

## ABSTRACTS

### “Death By Chocolate – Facts and Fiction”

Howard M. and Sally B. Peters

Chocolate has been part of the world culture for thousands of years. This talk will present:

- 1) the high points of the history of chocolate from the Mayan and Aztec cultures to the present;
- 2) some chemistry and biochemistry of theobroma cocoa (the food of the gods);
- 3) some health results that indicate that this exotic vegetable (obviously, since wine is a fruit) is actually good for you;
- 4) some circulating urban legends (little known facts, trivia) about chocolate;
- 5) discussions about the recent book, “The Emperors of Chocolate”, (those multibillion dollar international chocolate cartels); and
- 6) samples from the West Coast sufficient to make all attendees sick.

Some of us are not ashamed to admit to being card-carrying chocoholics and on a 12 step plan.

**NOTE:** One attendee will receive a ten-pound bar of West Coast dark, bittersweet chocolate (winner to be determined by lot at the end of the meeting). Enjoy.

### “US Patent Law – Warts And All”

Howard M. Peters

The U.S. patent system has its US Constitutional authority in Article I, SEC 8. The first us patent # 1 Issued in 1790 was a chemical one, issued to Samuel Hopkins for an improved method for making potash. The single page was signed by George Washington and Thomas Jefferson. Until 1836 patents were primarily registered and inventors tried to enforce their rights in the courts. In 1836, the U.S. Patent Office building in Washington DC burned down. The U.S. patent law was completely rewritten and our present examination started over with a new # 1. This talk will include a brief historical review, how we got to where we are now with the past 8 years of massive changes in the US patent law, and some predictions of where the US law and US inventor will be in 10 years. With the focus on harmonization of the US patent law with the patent law of the countries of the rest of the world, we can expect that the present US grace period of one year to file will disappear. Also, the 200-year old US doctrine of the first-to-invent is expected to fall. For those interested in trivia in the patent system, the final ten minutes will include surprising US inventions and patents issued to author Mark Twain (suspenders, scrapbook), actress Heddy Lamarr (torpedo directional system), dancer Julie Newmar (cheeky nylons), etc.

### “Letters to F.J.Allen: A Reflected Portrait of Linus Pauling”

Derek A. Davenport

Linus Pauling was born in Portland, Oregon on February 28, 1901 and died on August 19, 1994. No other mid-twentieth century chemist had a greater impact upon the way fellow chemists thought, believed, talked, and acted. His range was extraordinary: crystal structure, quantum mechanics, line spectra, quantum chemistry, molecular structure, electron diffraction, molecular rotation in crystals, ionic radii, stability and structures of complex crystals, the nature of the chemical bond, structure of metals and alloys, ferromagnetism, nuclear structure, structures of proteins, immunochemistry, sickle-cell anemia, anti-body action, anesthesia, macromolecular evolution, and the nature of memory. In several of these areas his contributions were quite literally epoch-making and in all of them they were boldly provocative. The 1954 Nobel Prize in Chemistry was an inevitable recognition of these achievements. Though they were all of a piece with his main scientific work Pauling’s multifarious political activities and his advocacy of orthomolecular psychiatry and megavitamin therapy were

predictably less universally admired. His efforts in helping bring about a ban in atmospheric nuclear-bomb testing led in 1963 to his being the first man to be awarded two Nobel Prizes in his own right. Previously Marie Curie had shared one of her two Nobel Prizes with her husband. One might wish that Pauling could have shared this second Nobel Prize with his wife, Ava Helen.

On 25 October 1924 Linus Pauling wrote the first of close to seventy surviving letters to Frederick J. Allen of Purdue University. The letters span 44 years ending with Allen's death in 1968. In the 1921-1922 academic year at Oregon Agricultural College (now Oregon State University) Fred Allen had taught physical chemistry for the first and last time in his life. Among his fourteen students were Paul Emmett and Linus Pauling. Many years later he was to write "I gave it my best and grieved that I was not really equal to the job." The first of these letters was written when Pauling was a graduate student at Cal Tech while the last is a letter of condolence to Fred's widow. Even those these letters do not add much to the public record of Pauling's extraordinary career there are many small details that reveal in a very personal context his broad humanity. Extracts will be used to paint an idiosyncratic portrait of Linus Pauling and, to a degree, of his at times curmudgeonly admirer, Fred Allen.

### **"Encyclia and Its Segregates"**

Dr. Wesley E. Higgins

The talk deals with Prosthechea and othe Encyclia segregates. One of the characteristics used to distinguish Prosthechea from Encyclia is the presence of flavanoid crystals. Dr. Higgins describes this talk as "...mostly pretty pictures with a little science thrown in."

### **"Diversity of Bromite Ion Redox Mechanisms in Aqueous Solutions"**

Dr. Dale W. Margerum

Abstract not yet available.