February Dinner Meeting

Antarctica: The Ultimate Field Trip
– Juanita Ryan –

Abstract
Juanita Ryan was one of 16 teachers selected to participate in the Teachers Experiencing Antarctica and the Arctic (TEA) Program. Sponsored by the National Science Foundation (NSF) and administered by Rice University, the Cold Regions Research and Engineering Lab (CRREL), and the National Museum of Natural History (NMNH), the TEA Program immerses teachers in a polar research experience.

Juanita was invited to join the ANSMET (Antarctic Search for Meteorites) team for the 2001-2002 field season. Led by Principal Investigator, Dr. Ralph P. Harvey of Case Western Reserve University, the team of eight (6 scientists, 1 mountaineer, and 1 teacher) set-up camp at the base of the Transantarctic Mountains near Darwin Glacier, otherwise known as “Meteorite Hills”. The team spent the next four weeks traveling across crevasse-filled fields, over ice-cover hillsides, and up mountaintops in search of “rocks from space”.

Almost 11,000 meteorites have been found in Antarctica by the ANSMET team in the past 24 years. An additional 10,000 have been found by Japanese

continued on next page

Reminder

January Dinner Meeting and Saturday Demonstrations

On Friday, January 17th, Dr. Lang will be receiving the 2002 Mosher Award. Dr. Lang will be talk on leadership in the chemistry field, “The Elements of Leadership: Chemical Demonstrations With a Theme”. The dinner will be held at the Biltmore Hotel and Suites in Santa Clara. Dinner selections for the evening are grilled salmon or wild mushroom stuffed manicotti. For reservations, please contact Shirley Radding (408-246-2564, 408-296-8625 FAX) by January 13th or visit the section’s web site (www.scvacs.org).

Join Dr. Lang and Dr. Showalter on Saturday, January 18th, for one of their world-renowned chemistry demonstrations! The demonstrations will be held at Santa Clara University’s Daly Science Center in Room 207 and will promptly start at 2:00 pm. This event is free to the section members and their guests. Don’t miss it!

February Dinner Meeting

Date: February 20, 2003
Time:
6:00 Social hour
7:00 Dinner
8:00 Lecture

Location: Biltmore Hotel & Suites
2151 Laurelwood Road
Santa Clara, CA 95054
408-988-8411

Speaker: Juanita Ryan
Science teacher
Experiencing Antarctica

Cost: $27.00
with the choice of
Chicken Monterey
(Broiled and topped with avocado and cheese)
or Penne Pasta
(with portabella mushrooms and Alfredo sauce)

Reservations: www.scvacs.org
Shirley Radding
408-246-2564
408-296-8625 Fax

Reservations should be made by February 17th, stating your name, company affiliation, number of people in party, and menu selection.

If you are unable to honor your reservation, you will be invoiced following the dinner meeting. To attend the lecture only, no reservations are needed.
and European programs bringing the
total to almost 21,000 meteorites. That’s
more meteorites found in two decades
than have been found in the rest of
the world in the past two centuries.

One reason for this abundance of
finds in Antarctica is that there are no
trees, plants, roads, or soil to obscure
the view. On the ice, everything stands
out. The meteorites that land there can
stay deep-frozen and unchanged for
hundreds of thousands, even millions
of years. But another important reason
is that the Antarctic ice has an in-built
mechanism for meteorite concentration.

Over thousands of years glacier
flows and the katabatic winds both
come into play to expose meteorites
to the open air.

In this talk, Juanita will share her
personal adventure of living and
working in Antarctica and discuss the
mechanism that makes Antarctica the
“perfect” place for meteorite hunting.

**Biography**

Juanita Ryan is a 5th grade
teacher at Toyon Elementary School
in San Jose’s Berryessa Union School
District. She is a past chair of the San
Francisco Section of the American
Institute of Aeronautics and
Astronautics. She is currently serving
as their Precollege Outreach Director.
Juanita is involved in education out-
reach with NASA Ames Research
Center, the SETI Institute, and the
Santa Clara Valley Section of ACS. She
is the recipient of numerous teaching
awards and is the 2002 recipient of
the “AMGEM Award for Science
Teaching Excellence in California”.

