

systems for conventional and computer-based chemical nomenclature, cooperating with the four current nomenclature Commissions, coordinating interdisciplinary activities in the nomenclature field, and recommending to the Bureau long-range strategy on chemical nomenclature. It is expected that this body will provide the long-term central planning, management, and coordination of chemical nomenclature that would otherwise be lost when the Commissions are discontinued at the end of 2001.

2. A feasibility study of the Chemical Identifier project, to be managed by the CCINS, has been initiated. A "chemical identifier" is intended to be a meaningful alphanumeric text string that can uniquely identify a chemical compound and facilitate its handling in computer databases. This code would be the equivalent of an IUPAC systematic name but would be designed to be easily used by computers. The identifier could also include other information about the specific substance in question. Because there are several issues to be resolved, the participants in the Nomenclature Round Table recommended that the feasibility of the project and resolution of these issues be carried out as soon as possible by representatives of a wide range of interested parties. Drs. Stephen R. Heller and Steve Stein (NIST) were asked to recommend a list of individuals and groups that should be consulted initially and to propose a framework for addressing the issues.
3. IUPAC has agreed to play a lead role in representing the international chemistry communities in the development of Chemical Markup Language (CML), which is an extension of the more general XML (Extensible Markup Language) with special ability to handle chemical information. XML is a new standard being adopted by web publishers worldwide. It is expected to replace the current standard HTML over the next few years.

Chemistry International Strategy Development Committee

IUPAC President Alan Hayes has appointed a Strategy Development Committee for *Chemistry International* (CI), charged with the responsibility for developing a recommended mission and strategy for the magazine. Among other things, the committee is being asked to define CI's function within IUPAC and to relate its content to the general mission of the Union in a time of profound change.

Readers who have views on the material that has been or should be included in CI, on its organization or physical appearance and layout, or on its relationship to the mission of IUPAC, are urged to communicate with the Chairman of the Strategy Development Committee:

Dr. D. H. Michael Bowen
8609 Ewing Drive
Bethesda, Maryland 20817 USA
Tel./Fax: +1 (301) 530 5764
E-mail: m_bowen@acs.org

DIDACTic Tools for Teaching Chemistry

Carbon—you can talk about it many different ways; what would be yours? You can do your best and picture yourself as the latest avant-garde modernist painter (see Fig. 1), or simply use DIDAC (see Fig. 2, which illustrates diamond, graphite, and fullerene—three different allotropic forms of carbon).

Because chemistry is fun and teaching it is not always easy, Agfa-Gevaert N.V., Belgium, has developed and produced "didactic" tools such as the DIDAC overhead transparency sheets. For more than five years, Belgian chemistry teachers in several respected schools have been using DIDAC overhead sheets. In the past year, and with the impulse of the Belgian National Adhering Organization, IUPAC's Committee on Chemistry and Industry (COCI), and, more recently, IUPAC's Committee on Teaching of Chemistry (CTC) have recognized the value of this project, and are actively promoting these materials.

Via a collaboration with UNESCO, and after the

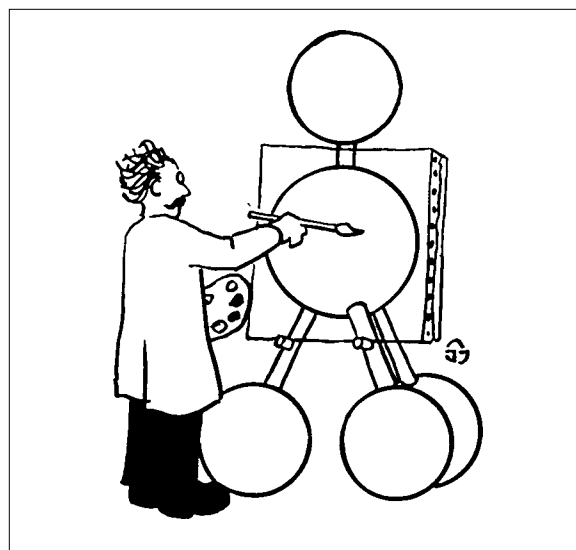


Fig. 1 Avant-garde modernist painter depicting a methane molecule.

