

Davis, Linda S

From: Davis, Linda S
Sent: Friday, February 20, 2009 9:18 AM
To: 'chme@ecn.purdue.edu'; 'chmegrad@ecn.purdue.edu'
Cc: 'Gauger, Steve A'
Subject: Safety Update #7: Emergency Safety Shower Incident at UCLA

ChE Faculty, Staff and Graduate Students,

The following summary describes a recent fatal accident at a UCLA laboratory. The incident is under investigation. The takeaway as stated in the summary is that we must all follow safe work practices and wear appropriate PPE when in the laboratory. We should all be aware of the nearest emergency safety shower and eye wash. The recommended minimum time for use of the safety shower or eye wash is 15 minutes, and eye washes should be flushed weekly due to the poor water quality at Purdue. Safety is our responsibility.

- On December 29, 2008, UCLA experienced a fire in one of its laboratories during the holiday shutdown. The fire resulted from a research associate intending to add an unknown aliquot of 1.6 M t-bu-Li (in pentane) to a round bottom flask and placing in a dry ice/acetone bath. The technician was employed in the lab for approximately 3 months.

The principal investigator had trained the employee to slightly pressurize the bottle (e.g., 250 ml Aldrich Sure Seal container) with Argon and withdraw the desired aliquot using a 60 ml syringe, fitted with a 20 gauge needle. The PI utilizes these particular syringes due to their tight seal. There is no evidence that the employee used this method.

Speculation: The research associate may have attempted to draw the aliquot into the syringe. The syringe plunger popped out or was pulled out of the syringe barrel, splashing the employee with t-bu-Li and pentane. The mixture caught fire, upon contact with air.

Although the research associate was wearing nitrile gloves and safety glasses, she was not wearing a lab coat. The fire ignited the synthetic sweater she wore and the nitrile gloves.

Although an emergency shower was located six feet from the fume hood, she ran from the area away from the shower. One of the post-docs working in an adjacent laboratory used his lab coat to smother the flames. Once emergency response arrived, the employee was placed in the shower and transported to the ER.

The 22-year-old woman, who was not identified, died Friday, January 16, 2009 at Grossman Burn Center in Sherman Oaks, where she was transferred after first being treated at UCLA Medical Center.

The Research Associate suffered second degree burns on her arms and third degree burns on her hands; a total of about 40% of her body.

There was very little damage to the lab.

Cal/OSHA began their investigation of the accident on Monday, 1/5/09. Their documentation requests include asking for training records, accident report, etc. UCLA EH&S has begun an audit of the Molecular Sciences Building, where the accident occurred. The building is the home for much of the Chemistry Department research, principally organic.

Take Away: There is a lesson to be learned here. All Employees must be vigilant in ensuring that they are following both safe work practices and wearing appropriate PPE. All scientists must be aware of the location and purpose of safety showers and eyewashes, and should be trained to use them.

Thank you.

Linda

Linda S. Davis

Industrial Education Director
School of Chemical Engineering
Purdue University
480 Stadium Mall Dr.
West Lafayette, IN 47907-2100
Phone: (765)496-1710
lsdavis@purdue.edu

Davis, Linda S

From: Davis, Linda S
Sent: Monday, February 23, 2009 10:04 AM
To: 'chmegrad@ecn.purdue.edu'; 'chme@ecn.purdue.edu'
Cc: 'Gauger, Steve A'
Subject: FW: Safety Update #7: Emergency Safety Shower Incident at UCLA
Attachments: Safety Update #7.pdf

ChE Faculty, Staff and Graduate Students,

The obituary for the young researcher, Sheharbano Sangji, who died at UCLA is attached.

Linda

Linda S. Davis
Industrial Education Director
School of Chemical Engineering
Purdue University
480 Stadium Mall Dr.
West Lafayette, IN 47907-2100
Phone: (765)496-1710
lsdavis@purdue.edu

-----Original Message-----

From: Phil Wankat [mailto:wankat@ecn.purdue.edu]
Sent: Friday, February 20, 2009 12:57 PM
To: Davis, Linda S
Cc: Davis, Robert
Subject: Re: Safety Update #7: Emergency Safety Shower Incident at UCLA

Linda, There is an obituary of the young lady in the Feb 16, 2009, issue of Chemical and Engineering News on p. 59. I will give it to Bob to share with you.

Regards,
Phil

Davis, Linda S wrote:

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> laboratory. The incident is under investigation. The takeaway as
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OBITUARIES

Shelton Bank, 76, emeritus professor of chemistry at the State University of New York, Albany, died suddenly on Jan. 12, while traveling in Oakland, Calif.

Born in the Bronx, N.Y., Bank received a B.Sc. in chemistry from Brooklyn College in 1954 before serving for two years in the Army, doing weather research in Arizona. He then earned a Ph.D. in chemistry at Purdue University in 1960, working with Nobel Laureate Herbert C. Brown. Afterward, Bank served as a postdoctoral fellow in or-



ganic chemistry at Harvard University with Paul D. Bartlett.

In 1961, Bank joined Esso (now ExxonMobil) where he became a project leader in 1964. Then in 1966, Bank accepted a position as associate professor of chemistry at SUNY Albany, where he was promoted to professor in 1972; he held a joint appointment in its Graduate School of Public Health Sciences.

