Professor sees solar solution to safer water

Cardboard and aluminum foil. Unlikely tools for curbing water-borne diseases—until you factor in sunshine and biology professor Robert Metcalf.

For 25 years, Metcalf has been touting the benefits of solar cooking as a cheap, sustainable fuel source for developing coun-
tries. But a series of laboratory findings by the microbiologist reveal it can also be a simple technique for killing harmful bacteria in drinking water.

When it comes to contami-
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“Water boils at 212 degrees, but heating it to only 149 degrees (63 degrees Celsius) will kill disease-causing microbes in water.”

About a dozen students have contributed to Metcalf’s pas-
teurization research. “We’re the world’s experts on this. It’s world-class stuff we’re doing,” he says. They also helped develop a simple, reusable device—a wax-based water pasteurization indicator or WAPI—that allows people in parts of the world where thermometers aren’t readily available to verify pasteur-
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For the last four summers, Metcalf has been taking his water act on the road to East Africa. This year, he and CSUS alum Christine Polinelli of the Australian Department of Health worked with the Sacramento-based non-profit Solar Cookers International to launch Sunny Solutions, a program in Tanzania’s Meatu District.

“Out in the middle of nowhere we’re teaching serious microbi-
ology that they can apply and understand. Through the method

SUNNY SOLUTION – Biology professor Robert Metcalf has spent the last four summers showing residents of Tanzania and Kenya how to use solar power to purify water. He is pictured (front row, third from left) with village health workers and chief village officers at a water testing/solar pasteurization workshop in Tanzania’s Meatu District.

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of teaching we use, they learn how a tiny microbe can become billions quickly and cause dis- ease. It's thrilling to be able to do that,” he says.

The information can help them make decisions about chlorine-water sources like wells or using solar-powered water purification. While in Tanzania and Kenya, Metcalf and Polielli even sold and persuaded their own drinking water.

One added bonus for the Sunny Solutions program is that once people see how to make a solar cooker and do water purification, they see what it can do for cooking.

Metcalf says that most of the world’s 1.2 billion people who don’t have safe water also use even-scarcer fuel wood for cooking. Cooking using traditional fuel requires about two pounds per person each day, which ends up as ash. Wood fires also create tremendous indoor air pollution, equivalent to smoking three packs of cigarettes per day. In many fuel-scarce countries like Kenya, solar cooking and solar water pasteurization is possible 200-300 days per year.

“The potential for spread and the sustainability of the project are enormous,” Metcalf says. “The reason so many of us get into this work is there are things we can discover which we can learn from the human community. Here’s something that can.”

– Laurie Hall

**Solution Continued from page 1**

**new faces**

**JIM MACKEY**
Accountancy, had an article titled “The New CPA Exam Continues to Ignore the Needs of Managerial Accounting Students for American Industry” published in the July issue of The CPA Journal.


**ERNST UWAZIE**, criminal justice, presented a lecture on “Examining Legal Reform in Nigeria: The Prospects of Alternative Dispute Resolution” on Aug. 8 at the Nigerian Institute of Peace and Conflict Resolution in Abuja, Nigeria. He also had a book titled Conflict Resolution and Peace Education in Africa published in August.

**RICKY GUTIERREZ**, criminal justice, had a book titled Social Equity and the Funding of Community Policing published in October.

**KATHLEEN CAIRNS**, history, presented a paper titled “Outlaw Women and Noir Fiction in Depression-era California” at the Western History Association conference in Fort Worth, Texas on Oct. 10.

**JIAN-ZHONG ZHOU**, library, had an article titled “History of Web Portals and Their Development in Libraries” in the September issue of Information Technology and Libraries.

**MARK SIGLER**, economics, had an article titled “The NBA and the Influx of International Basketball Players” accepted for publication in Applied Economics.

**JACK GODWIN**, global education, received a $5,000 scholarship from the Fulbright Specialist program and worked on a project related to Hungary’s forthcoming membership to the European Union at the Budapest University of Economic Sciences and Public Administration.

