



the Alembic



Chair's Corner



Greetings. As I attempt to put together my first piece for the Alembic, I hardly know where to start. First of all, I suppose some background is in order. I have worked the last 23 years in electronics, specifically in manufacturing components for the computer industry. It has been somewhat overwhelming to see the changes within this industry as electronic circuit widths have shrunk greatly in size, resulting in much smaller devices and incredibly fast speeds. And when I read some of the articles related to electronic materials and photolithography in C&EN, it becomes obvious that this trend will be able to continue for some time. Most of my work has been maintaining compliance with environmental regulations for manufacturing facilities, although I have also been involved as a manufacturing engineer.

One of the things that I would like to see developing within our organization is more dialogue between industry and academia. There is a potential synergy there that is going largely untapped. As I met with others

last year at the Local Section Leadership Conference, I was pleasantly surprised by those who wanted to know more about how and what they taught in the universities and colleges were going to be applied. Or how could they better equip those that go into industry immediately upon graduation. On the other hand, I feel that some of us in industry have hesitated to avail ourselves of the willingness of professors and researchers to work with us on increasing our knowledge in specific areas. Now, before you start writing me about all the cooperative efforts of which you are aware, let me state that I am aware of some of these too. I am talking in general terms and as I believe it was Sam Goldwyn of MGM put it. "No generalization is worth a damn and that includes this one." So, for those of you who have ideas in how we can start or improve the communications between these disciplines in our area, I would like very much to hear from you.

Gary

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"Solder Mask Fundamentals"

by

Dr. David Powell

Monday, March 29, 1999
Phillips Hall - UW-Eau Claire
Eau Claire, WI
8:00 PM

Abstract

Solder mask is a polymer coating applied to circuit boards prior to soldering the components to the board. The main function of the mask is to protect circuits from being shorted together as the board passes over a wave of molten solder. There are many challenges to producing a mask that has the desired chemical, thermal, and electrical characteristics.

Biographical Sketch

David Powell earned his Ph.D. in Physical Chemistry from Michigan Technological University. He began his industrial career in electronic materials, developing dry film photoresists and solder masks, at DuPont. Later, at AT&T-Bell Laboratories, he formulated high performance polymeric materials and developed processes used to protect silicon devices and multi-chip modules. These coatings and potting materials are used to package electronic modules used in undersea, digital switch, and other telecommunication applications. Currently, Dave is a Polymer Chemist for Johnson Matthey – Advanced Circuits. He is responsible for developing new materials for advanced circuit board manufacturing.

The social mixer at 6:00 and dinner at 6:30pm will be at Sweetwaters Restaurant, 1104 W. Clairemont Ave, Eau Claire (near the intersection of Clairemont (US 12) and State Highway 37). For reservations call Bob St. Louis at 834-3774, or Patricia Jenneman in the Chemistry Department office at 836-3417.



American Chemical Society

Central Wisconsin Section



AMERICAN CHEMICAL SOCIETY - CENTRAL WISCONSIN SECTION
ANNUAL AWARDS BANQUET AND SPOUSE'S NIGHT

"Nature and Gods: Science and Scientists"
Five Myths Which Describe Origins of Science and the Problems of Scientists

by

Dr. Rudolph J. Marcus

Wednesday, April 21, 1999
University Center - UW-Stevens Point
Stevens Point, WI 54481

6:00 - 6:30 Cash Bar
6:30 - 7:15 Dinner
7:15 - 7:30 Awards Presentations
7:30 - 8:30 Speaker's Program

Abstract

We scientists struggle every day with the accomplishments and problems which these five stories describe. Three of these stories are ancient: one deals with human flight, another with harnessing the sun, and a third with finding energy. A story from the middle ages deals with science and scientist. A modern story deals with science strategies.

Some examples show the pertinence of those stories to our work as scientists. Questions for use in interactive discussion or in personal reflection are included for each of these stories.

Biographical Sketch

During twenty years at the Office of Naval Research, Dr. Marcus initiated cooperative basic research programs in photochemistry and in computer controlled experimentation, and lived in Japan for two years as scientific director of ONR Far East. He earned a Ph.D. in physical chemistry at the University of Utah. In ten years of bench work at SRI International, Dr. Marcus published extensively on techniques for observing photochemical reactions occurring within the focal spot of a solar furnace; those techniques are now used for cleanup of polluted groundwater. Dr. Marcus is a contributing editor of CHEMTECH, where Rudy's Digest appears monthly.

Dinner reservations should be made by calling Tom Zamis at (715) 346-3258 before 5 PM on Monday, April 19.



Call for Nominations 1999 Awards

One of the more significant activities that the Central Wisconsin Section of ACS sponsors each year is the recognition of outstanding performance by chemists in our area. Recipients of these awards are recognized at our annual Awards Banquet and Spouse's Night held on April 21, 1999. The time has come for **YOU** to submit your nominations. Criteria for each award are listed on our Web page. Please consider taking a little time and submitting nominations for:

Outstanding Contribution to Chemistry
Outstanding Company
Outstanding Service
Outstanding College Chemistry Student
Outstanding High School Student
Outstanding H.S. Chemistry Teacher

Nominations for these awards should be submitted ASAP to:

Tom Marty
Associate Professor of Chemistry
UWC - Marshfield/Wood County
Marshfield, WI 54449
phone (715) 389-6502
FAX (715) 389-6517
email tmarty@uwc.edu

ACS-CWS Web Page



<http://chemdept.uwsp.edu/acscws/>

or you can link there from the American Chemical Society home page - Local Sections. Contains the most up-to-date information about section activities. Maps of all of the usual places where monthly meetings are held are there.

There is a link on our Web page for the Alembic. It is listed there in pdf (portable document format). These can be opened and read by a utility called Adobe Acrobat Reader that is freeware, and can be installed as a plug-in to your web browser.

Cryptogram (Submitted by Jim Adams)

MQ IYZ OBRRJZ SJZQBQ
AMZFMZGEJ, G RZBQR XYTQ AYZJ
RCME XCJAGQRQ. (HYME FBQQYT)
(Solution in next *A lembic*.)

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