IUPAC

THE IUPAC COMPENDIUM OF ANALYTICAL TERMINOLOGY ON-LINE EDITION: A FREE RESOURCE

David S. Moore

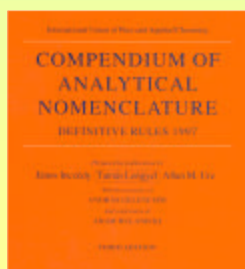Materials Dynamics Group, DX-2, Los Alamos National Laboratory, Los Alamos NM 87545 USA

IUPAC

IUPAC on the Internet

www.iupac.org - the online resource

- Information on current IUPAC projects
- Contact information
- Reports and recommendations
- *Chemistry International*
- Conference Calendar
- Nomenclature and terminology
- Book ordering (also from Amazon.com)
- E-news

IUPAC Orange Book

http://www.iupac.org/publications/analytical_compendium/

COMPENDIUM OF ANALYTICAL NOMENCLATURE
DEFINITIVE RULES 1997

Organization

Home Page

Index

A B C D E F G H I JK L M N O P Q R S T UV W X Y Z

☐ = hyperlink

Layout and Usage

- The home page for the Web edition is in frames, with the left hand frame serving as a shorthand table of contents.
- Clicking on a chapter loads its table of contents into the main frame.
- The sections of each chapter are linked to Adobe Portable Document Format (pdf) versions of that particular section.
  - These can then be searched and/or printed, as desired. The margins allow printing on US Letter or A4 paper.
- The index is hyperlinked to the pdf format sections containing each term to enable easy searching

Conversion to XML

Analytical Information Markup Language
ASTM E13.15 AnIML
https://sourceforge.net/projects/animl/
Contact: Gary W. Kramer: gary.kramer@nist.gov

IUPAC Project:
Standard XML Data Dictionaries for Chemistry
http://www.iupac.org/projects/2002/2002-022-1-024.html
Contact: Steve Stein: steve.stein@nist.gov

SpectroML (GAML and XML) Task Group
Contact: Kimberly Abramo:
KHAbramo@SHIMADZU.com

ASTM Subcommittee E13.15
https://sourceforge.net/projects/animl/
- Builds off existing data standarization efforts, such as SpectroML, GAML, LIMS, IUPAC, vendor proprietary
- Development of new Schemas
- Translation of current datasets to new standard
animl.sourceforge.net/SpectroML_PittCon_03.pdf
Newest developments:
http://animl.sf.net

IUPAC Standard XML Data Dictionaries

Objectives:

- To translate existing IUPAC standard terminologies and related information to data dictionaries in eXtensible Markup Language (XML) format.
- To establish a strategy for future IUPAC involvement in applications of XML for chemistry.
- To enable IUPAC to serve as the principal, authoritative source of basic chemical terminology for electronic communications.

http://gold.zvon.org

αadecay (alpha-decay)

PREVIOUS	NEXT
alpha-cleavage	αaeffect

aadecay (alpha-decay)
Radioactive decay in which an **alpha particle** is emitted.

Source: PAC, 1982, *54*, 1535
(Glossary of terms used in nuclear analytical chemistry.)

Interactive Link Maps
First Level   Second Level   Third Level

Cite as: IUPAC Compendium of Chemical Terminology, Electronic version, http://gold.zvon.org/A00005.html.
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Miloslav Nic, Jiri Jirat, Bedrich Kosata, ICT Prague, Czech Republic

Updating / Archiving

- The IUPAC Project System is used to update or add to terminology in the Orange Book.
  - This can be done on individual terms, collections of terms, or entire chapters
  - See examples below
- The updated terms or chapters replace existing ones; additional terms are added.
  - This is first done in Pure Appl. Chem.
  - Once a year (if necessary) a new on-line Orange Book will be released and the old one archived.
- Several projects are aimed at converting chapters to glossary format for XML conversion, and comparison of terms in the Orange and Gold Books, eventually leading to one on-line terminology source.

OB Updating Projects

Number: 2001-083-1-500
Title: Compendium of Analytical Chemistry (Orange Book; Revised Edition)
Task Group Chairman: David S. Moore
Completion Date: 2002 - *Project Completed*

Description: The compilation of the Compendium of Analytical Nomenclature (Orange Book) forms a very active part of the Analytical Division of IUPAC where a uniform nomenclature of all aspects is included. The revised Orange Book will be published in two forms, classical and electronic.>
See 3rd edition foreword and brief contents

Progress: *Project Completed* **-** The 1st web edition of the IUPAC Compendium of Analytical Nomenclature has been completed during the summer 2002. > Access the **Orange Book online**

Further revisions will be done section and/or chapterwise, as proposed in the following projects:
 2001-063-1-500 - Revision of terminology of separation science (R.M. Smith) and
1999-044-2-500 - Terminology for the description of peak asymmetry in chromatography (J. A. Jonsson)
2002-002-2-500 - Recent advances in electroanalytical techniques: characterization, classification and terminology (W. Kutner).

Number: 2001-063-1-500
Title: Revision of terminology of separation science
Task group Chairman: Roger M. Smith
Members: V.A. Davankov, Jan Åke Jönsson, and P. Jandera

Objective: To revise, up-date and systematize the terminology of separation science as a unified computer readable compilation and to facilitate the future updating of the Orange and relevant terms in the Gold book.

Number: 2002-002-2-500
Title: Recent advances in electroanalytical techniques: characterization, classification and terminology
Task Group Chairman: Wlodzimierz Kutner
Members: Z. Galus, G. Farsang, C. Brett, and K. Winkler

Objective: Revision and updating of an old IUPAC document (*Pure Appl. Chem.*, **45**(2), 81-97, 1976) on classification, characterization and nomenclature of electroanalytical techniques. The product will be a unified computer readable compilation to facilitate the future updating of the Orange book and relevant terms in the Gold Book.

Number: 1999-044-2-500
Title: Terminology for the description of peak asymmetry in chromatography
Task Group Chairman: Jan Åke Jönsson
Member: Roger M. Smith

Objective: To make recommendations of definitions and terms for the description of the symmetry of peaks in chromatography separations.