

Provisional Recommendations

IUPAC Seeks Your Comments

Provisional recommendations are drafts of IUPAC recommendations on terminology, nomenclature, and symbols made widely available to allow interested parties to comment before the recommendations are finally revised and published in *Pure and Applied Chemistry*.

Name and Symbol of the Element with Atomic Number 111

A joint IUPAC-IUPAP Working Party has confirmed the discovery of element number 111 by the collaboration of Hofmann et al. from the Gesellschaft für Schwerionenforschung mbH (GSI) in Darmstadt, Germany. In accord with IUPAC procedures, the discoverers have proposed a name and symbol for the element. The Inorganic Chemistry Division Committee now recommends this proposal for acceptance. The proposed name is roentgenium with symbol Rg.

This proposal lies within the long established tradition of naming elements to honor famous scientists. Wilhelm Conrad Roentgen discovered X-rays in 1895.

Comments by 31 October 2004

Prof. John Corish, University of Dublin, Chemistry Department, Trinity College, Dublin 2, Ireland,
Tel: +353 1 6081776, E-mail: jcorish@tcd.ie



www.iupac.org/reports/provisional/abstract04/corish_311004.html

Numbering of Fullerenes

Rules for numbering (C_{60-I_h})[5,6] fullerene and ($C_{70-D_{5h(6)}}$)[5,6] fullerene were codified in a publication "Nomenclature for the (C_{60-I_h})[5,6] and ($C_{70-D_{5h(6)}}$)[5,6] fullerenes" published in *Pure and Applied Chemistry*, **74**(4), 629-695, 2002.

The current publication contains recommendations for numbering a wide variety of fullerenes of different sizes, and of various point group symmetries, including low symmetries such as C_s , C_i , and C_1 , as well as many fullerenes that have been isolated and structurally well characterized. These recommendations are based on the principles established in the earlier publication, and aim to identify well-defined, and preferably contiguous helical pathway for numbering.

Comments by 31 August 2004

Dr. Warren H. Powell, 1436 Havencrest Court,
Columbus, Ohio 43220-3841, USA,
Tel.: +1 614 451 1830, E-mail: wpowell2@juno.com



www.iupac.org/reports/provisional/abstract04/powell_310804.html

Nomenclature of Inorganic Chemistry

Since the publication of IUPAC's *Nomenclature of Inorganic Chemistry—Recommendations 1990* (the "Red Book"), inorganic chemistry has continued to expand and flourish, bringing with it the need to adapt and develop associated nomenclature. A revision of the Red Book was therefore initiated in 1998. This revised Red Book will supersede not only the 1990 Red Book but also, where appropriate, *Nomenclature of Inorganic Chemistry II—Recommendations 2000* (Red Book II). One of the main changes from the old Red Book is the different organization of material, adopted to improve clarity. Overall, the emphasis on additive nomenclature (generalized from the classical nomenclature of coordination compounds) which was already apparent in the 1990 Red Book, is reinforced. Examples are even included of organic compounds, from the borderline between inorganic and organic chemistry, which may be conveniently named using additive nomenclature.

The reader facing the problem of how to name a given compound or species may find help in several ways. A flowchart is provided that will in most cases guide the user to a section or chapter where rules can be found for generating at least one possible name. A more detailed subject index is also provided, as well as an extended guide to possible alternative names of a wide range of simple inorganic compounds.

Comments by 31 August 2004

Prof. Neil G. Connelly, University of Bristol, School of Chemistry, Cantock's Close, Bristol, BS8 1TS, UK,
Tel: +44 117 928 8162, Fax: +44 117 929 0509,
E-mail: neil.connelly@bristol.ac.uk



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