



# SoCal SETAC NEWS

Society Of Environmental Toxicology and Chemistry  
Southern California Chapter

Volume 8, Issue 4

[www.socalsetac.org](http://www.socalsetac.org)

November 2001

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## ***President's Corner...***

**KAT PRICKETT**  
**SoCAL SETAC PRESIDENT**

The emails have been flying fast and furious between Board members as we make plans for upcoming events. We hope that those of you who are heading to the SETAC North America meeting in Baltimore (November 11 – 15, 2001) will join attending Board members at our chapter meeting. Good news... due to the concerns (OK, griping) of us time-zone-challenged west coasters, SETAC NA offered chapters the option of a lunch break meeting time. We jumped at the opportunity. The SoCal chapter meeting will be held during Tuesday's lunch break. Please refer to the program when you arrive in Baltimore for the exact time and location. I will be providing a brief summary of the meeting of all SETAC regional chapters that will be held Monday, but mostly it will be a time to mix with other SoCal folks at the national meeting. We will also offer some light fare (fruit and drinks) for the grazers among us. Also look for the SoCal Chapter booth (we'll be sharing with our NorCal colleagues) on Wednesday between 11:00 and 1:00 and bring that friend of yours who hasn't yet joined the regional chapter. We have an exciting giveaway planned. "What could that possibly be?" you ask. Come on by and find out!

Those of you recently joining or renewing your membership to SETAC NA may have noticed a new addition to the form. SETAC NA is now offering one-stop shopping for folks wanting to join/renew membership to both SETAC NA and a regional chapter at the same time. But wait... there's more. Traditionally, the membership

term for SoCal SETAC has been July through June, while SETAC NA follows the calendar year. To avoid an administrative nightmare, we will be changing our membership term to match SETAC NA's. As a result, those of you who joined the regional chapter at the Annual Meeting in Long Beach last July or any time before the end of the year will not have to renew until 2003. Don't worry if your day planner doesn't go out that far yet; we'll send you a reminder.

Board members have been busy planning our next dinner meeting. Dr. William A. Jury from the Department of Environmental Sciences, UC Riverside, will present a talk entitled *The Emerging Water Crisis*. This is a topic near and dear to all Southern Californians, but is of global interest and import as well. We'll be gathering Tuesday, December 4<sup>th</sup>, at the Marie Callender's in Corona. See the dinner meeting announcement for details. The social "hour" will get started a bit earlier than usual (3:30 p.m.), so come early and enjoy the company of fellow SoCal SETACers rather than that of anonymous commuters. Dinner and the presentation will follow. I look forward to seeing you there.

Finally, with the calendar year winding down, it's getting to be that time of the year again. We will soon start accepting nominations for the SoCal SETAC Board of Directors. If you or someone you know is interested in learning more about Board member responsibilities, please do not hesitate to contact me or any of the other Board members or Officers.

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## **MEET THE BOARD**

***Dan Schlenk, University of California, Riverside***

As a southern California resident, I grew up in Torrance and basically lived at the beach throughout my childhood. During my junior year in High School, I was fortunate to take a class from Nick Furjanick in Oceanography and he recommended that I apply for a National Science Foundation Summer Science Program at Humboldt State University. In mostly field-oriented course-work, Dr. Gary Brusca taught me Marine Biology and I was hooked. How-

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*Meet the board (continued from previous page)*

ever, I was very concerned about the likelihood of finding employment as a “Marine Biologist” and paying for my education. Consequently, I left So. Cal and did my undergraduate training at Northeast Louisiana University (now known as University of Louisiana at Monroe) where I obtained several scholarships and graduated in 1984. Originally a Pre-Med major, I became disillusioned with what my life would be like as a physician during my junior year. I met Dr. Paul Ferguson who was beginning an undergraduate Toxicology degree program (one of only eight in the US at the time). I was able to do some research in his laboratory and he suggested that I could pursue “Marine Biology” as a “Marine Toxicologist”.

