inorganic chemistry from the University of Pennsylvania in 1984 working with Prof. Alan After carrying out MacDiarmid (Nobel Laureate 2000). postdoctoral research at the University of California, Berkeley, he joined the University of California, Los Angeles (UCLA) in 1987 as an Assistant Professor. He was promoted to Associate Professor with tenure in 1991 and became a Full Professor in 1993. He has published over 225 papers in top peer reviewed journals and holds 13 U.S. patents with 14 more pending. Professor Kaner has received awards from the Dreyfus. Fulbright, Guggenheim and Sloan Foundations as well as the Exxon Fellowship in Solid State Chemistry and the Buck-Whitney Research Award from the American Chemical Society for his work on refractory materials including new synthetic routes to ceramics. intercalation compounds, superhard materials, graphene and conducting polymers. Alona with appointments in the Departments of Chemistry and Materials Science & Engineering, Professor Kaner served as the Associate Director of the California NanoSystems Institute from 2007-09. Professor Kaner's teaching has been recognized with the Hanson-Dow Award for Excellence in Teaching, the Harriet and Charles Luckman Distinguished Teaching Award and the Gold Shield Faculty Prize for Academic Excellence.

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Science Café Saturday, May 1st, 2010 3:00 pm

Barnes & Noble Booksellers (2nd floor) at 210 Americana Way, The Americana at Brand in Glendale, CA

Rebecca Skloot "The Immortal Life of Henrietta Lacks"

Come hear the incredible story of the most medically influential person to have ever lived - and still lives on, immortally, through her cells! Rebecca Skloot has chronicled the unsung life of the little known (unwitting) donor of the HeLa cell line, Henrietta Lacks, that was used to produce the cure for polio and has been invaluable in medical research to this day, despite her death almost sixty years ago!

THE IMMORTAL LIFE OF HENRIETTA LACKS marks the debut of an outsize new talent in narrative nonfiction. Rebecca Skloot brilliantly weaves together the Lackses' story—past and present—with the story of the first culturing of HeLa cells, the dark history of experimentation on African Americans, and the birth of bioethics. She combines investigative reporting, crystalline science writing, and riveting narrative. The result is a book that leaves as indelible an impression as Henrietta's cells.

REBECCA SKLOOT is an award-winning science writer whose articles have appeared in *The New York Times Magazine*; *O, The Oprah Magazine*; *Discover, Columbia Journalism Review*; and elsewhere. She is a contributing editor for *Popular Science* magazine and has also been a correspondent for NPR and PBS. A former vice president of the National Book Critics Circle, she is on the faculty at the University of Memphis, where she teaches creative nonfiction, and she blogs at Culture Dish, hosted by *Seed Magazine*'s science blogs. Skloot has an undergraduate degree in biomedical science from Colorado State University and an MFA in nonfiction writing from the University of Pittsburgh. She lives in Memphis, Tennessee.

Science Cafes are informal meetings which usually include a short presentation on a particular scientific theme. In addition to our members, we invite the public at large to come participate in open discussions. A central goal of these gatherings is to bring scientists and nonscientists together to listen to one another, so as to get a better sense of how we each see the scientific issues that affect all of our lives. There is a book signing to follow. See you there!

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Joint Younger Chemists Committee and Alpha Chi Sigma Lab Tour at the J. P. Getty Museum.

April 16, 2010 (1:30 pm): Come join the YCC and AXS as we visit the laboratories of the Getty Conservation Institute's Science Group. On the tour we will see how spectroscopy, chromatography, microscopy and analytical methods are used to investigate the materials used in works of art and aid in their understanding and conservation.

Please meet outside the Cafe at 1:30 pm for check-in and an informal social mixer. Due to the size of the group there will be two tours of 15 individuals; one at 2:00 pm the other at 3:30 pm. While not on the tour, you are invited to visit the museum and take in the art and exhibitions.

Please reserve you spot before April 8th as space is limited to 30 individuals. There is a \$15 per vehicle parking fee so if possible, please carpool. There is no cost for the tour.

For questions or reservations, please contact Derek Marin at ma@axsigmalapro.org.

Outreach Activities

The Local Section High School Olympiad Exam was held on March 17 and 18th at 30 schools in Los Angeles County. The National Exam will be held on April 24th at Occidental College.