**DAVID LEON**, ethnic studies, was appointed an advisory committee working on a quality of life report with Valley Vision.

**STEPHAN KROLL**, economics, has an article titled “Social Capital and the Value of Hunting Clubs” accepted for publication in Human Dimensions of Wildlife.


**TERRI CASTANEDA**, anthropology, presented research on linguistic J.P. Harrington’s fieldwork among North Central California Indians in October at the California Indian Conference in Watsonville. Castaneda also served as moderator for a panel titled “Putting Culture into Practice” at the September Envisioning California conference in Universal City.

**BOB JENSEN**, psychology, recently presented at the conference of the International Society for Exploring Teaching and Learning at Port Collins, Colo. His presentation was titled “I Read the News Today, Oh Boy! Getting Behind the News to Develop Critical Thinking Skills and Information Competencies.”

**BETH KIVEL**, recreation and leisure studies, presented a paper titled “Theorizing ‘Experience’ and ‘Race’ in Leisure Sciences” during October’s Leisure Research Symposium at National Recreation and Park Association Congress in St. Louis.

**DAVID MADDEN**, English, attended a conference in France and gave the introductory speech about writer Paul Weyr’s manipulations of postmodern historiography.

**AFSIN MARASHI**, history, received honorable mention in the annual dissertation competition of the Foundation for Iranian Studies for his doctoral thesis titled “Nationalizing Iran: Culture, Power, and the State, 1870-1941.”

**DONALD DIXON**, criminal justice, presented three times at the International Association for the Study of Crime Analysts conference in Kansas City, Mo. His research was on “Understanding the Criminal Justice System,” “Use of Inferential Statistics,” and “Conducting Demographic Analysis.”

**MARLENE VON FRIEDERICHS-FITZWATER**, communication studies, has been appointed to an assistant adjunct professor position in Hematology/Oncology at the UCD Medical School. She was also named to the scientific advisory board of the Cancer Narratives for Low Literacy Adults program.


**KATHRYN KEYES**, advancement, received her Certified Fund Raising Executive designation in October.

**JIM BAXTER**
Assistant professor of biological sciences
Background and expertise
Baxter earned a bachelor’s degree in biochemistry and molecular biology from UMass Amherst, a master’s degree in ecology and systemic biology from San Francisco State University and a doctorate in ecology and evolution from Rutgers University. His expertise is in the ecology of plant communities, especially in how the diversity of mycorrhizal fungi influences plant performance and plant community structure. He also is interested in the effects of pollution, biological invasions and other human impacts on ecological systems.

**JOEL DUBOIS**
Assistant professor of humanities and religious studies
Background and expertise
Dubois earned a bachelor’s degree in speech from Northwestern University and a master’s degree in theological studies and a doctorate in theology from Harvard Divinity School. He previously taught at Wharton College in Walla Walla, Wash., and Transylvania University in Lexington, Ky. He specializes in Asian religions, particularly Hindu and Buddhist traditions in South Asia.

**LEON WIEBERS**
Assistant professor of theatre and dance
Background and expertise
Wiebers earned a bachelor’s degree in theatre from the University of Washington and a master’s degree in design from UCLA. His expertise is in set and costume design and he has designed theater productions in the U.S. and Europe. Wiebers recent credits include costume design for Il Barbaro dei Sigilgia for the San Francisco Opera Center, Cymbeline for the Georgia Shakespeare Festival and Three Sisters for the Interact Theatre, for which he won a Back Stage West Garland Award and an L.A. Weekly Award.

**GINA KAUFMANN**
Assistant professor of theatre and dance
Background and expertise
Kaufmann comes to CSUS from the University of Louisville where she was an assistant professor of acting and directing. She earned her bachelor’s degree in theatre from the University of Iowa and her master’s degree in directing from the University of Kansas. Kaufmann’s expertise includes the development of new plays, a skill she developed as a guest director at Brown University and as artistic director for The Unusual Cabaret in Maine. In addition she has worked as a professional actor and director in New York and in regional theaters for the past 15 years.
State Hornet alumni buzz over upcoming reunion

For more than 50 years, the staff of the State Hornet has been pounding out the news. Year after year the newspaper has given generations of students hands-on experience in journalism while keeping the campus community informed. Along the way many of those students made memories—and friends—to last a lifetime.

