## **Lawrence Berkeley National Laboratory**

## **LBL Publications**

#### **Title**

MMRD Newsletter Vol 10 No 1

#### **Permalink**

https://escholarship.org/uc/item/9m07s93d

## **Author**

Lawrence Berkeley National Laboratory

## **Publication Date**

1986-04-01

#### **DISCLAIMER**

This document was prepared as an account of work sponsored by the United States Government. While this document is believed to contain correct information, neither the United States Government nor any agency thereof, nor the Regents of the University of California, nor any of their employees, makes any warranty, express or implied, or assumes any legal responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by its trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof, or the Regents of the University of California. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof or the Regents of the University of California.

00B-438

Materials and Molecular APR 23 1986
Research Division

Lawrence Berkeley Laboratory University of California Berkeley, California 94720

Volume 10 Number 1 April 1986

For Reference

Not to be taken from this room
LIBRARY



# Margie Janzen, Ethel Skrydlinski Retire

Margie Janzen and Ethel Skrydlinski are retiring from MMRD. Between the two of them they represent 57 years of experience with MMRD and its predecessor IMRD. The last day of work for both of them is April 18 — Ethel's birthday, coincidentally.

Margie became involved with LBL through the University of California. She began working for the Institute of Engineering Research, which became the Office of Research Services, in 1954. She worked for investigators based out of Hearst Mining Building, including **Earl Parker** and **Jack Washburn**. This group, with research contracts with such national groups as the AEC and the U.S. Navy, formed part of the core of what, in 1960, became the Inorganic Materials Research Division (IMRD).

IMRD was located in various campus buildings originally, and Margie handled pretty nearly everything for the Hearst Mining group of researchers, including purchasing, time cards, and technical papers, "with a manual machine, of course," she remembers. "I would leave a few blank lines to let the professors write their equations in by hand." She had so much to do that Ethel Skrydlinski joined the staff in 1962 to help her out.

One of Ethel's first tasks was to take over the travel responsibilities. "Of course, there was a foreign trip right then", Ethel remembers. A good start to her career, which spanned 24 years.

In 1965 Building 62 was completed, and Ethel and Margie, along with many of the other staff, moved up the hill and into the new building. Back in those days, the administration was in Room 203, presently the large meeting room. Whenever the crane in the high bay would move, "it was like an earthquake," according to Margie.

Margie and Ethel have worked with all IMRD and MMRD heads — all of whom are still-MMRD investigators. First was **Kenneth Pitzer**, followed by **Leo Brewer**, **David Shirley**, **Alan Searcy**, and **Norman Phillips**, the current Division Head.

(Please turn to **Retire**, p. 3)

# Lee Wins National Medal of Science

MMRD investigator **Yuan T. Lee** was presented with the National Medal of Science at a ceremony at the White House on Wednesday, March 12. Lee received the award "for his world leadership in the development of molecular beam techniques and their application to the study of chemical dynamics," according to the citation. "His work has had an enormous impact on many areas of physical chemistry, especially building up a quantitative bridge between the laws of mechanics and complex macroscopic phenomena." Lee is one of only 20 scientists in the U.S. to receive the medal this year.

HONORS And AWARDS HONORS And AWARDS

MMRD Investigator **Gareth Thomas** received an honorary professorship at the Beijing University of Iron and Steel Technology on November 15, 1985, for his research in electron microscopy and alloy design. He also delivered several lectures in Beijing and a keynote address at the High Voltage Electron Microscopy conference celebrating the 50th anniversary of Osaka University in Japan. Thomas was also an invited participant in the first USA-India Conference and Workshop on Steels, held in Ranchi, India, in January.

MMRD investigators Alan Searcy and Leo Falicov have been appointed by LBL Director and MMRD investigator David Shirley to a Faculty Scientific Advisory Committee. All members of the committee have ties to both LBL and the U.C. Berkeley campus. The committee will meet regularly with Shirley to advise on LBL-related issues that may affect campus faculty.

MMRD investigator **Charles Tobias** has been honored by a festschrift (volume of original research papers) published as the December 1985 issue of *Chemical Engineering Communications*. The papers were compiled by his former students as a tribute to his personal qualities and professional activities.

MMRD Investigator **Alan Levy** hosted the Third Berkeley International Conference on Corrosion-Erosion-Wear of Materials at Elevated Temperatures. The conference was held January 29–31 at the Berkeley Marriott Inn. Sponsors were the National Association of Corrosion Engineers, the Electric Power Institute, and LBL.

MMRD Investigator **Y. Ron Shen** received the 1986 Charles H. Townes Award of the Optical Society of America. He was honored "for his pioneering and continuing contributions to the field of nonlinear optics." The award consists of a silver medal, a certificate, and \$1000. Shen will receive the award formally at a conference in San Francisco in June.

MMRD Investigator **John Clarke** has been elected a Fellow of the Royal Society. He is one of only 40 scientists worldwide so honored.

MMRD Investigator **Marvin Cohen**'s discovery with his coworkers that silicon becomes a superconductor under extreme pressure was listed as one of the scientific highlights of 1985 by *Science News*.

MMRD Investigator **K. Peter Vollhardt** has been invited to give the Wilson Baker lecture in Bristol, England, during the Royal Society of Chemistry's Perkin Division South West Regional Symposium in April 1986. He will talk on "Cobalt-Mediated Total Synthesis of Natural and Unnatural Products." He gave the same talk at the Syntex Lecture at the University of Colorado in March.

The March 7 issue of Science featured a review article, "Methylene: A Paradigm for Computational Quantum Chemistry," by MMRD investigator **Henry. F. Schaefer III**.