Saturday, April 3rd, 2010 (8:30 am to 2:00 pm) Opportunities for You in Science and Engineering Conference at Caltech. This is a program that encourages high school students to study science and engineering. The event includes talks on innovations in science and engineering, tours of labs, talks on getting financial aid and college admissions, and hands-on activities. The event will be hosted by Caltech's Center for the Science and Engineering of Materials, the Caltech Classroom Connection, and the local section. Contact Bob de Groot for more information: rdegroot@oxy.edu.

The Expanding Your Horizons Conference for middle school girls will take place on April 10, 2010 from 8:45 am to 2:45 pm at Mount St. Mary's College Doheny Campus, Los Angeles. If you would like to volunteer, please contact Dr. Eleanor Siebert at esiebert@msmc.la.edu.

April 17, 2010 (9 am – 4 pm) Sally Ride Science Festival at Cal State Los Angeles. Join the CSULA Student Members and the Partnership for Research and Education in Materials (PREM) for a day of fun activities and workshops at the Sally Ride Science Festival. We need local section volunteers to help with activities at the Festival's street fair and with the workshops. Contact Bob de Groot at rdegroot@oxy.edu for questions or if you would like to volunteer.



Chemists Celebrate Earth Day Events Theme: "Plants - The Green Machines!"

ACS observes Earth Day with the Chemists Celebrate Earth Day (CCED) program. We offer a suite of events, contests, and educational resources that can be used by members, chemical educators, and chemistry enthusiasts to illustrate the positive role that chemistry plays in the world.

Tuesday, April 20th, 2010 (2—6 pm): Earth Day Celebration at California State University, Northridge. Junior and high school student workshops in chemistry, biology and geology. Contact Dorothy Nguyen-Graff for more information at dng@csun.edu.

Wednesday, April 21st, 2010 (10 am - 1 pm): Earth Day Celebration and Fair at East Los Angeles College, 1301 Avenida Cesar Chavez, Monterey Park, CA 91754. ACS will host a table with the Student Members from ELAC. For more information, contact Bob de Groot at rdegroot@oxy.edu or Armando Rivera at RiveraAM@elac.edu.

Thursday, April 22nd, 2010 at 7:00 pm: The movie Sizzle: A Global Warming Comedy will be shown in the Loker Student Union at the California State University Dominguez Hills. CSUDH's Toro Productions and Science Society join SCALACS in sponsoring the screening, part of the Susana Halpine Memorial Science in the Cinema Series. The Web site for the mockumentary/documentary film is http://sizzlethemovie.com. Ifeanyi Njoku, co-producer (with Randy Olson) of the movie, will be on hand for discussion.

Driving directions may be found at http://www.csudh.edu/visitus/drivingdirections.shtml and a map of the campus is available from http://www.csudh.edu/visitus/campusmap.shtml. There is scant on-street parking; the parking lot costs \$4. For further information, contact Sofia Pappatheodorou at sofia@csudh.edu.

Mailing List Error

We wish to apologize for last month's mailing list error which resulted in the Southern California Section members receiving SCALACS at the right address but with the wrong name. Please be assured this was just a mailing list error and not a database error. We will endeavor to never let this happen again!

Thank you for your patience.

Nancy Paradiso
 Section Administrator

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Orange County Section



Chair's Message

Our February dinner meeting was exciting and thoughtprovoking as we had our first open meeting in a while to discuss the next year of programming for the OC-ACS. Our Section will be not only developing and promoting new programming this year within the local section but also across other scientific societies in the area. One fantastic recommendation is to bring

together local Nobel Prize winners with local students possibly at the 2011 Anaheim National Meeting.

As part of our discussion of the upcoming Anaheim National Meeting, we started discussion ideas for a full day of programming, along with a teachers event. The programming will focus on chemistry from Southern California. We are discussing whether we can invite high schools from the area, along with asking the ACS to provide them with reduced or no entry fees, in order to introduce young chemists to the possibilities of scientific discovery. We are also planning a reception and other activities in order to bring together the local sections in our area.

Our April and May dinner meetings will have the College Awards and High School Awards dinners, respectively. Please review our website for a June event - which will either be a tour of a local facility or a Chemistry Cafe event. Our programming will resume in September. In addition, if you want to attend one of our Executive Committee meetings, please check the online calendar for dates, locations and times. We regularly alternate between in-person meetings and teleconferences.

As mentioned last month, our local section will be putting a greater emphasis on our website this year (www.ocacs.org). The content, calendar and announcements will be updated regularly. So much so, that we are going to use the local section budget normally reserved for the paper newsletter - and invest it in our website. To this end, our last SCALACS participation will be the May/June issue. Please visit our website, update your information with us and set it as your homepage! As part of our content upgrade, we are inviting local section members to provide content in the form of informative articles and/or information that section members may find useful. We will be using the ACS "Cut and Paste" service to provide ACS content on our site. Finally, we are on Facebook at American Chemical Society - Orange County Local Section. Please become a fan and receive regular updates on activities and programming on your Facebook page.

