

Citation for Chemical Breakthrough Award Program Update

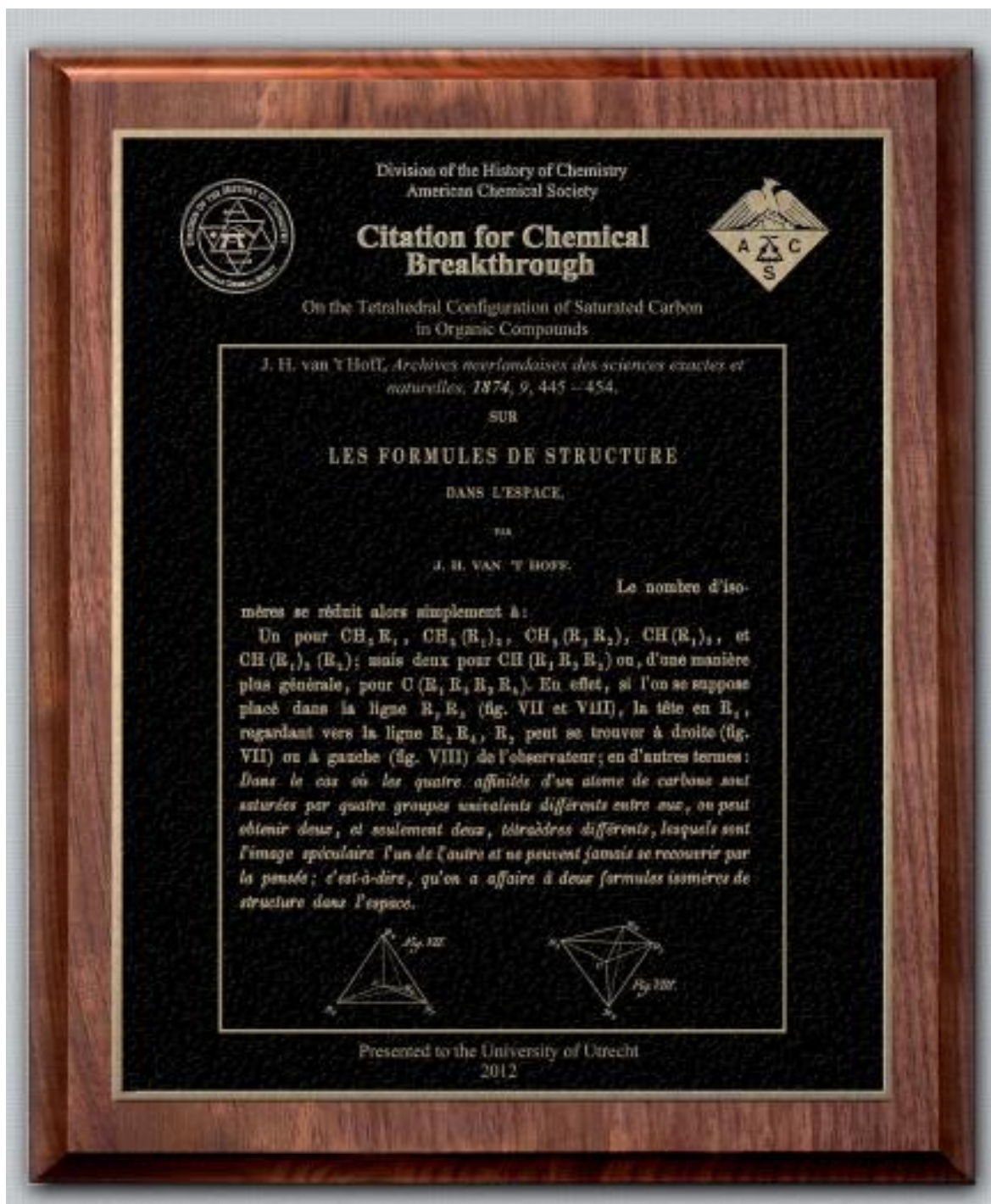
Jeffrey I. Seeman
Award Committee Secretary

August 15, 2013

Summary

- Seven years of completed awards (2006 –2012).
- 41 CCB Awards presented to date.
- 2013 award program in progress.
- CCB Awards are plaques only, given to institution from which the research was published
- We provide assistance with and sometimes participation in award ceremonies.
- At least three award ceremonies will be held in 2012
 - Pasteur in Paris, with Joe Gal
 - Mendelejeff in St. Petersburg, with David Lewis
 - van't Hoff in Amsterdam and Utrecht, with Jeff Seeman
- Several duplicate awards presented, e.g., to the current location of researcher. Duplicate awards are paid for by the institution requesting them or by other donors. For example, two plaques will be on display in the Netherlands For example, two plaques will be on display in the Netherlands For example, two plaques will be on display in the Netherlands

A typical award plaque is shown below, that for the 1874 paper by J. H. van't Hoff that proposed the tetrahedral geometry for saturated carbon. All plaques are also found on the HIST website under HIST Awards, Citation for Chemical Breakthrough Award.



