

# Provisional Recommendations

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## IUPAC seeks your comments

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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* and synopses of these are published in *Chemistry International* as recent reports.

If you would like to comment on the provisional recommendations please write to your nearest national/regional centre requesting a copy of the full report. Copies are not available from the IUPAC Secretariat. The most recent list of the national/regional centres appeared in *Chemistry International* 1997, **17**, 141. This information is also available on the IUPAC Web Site: <http://www.iupac.org>

### Inorganic Chemistry Division. Commission on Nomenclature of Inorganic Chemistry— Nomenclature of Organometallic Compounds of the Transition Elements

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Organometallic compounds are defined as containing at least one bond between an organic molecule and a metal. Organometallic nomenclature therefore usually combines the nomenclature of organic chemistry and that of coordination chemistry. Provisional rules outlin-

ing nomenclature for such compounds are found both in Nomenclature of Organic Chemistry, 1979 and in Nomenclature of Inorganic Chemistry, 1990.

As part of a joint effort by commissions II.2 and III.1 to publish a separate rule book on organometallic nomenclature, a document on transition metal compounds is presented.

This document describes the nomenclature of compounds with metal-carbon single bonds, metal-carbon multiple bonds as well as complexes with unsaturated molecules (metal- $\pi$ -complexes). Organometallic com-

pounds are considered to be produced by addition reactions and so they are named on an addition principle. The name therefore is built around the central metal atom name. Organic ligand names are derived according to the rules of organic chemistry with appropriate endings to indicate the different bonding modes. To designate the points of attachment of ligands in more complicated structures, the  $\eta$ ,  $\kappa$ , and  $\mu$ -notations are used. The final section deals with the abbreviated nomenclature for metallocenes and their derivatives.

*Comments on these recommendations are welcome and should be sent by 1 December 1998 to Prof. Dr A. Salzer, Institut für Anorganische Chemie, RWTH Aachen, D 52056 Aachen, Germany. Tel.: +49 241 804646, fax: +49 241 8888 288, e-mail: albrecht.salzer@ac.rwth-aachen.de*

## Analytical Chemistry Division Commission on General Aspects of Analytical Chemistry. Classification and Use of Terms for Amplification and Related Reactions

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**(Prepared by D. Thornburn Burns<sup>1</sup> and Alan. Townshend<sup>2</sup>)**

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*Synopsis:* A systematic classification is given for the various types of amplification and related reactions. The report refines earlier IUPAC recommendations (*Pure & Appl. Chem.* 1982, **54**, 2553–2556,) to include non-multiplication reactions.

*Comments by 1 December 1998 to Prof. D. Thornburn Burns <H.Johnston@Queens-Belfast.AC.UK>*