the Brunel Institute of Bioengineering, UK, and at other research and development institutions.

The aim of this proposal is to survey emerging technologies and applications based on CCC, including the progress made in the pharmaceutical industry, radiochemistry, and analytical and through preparative-scale inorganic separations.

Comments from the chemistry community are welcome and should be addressed to the project coordinator Prof. B.Spivakov, Vernadsky Institute of Geochemistry and Analytical Chemistry, Russian Academy of Sciences, Kosygin Str. 19, Moscow, Russia 119991, Tel.: +7 095 137 82 63, Fax: +7 095 938 20 54, E-mail: spivakov@geokhi.ru.

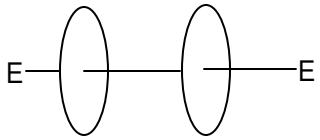
www.iupac.org/projects/2001/2001-041-2-500.html

Nomenclature for Rotaxanes, Catenanes, and Macromolecular Rotaxanes

There are currently no standards for nomenclature of rotaxanes, catenanes, and of macromolecular rotaxanes. During the last 15 years, the scientific community has shown increasing interest in these fields of small molecules and polymers, and Standardization of nomenclature in these fields is highly desirable and long overdue. This presents an opportunity for IUPAC to recommend nomenclature systems in order to establish world nomenclature standards.

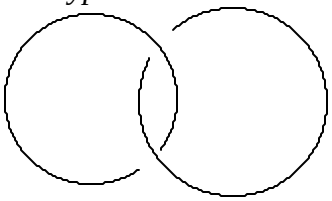
The title projects have been initiated in order to address the issues. Since the fields of rotaxanes and macromolecular rotaxanes are still rapidly expanding, the paths forward are necessarily undefined, so this may be an unusually challenging task.

Typical ***(Macromolecular) Rotaxane***



Pseudorotaxane: E-E is a linear (macro)molecule; E is an end-group small enough to permit dethreading. **Rotaxane:** E-E is a linear (macro)molecule; E is an end-group large enough to prevent dethreading. The number of rings threaded varies; 1 is commonest.

Typical ***Catenane***



Catenane: physically interlocked macrocycles with no chemical bonding between them. Each macrocycle size is generally specified and the macrocycles are usually non-polymeric. Catenanes contain at least two macrocycles, and may be linear or branched.

www.iupac.org/projects/2002/2002-007-1-800.html
www.iupac.org/projects/2000/2000-037-1-800.html

Provisional Recommendations

IUPAC Seeks Your Comments

In this section, we publish synopses of IUPAC's latest provisional recommendations on nomenclature and symbols. All comments on these recommendations are welcome and will be taken into consideration. The final revised versions are published in *Pure and Applied Chemistry*.

If you would like to comment on the provisional recommendations, please visit the IUPAC Web site at http://www.iupac.org/reports/provisional/index.html, where the full texts are available for downloading as draft pdf files. Alternatively, you can write to your nearest national/regional center to request a copy; the most recent list of national/regional centers is available on the Web site at the address above and last appeared in *CI*, Vol. 17, p. 141 (1997).

Thermochemistry of Chemical Reactions: Terminology, Symbols, and Experimental Methods for the Determination of Bond Energies

This work, which is presented in two parts, is concerned with the most currently experimental techniques used on the study of the thermochemistry of chemical reactions. The first part of this recommendation deals with the terminology and symbols, discusses the meaning, designation and symbols of the different parameters used in molecular thermodynamic studies. The second part is a brief description of the most important methods used to investigate the thermodynamic stability of molecules and chemical bonds, together with a detailed analysis of its basic assumptions and how thermodynamic quantities are derived.

www.iupac.org/reports/provisional/abstract02/ribeiro-da-silva_300902.html

Comments by 30 September 2002
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