❖❖❖

**Editor’s Corner**

Two corrections are to be noted
in the December 2002 issue. The first
was an obvious date for the January
2003 (not 2002) dinner meeting on
the front page. The second correction
needed: no demonstration will be
held at the Biltmore during the
January Dinner meeting. Any and all
demonstrations will be held the fol-
lowing day, January 18th, at Santa
Clara University’s Daly Science Center
(Room 207) starting at 2:00 pm.

Happy New Year! For the ACS-
SCV section, the New Year also brings
a change in leadership. My name is
Maureen Scharberg and I am the 2003
Chair for the ACS-SCV Section. I am an
Associate Professor of Chemistry and
Co-Director of the Science Education
Program at San José State University.

In 2002, the Program Committee
and I were busy planning a variety of
events for 2003 that we believe will
interest the diverse group of chemistry
professionals in our section. I hope
you will attend many of these events.

At our January dinner meeting, we
awarded the 2002 Harry and Carol
Mosher Award to Dr. C. Marvin Lang,
Professor of Chemistry from University
of Wisconsin, Stevens Point. On
Saturday, January 18th, Dr. Lang and
his University of Wisconsin colleague,
Dr. Donald Showalter, presented spec-
tacular chemical demonstrations in the
Daly Science Center at Santa Clara
University. I thank Dr. Linda Brunauer,
one of your ACS-SCV Councilors, and
her staff at Santa Clara University for
hosting this event. Also, I thank Dr.
Jamil Talhouk for chairing the Mosher
Award this year.

Next month on February 20th,
middle school science teacher, Juanita
Ryan will discuss her research experi-
ence in Antarctica. I hope you will
plan on attending the dinner and her
research seminar. It should be quite
fascinating! Research experiences for
teachers play a critical role in enhanc-
ing their professional development in
science. Teachers, like Juanita, often
then bring their experiences into their
classrooms to enrich their students’
learning environments. If you would
like more information on providing
research experiences, especially 6-8
week summer internships for chem-
istry teachers, please contact me.

I hope that you will partici-
pate in our monthly dinner meetings
and other events throughout the year.
Current ACS-SCV Section information
can always be found on our website
at www.scvacs.org. Karl Marhenke
does a wonderful job in keeping our
web page up to date. Also, to learn
more about our Section’s activities
and volunteer opportunities, I invite
you to attend our monthly executive
meetings. I can be reached at (408)
924-4966 or scharbrg@pacbell.net for
any questions or suggestions. Once
again, best wishes for a Happy New
Year!

Maureen Scharberg

---

**Dr. George Washington Carver Science Fair Cancelled**

For the past three years, the Santa Clara Valley local section has par-

cipated in the Dr. George Washington Carver Recognition Day held

around January 5 at the Santa Clara Convention Center. ACS has provid-
ed funds, science fair judges, and the new Carver Kidvention activity.

We regret to inform you that the Carver Science Fair, Carver Kidvention

and Awards Dinner has been canceled for January 4, 2003.

After a number of factors are considered, the overriding problem

was a lack of adequate funding this year — no doubt due to the

decline in the economy, particularly in the Silicon Valley. We want to

thank those ACS members that have served as volunteers in the past

and volunteered for this e January 4 event. We understand that plans

are underway for Carver Day on January 3, 2004, and we will keep you

informed.