As always, please contact me if you have any questions, programming or website content ideas/submissions and/or want to be more involved in your local section. You can reach me at sthompson@buchalter.com.

- Sandra Thompson, 2010 Chair

Orange County Section

April College Awards Dinner Meeting Thursday April 22, 2010

Concordia University, Irvine

1530 Concordia West, Irvine, CA 92612 Grimm Hall 128 (Social & Dinner) Grimm Hall 120 (Presentation and Awards Program)

Air Quality Management in the South Coast Basin: A Chemist's Perspective Jason C. Low, Ph.D.

Science and Technology Advancement South Coast Air Quality Management District

Registration & Social: 6:00 pm Dinner: 6:30 pm Presentation: 7:15 pm Awards Program: 8:00 pm

Abstract: The presentation will cover a chemist's perspective working in the organization performing air quality regulation in the jurisdiction covering one of the nation's most polluted air environments. The presentation will briefly summarize some of the toxic chemical emissions, chemistry, meteorology and transport which contribute to the challenges in regulating air quality in Southern California and then give an inside view of the role of the South Coast Air Quality Management District and the types of positions responsible for enforcement, technology development, air monitoring, chemical analysis, and policy making.

Biography: Dr. Jason Low is the Quality Assurance Manager of the Monitoring and Analysis Division. He leads the Branch that is responsible for ensuring the quality of the environmental measurement data produced by AQMD meets or exceeds the state and federal specifications. He graduated from the University of California, Irvine with a B.S. in Chemistry, a B.S. in Biology, and an M.S. and Ph.D. in Analytical Chemistry with a focus on atmospheric chemistry. His graduate research involved ambient air studies which included one in *(Continued on Page 11)*

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Orange County Section

April College Awards Dinner Meeting (Continued from Page 10)

the South Coast Basin. He gained six years experience as an Air Quality Chemist and half a year's experience as a Senior Air Quality Chemist in the AQMD laboratory performing technical analytical work on projects related to federally mandated programs such as PAMS and PM2.5 monitoring. He has taken the lead on special projects within large studies such as MATES III and also coordinated laboratory involvement in the AQMD emergency response program which included outreach to local first responder agencies. His current role at the AQMD provides him the responsibility for the implementation, development and assessment, maintenance of the Monitoring and Analysis Division quality system which encompasses the project documentation, methods, training, and QC work performed in the Laboratory and Source Test Engineering and Atmospheric Measurements Branches. Also, he is a co-coordinator for the AQMD monitoring response to regional wildfires that may affect ambient air quality.

Reservations: Please contact Dr. Terri Speakman no later than Thursday, April 15, 2010 at 12 noon to make your reservation. She can be contacted by E-mail: tspeakman@gwc.cccd.edu. Please provide the names and affiliations of those coming to dinner and a contact address and phone number. All requests for any change in reservation must be received by 12 noon on April 19th. Guests will be billed for the full amount for all cancellations received after the April 19th deadline.

Menu: Italian Buffet **Vegetarian option available with advance request**

Cost: \$20 per person. Please pay on arrival (cash or check to OCACS)

Directions: From the 405 Freeway, take Jeffrey-University exit, and then drive west toward UC Irvine. Turn left from University onto Ridgeline, then immediately right onto Concordia. Gate attendant will direct you to free parking and OCACS College Awards Dinner.



This Month in Chemical History

Harold Goldwhite, California State University, Los Angeles hgoldwh@calstatela.edu

In my last column I described the beginning of the career of the chemist – and chemical historian – Edward Thorpe. In 1885 he was picked to succeed Sir Edward Frankland as Professor of Chemistry at what was then the Normal School of Science and Royal School of Mines in South Kensington, London – later known as Imperial College of Science and Technology of the University of London. He resumed work on inorganic chemistry discovering diphosphorus tetroxide in 1886; and later phosphorus (III) oxide, a volatile low-melting reactive crystalline solid. It was this oxide which was responsible for the horrible necrosis of the jaw observed among female workers in the early years of the match industry. His continuing interest in photochemical determinations of light intensity led to expeditions to solar eclipses in the West Indies in August 1886 and in French Senegal in Africa in April Meanwhile inorganic chemistry prospered investigations on atomic weights of titanium and gold; the composition of the spa waters of Cheltenham; manganese trioxide: phosphoryl trifluoride; thiophosphoryl trifluoride: fluosulphonic acid; vapor density of HF at different temperatures; and the decomposition of carbon disulfide by shock. Thorpe also worked both at Leeds and in London on the causes of coal-dust explosions in mines.