After attaining my BS in Toxicology, I only applied to one graduate program. At the time, only Oregon State University had a graduate program in Toxicology where the Director of the Marine Laboratory was on the Toxicology faculty. Unfortunately, after gaining acceptance to the PhD program, I was informed he was no longer taking students. Since I didn't have any other options, I decided to go anyway and spent the first 3 years of graduate school moving from department to department trying to decide what I wanted to do. One of the laboratories in which I worked isolated Marine Natural Products (i.e. potential therapeutic agents) from Marine algae (Dr. William Gerwick). I became very interested in “how” these compounds caused the bioactivity observed in the field and transferred to the laboratory of Dr. Donald Buhler who became my mentor and provided me with an NIEHS predoctoral fellowship. In his laboratory, I learned about how marine organisms biotransform chemicals to detoxify, or in some cases bioactivate them to more toxic intermediates. I became very interested in mechanisms of toxicant action and the role of biotransformation in this process. Since many of these enzymes are induced upon exposure to potential substrates, I also became interested in the use of biomarkers or bioindicators to provide mechanistic insight into ecological risk assessments.

After finishing up my dissertation in 1989, I was fortunate to obtain a NIEHS postdoctoral fellowship at Duke University. Here, I worked in the laboratory of Dr. Marius Brouwer learning recombinant DNA methodologies and characterizing various metal binding



Dan Schlenk (right) and colleague Marc Slattery (left) attempt to play Frisbee with alligators on a collecting trip in Florida.

proteins (Metallothioneins) in marine arthropods. This work was done primarily at the Duke University Marine Laboratory.

In 1991, I was hired as an Assistant Professor at the University of Arkansas for Medical Sciences. I have always been grateful to those who mentored me during my high school, undergraduate and graduate years, so I chose academia as a career in the hope that I too may positively influence the lives of others and provide hope and encouragement as I was by those who mentored me. In addition, the “freedom” to travel and meet new people and learn as much as I can from others have been important factors in guiding my career. However, this initial academic experience was quite painful, as I was trying to basically be an aquatic toxicologist in a human-health oriented environment.

After 3 grueling years essentially working alone, I moved to the University of Mississippi where I was able to work in close collaboration with Dr. William Benson. This was truly the epitome of the academic experience as we essentially combined laboratories and worked on a number of very interesting issues including Environmental Estrogens and other Endocrine Disrupting compounds. We also began work examining the effects of natural marine products derived from sponges and corals on specialist predatory organisms (tropical invertebrates and fish) trying to understand how these organisms cope with the toxicity from chemical defended prey.

In 1999, Dr. Benson left the University of Mississippi, and I finally realized I was a long way from the ocean. Consequently, in 2000, I decided to move back to Southern California and accepted a position at the University of California, Riverside as Professor of Aquatic Ecotoxicology. Since moving here a year ago, I have been so fortunate to meet a plethora of fantastic scientists with whom to collaborate. We have projects ranging from the effects of salinity on pesticide toxicity (Salton Sea) to utilizing mechanistic risk assessments to provide more accurate indications of sediment quality (PAHs), as well as projects exploring the basic effects of organoselenium and environmental estrogens on fish development.

Although a bit farther away than I would like, the beach is still within striking distance and I have been all-too-painfully trying to

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pick up surfing again after a 20 year hiatus. My favorite hobbies are spending time with my two children (Marina and Noah—note the oceanic/aquatic theme) and wife, Ronly.

## BOARD MEETING MINUTES SEPTEMBER 2001

*Contributed by Karen Riveles*

On September 6, 2001, a SoCal SETAC Officer and Board of Directors meeting were held at the Mikel Residence, Ventura, CA. Our Treasurer's report was provided by Lan Wiborg via email, which included an update of our financial status. A handout was given out with the breakdown of the total input and output costs of the 2001 Annual Meeting. Some ideas were discussed regarding how to lower our Annual Meeting expenses, including raising the registration fee and having the meeting at a university instead of a hotel. The application for nonprofit status is still pending.

During Karen Riveles' Secretary's Report, we discussed clarifying the definitions of current members vs. extended members. Current members are those who have paid for the current year. Members that are delinquent by only one year will continue to receive the newsletter, but will be sent an email requesting renewal of membership dues. The extended list will now be used only to promote events, dinner meetings, and the annual meetings. People on this list will no longer receive the newsletter. For the next newsletter, we will notify people on this list that it is their last issue.

We will start to receive information and money from National SETAC for those who sign up for our chapter through the National registration. Their membership cycle is by calendar year, so we discussed and voted to change our membership cycle to the

calendar year (Jan to Dec). We will start our membership drive in November. Everyone who renewed their membership at this year's annual meeting will actually receive a 1½ year membership until Dec. 31, 2002. If someone registers to be a member at next year's Annual Meeting, that membership will only be good until the end of the year.

