



## **IUPAC Chemistry and Human Health Division**

IFCC Scientific Division

Subcommittee/Committee on Nomenclature, Properties and Units (SC/C-NPU)

## Minutes of meeting, Paris, 2006-04-08 – 10

- 1. Opening of the meeting. The meeting was opened by Francoise Pontet (FP) at Hotel Minerve, Paris, 2006-04-08 at 1.00 PM.
- 2. Participants and apologies. The following members of the IFCC committee for NPU and the IUPAC project groups were present: Françoise Pontet (FP), Gunnar Nordin (GN), René Dybkaer (RD), Ivan Bruunshuus (IB), Ulla Magdal (UM), and Jarkko Ihalainen (JI). Apologies were presented for the absence of Urban Forsum (UF), Daniel Karlsson (DK), Pedro Soares de Araujo (PSA), Xavier Fuentes Arderiu (XFA), and Gunther Schadow (GS). Henrik Olesen (HO) expressed his thanks for being specially invited to the meeting.
- 3. The agenda for the meeting was approved after revision.
- 4. The minutes from the Rome meeting 2005-10-07—09 were approved after a technical correction in item 11. The minutes should be sent to Fabienne Meyers (IUPAC) and Paula Bramati (IFCC) with copies to Mauro Panteghini and Howard Morris (IFCC-SD) within one month.
- 5. Committee and project group memberships. The IFCC committee C-NPU has 5 titular members: Ivan Bruunshuus (2005--), Jarkko Ihalainen (2005--), Daniel Karlsson (2006--), Xavier Fuentes Arderiu (2006--), and Françoise Pontet (2005--). René Dybkaer and Urban Forsum are appointed consultants for the committee.

For IUPAC, SC-NPU consists of members of the current project groups in addition to the chairman (FP) and the secretary (GN). Günther Schadow participates in project '2004-23' nominal properties. Huib Storm was suggested and asked to join one of the SC-NPU projects, but he proposed to be replaced by Christa Cobbaert, who works with JCTLM. Douglas Templeton will be contacted to also join a project group.

At the last IUPAC DC meeting Henrik Olesen, René Dybkær and Urban Forsum were suggested as emeriti, who, if accepted by IUPAC Executive Committee, would then be reimbursed for SC-NPU meetings.

Corresponding members, not sponsored by IFCC, are either corporate members or members sponsored by national societies. The Menarini company is thus welcome as the first company which has signed to be corporate member of C-NPU. The following five individuals are currently listed as corresponding members of C-NPU from National Societies: Desmond Kenny (Ireland), Masayuki Totani (Japan), Nada Majkic-Singh (Serbia Montegro), Kiro Stojanovskai (Macedonia), and Dalius Vitkus (Lithuania).

The corresponding members should be contacted and asked whether they are interested in information.

- 6. The terms of reference for the SC-NPU (as stated by FP 2006-02-22):
  - (i) To coordinate projects which have been approved by the Division VII Committee and that relate to nomenclature, properties and units.
  - (ii) To provide a forum for discussing the information content and progress of projects identified under (i) above.
  - (iii) To provide a forum for initiating new project submissions in the subject area of nomenclature, properties and units that are considered to be suitable activities for Division VII.

- (iv) To report to the Division VII President and the Division Committee on items (i) to (iii) above.
- (v) To provide a connection with other organizations concerned with nomenclature, properties and units such as the International Federation of Clinical Chemistry (IFCC), the Bureau International des Poids et Mesures (BIPM), other national and international clinical chemistry societies, and chemical industry health groups.
- (vi) To provide an opportunity for IUPAC interaction with chemists in the Medicinal Chemistry Industry worldwide.
- (vii) To broaden the activities of the Division by providing opportunities for other organizations involved in nomenclature, properties and units to work together with Division VII members.
- (viii) To offer advice to the Division President and the Division Committee on matters concerning nomenclature, properties and units in all its aspects.

The SC reports to Tom Perun, IUPAC.

- 7. Activity reports: An IFCC & IUPAC activity report was prepared for 2005 by UF. FP has also prepared a report for the first 3 months of 2006 to be published in the IUPAC newsletter.
- 8. The budget for C-NPU is 10 000 CHF/ 6493 € per year. For three running projects in IUPAC the budgets are

2200 \$/1800 €: 2001 – 067 Function examinations 640 \$/520 €: 2001 – 070 Urinary calculi,

5000 \$/4100 €: 2004 – 034 Nominal properties.

9. Report from members.

JI reported from the Finnish national coding scheme for laboratory investigations, which has been in use for 30 years. The codes are created in a pragmatic way, and contain no procedure information.

GN reported that a national group has been created in Sweden for national implementation of NPU codes in the field of transfusion medicine.

FP reported that the French Society for Clinical Biology (SFBC) has accepted a French version of the database to be published on its web site. French laboratories are free to choose any coding system.