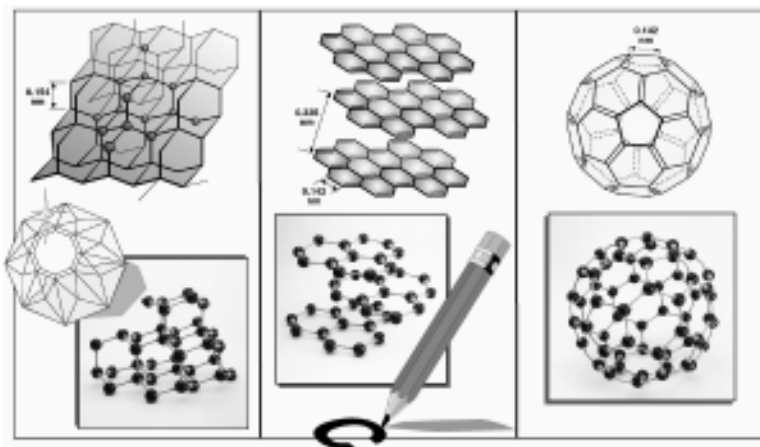


Fig. 2 Three different allotropic forms of carbon, illustrated by diamond, graphite, and fullerene.

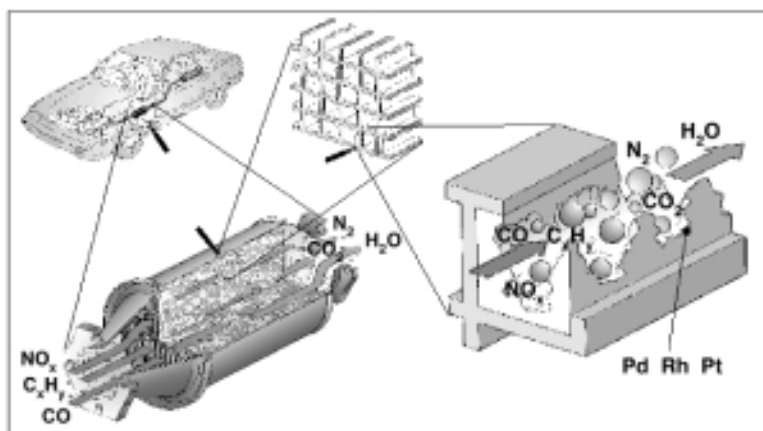


Fig. 3 Catalytic converters in cars.

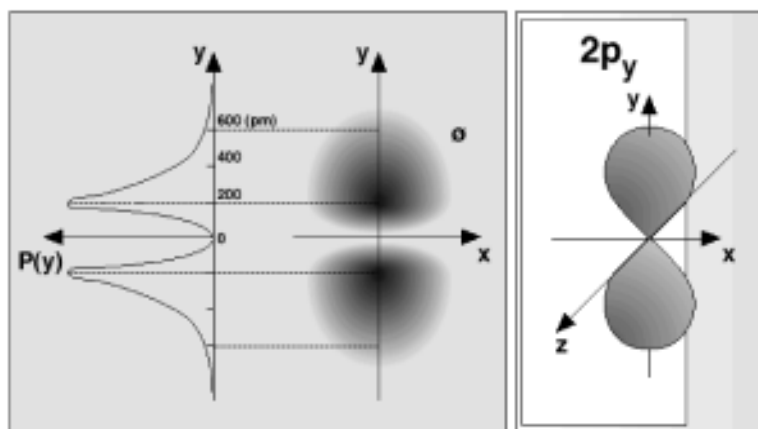


Fig. 4 A $2p_y$ orbital.

IUPAC Congress in Berlin in 1999, DIDAC material was presented at advanced teacher training courses during January–May 2000 in Libya, Mali, Burkina Faso, Belarus, Lithuania, Yemen, Niger, and Iran. By the end of this year, at least 10 more new training activities will be organized in Africa, Europe, and the Caribbean countries; these training activities also

feature a workshop on microchemistry organized by CTC. By the end of 2001, the project should be presented in more than 30 countries around the world. The international recognition of DIDAC should be easy because only simple facilities are required for the different levels and different curricula.

As one chemistry teacher put it, “Sometimes it can be awfully difficult to explain a chemical subject by drawing an illustrative picture on the blackboard. Especially when you need three-dimensional drawings, or you are dealing with topics like chemical bonds, equilibria, etc. It is so much more relaxing if you already have the illustration on an overhead sheet, as you then can concentrate on explaining the concept. And that is exactly why I use DIDAC transparencies in my lessons”.