SoCal SETAC will hold a Dinner Meeting in December. Dan, Karen, and Fabienne have formed a committee to plan the December Dinner Meeting, which will be held in Corona, CA. We had a long discussion about traffic and decided that the dinner meeting would need to be held earlier in the hope that people would leave work earlier to avoid traffic. We have scheduled as follows: 3:30-5:00 Social, 5:00-6:30 dinner, and 6:30-7:30 lecture/presentation. Our speaker will be Bill Jury, who will speak on Resource Sustainability. The registration information for the Dinner Meeting will be included in the November newsletter.

SETAC North America Annual Meeting is happening this November and SoCal SETAC representatives will be there. SoCal SETAC Chapter will have a meeting on Tuesday at lunchtime, so, if you plan to attend the National Meeting this year, make sure to come to this gathering. This will be a social event and NA SETAC will be providing drinks and a light snack. Kat will provide a very informal presentation on the Regional Chapters Meeting and possibly discuss the benefits of local chapter membership. We will be sharing a booth with the NorCal Chapter on Wednesday from 11am-1pm. If you would like to volunteer at this booth, please let Kat Prickett know. We discussed ideas of what we could do at the booth to attract prospective members. The Long Beach Aquarium will be donating tickets for us to give away.

The next Board Meeting will be at Marie Callender's, 160 Rincon St. (Main and Rincon), Corona, CA. on Tuesday, December 4, 2001 starting at 11am followed by a Dinner Meeting starting at 3:30pm.

### A "Thank You" from Kids At Heart/UPLIFT.



At the 2001 Annual Meeting, a \$200 donation in the name of outgoing Past President Marilyn Schwartz was made to Kids at Heart, an organization that tutors economically and socially disadvantaged youth in the region, as part of the Marissa Gaumond Memorial Award of Service.



*Southern California SETAC*



Invites You to Attend  
A Dinner/Speaker Meeting Entitled

*The Emerging Water Crisis*

Presented by

*National Academy Member  
and Distinguished Professor of Soil Physics  
William A. Jury, Ph.D.*

Department of Environmental Sciences  
University of California, Riverside

December 4, 2001

*3:30 –5:00 PM Social*

*5:00-6:30 Dinner*

*6:30-7:30 Presentation*

Marie Callenders' Restaurant

160 East Rincon Street

Main and Rincon

Corona, CA 92879

North on Main Street off of the 91 freeway (west of I-15)

909-735-4310

Are we running out of fresh water? If we focus our attention on the next 25-50 years the answer is a qualified yes. By the year 2025, some 3 billion people will live in water-stressed areas, and dozens of countries, including some large ones, will lack the water needed for food self-sufficiency. The emerging water crisis is but one aspect of the enormous challenge of reaching planetary sustainability. Solutions to water problems must be addressed globally, with enhanced technology transfer and unprecedented cooperation between those who share a common resource.

**Dinner Meeting Registration Form**  
**Southern California SETAC Dinner Meeting – Dec 4, 2001 - 5:00 pm**

*The Emerging Water Crisis*

**Dr. William Jury, UCR**

**Meeting Registration Information (Circle One)**

Name \_\_\_\_\_

Company/Institution/Organization \_\_\_\_\_

Address \_\_\_\_\_

Phone/Fax \_\_\_\_\_

E-Mail \_\_\_\_\_

<i>Membership Status</i>	<i>Before 11/30</i>	<i>On Site</i>
<i>SoCal SETAC Member</i>	\$30	\$35
<i>Non-Member (Includes membership)</i>	\$50	\$55
<i>SoCal SETAC Student Member</i>	\$20	\$25
<i>Non-Member Student (Includes student membership)</i>	\$35	\$40
<b>Total Enclosed</b>		

Send Check or Money Order made out to **SoCal SETAC** to:  
**SoCal SETAC**  
**c/o Karen Riveles, Secretary**  
**P.O. Box 655**  
**Riverside, CA 92502**

**Meal Selection (Check One)**

Pasta Primavera (vegetarian dish)  
 (Chicken optional; please place a C in the box)

Artichoke and Mushroom Chicken (chicken breast  
 with freshly sauteed mushrooms and artichokes in  
 an Alfredo-herb sauce, served over rice pilaff)