“It’s more than a club,” says Sylvia Fox, the paper’s faculty adviser. “These students bond with their group for life.”

Now those generations of staff are set to get together and celebrate. The newly formed State Hornet Alumni Chapter will be hosting a reunion for all staffers, past and present, from 4 to 8 p.m., Friday, Dec. 12 in the University Union. Speakers will include government professor Bill Dormann and other State Hornet personalities.

The reunion is the chapter’s first event.

“We’re trying to get anyone who’s ever been involved in the State Hornet,” says Fox. For her and chapter president Tomi Ross Poeppelman it’s an opportunity to give the current crop of staffers a sense of their heritage and peek into their future possibilities as well as to reacquire alumni to the program.

“This first one is a ‘friend raiser’—you need to find out who is interested,” Ross Poeppelman says. Those interested will be encouraged to reconnect to the campus by joining the chapter and supporting programs benefiting student staffers.

“Reconnecting means speakers who can come to the campus, mentors, or internships,” Ross Poeppelman says. Plans also call for the chapter to establish a travel fund so that staffers can attend student and professional conferences.

Ross Poeppelman knows first hand how a student’s time at the Hornet can affect their lives. From 1983 to 1985 she was a Hornet reporter, then the paper’s first female sports editor and, finally, its managing editor. Now she’s a CSUS communications and journalism professor.

Looking out over the newspaper’s University Union offices with its rows of shiny Macintosh computers and wall-to-wall carpeting, Fox doesn’t want the staff to forget it hasn’t always been this way.

She and Ross Poeppelman recall the days when the paper was housed in cramped yet cozy buildings adjacent to Union.

“When it would rain, they would have to throw plastic over the computers because the roof would leak,” recalled Fox, whose husband and fellow communications studies professor Michael Fitzgerald advised the paper form 1986-1995.

Fox thinks many of the alumni will be surprised by the comfy and comfortable newsroom, but she’s also looking forward to hearing their stories.

“There is a lot of history,” she says. Some of that has started to be recorded on the chapter’s webpage—there is a link available from the State Hornet homepage at www.statehornet.com—as alumni check in with their favorite recollections of days gone by.

“Some of the stuff is just hilarious,” she says.

RSVPs for the reunion are required and there is a $10 donation required at the door. For more information on the event, visit the State Hornet Alumni Chapter website by clicking the alumni link on the State Hornet homepage at www.statehornet.com.

— Tom Wright

Soft drinks, soft kids?
Essay contest on soda in schools

High school juniors and seniors can win a day in Sacramento meeting with state leaders in an essay contest sponsored by the LegiSchool Project, a civic education program of the CSUS Center for California Studies and the State Legislature.

This year’s topic is soda machines in high schools. Legislation signed in September bans the machines in California’s elementary and junior high schools in an effort to reduce childhood obesity rates.

But high schools, originally included in the legislation, were excluded in the final version. They still can collect an average of $30,000 a year in vending sales that’s often used for school clubs, athletics and other special programs.

Entries should answer the following: At a time when roughly 30 percent of California’s kids are overweight, almost 40 percent are considered unfit and childhood diabetes is on the rise, should schools be required to remove soda machines? Most schools rely heavily on revenues generated from soda sales. As funding for education decreases, can schools afford to do away with soda sales without adversely impacting special programs? If this new law applied to high schools, how would it affect your school? Should this law apply to all levels of public schools (K-12) or should high schools be excluded? Why or why not? How do you recommend tackling the health problems mentioned above?

The 10 winners will come to Sacramento on Thursday, March 25 to take part in the annual Student Legislative Summit at the State Capitol. It will include a student-run press conference with state leaders, lunch at the Capitol, tours of the Capitol and Golden State Museum, and meetings with journalists and state leaders.