Howard Peters

Chair, SCV - Minority Affairs Committee
Happy New Year to all our readers! Albeit somewhat belated, I wanted to give you all an update of National Chemistry Week last year. Unfortunately, I missed the December issue deadline as I was in sunny Australia at the time. Both Governor Gray Davis and Mayor Ron Gonzales proclaimed October 20-26 last year “National Chemistry Week” with the theme “Chemistry Keeps Us Clean” and we had a successful week, with several colleges including Cañada College, Notre Dame de Namur University and Cabrillo College holding career events for their students. Local libraries in San Jose including Hillview Library and Biblioteca Latino Americana also participated. Our very own Dr. Bruce Raby went out to Hillview Library and spoke to the kids about chemistry and did some simple demonstrations, which went over well. Chemistry demonstrations and outreach programs at libraries can be done any time throughout the year so if there is anyone interested in participating please let me know. If you speak Spanish, we would also like to organize outreach programs at Biblioteca Latino Americana for the children there. On the eve of NCW, we held a successful workshop/seminar on “Celebrating Excellence in Chemistry” and the teachers who attended received several NCW ideas and items to take back to their schools and students. These included Celebrating Chemistry, the activity publication for elementary and middle school students which contained activities relating to keeping clean as well as brief articles that aimed to teach students more about what chemistry is and how it influences our quality of life. Also included was ChemMatters, the magazine for high school students and the Journal of Chemical Education with feature articles and activities related to the NCW-2002 theme in its October issue. Teachers also received temporary tattoos for their students, milli-liter sponges, pencils and several other goodies. We were very fortunate to receive some wonderful booklets from the Soap and Detergent Association, courtesy of Nancy Bock, the Senior Director of Consumer Education, that we passed onto the teachers as well. We finished off NCW with our annual “Slim Fest” that was held at La Entrada School soccer field in Menlo Park with kids and adults alike thoroughly enjoying themselves with slime. Details were posted on our website (www.scvacs.org) by Dr. Karl Marhenke, and we will do so again this year. Speaking of this year, NCW will be held on October 19-25, 2003 with the theme “Earth’s Atmosphere and Beyond”, so please start thinking of ways that you would like to participate – volunteers are always more than welcome. Feel free to contact me anytime at asfiaq@yahoo.com or 650-526-3031.

Asfia Quershi

GATEWAY CHEMICAL TECHNOLOGY
chemistry to meet your needs

CUSTOM SYNTHESIS
- Pharmaceuticals
- Agrichemicals
- Combinatorial Platforms
- Competitor’s Products
- Intermediates
- Analytical Standards
- Metabolites

PROCESS DEVELOPMENT
- Process Evaluation
- New Route Development

SPECTROSCOPIC SERVICES
- LCMS (APCI and API-ES)
- NMR (300 MHz)
- GCMS (EI)

NDE Analytical
Provides expert, fast and competitively priced chemical analysis for industry, government, and academia. Also, NDE Analytical offers:
- State-of-the art FTIR and GC/MS services
- Expert contamination analysis
- Polymer/plastics characterization
- Method development and literature searches

Telephone: (925) 485-0080
e-mail: NDEAnalytical@aol.com

Professor Collman, the presenter at the November dinner meeting, and his wife converse over dinner.

Jon Touster, now, our past-Chair is relaxing from his duties.
The Division of Chemistry and The Law
Contributed by Hubert H. Dubb and Howard Peters

The Division of Chemistry and The Law (CHAL) was created in the mid-1970s, largely at the impetus of Howard Peters and Hubert Dubb of the Santa Clara Valley local section. Peters and Dubb had each worked for several years as a research chemist before completing law school. Before the creation of CHAL, ACS did not have a division that programmed at the interface of the chemical and legal professions. Patent law is an obvious area of overlap, but chemical and legal professions. Peters and Dubb submitted the original petition and signatures in early 1979. The United Airline strike left many voting ACS members from the Spring meeting in Honolulu and delayed the process. Early helpers in his efforts were Shirley Radding and Jack Riley. Neither Radding nor Riley had legal training, but both were increasingly becoming involved in the regulatory interface between the chemical and legal professions. Peters also arranged for the group to operate as a subdivision of the Division of Chemical Information. After several years of operation as a subdivision, CHAL was made a probationary division in 1982 and was granted full status as an ACS division in 1985.