Top Sirloin steak on a bed of caramelized onions  
 and mushrooms, served with a baked potatoe

## SUMMARY OF THE 11<sup>TH</sup> INTERNATIONAL SYMPOSIUM ON POLLUTANT RESPONSES IN MARINE ORGANISMS.

*Contributed by Dan Schlenk*

This symposium, abbreviated as PRIMO, occurs every two years and alternates between North America and Europe. In 2001, the meeting was held on July 10-13 in Plymouth (UK), where the original meeting occurred in 1981. The meeting was initially started as a joint workshop put together by the Plymouth Marine Laboratory and Woods Hole Oceanographic Institution. Each symposium is organized regionally and is not supported by any scientific society. Attendees are notified through "word of mouth" or through viewing the contents of the meeting which are published in special issues of *Marine Environmental Research*.

Topics of the symposia are dedicated to a mechanistic understanding of the effects of foreign chemicals on biological systems which reside in aquatic environments. This year's approximately 300 attendees viewed more than 200 papers as poster or platform presentations. The topics included Mechanisms of Toxicity (with a focus either on organics or metals); Endocrine Disrupters; Biomarkers of exposure and adverse effect; Proteomics and Genomics; Multixenobiotic resistance; Pathology and Carcinogenesis; Toxic Effects on Reproduction and Development; Genotoxicity; and Oxidative Stress.

Highlights included: Identification of specific endocrine disrupting compounds from sewage treatment effluents demonstrating a lack of androgenic compounds in the UK; The identification of novel mechanisms explaining species resistance of halogenated aromatic compounds observed in several locations such as the Elizabeth River, and New Bedford Sound; Characterization of novel xenobiotic biotransformation pathways and enzymes from aquatic organisms; Numerous studies showing the

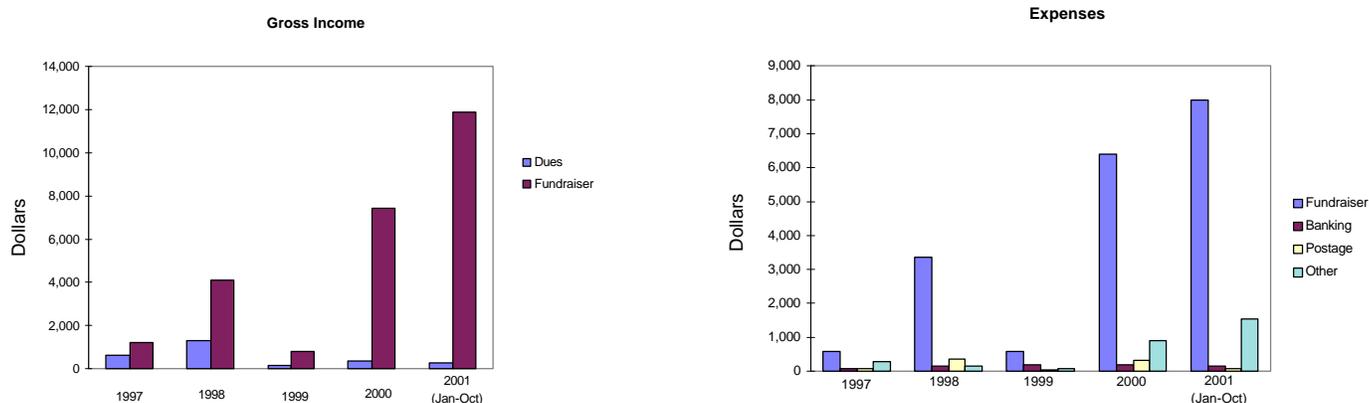


benefits of utilizing biomarkers and bioindicators as mechanistic tools to determine causality of specific stressors; and Utilization of microarray technology to identify molecular targets of specific toxicants that can be used to determine species susceptibility as well as more specific bioindicators of sublethal adverse effects.

Plenary sessions included topics such as: Assessing Human Impact on Aquatic Systems at a Global and Regional Level (Prof. Laurence Mee); Supercomputer Simulations of the Heart and Lungs and their Use in Toxicology (Prof. Denis Noble); The Role of Biological Research in Supporting Policy Needs (Paul Leonard); and Recovery of Polluted Coastal Ecosystems: the Case for Long-term Studies (Prof. Steve Hawkins et al.).