Entrants must be juniors or seniors in high school. Essays must be typed, double-spaced, 750 words or less and include the student’s name, home address, phone number, name of high school and teacher who announced the contest. Entries must be postmarked by Jan. 16, 2004 and submitted to: CSUS, Center for California Studies, LegiSchool Essay Contest, 6000 J Street, Sacramento, CA 95819-6081.

LegiSchool seeks to engage students in the state’s political process by addressing issues that directly impact their lives. More information is available at (916) 278-6906 or www.csus.edu/legischool.

Keeping up the campus
On the job

The Bulletin talked with Lisa Hall, director of administration and customer service in the customer service department of facilities management.

What do people think you do?

“They think we just dispatch our maintenance staff and issue keys.”

What do you really do?

“We serve as a command center for all facility and ground maintenance on campus. We receive, organize, coordinate, review and estimate work that has to be done. We manage projects in progress and record it all in a computerized maintenance management system. We create more than 75 work orders a day—20,000 a year. We also issue anywhere from 20-100 keys per day. We manage the records for keys to tens of thousands of locks.”

Describe your office:

“Active. We have a manager, storekeeper, planner/estimator, three customer service associates plus some student help.”

What surprises people?

“The extremely large quantity and exciting variety of the things we juggle every day. People expect a big fleet of employees but it’s just a few.”

What’s the biggest challenge your office faces?

“Continuing to come up with innovative and creative ways to meet the needs of our customers with limited resources. As the campus grows in size and population, facilities are used more hours, there’s more wear and tear and more upkeep. We have to get real creative in how we meet those needs.”

What questions do you get asked the most?

“How soon is it going to be done? Or: ‘How soon are they going to get here?’ We also get a lot of: ‘You’re probably not the right person to talk to but …’”

INTERVIEWER: Catastrophic leave has been approved for Carl Kimble, facilities management.

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— Laura Zediker

CATASTROPHIC LEAVE
Catastrophic leave has been approved for Carl Kimble, facilities management.

Employees may donate up to 16 hours of vacation or sick leave credits to other employees each fiscal year. CSEA, MPP and Confidential employees may donate up to 40 hours per fiscal year. Unit 8 employees may donate up to 32 hours per fiscal year.

Donation forms are available in the benefits office, Sacramento Hall 259.

Details: 278-6213.

PRESIDENT SPEAKS AT ‘BREAKFAST CLUB’

The Breakfast Club Speakers Series continues with President Alexander Gonzalez, 7:30 a.m., Tuesday, Dec. 16 in the Alumni Center.

Gonzalez will speak on his “Vision of CSUS.” The free event, hosted by the Alumni Center and sponsored by its Engineering and Computer Science chapter, also includes breakfast and promises a relaxed atmosphere designed to promote audience interaction.

Seating is limited. For reservations or additional information, contact the Alumni Association at 278-6295.

RECYCLING PROGRAM HONORED

The CSUS recycling program, under the direction of Roger Guzowski, received a STARR (State Agency Recycling Recognition) Award for Excellence” at the California Integrated Waste Management Board.

Guzowski gives much of the credit to the custodial staff for their assistance with the campus’ revised office paper recycling program. The office paper program recycled 92 tons more paper in 2002 than in 2000, an 85 percent increase. The tonnage is expected to be even higher in 2003.

CAREER CENTER LAUNCHED

Marilyn Albert, director of the Career Center, accepted the California Career Development Association’s “Education and Community Career Center Award for Excellence” at the International Career Development Conference in Oakland on Nov. 8.

The award recognizes the center’s program and staff for original and innovative career services to their community. The center offers career development services to CSUS students, alumni and employers.
 Clarification
Because of a printer’s error, last week’s item about the Dragapella performance by the Kinsey Sicks was incomplete. The last line should have read: “Tickets are $7.50 general, $5 for CSUS students and available from the CSUS Ticket Office at (916) 278-4323 or Tickets.com.”