MINUTES OF THE EXECUTIVE MEETING OF
THE ACS COUNCIL COMMITTEE ON
NOMENCLATURE, TERMINOLOGY, AND SYMBOLS (NTS)

MONDAY, MARCH 26, 2012
SAN DIEGO, CA

OPENING ITEMS: Committee chair Peter Rusch convened the meeting at 2:08 pm and requested self-introductions. Attendees were requested to record attendance by checking a printed roster.


Changes to list of members: For David Ball, delete third line (Director…); delete entry for Herbert Kaesz (deceased March, 2012).

Minutes: The minutes of the Fall 2011 meeting (Denver) were approved as distributed.

NEW REIMBURSEMENT POLICY: The newly-announced policy for reimbursement of travel expenses for attendance at committee meetings was discussed, and members posed questions for clarification of it. After adjournment of this NTS meeting, Rusch and Gerald Fenske plan to visit the session of the Committee on Committees to express their concerns about how the new policy might affect the NTS committee. [Subsequently, on Tuesday, March 27, Rusch participated in the CPC committee meeting to clarify what was done in the past and what should be done for the future. On the basis of the subsequent CPC decision, NTS is allowed to reimburse membership as per the previous policy for 2012 only. For 2013 and beyond, the committee must decide on a transition to either the new policy requirements or remain under the old policy now in use. This decision should be made at the Philadelphia August meeting.]

OPERATIONS MANUAL:

A draft of a new Operations Manual for NTS was presented to the committee. Mike Sheets volunteered to review the document and to edit, format, and put it into final form for discussion at the Philadelphia meeting. The aim is to have the manual available for 2013 use by all new and continuing members and, if possible, by the ACS membership committee selection process, which usually takes place in late June/early July. That availability will enable potential new members to become better informed about critical committee information, thereby supporting the committee decision-making process.
REPORTS FROM RELATED BODIES:

**IEEE SCC 14:** Albert Censullo made a PowerPoint presentation pertaining to the list of standards under review/reaffirmation, a NIST legislative subcommittee report, a USMA legislative subcommittee report, and an international subcommittee report. That PowerPoint presentation is posted and available at the NTS committee workspace on ACS Network: [https://communities.acs.org/groups/committee-on-nomenclature-terminology-and-symbols](https://communities.acs.org/groups/committee-on-nomenclature-terminology-and-symbols) (log-in, join Community if necessary, click on IEEE SCC 14 report for PowerPoint presentation).

**Specification of constants of nature:** Rusch presented a proposal pertaining to the calculation of the molar mass constant: \( N_A \times h \) (\( N_A \) is Avogadro’s constant and \( h \) is Planck’s constant) is a product related to many other constants. \( N_A, h \), and \( c \) (speed of light) are all to be exactly specified. David Carter raised the issue of liaison with other ACS committees about the SI constants matter; Rusch asked him to consider contact with the other appropriate committees to promote such liaison.

**IUPAC: Chemical Nomenclature and Structure Representation Division:** Warren Powell was unable to attend the meeting of NTS, but he submitted a written report. The revised and expanded edition of recommendations for nomenclature of organic chemistry, including preferred IUPAC names (PIN names), has a tentative date for submission of camera-ready manuscript: May 31, 2012. Several chapters (over 900 pages) are already complete.

**Biochemical and Carbohydrate Nomenclature:** Derek Horton was unable to attend the NTS meeting but submitted a written report. He is a member of an IUPAC working group that is developing a new document on flavonoids and expects to meet with that group in May 2012 in Cambridge, U.K. The rapidly advancing area of glycoscience presents important challenges to naming novel glycoconjugates. For further information, Horton cites a Background Paper on Glycosciences and Glycomics in the United States at [www.functionalglycomics.org](http://www.functionalglycomics.org).

**Inorganic Chemical Division:** Paul Karol presented the provisional recommendations for names and symbols of elements 114 and 116. For element 114, the name flerovium (honoring the Flerov Laboratory of Nuclear Reactions (Gregory N. Flerov, founder) and the symbol Fl are proposed. For element 116, the name livermorium (honoring the Lawrence Livermore National Laboratory) and symbol Lv are proposed. After brief discussion, a motion by Karol that the proposed names and symbols be accepted by NTS passed.

**TASK FORCE REPORTS:**

*Report of Chair:* Rusch reported on a quarterly session of journal editors, which he attended by invitation. Some editors expressed the view that “authors name their own compounds.” Karol suggested that Rusch urge editors sending out instructions to authors include NTS citations of nomenclature web sites and advise authors to use them. Bob Howell commented that some
polymer structures are so complex that IUPAC names are not usable. Fenske said that NTS reviews of instructions to authors provide an opportunity to insert references to software for nomenclature and editors can say “take a look at the revised instructions.”

**Redefinition of the Kilogram and the Mole:** Rusch reported that the CGPM (the international body concerned with SI base units) met in October 2011, accepted the idea of “explicit constant” definitions of SI base units but postponed adoption of the actual definitions until 2015 (or later). Some national and international chemistry organizations have expressed opposition to the proposals developed last year. Rusch proposed that NTS develop short but accurate explanations of SI base units for audiences of different age and educational levels.

**Nomenclature generation software update:** Censullo presented an update of nomenclature software in three categories: (1) stand-alone chemical nomenclature software application running on desktop PC, (2) “lookup” applications using database search of input structures, and (3) web-based applications. Ten products in category 1, five in category 2, and six in category 3 were updated. Some summary comments of potential interest are:

ChemDraw from CambridgeSoft and ChemSketch from Advanced Chemistry Development (ACD) are popular in U.S. academia.

MDL, formerly Molecular Designs Limited, was purchased by Symyx Technologies in 2007, and Symyx merged with Accelrys in 2010 with the retained name Accelrys. AccelrysDraw replaces the previous SymyxDraw.


Structure-to-name applications are considered “mature,” but name-to-structure applications have room for future growth, especially in areas of speed and accuracy.

This report, with citations of relevant web addresses, is posted at the NTS committee workspace on the ACS Network.


**FUTURE ACTIVITIES OF THE COMMITTEE:**

**ACS Strategic Plan:** Robert Rich gave a PowerPoint presentation about the *ACS Strategic Plan for 2012 and Beyond.* He emphasized the statement of goals of the Society: To remain a strong and sustainable organization with adequate financial resources and financial stewardship principles to ensure its ability to accomplish its goals today and into the future; to be the most
Leslie Sperling expressed concern that ACS should emphasize more inclusion of polymers in textbooks; a significant portion of U.S. chemists are polymer chemists, but that fact is not reflected in chemistry texts.

**Liaison Opportunities:** Rusch directed attention to the list of organizations with which we might develop interaction. Karol suggested that NTS request support for an NTS member to attend an occasional meeting of some international societies with agenda items of mutual interest. David Ball directed attention to the list of ACS committees in the agenda book; the Committee on Science seems a natural for NTS interaction. Fenske suggested that the list of organizations be sent to all NTS members with instructions to pick a short list to focus on at the next meeting (Philadelphia); Mark Benvenuto will do so.

**IUPAC Cooperation:** Fenske called attention to the list of IUPAC funded projects included in the agenda book and asked for ideas about how NTS can cooperate or be involved.

**ADJOURNMENT:** The meeting was adjourned by the Chair at about 5:05 pm.

Prepared by James G. Traynham, Secretary