In 2003, the meeting is scheduled to be hosted by the University of Florida at an undetermined site. The website for the past meeting in Plymouth is located at [www.primo11.org](http://www.primo11.org).

## SoCAL SETAC FINANCIAL REPORT



Thanks to the hard work of many dedicated individuals and the continuing support of our members and SETAC NA, the chapter's financial outlook has steadily improved throughout the last several years. The 2001 annual meeting was a great success and the corporate sponsorships and advertisements gave our account a much-needed boost. Let's keep up the good work! Meanwhile, the chapter's non-profit application is being handled by Considine & Considine, a San Diego accounting firm specializing in non-profit organizations. As always, the financial records are available for review to all members in good standing. – *Lan Wiborg, Treasurer*

## Membership Reminder

*It's time to renew your SoCal SETAC membership!!!*

Membership fees for 2001-2002 are now due (all memberships were due for renewal on July 1). The membership term has been changed to the calendar year (Jan. 1 – Dec. 31); renewals received before the end of the year will be valid until December 31 2002.

Please fill out a membership form (found both in this newsletter and on the website) so we can update your contact information. Send the form and your check made out to SoCal SETAC to:

Karen Riveles  
SoCal SETAC Secretary  
P.O. Box 655  
Riverside, CA. 92502

If you have any questions regarding your membership status, you can email Karen at [karenriv@aol.com](mailto:karenriv@aol.com)

If you attended the annual meeting, your membership was automatically renewed through December 31 2002.

## Employment Opportunities

**Marine Toxicologist** The Southern California Coastal Water Research Project ([www.sccwrp.org](http://www.sccwrp.org)) seeks a Ph.D scientist to study the effects of contaminated sediment and urban runoff on marine life. Send resume to Bryan Neece, administrative officer, [bryann@sccwrp.org](mailto:bryann@sccwrp.org).

**Watershed Ecologist** The Southern California Coastal Water Research Project ([www.sccwrp.org](http://www.sccwrp.org)) seeks a Ph.D scientist experienced in the measurement/interpretation of water quality data and the use of watershed models. Apply to Bryan Neece, administrative officer, [bryann@sccwrp.org](mailto:bryann@sccwrp.org).

**Laboratory Assistant** The Southern California Coastal Water Research Project ([www.sccwrp.org](http://www.sccwrp.org)) has part-time job openings (20 hrs./wk) for undergraduate/graduate students. Activities include marine animal culture, toxicity testing, and data analysis. Apply to Steven Bay, [steveb@sccwrp.org](mailto:steveb@sccwrp.org).

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- TMDL Development and Support
- NPDES Permitting
- Toxicity Assessments
- Wetland Restoration
- Regulatory Compliance and Support
- Remediation and Investigation



ARCADIS JSA is one of the premier strategic environmental consulting firms in the country, which specializes in ecological risk, natural resource damage assessment and environmental liability allocation. Much of our experience has been on sites involving multiple potentially responsible parties and sources. ARCADIS JSA has worked in collaborative efforts with engineering and law firms, manufacturers, real estate developers, municipalities, and landowners in broad interdisciplinary studies. Our risk professionals have extensive experience dealing with regulators at the state level and within the regions of the EPA.

ARCADIS JSA offers a wide range of risk, regulatory and toxicological services to manage and evaluate the impact of human activity on the environment. Our expertise includes extensive work on PCBs, dioxins and furans, PAHs, metals and metalloids, crude oil and chlorinated pesticides in virtually all types of aquatic and terrestrial systems. Our expertise in toxicology, ecology, biology, biostatistics and environmental chemistry ensures that appropriate project designs are utilized and that conclusions are made from a scientifically defensible position. ARCADIS JSA offers a unique combination of technical expertise and a thorough understanding of risk regulations and guidance.