Several MMRD investigators participated in a two-day symposium held recently by The Metallurgical Society in honor of former MMRD investigator Earl R. Parker. Current investigators participating included J.W. Morris, Robert O. Ritchie, Gareth Thomas, and Alan Levy.

Two U.C. Berkeley undergraduates working with MMRD investigator **Gabor Somorjai** have been named recipients of \$5000 scholarships from the Northern California Chapter of the Achievement Rewards for College Scientists Foundation (ACRS). The two are **George Rodrigues**, a junior, and **Jan Sherman**, a sophomore. ACRS awards have been given at LBL for the past 13 years to high-ranking UC undergraduates in the life sciences, physical sciences, and engineering.

## MMRD Holds Annual Review

The 1986 MMRD Annual Review Symposium was held on February 27 and 28, 1986, at the Building 62 Conference Room. **Gerd Rosenblatt**, LBL Deputy Director for General Sciences, and **Norman E. Phillips**, MMRD Head, offered the traditional Welcome and Introduction. Featured speakers included the following MMRD investigators (with the titles of their talks):

- Gabor A. Somorjai: The Molecular Ingredients of Catalysis by Metals. The Structure and Bonding of Organic Monolayers
- Harold S. Johnston: Photolysis Induced Fluorescence
- Alan W. Searcy: Consequences of Dropping Two Special Assumptions of Classical Surface Thermodynamic Theory
- Robert O. Ritchie: Crack Tip Shielding in Fracture and Fatigue
- Gareth Thomas: Analytical Microscopy and Convergent Beam Diffraction in Materials Research
- Didier de Fontaine: Long-Period Superstructures and Spinodal Ordering in Electron Irradiated Cu<sub>2</sub>Pd and Ag<sub>3</sub>Mg
- Kenneth M. Westmacott: Microstructural Characterization of Novel Alloy Phases by Advanced TEM Techniques

## Retire (continued)

Over the years Ethel and Margie have done just about everything possible on the administrative side for MMRD. Besides handling travel, Ethel has done personnel, payroll, and budget, as well as serving as MMRD Newsletter editor the last five years. Margie has held down the fort as head of the administrative support staff in the main office.

What about retirement plans? Ethel will visit her daughter in Indianapolis, and Margie plans to do a lot of gardening. But both of them plan to enjoy their free time. Congratulations are in order to both Margie and Ethel.

- Norman E. Phillips: Pressure Dependence of the Specific Heat of Heavy-Fermion Compounds
- K. Peter Vollhardt: From Fulvalene to Oligocyclopentadienyl Metals: Remarkable Organometallic Materials
- Norman M. Edelstein: Optical and Magnetic Properties of f Element Compounds
- Robert G. Bergman: Activation of Carbon-Hydrogen Bonds in Organic Compounds Using Transition Metal Complexes

The outside reviewers included Professor William Chupka, Department of Chemistry, Yale University, who served as Chair of the review committee; Professor Alan Ardell, Chair, Materials Science and Engineering Department, UCLA; Dr. Richard Claassen, Vice President, Livermore Programs, Sandia National Laboratories (Livermore); Professor Theodore H. Geballe, Center for Materials Research, Stanford University; Dr. Adam Heller, Head, Electronic Materials Research, AT&T Bell Laboratories; and Professor Robert W. Parry, Department of Chemistry, University of Utah.

## Other Reviews Held

A review of 1985 programs supported by the Chemical Sciences Division of the Office of Basic Energy Sciences was held on February 19, 20, and 21, 1986. Outside reviewers were Professor William A. Goddard, Department of Chemistry, California Institute of Technology; Professor John T. Groves, Department of Chemistry, Princeton University; and Dr. Arthur J. Nozik, Senior Research Fellow, Solar Fuel Research Division, Solar Energy Research Institute.

The annual Materials Sciences Review was held in Washington, D.C., on March 25, 1986. MMRD Division Head **Norman E. Phillips** gave a presentation, along with presentations by other LBL division heads supported by Materials Sciences funds.

An LBL budget review was also held, at LBL, on February 12, 1986. In these reviews, LBL Director **David A. Shirley** reviews each division program, including budget.

# MMRD People MMRD People MMRD People

MMRD had a few guest employees in January, courtesy of Holy Names High School in Oakland. Dani Bowman, Tamara Ali, Yvonne Jensen, Lonnie Spiller, and Michelle Butler all spent two weeks working at various locations in Building 62 as part of Holy Names' midsession career explorations program. MMRD's **Don Krieger** provided the liaison between the school and LBL.

**Jerome Leonard**, Division Office receptionist, has spent March at Camp Humphrey in Korea fulfilling his Army National Guard responsibilities.

**Elodia Perez** has become a grandmother again. Her daughter, Rosemary Conley, gave birth to a baby girl, Rose Ann, on March 7.

Raquel Rodriguez gave birth to her second child, a boy, Allen, on February 8. Raquel, who is secretary to MMRD Investigator Lutgard De-Jonghe, is currently on leave of absence. She is being replaced temporarily by Alicia Baker.

**Tim Sands**, guest scientist with MMRD Investigator **Jack Washburn**, has also experienced the joy of parenthood recently. He became a father on December 3, when his wife Laura gave birth to a baby girl, Amanda Lee.

MMRD Personnel Administrator Meredith Montgomery has been appointed to the LBL Staff Transportation Committee. She replaces Michael Cima, GSRA working with MMRD investigator Leo Brewer.

#### MATERIALS AND MOLECULAR RESEARCH DIVISION

Lawrence Berkeley Laboratory University of California 1 Cyclotron Road Berkeley, CA 94720

MMRD NEWSLETTER

Editor: Ethel Skrydlinski Bldg. 62 Rm. 221 Phone: (415) 486-7077

PUB 438 4/86/400 Prepared for U.S. Department of Energy under Contract DE-AC03-76SF00098