

Provisional Recommendations

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. Full text is available online.

Terminology and Nomenclature for Macromolecular Rotaxanes and Pseudorotaxanes

This document provides definitions of terms related to macromolecular rotaxanes and macromolecular pseudorotaxanes, and recommendations for naming these macromolecular assemblies. The nomenclature recommendations presented here have been developed by combining the nomenclature rules for the low-molecular-weight rotaxanes and the nomenclature rules for macromolecules (both established in published IUPAC Recommendations) in such a way that the developed nomenclature system provides unambiguous names for macromolecular rotaxanes (pseudorotaxanes) including differentiation among various isomers of these supramolecular assemblies. Application of the nomenclature recommendations is illustrated using examples covering a wide range of structure types of macromolecular rotaxanes and pseudorotaxanes. An alphabetical index of terms and a list of abbreviations and prefixes are included.

Comments by 31 March 2012

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 http://media.iupac.org/reports/provisional/abstract11/vohlidal_310312.html

Name and Symbol of the Element with Atomic Number 114 and 116

A joint IUPAC/IUPAP Working Party (JWP) has confirmed the discovery of the elements with atomic numbers 114 and 116. In accord with IUPAC procedures, the discoverers proposed names as follows: flerovium and symbol, Fl, for the element with $Z = 114$ and livermorium with the symbol Lv for the element with $Z = 116$. The Inorganic Chemistry Division recommended these proposals for acceptance.

For element with atomic number 114, the proposal lies within tradition and honours the Flerov Laboratory of Nuclear Reactions where superheavy elements are synthesised. Georgiy N. Flerov (1913–1990) was a renowned physicist, author of the discovery of the spontaneous fission of uranium (1940, with Konstantin A. Petrzhak), pioneer in heavy-ion physics; and founder in the Joint Institute for Nuclear Research the Laboratory of Nuclear Reactions (1957).

For the element with atomic number 116, the proposed name livermorium is again in line with tradition and honours the Lawrence Livermore National Laboratory. A group of researchers of this Laboratory with the heavy element research group of the Flerov Laboratory of Nuclear Reactions took part in the work carried out in Dubna on the synthesis of superheavy elements including element 116.

Comments by 30 April 2012

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 http://media.iupac.org/reports/provisional/abstract11/corish_300412.html