ARCADIS JSA  
301 E. Ocean Blvd., Suite 1530  
Long Beach, California  
562-628-1176  
[www.arcadis-us.com](http://www.arcadis-us.com)

# ENTRIX

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- environmental risk management
- forensic chemistry
- natural resource damage assessments, including environmental economics
- aquatic resources
- restoration ecology
- environmental compliance

*the Team... the Tools... the Results*

# ENTRIX

## CALENDAR OF EVENTS

Contributed by Marilyn Schwartz

### NOVEMBER 2001

**Society of Toxicology: Use of Genomic Data in Risk Assessment: State of the Art 2001**

7 - 8 November, Washington, DC

[www.toxicology.org/memberservices/FormsApps/genomics.pdf](http://www.toxicology.org/memberservices/FormsApps/genomics.pdf)

**Industrial Environmental Association Annual Mtg**

8 - 9 November, San Diego, CA

[www.ieasdc.org](http://www.ieasdc.org)

**Western Society of Naturalists**

9 - 12 November, Ventura, CA

<http://www.wsn-online.org/meeting.html>

**22<sup>nd</sup> Annual SETAC Meeting**

11 - 15 November

Baltimore, Maryland

[www.setac.org](http://www.setac.org)

### DECEMBER 2001

**Society for Risk Analysis Annual Meeting**

2 - 5 December

Washington, DC

[www.sra.org](http://www.sra.org)

**Symposium on Gene Expression & Proteomics in Environmental Health Research**

3 - 4 December, Bethesda, MD

[www.niehs.nih.gov/nct/](http://www.niehs.nih.gov/nct/)

**2<sup>nd</sup> National Conference on Science, Policy & the Environment: Sustainable Communities: Science & Solutions**

6 - 7 December, Washington, DC

[www.NCSonline.org](http://www.NCSonline.org)

### JANUARY 2002

**Sediment Stability Workshop**

22 - 24 January 2002

New Orleans, LA

[smv@honigman.com](mailto:smv@honigman.com)

### APRIL 2002

**Mercury in the Environment: Assessing and Managing the Multimedia Risks**

7 - 11 April 2002, Orlando, Florida

[stelz.william@epa.gov](mailto:stelz.william@epa.gov)



## *SETAC 22<sup>nd</sup> Annual Meeting*

*Baltimore Convention Center*

*11 - 15 November 2001*

*“Changing Environmental Awareness: Societal Concerns and Scientific Responses”*

### **SHORT COURSES INCLUDE:**

Whole Effluent Toxicity (Part 2)  
Toxicity Identification Evaluations  
Predicting the Toxicity of Metals  
Determination of Biological Impairment  
Application of GIS  
Interviewing: A Workshop for Students  
Molecular Techniques in Ecotoxicology

### **SPECIAL SYMPOSIA:**

Perfluorinated Chemicals  
Problems of Scale in Assessment of Contaminant Fate and Transport  
Endocrine Disruptors: Policy, Science and Issues  
Advances in Regional and Coastal Ecological Assessments  
Hydrocarbons in Ecological Assessments

### **ALSO:**

*72 platform sessions and over 1,000 posters  
SoCal SETAC meeting at noon on Tuesday  
Banquet at the National Aquarium*

Registration Forms and Hotel Selection  
available online

Check [www.setac.org](http://www.setac.org) for details

## SoCal SETAC Officers and Board of Directors – Fiscal Year 2001-2002

POSITION	NAME & AFFILIATION	RESPONSIBILITIES
<b>Past President</b>	<b>Joe Gully</b> L.A. County Sanitation Districts <a href="mailto:jgully@lacsdsd.org">jgully@lacsdsd.org</a>	Advisor/Stand-in for President and Vice-President. Program Committee Chair for SoCal SETAC Annual Meeting
<b>President</b>	<b>Kat Prickett</b> Arcadis JSA <a href="mailto:kprickett@jsae.com">kprickett@jsae.com</a>	National SETAC Liaison Board Agenda & Action Items
<b>Vice-President</b>	<b>Steve Bay</b> SCCWRP <a href="mailto:steveb@sccwrp.org">steveb@sccwrp.org</a>	Newsletter Editor
<b>Treasurer</b>	<b>Lan Wiborg</b> City of San Diego, MWWD <a href="mailto:L7W@sdcity.sannet.gov">L7W@sdcity.sannet.gov</a>	Membership Maintenance Meeting Finances & Contracts Non-Profit Application
<b>Secretary</b>	<b>Karen Riveles</b> UC Riverside <a href="mailto:karenriv@aol.com">karenriv@aol.com</a>	ElectionCoordinator
<b>Board Member (Academic)</b>	<b>Daniel Schlenk</b> UC Riverside <a href="mailto:Daniel.schlenk@ucr.edu">Daniel.schlenk@ucr.edu</a>	
<b>Board Member (Private)</b>	<b>Tim Mikel</b> Aquatic Bioassay and Consulting <a href="mailto:tmikel@pacbell.net">tmikel@pacbell.net</a>	
<b>Board Member (Public)</b>	<b>Gerald McGowen</b> City of Los Angeles, EMD <a href="mailto:gem@san.ci.la.ca.us">gem@san.ci.la.ca.us</a>	
<b>Board Member (Student)</b>	<b>Fabienne Reisen</b> UC Riverside <a href="mailto:fabienne_reisen@hotmail.com">fabienne_reisen@hotmail.com</a>	
<b>Board Member (Academic)</b>	<b>Arturo Keller</b> UC Santa Barbara <a href="mailto:keller@bren.ucsb.edu">keller@bren.ucsb.edu</a>	
<b>Board Member (Private)</b>	<b>Michelle Anghera</b> UC Los Angeles <a href="mailto:angheras@email.msn.com">angheras@email.msn.com</a>	
<b>Board Member (Public)</b>	<b>Jeff Armstrong</b> Orange County Sanitation District <a href="mailto:jarmstrong@ocsd.com">jarmstrong@ocsd.com</a>	