When designing the sheets, the topics that are difficult to illustrate on a blackboard first came to mind. The carefully devised, attractive graphical representations help students to visualize the concepts and understand the theory. The sheets do not include narrative text, which make them accessible regardless of the language spoken in class. The sheets are designed for every level; the teacher selects only the sheets that provide added value to the lesson and match the level of the students in each class. Accompanying explanations for the teacher are available in Dutch, French, and English. The sheets are not meant to replace a course book, but merely to help explain topics that are rather difficult to illustrate.

Contents

Five kits are currently available. Each illustrates several common chemical subjects, from the role of chemistry in our daily lives to basic theoretical concepts. Each teaching module consists of approximately 60 color transparencies and presents chemical concepts in an easy-to-understand way. A black-and-white version of the transparencies, from which copies can be made, is included for the students. For example, Fig. 3 illus-

trates catalytic converters in cars, and Fig. 4 depicts a $2p_y$ orbital.

Volume 1

Role of chemistry in our daily lives (10 sheets)
Water (8 sheets)
Periodic table of the elements (31 sheets)
Colloidal systems (7 sheets)
Thermodynamics (14 sheets)

Volume 2

Chemical equilibria (27 sheets)
Petrochemistry (16 sheets)
Silverhalide photography (17 sheets + 3 wedges)

Volume 3

Electrochemistry (22 sheets)
Air and water (19 sheets)
Atomic models (21 sheets)

Volume 4

Polymers (28 sheets)
Biopolymers (25 sheets)
Chemical bonds (26 sheets)

Volume 5

Separation techniques (19 sheets)
Chemistry and health (19 sheets)

The content is specifically designed for students in secondary and higher education. As each sheet is autonomous, the teacher can use only the sheets that are applicable to their students and match their level. Thus, teachers still have complete freedom to design lessons in the way they feel is best for their class.

High Pedagogical Value

The DIDAC editorial team consisted of Agfa chemists and an interuniversity group of professors and teachers from several Flemish universities, colleges, and didactic centers. This team ensured the educational value of each set of overhead sheets. They also selected the topics that were to be addressed in consultation with teachers, and in relation to the curriculum of secondary schools and colleges. The accompanying explanations provided with each teaching module constitute a valuable support for pre-service and in-service teacher training. The DIDAC editorial team welcomes any comments and suggestions from the chemistry community.

www.agfa.com/didac/

The DIDAC web site presents detailed contents of each volume. Sample sheets can be viewed there in color and as they will appear on an overhead pro-

jector. Price and ordering information are also available on the DIDAC web site, or you may contact the IUPAC Secretariat, P.O. Box 13757, Research Triangle Park, NC 27709-3757, USA; Tel: +1 919 485 8700; Fax: +1 919 485 8706; E-mail: secretariat@iupac.org; URL: <http://www.iupac.org> or specifically for DIDAC: http://www.iupac.org/divisions/current_projects/1998/022_17_98.html.

Pure and Applied Chemistry. The Special Topics Project

Prof. James R. Bull (Department of Chemistry, University of Cape Town, Rondebosch 7701, South Africa; E-mail: special.pac@iupac.org), IUPAC Special Topics Editor, has submitted the following article:

Background

The special topics project has its origins in a series of one-off issues of *Pure and Applied Chemistry* (PAC) published during recent years. These issues comprised collections of critical reviews on aspects of pure and applied chemistry that were deemed to be of compelling public interest, and were instrumental in broadening the readership base of the journal and publicizing the role of IUPAC in interdisciplinary ventures. As a consequence, a decision has been taken by the Executive Committee to introduce the concept as a regular feature of PAC. This innovation is intended to find expression in publication of thematically related collections of papers, as before, and occasional stand-alone review articles. These features will complement the traditional role of PAC as a medium for publishing articles based upon plenary lectures of IUPAC-sponsored events and reports and recommendations generated by the activities of IUPAC Commissions, and they are intended to supersede some of those special publication ventures formerly referred to by terms such as "White Book", etc.

The publication of a first issue of the journal under this new dispensation (PAC, Vol. 72, Nos. 1–2, pp. 1–331, 2000), is devoted to a collection of short critical reviews and research papers arising from presentations made at the first IUPAC-sponsored Work-