CHAL does not operate in any one area of technology, because all technological areas interact with the law. Accordingly, CHAL continues to program in areas of interest not only to its members but also to members of all ACS divisions. Typical programs educate ACS members about career opportunities in chemistry and the legal profession; proposed and actual modified statutory laws; regulatory agency rules and interpretations and court interpretations, which can affect the chemical profession in many ways; what to expect if called upon to act as a witness at a trial as taught through mock trials; what rights and responsibilities a chemist might have in intellectual property that he or she created or helped to create; and what a chemist's rights are in cases of harassment. CHAL also inherently creates a networking opportunity for its members. This opportunity is enhanced by the division's excellent newsletter, edited from its inception by Radding; its periodically published membership directories; and more recently, its website. CHAL also has created the Roger Middelkauf Award, named for a deceased former chair of the division. It is awarded on an occasional basis for outstanding service to the division, the Society, and the chemical profession.

CHAL members come from all chemical disciplines and all types of organizations with an interest in the interface between chemistry and law. Many members of CHAL have degrees in chemistry and law. The CHAL board and membership are currently composed of chemists from all areas of the country. CHAL has grown from a full divisional membership of about 200 to a current membership of about 1100. Further growth is expected in the next 25 years as interactions between chemistry and the law continue. Visit CHAL's website at membership.acs.org/c/chal.


Dr. Hubert Dubb is a retired San Francisco patent attorney with an undergraduate chemistry degree from Cal Tech, a Ph.D. in Chemistry from Yale, and a law degree from a school in Southern California.

Dr. Howard Peters is a patent attorney in Palo Alto with a B.S. in chemistry from Geneva College (Beaver Falls, PA - former home of Joe Nameth), a Ph.D. in Chemistry from Stanford, and a law degree from Santa Clara University. He is a former chair of the local section and of CHAL, and is presently the Councilor for CHAL. He recently was a candidate for the ACS Board of Directors for District VI and lost by a narrow margin.

Workshop for Teachers: Clean Chemistry

Roche Bioscience and the ACS Santa Clara Valley Section teamed up again to sponsor a Saturday workshop for area teachers. Superteachers Juanita Ryan of Toyon Elementary School and Julie Shultz of Redwood Middle School planned all the experiments and taught the workshop. Their expertise and enthusiasm once again produced a very successful program. The workshop theme followed that of National Chemistry Week, “Chemistry Keeps Us Clean.” Teachers from many area schools enjoyed the workshop and took away experiments to do with their classes.

The workshop included hands-on experiments dealing with the properties of water, bubbles, surfactants, and the composition of cleaning materials such as soaps and toothpastes. Break-fast, lunch, and snacks were provided, allowing teachers and volunteers time to interact and discuss workshop topics. Tours of Roche laboratories were provided by employees and showed many of the ways chemistry is used in the discovery and development of medicines. The workshop concluded with a prize drawing featuring many useful items donated by Roche, including keyboards and other computer accessories and supplies useful for teachers. Each teacher also received gift bags of beakers and chemistry publications for use in the classroom.
Thanks go to Roche for providing a generous grant, and to the new primary organizers of the workshop, David Swinney and Ferenc Makra who did a great job in taking on the myriad organization-related tasks. Other Roche employees who generously gave of their time and enthusiasm were Ronald Cohn, Stephen Gomez, Fujun Li, Rebecca Mackenzie, Kristen McCaleb, Bart Mialluss, Barbara Murphy-Wesley, Eric Sung, Patricia Takahara, Felicia Thai, Paul Wertel, Lynne Yacovetta, Helen Yeo, Garry Hedden, Mike Maddox, and Bruce Koch. A special thanks to Brenda Price for her work behind the scenes.

