

## "Bioinorganic Chemistry -- Sixth International Conference, August 23-27

## August 20, 1993

MEDIA ADVISORY

EVENT: "Bioinorganic Chemistry -- Sixth International Conference" sponsored by UCSD. Chaired by Paul Saltman, a professor of biology at UCSD, the conference will include oral and poster presentations by about 700 researchers from around the world on topics at the frontiers of medicine, agriculture, biology and chemistry.

DATES: August 23--August 27

INTERVIEW OPPORTUNITIES: Paul Saltman will be available throughout the week to comment on top news items from the conference of interest to the general public.

LOCATION: Most sessions will be held in either the Mandeville Center, Peterson Hall or the Recreational Gym at UCSD. (See attached program for specific locations)

BACKGROUND: Recently featured on the cover of Science, the field of bioinorganic chemistry is rapidly expanding as scientists glean new information about the role metals play in everything from the synthesis of proteins within living cells to the effective treatment of diseases such as cancer and arthritis.

**KEY SESSIONS:** 

August 23, 8:30 a.m. at Mandeville Center:

The opening plenary lecture will feature Douglas Rees of Caltech who recently discovered the structure of the active center of nitrogenase, an enzyme that enables bacteria to "fix" nitrogen, or convert it from its usual inert state as nitrogen gas into useful ammonia. Understanding how nitrogenase works is of key interest to scientists because it could lead to the production of fertilizer and other ammonia-based products for a fraction of the cost.

August 25, 8:30 a.m. at Mandeville Center:

Bo Malmstrom of the University of Goteborg will deliver a plenary lecture on his work in oxygen metabolism. Malmstrom is studying how the cell harnesses energy by burning sugars, fats and amino acids and converts them into ATP, the cell's energy currency.

Other highlights include sessions on "Metal Clusters" in which scientists will discuss their work to develop synthetic compounds that mimic the activity of their biologic counterparts.

August 26, 10 a.m. - noon at Mandeville Center: Richard Holm of Harvard University, for example, will discuss his work with the manganese center of the photosynthetic system of plants. If researchers could mimic photolysis, the process in which plants capture light and break water down into oxygen and hydrogen, it would open the door to harnessing photo energy and converting it to chemical energy.

Other sessions will focus on such topics as "Metals in Medicine" and "Gene Regulation."

On the lighter side, a range of evening activities also are planned including:

August 23, 7 p.m. at Mandeville Center:

Hans Hornung, a professor of aeronautics at Caltech and consultant David Saltman will discuss the "Physics and Metaphysics of Surfing."

August 25, 5:30 p.m. at the Pavilion:

Michael Mondavi will deliver a talk entitled, "In Appreciation of Great Wines."

Members of the news media are invited to the event and to interview participants.

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(August 20, 1993)