### THIS SPACE FOR RENT

### CHEAP !!!

**FREE** Generic Job Announcements and **INEXPENSIVE** Commercial Advertisements/Announcements are being accepted for future issues of SoCal SETAC News

Free job postings are limited to 5 lines at publication width (3.25 in., 10 point, Times New Roman font) and are subject to edit as needed to format the newsletter. Job announcements beyond the 5-line limit described or including logos can be purchased at the commercial rates. Per issue ad rates are:

**Full Page: \$100**  
**Half Page: \$75**  
**Quarter Page: \$50**  
**Eighth Page: \$35**

Please send camera-ready advertisements or job listings to Steve Bay at [steveb@sccwrp.org](mailto:steveb@sccwrp.org) for inclusion in the next issue of SoCal SETAC News.

**SOCIETY OF ENVIRONMENTAL TOXICOLOGY AND CHEMISTRY  
SOUTHERN CALIFORNIA CHAPTER  
2000-2001 APPLICATION FOR MEMBERSHIP**

Please send application and payment (checks payable to Southern California SETAC) to SoCal SETAC, c/o Karen Riveles, P.O. Box 655, Riverside, CA. 92502. Please do not send cash.

Name \_\_\_\_\_ Affiliation \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone No.: \_\_\_\_\_ FAX No.: \_\_\_\_\_ E-Mail\* \_\_\_\_\_

\*E-Mail address required to receive newsletter.

**Category of Employer: (Please check one that applies)**

Government \_\_\_\_\_ Industry/Business \_\_\_\_\_ Academic \_\_\_\_\_  
 Student \_\_\_\_\_ Consultant \_\_\_\_\_ Other \_\_\_\_\_

**Technical Background: (Please check one that applies)**

Atmospheric Science \_\_\_\_\_ Engineering \_\_\_\_\_  
 Biology \_\_\_\_\_ Health Science \_\_\_\_\_  
 Chemistry \_\_\_\_\_ Toxicology \_\_\_\_\_  
 Earth Science \_\_\_\_\_  
 Ecology \_\_\_\_\_ Other \_\_\_\_\_

**Degree(s) earned:** \_\_\_ B.A./B.S. \_\_\_ M.A./M.S. \_\_\_ Ph.D. \_\_\_ P.E. \_\_\_ Other \_\_\_\_\_

**Class of Membership for which you are applying: (Please check only one)\***

Annual membership covers January 1<sup>st</sup> - December 31<sup>st</sup>. Dues paid prior to September 1<sup>st</sup> will apply only to the current membership cycle.

_____	Active Member	\$20.00 per year
_____	Regional Member	\$20.00 per year
_____	Student Member	\$10.00 per year

\***Active Members** and **Regional Members** are qualified professionals who share the stated purpose of the Chapter and who have education, training, research or applied experience in environmental toxicology and/or chemistry. **Active Members** must also be members of National SETAC. **Student Members** are individuals who share the stated purpose of the Chapter and are students showing promise of becoming qualified for Regional or Active status at a later date.

Please check here if you would prefer not to be included in the membership directory \_\_\_\_\_