ACS Section members who cheerfully assisted in whatever needed doing included Lois Durham, Carol Mosher, Howard Peters, Sally Peters, Bruce Raby, Jack Riley, and Bonnie Charpentier.

The response from the participants was very positive. The workshop, which has become an annual event, is a great way of supporting our teachers and providing fun ways to teach and learn chemistry.

Juanita Ryan taught the workshop.
SANTA CLARA VALLEY SECTION  
AMERICAN CHEMICAL SOCIETY  
P.O. Box 395, Palo Alto, CA 94302

JANUARY 2003 NEWSLETTER TOPICS:

Antarctica: The Ultimate Field Trip  
Reminder: January Dinner Meeting and Saturday Demonstrations  
February Dinner Meeting  
Chair’s Message  
Editor’s Corner  
Dr. George Washington Carver Science Fair Cancelled  
A National Chemistry Week Update  
The Division of Chemistry of The Law  
Workshop for Teachers: Clean Chemistry

CHEMPTLOYMENT ABSTRACTS

Visit our web site at:

http://www.scvacs.org

To receive emails when newsletters are published on our web site, 
send an email to SCVACS-newsletters-subscribe@yahoogroups.com.

SANTA CLARA VALLEY SECTION

2003 Section Officers

Chair: Maureen Scharberg 408-924-4966  scharbrg@pacbell.net  
Chair-Elect: George Lechner 408-226-7262  george.lechner@usa.xerox.com  
Secretary: Karl Marhenke 831-479-6263  karlmar@armory.com  
Treasurer: Hong Gao 650-564-5197  hong.gao@alza.com  
Past-Chair: Jon Touster 650-723-4340  touster@leland.stanford.edu

Councilors

2001-03: Linda Brunauer 408-554-6947  lbrunauer@scu.edu  
2001-03: Sally Peters 650-812-4994  speters@parc.xerox.com  
2002-04: Bonnie Charpentier 650-948-3931  charpentierbon@yahoo.com  
2002-04: Herb Silber 408-924-4954  hbsilber@sjuvm1.sjsu.edu  
2003-05: Maureen Scharberg 408-924-4966  scharbrg@pacbell.net  
2003-05: John F. Riley 650-328-4036  jfriley@attial.net  
2003-05: Ean Warren 650-329-4554  ewarren@scvacs.org

Alternate Councilors

2001-03: George Lechner 408-226-7262  george.lechner@usa.xerox.com  
2001-03: Carol Mosher 650-322-3120  cmosher2@aol.com  
2002-04: Peter Rusch 650-941-8120  prusch@aol.com  
2002-04: Jon Touster 650-723-4340  touster@leland.stanford.edu  
2003-05: David Parker 408-984-4108  dparker@ci.santa-clara.ca.us  
2003-05: Laura Jarvis 650-404-2950  ljarvis@scvacs.org  
2003-05: Asfia Quershi 650-526-3031  asfiaq@yahoo.com

Newsletter

Editor: Laura Jarvis 650-404-2950  editor@scvacs.org

ChemPloyment Abstracts

Director: Shirley B. Radding 408-246-2564  sradding@att.net

FUTURE MEETINGS

Jan 18  Chemistry Demonstration  
Dr. C. Marvin Lang  
University of Santa Clara

Feb 1-5  LabAutomation 2003  
Palm Springs, CA

Feb 1-5  50 Years On: From the Double Helix to Molecular Medicine  
University of Miami

Feb 20  SCV Dinner Meeting  
Juanita Ryan  
Experiencing Antarctica

Feb 23-26  Polymorphism in Crystals  
Tampa, FL  
ACS Prospectives

Mar 9-13  Pittcon 2003  
Orlando, FL

Mar 13  SCV Dinner Meeting  
Dr. Thomas Okarma  
Stem Cell Research

Mar 23-27  ACS Spring National Meeting  
New Orleans, LA

For the latest information, please visit SCV/ACS web site: www.scvacs.org