Thorpe's penultimate position, which he held from 1894 to 1909, was as Director of the Government Laboratory. He helped design the laboratory's new buildings in central London. This laboratory was heavily involved in analytical chemistry related to industry and Thorpe published papers on the determination of ethanol content of medicinals; on lead content of ceramics; on the occurrence of paraffin hydrocarbons in plants; and on a more precise determination of the atomic weight of radium. He returned to Imperial College from 1909 to 1912 where he helped develop plans for its new buildings which were completed under his successor, William Tilden. (Continued on Page 13)

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This Month in Chemical History

(Continued from Page 12)

Edward Thorpe's great accomplishments led to many honors. After he retired from the Government Laboratory he received a knighthood and was an advisor to the Government during the first World War. He was Vice President of the Royal Society in 1894-95; President of the Society of Chemical Industry in 1895; President of the Chemical Society from 1899-1901; and President of the British Association for the Advancement of Science in 1921. His honorary degrees included doctorates from Dublin University, and the Universities of Manchester, Leeds, Glasgow, and Edinburgh. He had many European friends including Victor Meyer and Mendeleef who stayed with him when they came to England.

Thorpe was a prolific author of textbooks and reference works. His multi-volume "Dictionary of Applied Chemistry" was first published in 1890 and went through several subsequent editions. His texts on inorganic chemistry, quantitative analysis, and qualitative analysis were standard works in their time. (I have a number of Thorpe's works in my personal library). And in the area of history of chemistry, in addition to the "Essays" referred to in my first column on Thorpe he published a history of chemistry (1909) and biographies of Humphrey Davy, Priestley, and Roscoe. Thorpe was also a keen yachtsman; he maintained yachts at Salcombe estuary and wrote two guides for sailors – to the Dutch waterways and to the River Seine. Sir Edward Thorpe died at Salcombe in Devon, England, in February 1925.



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San Gorgonio Section



Chair's Message

Earth Day is this month, and the ACS is sponsoring "Chemists Celebrate Earth Day" on April 22, 2010. This year's theme is "Plants – The Green Machines!" with a unifying event entitled "Where is your green machine?" We are all being encouraged to celebrate the chemistry and use of plants by planting our own Green Machines. If you participate, please consider submitting photos along with a description of what your green machine does to

energize, produce and clean the planet. National is even sponsoring an Illustrated Poem Contest for K-12 students. Please help spread the word to any teachers that you know! More information about all of the ACS sponsored Earth Day programs is available at http://www.acs.org/earthday.

Last summer the section had two Rialto High School students participate in its Project SEED research program, one at CSU San Bernardino, one at the University of Redlands. Both students gave brief oral reports at last October's celebration of the section's 60th anniversary. Here are the remarks of one of the students, Janette Guijosa:

I can't begin to explain how excited I am to be here and to have been part of Project SEED. Before this project, I used to be very intimidated by science. I wouldn't like to work in a lab by myself because I was afraid I would make some sort of error. I was always paranoid that if I tried to pursue a career as a chemist or chemical engineer I was going to fail. I knew I loved science, especially chemistry, but I didn't have the courage to actually try to become a specialist in the field. Project SEED helped me overcome that. I was afraid to participate, but the more I thought about getting to work in college labs with professors who taught the material, the more inspired I was to try.

I couldn't have been any happier the day I learned I was accepted, especially to work at California State University, San Bernardino. When I first got to meet my mentor, Dr. David Maynard, and the rest of the students and professors I would get to work with, I felt more determined to succeed in this project than I was scared.

It was intimidating at first. Everybody I was working with had years of experience and knew a lot more than I did. This worked to my advantage though because I had something new to learn every day. In every procedure I had either a lab partner or a professor there who would be able to explain the reasons and the chemistry behind everything that happened in the lab. This persuaded me to take notes, to go home and find a definition for every word I didn't understand that day. I was inspired to read the textbooks Dr. Maynard gave me and to teach myself what I hadn't known in the lab that morning. I was developing this thirst for knowledge in a subject that I was previously very scared by. (Continued on Page 16)

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San Gorgonio Section

April 2010 Dinner Meeting

A Modern Gold Rush in Arizona:

The use of modern chemical and isotope analysis to understand the occurrence and distribution of placer gold.