- A number of feature articles on the program have appeared in C&EN. See, for example:
 1. L. Wang, "Pivotal Publications. New Awards Program Honors Institutions That Have Nurtured Breakthrough Discoveries," *Chem. Eng. News*, **2006**, *84* (July 3), 49-50.
 2. L. Wang, "Paying Tribute to Bruce Merrifield," *Chem. Eng. News*, **2006**, *84* (Dec. 18), 61-62.
 3. L. Wang, "Landmark Achievements. Award Program Honors Institutions Where Breakthrough Discoveries Occurred," *Chem. Eng. News*, **2007**, *85* (April 30), 35.

4. Anonymous, "Breakthrough Award to 'Organic Reactions'," *Chem. Eng. News*, **2009**, (August 10), 43.

- Announcements of the call for nominations and of the awardees appear regularly in C&EN.
- A healthy number of award nominations occur for each year but we could accept more nominations.
- Nomination process very simple and quick.
- The nomination process is entirely internet-based.
- The CCB award program has a diverse, high quality, very cooperative awards committees.
- Very simple award selection process.
- Entirely internet-based info dissemination and voting
- Names of award committee members are on HIST's website. For example:

**Award Committee Members
2012**

Anthony G. M. Barrett, F.R.S. (Imperial College of Science, Technology and Medicine)

Michael Bowers (University of California, Santa Barbara)

Carmen Giunta (Le Moyne College)

Harry Gray (Caltech)

Dudley Herschbach (Harvard)

Peter Morris (Science Museum London)

Amos Smith (Penn)

Joanne Stubbe (MIT)

Jeffrey I. Seeman, Committee Secretary (Non-voting)(University of Richmond)

- The CCB award program's website is exceptional, thanks to the excellent work of Vera Mainz.
- The program has received excellent responses in the USA and Europe. To date, no awards have been presented to Asia or South America.
- We have received extraordinary cooperation from the plaque manufacturer, Stellar Kent (<http://www.stellarkent.com/index.php>).
- The plaque-design process is much more difficult than anticipated. It is often hard to obtain the required high quality scans of the original publications. There have been design issues with the recipient organizations.
- In some instances, the plaque contains errors that were in the original document. We have refused to make corrections as requested by the recipients as the plaques must

reflect the original document, not subsequent (or modern) modifications. See the title in the following:



**Stratospheric sink for chlorofluoromethanes :
chlorine atomc-atalsed destruction of ozone**
Mario J. Molina & F. S. Rowland

Finances

- The plaques cost ca. \$350 each including shipping to the USA. Shipping to Europe is another \$100 and sometimes considerably more than \$100.
- Funding
 - \$10K from ACS DAC Innovative Grant
 - \$10K from ACS Corporate Associates
 - \$6K from ACS DAC Innovative Grant for Local Section travel
 - Funds from individual donors (which continues to this day)
- HIST currently provides 50% matching to one donor (donor, \$1200/year; HIST, \$600/year).
- Annual costs ca. \$1700 - \$2000/year.
- Annual income ca. \$1800/year.
- Available as of 8/15/13: \$901.84 not including a 2013 pledged gift from Jeffrey I. Seeman of \$1200 and a \$600 match from HIST.
- \$4426.16 available for local section travel support.

The website contains high quality images of all the plaques and much supplementary information, including photographs of many awards ceremonies, ceremony agenda, and related materials.

The website is organized by award year. There is a table of all award winners for each year. From that page, one can see the award plaques for each winner as well as the supplementary material associated with that award.

In 2013, several articles appeared in the *Bulletin* on the CCB award program (see next page)

TITLE	Author	Page Number
REPORT: A Citation for Chemical Breakthrough Award to an Italian High School, the Scientific Liceo Amedeo Avogadro of Vercelli, for Avogadro's 1811 Paper	Teresa Celestino School of Advanced Studies, University of Camerino, Italy	1
HIST'S CITATION FOR CHEMICAL BREAKTHROUGH AWARDS: THE FIRST PAPER OR THE "BREAKTHROUGH" PAPER?	Jeffrey I. Seeman Department of Chemistry, University of Richmond	4
CITATION FOR CHEMICAL BREAKTHROUGH AWARDS: CHOOSING PASTEUR'S AWARD-WINNING PUBLICATION	Joseph Gal Departments of Medicine and Pathology, University of Colorado School of Medicine	7
CHARLES M. HALL'S PERSISTENT QUEST OF PATENTS FOR REFINING ALUMINUM METAL BY ELECTROLYSIS	Norman C. Craig Oberlin College	13