Bank conducted research on reaction mechanisms, including electron transport, before doing applied research in neurotoxins, metabolic and fermentation pathways, environmental pollutants, and clays. He had a career-long interest in nuclear magnetic resonance spectroscopy.

Bank authored or coauthored almost 100 research papers, was awarded two patents, and presented numerous lectures. In 1995, he and his wife, Janet, cowrote a book for students, "1001 Ways To Pass Organic Chemistry." He was an emeritus member of ACS, joining in 1959. He served as chair of its Division of Chemical Education in 1974.

At SUNY Albany, Bank received the 1988 University Award for Excellence in Teaching and the 1989 Chancellor's Award for Excellence in Teaching. After retiring in 1997, he lived mostly on Martha's Vineyard, in Massachusetts.

In addition to his wife of 51 years, Bank is survived by a son, Todd; daughter, Brigeda; and two grandchildren.

Hyman Ratner, 88, a retired industrial organic chemist, died on Dec. 10, 2008.

Born in Chicago, Ratner received a B.S. degree in chemistry in 1941 from the University of Chicago. After securing work in the Gary, Ind., steel mills, then serving in

the U.S. Army Air Corps in World War II, he returned to the University of Chicago. He earned an M.S. degree in chemistry in 1948.

Ratner worked for Shell Oil in Martinez, Calif., and Wood River, Ill., as a research chemist from 1952 until 1972. He then went to work in Troy, Mich., at Sperry-Vickers, from which he retired as chief chemist and director of its Materials Science Laboratory in 1988.

Ratner was an emeritus member of ACS, joining in 1949. He was also a life member of the Society of Tribologists & Lubrication Engineers and an emeritus member of the science research society Sigma Xi.

In his retirement, he and his wife, Marilyn, traveled extensively, participating in almost 50 domestic and international Elderhostel programs.

In addition to his wife of 56 years, he is survived by two sons, David and Barry, and a grandson.

Sheharbano (Sheri) Sangji, 23, a research assistant at the University of California, Los Angeles, died on Jan. 16 at the Grossman Burn Center in Sherman Oaks, Calif., from injuries sustained in a laboratory fire that occurred in December 2008 (*C&EN Online Latest News*, Jan. 22).



Born in Karachi, Pakistan, Sangji came to the U.S. in 2004 to attend Pomona College, in California. While at Pomona, she worked for three years in the lab of chemistry professor Daniel J. O'Leary. Her senior thesis focused on modifying peptide structures using the olefin metathesis reaction.

After receiving her undergraduate degree in chemistry in May 2008, Sangji worked at Norac Pharma in Azusa, Calif., for four months before starting in chemistry professor Patrick Harran's lab at UCLA. She was particularly interested in science policy issues and intended to start law school in the fall.

Sangji was president of the Muslim Students' Association at Pomona from 2005 to 2006 and volunteered for South Asian Network, a Southern California-based community organization that aims to eliminate discrimination against persons of South Asian origin.

She is survived by her parents, Shaukat and Maimoona; sister, Naveen; and brother, Hussain.

Allan L. Smith, 70, professor emeritus of chemistry at Drexel University, died on Dec. 9, 2008, in Orleans, Mass.

Born in Newark, N.J., Smith earned a B.A. from Harvard University and a Ph.D. in physical chemistry from Massachusetts Institute of Technology. He then completed a postdoctoral fellowship at the National Bureau of Standards (now the National Institute of Standards & Technology).

In 1966, he accepted a faculty position at Yale University. He then earned fellowships with the Alfred P. Sloan Foundation and with the North Atlantic Treaty Organization, under which he studied at Oxford University in 1971.

In 1975, Smith joined Drexel as an associate professor. He became a full professor in 1984 and retired in 2003.

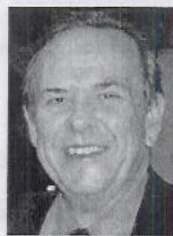
In the early 1980s, Smith was a principal member of Drexel's Microcomputer Committee. He partnered with an engineering colleague to obtain National Science Foundation funding for a new approach to the teaching of chemistry to engineering freshman, helping to form the basis for Drexel's "E⁴" engineering program.

Smith authored or coauthored more than 60 papers on sophisticated small-molecule spectroscopy, sulfur allotropes, oscillating reactions, and fullerenes.

Through his study of fullerenes, Smith developed the quartz microbalance microcalorimeter. He also founded Masscal Scientific Instruments.

Smith was on the executive board of the Calorimetry Conference and was a member of ACS, joining in 1979. He was program chair for the ACS Division of Chemical Education in 1992 and a member of the board of the *Journal of Chemical Education*. He served as chair of the ACS Division of Computers in Chemistry in 1987 and was active in the ACS Philadelphia Section. He received a Christian R. & Mary F. Lindback Foundation Distinguished Teaching Award in 1985.

Smith is survived by his wife, Charity; a daughter, Nadja Gale; and a son, Fletcher.



SUSAN J. AINSWORTH and JYLLIAN KEMSLEY wrote these obituaries. Obituary notices may be sent to s_ainsworth@acs.org and should include a detailed educational and professional history.