Dr. Erik Melchiorre

Thursday, April 22, 2010

Coco's

15570 Park Victorville, CA 92392

Social and Checkin: 5:45 pm Dinner: 6:30 pm Program: 7:30 pm

Abstract: The origin of placer gold has long been of interest to economic geologists. Recent advances in chemical characterization of natural materials have presented a unique opportunity to examine the origin of placer gold through "chemical fingerprinting." This fingerprint involves 1) ICP-MS-LA analysis of ppm-ppb level trace element concentrations within individual grains of gold: 2) Backscatter electron images of grain inhomogenaities and mineral inclusions; 3) lead isotope analyses. The use of these techniques has led to significant recent breakthroughs in identification of the bedrock source(s) of placer gold, and the age of primary mineralization. Gold from Quartzsite, AZ has unique 1-50 micron tellurium-bismuth-mercury mineral inclusions that are characteristic of individual source regions. Gold from Rich Hill, AZ has coppertellurium- bismuth traces in solid solution that identify the specific veins that produced individual placer gold grains. Furthermore, the lead isotope values of the rocks, minerals, and placer gold provide specific information on gold origin and age of deposit formation. All of these techniques will ultimately find use in the archeological community in identification of the gold source for ancient artifacts. In addition to discussion of the geochemical techniques, this presentation will show photos of modern gold collection equipment used by students from California State University, San Bernardino to obtain samples for these studies. Photographs of the nuggets used in this study, ranging from several grams to several ounces, will be shown.

Speaker: Dr. Erik Melchiorre is associate professor of geology at California State University, San Bernardino. He received a B.S. in Geology from the University of Southern California, a M.S. in Geology from Arizona State University, and a Ph.D. in Stable Isotope Geochemistry from Washington *(Continued on Page 16)*

San Gorgonio Section

April Dinner Meeting (Continued from Page 15)

University in St. Louis. Dr. Melchiorre has worked in the Arizona mining industry at the Phelps Dodge-Morenci copper mine and the Cyprus-Bagdad copper mine. He and his students are actively engaged in research on the geochemistry of placer gold deposits in California and Arizona.

Dinner, Cost and Reservations: You may choose one of the following: Angus Bistro Sirloin Steak, Grilled Red Snapper, or Parmesan Crusted Chicken. Entrees come with your choice of an appetizer, soup, or dessert. Alternatively, you may also choose one of the large fresh salads from the menu. All meals include your choice of a soft drink or iced tea (complementary refills). The cost will be \$13 for ACS members, \$15 for nonmembers, \$10 for retirees and \$8 for students. Please make your reservation no later than Monday, April 19th by contacting either Jodye Selco (jiselco@csupomona.edu) or Dennis Pederson (909-537-5477, dpedersn@csusb.edu).

Directions: From the south, take Interstate 215 to Interstate 15 and then to the Palmdale Road Exit in Victorville. Exit and turn left on Mariposa Road, go to Palmdale Road and turn left, go over the freeway to Park Avenue, turn left and the restaurant will be on the left. From the north, take Interstate 15 to the Palmdale Road Exit in Victorville, turn right on Palmdale Road, left on Park Avenue, and the restaurant will be on the left.

Chair's Message (Continued from Page 14)

I was fortunate to have worked in environmental chemistry because it was a branch of chemistry that I did not have any previous knowledge of. As I worked with Dr. Noblet and his students on the water samples, I learned how chemistry plays an important role in the environment. I was part of their water sampling lab, so I had to prepare and test water samples that we would collect from Lake Elsinore and Canyon Lake. As part of my experience in a water sampling lab, I had to actually go out to Canyon Lake and collect some samples myself. That was a new experience because I got to see the actual lake and place that we were monitoring and testing so diligently back in the labs.

I felt so accomplished the next day to know that I was working on the samples that I had collected the previous day. It was a great feeling to know that I was actually doing work in chemistry and that I was doing it well. I am grateful that Project SEED provided me with the opportunity to learn and develop these new skills. This summer experience has been nothing short of spectacular and inspirational. I am now confident that I can and will pursue a career in chemistry. I claim that this is my greatest accomplishment as a participant in the Project SEED program.

If you are interested in sponsoring or hosting a Project SEED student this summer, please contact me at jiselco@csupomona.edu or at (909) 869-4552.

- Jodye Selco, Chair, San Gorgonio Section

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