Rare Earth Metal (Sc, Y, Lanthanoids) Bromides and Iodides in Water and Aqueous Systems (Solubility Data Series)

A complete set of compilations will be prepared for the solubilities of all rare earth metal bromides and iodides in water as well as in aqueous solutions containing inorganic and organic substances. The set of compilations related to a selected metal will be introduced with a critical evaluation of all related solubility results, equilibrium solid phases, and a selection of suggested solubility data.

Rare earth metal bromides and iodides are of increasing importance in the production of mercury-free lamp fillings, materials used in spectroscopy, corrosion protection, and catalysis of polymerization and various organic reactions.

This report continues the previous elaborations dealing with rare earth metal halides in nonaqueous[1] and aqueous[2] solvents:

1. T. Mioduski and M. Salomon, IUPAC *Solubility Data Series*, vol. 22 (Oxford: Pergamon, 1985).
2. T. Mioduski, C. Gumiński, and D. Zeng, "IUPAC-NIST Solubility Data Series, Vol. 87," *J. Phys. Chem. Ref. Data* 37, 1765–1853 (2008); 38, 441–562 (2009); 38, 925–1011 (2009).

For more information, contact Task Group Chair Cezary Guminski <cegie@chem.uw.edu.pl>.

www.iupac.org/web/ins/2010-005-2-500

Stamps International

See also www.iupac.org/publications/ci/indexes/stamps.html

IYC 2011: Ready, Set, Go!

Personalized or "customized" stamps constitute an alternative form of postage in which a photograph or picture provided by an individual or company is added to the stamp's design. In the past few years they have become increasingly popular in Europe and North America, particularly for the delivery of personal greetings or the announcement of special occasions (e.g., births, weddings) that could not possibly be featured on "regular" stamps issued by official postal authorities. Since the United States Postal Service will, unfortunately, not be issuing a stamp to honor the International Year of Chemistry (I'll spare you the details of the story), I decided a few months ago to create and order my own. Illustrated herein is the brainchild of my philatelic stubbornness, a self-adhesive stamp with a rather simple design that features the IYC logo on a white background. My hope is that many readers of *Chemistry International* will follow through on this idea and create stamps showcasing the chemistry theme of their choice (perhaps a favorite element or molecule?), and thus help promote and commemorate the IYC.

I would also like to mention here three stamp-related events that will take place during 2011. A Global Stamp Competition is the focus of a new IUPAC project intended to draw attention to chemistry as a cultural enterprise. Schoolchildren all over the world are invited to submit entries that recognize the multiple contributions of chemistry to society and highlight its role in the welfare, safety, and health of all people. (Follow this activity on the IYC website @ www.chemistry2011.org/participate/activities/show?id=110) In addition, a "Chemistry on Stamps" Symposium and an associated Stamp Exhibition will take place during the 242nd national meeting of the American Chemical Society in Denver, Colorado, between 28 August and 1 September. Everyone is invited to join in the celebrations!

Written by Daniel Rabinovich <drabinov@uncc.edu>.

Follow the IYC Postage Stamp Central @www.chemistry2011.org/participate/activities/show?id=533

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.

Definition of the Hydrogen Bond

This recommendation provides a short definition for the hydrogen bond, followed by a list of experimental and/or theoretical criteria, which can be used as evidence for the presence of the hydrogen bond. Finally, some characteristics that are typical of hydrogen bonded systems are given. A brief explanation of the terms used is provided after the definition. The task group has also produced a comprehensive technical report, which provides a summary of the past work on hydrogen bonding and also the rationale for the proposed definition.

Comments by 31 March 2011
Professor E. Arunan
Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore 560012, India
E-mail: arunan@ipc.iisc.ernet.in

http://media.iupac.org/reports/provisional/abstract11/arunan_310311.html

Definitions of Terms Relating to Crystalline Polymers

The recommendations embodied in this document concern the terminology relating to the structure of crystalline polymers and the processes of polymer crystallization. Reference to actual polymer crystals of microscopic dimensions is essential to define the characteristic properties of crystalline polymers. Such crystals correspond only very approximately to the infinite, three-dimensionally periodic arrangements of atoms defining the ideal crystalline state.

Comments by 31 May 2011
Professor G. Allegra
Dipartimento de Chimica, Via L. Mancinelli 7, Materiali e Ingegneria Chimica, Milano I-20131, Italy
E-mail: giuseppe.allegra@polimi.it

http://media.iupac.org/reports/provisional/abstract11/allegra_31052011.html

Terminology for Biorelated Polymers and Applications

The science and application of biorelated polymers require cooperation among different disciplines and scientific domains. Scientists whose research involves using polymer-based compounds and devices in contact with living systems tend to use the terms and definitions recommended by IUPAC. However, scientists in other fields have often developed incoherent terminologies.

The aim of the following recommendation is to provide a standard terminology that can be used across all fields of science involved with biorelated polymers, namely medicine, surgery, pharmacology, agriculture, packaging, biotechnology, and polymer waste management. This is necessary because i) human health and environmental sustainability are more and more interdependent; ii) research, applications, norms and regulations are still developed independently in each sector; and iii) nonspecialists such as journalists and politicians need a common language.

Comments by 31 May 2011
Prof. Michel Vert
Université de Montpellier I, IBMM-UMR CNRS 5247, 15, Ave. Charles Flahault, B.P. 14491, Montpellier Cédex F-34093, France
E-mail: vertm@univ-montp1.fr

http://media.iupac.org/reports/provisional/abstract11/vert_31052011.html