It was reported that Estonia might have decided to promote LOINC instead of NPU codes.

IB reported from the housekeeping of the NPU database, which currently increases with roughly one new entry a day.

10. RD reported from the BIPM Joint Committee for Guides in Metrology (JCGM), Working Group 2, with responsibility for revising and promoting the use of VIM. All 700 comments to the revision have been reviewed, but the proposed new concepts have not yet been defined. Also the International Electrotechnical Commission (IEC), a member of JCGM, has suggested some changes. Some 'not defined concepts' will be added, inconsistencies will be checked for, and some of the concept diagrams will be changed. VIM3 will contain both the classical accuracy approach and the uncertainty approach. One more meeting is planned. The revised version should be ready in June for comments and published on the BIPM website by the end of 2006, and also sold as paper copy by the ISO. As for the 2<sup>nd</sup> edition, the 3<sup>rd</sup> edition will be bilingual English and French.

We were also informed that the working group 1, with responsibility for GUM, will soon publish the first supplement to GUM covering uncertainty calculations through Monte Carlo simulations.

11. Collaboration with CLSI. IB and UF met CLSI in Philadelphia in the fall of 2005 to discuss the future administration of the NPU database. UF has reported earlier (e-mail), and for the day no other information is known. It was discussed which possible interest CLSI could have in hosting the database. As an alternative to partnership with CLSI HO mentioned possibilities to cooperate with SNOMED. Until further information is given, UF will be asked to continue the negotiations with CLSI.

FP recently also reported on the negotiations between SC-NPU and CLSI to the IUPAC division VII president, who will initiate necessary contacts between the IUPAC and CLSI Presidents.

[Later development shows that CLSI will not host the database.]

- 12. Finalizing of the manuscript *Properties and units in clinical and environmental toxicology*. The discussion was planned 2006-04-10 (Monday), but all members were not updated with the latest revisions of the manuscript. IB was asked to provide RD with the submitted version of the document.
- Revision of the manuscript *Urinary calculi* (2001 070) with the purpose to finalize the project. Comments should be forwarded to GN within 1 month. GN will correct the manuscript to the proper format, including syntax, and contact the project leader Toni Jabor to discuss a possible publication procedure.
- 14 Revision of the manuscript for *Function examinations* (2001 067). At the Rome meeting a complete list of the tests covered by the manuscript was circulated. Some ambiguities in the formal description of tests were noted, e.g. 'Furosemid test'. It remains to be decided which are the main principles that should be used to systematically describe dose and time properties. So far no procedure reference has been given for the function examinations. No common header has been found yet (challenge, tolerance or function test?).

UM promised to create a list of current function examinations in the database. The distinction between a function examination and a physiological test was addressed.

Should 'calculated' properties be included among the function examinations (e.g. 'the triple test') and different types of clearance investigations? It was decided to include those tests for the moment and see what comes up. The project might for this reason be prolonged.

Input from extended NPU-groups and others interested is asked for within 1 month to the project group and extended NPU groups. FP and GN continue the work.

- Abbreviations for acid base quantities. The suggested abbreviations recently published in Germany in QualTest, 2005. Heft 8(April): p. 2-7 (*Patientennahe Sofortdiagnostik (Point of Care*). Vereinheitlichung von Nomenklatur und Symbolen.) do not adhere to earlier suggestions from the IFCC WG on Selective Electrodes and Biosensors (WG-SEB). The problem should therefore be described, and forwarded to IFCC SD for appropriate action. Wolf Kuelpmann should also be kept informed.
- The *HbA1c manuscript* was once more discussed. GN and RD will finalize the work and present the manuscript for SD.
- Web site update. The IUPAC web page has now been updated, including a picture of the SC-NPU. HO suggested us to give the complete bibliography of C-NPU references, including the earlier work in the Committee for Quantities and Units, the Commission on Clinical Chemistry, and George Férard's works. Preferable also the pd-files should be available. All information ought to be mirrored on the IFCC webpage.
- Maintenance of the NPU database. The current main sources of codes for elements in the database are: CAS, MeSH, E.C. ATCC, UMLS, Hugo, OMIM, Uniprot, NA, ISO 31, and the Silverbook. A reliable code source for viruses is still lacking. All spelling is according to Oxford Dictionary. It was emphasized that code sources should not be fixed or hard coded, giving the possibility, if needed for some reason, to change source for a given element in the database. This is the reason for the use of "codes for codes" in the database.

For the promotion of the NPU codes it was noted that we need a short description of the benefit of the use of NPU codes for harmonizing laboratory work. A clarification is also needed for when the term 'procedure' should be added to the formal description of an entry, and when the property is described by the procedure (such as Sedimentation Reaction, Coagulation). RD even raised the question whether the NPU codes could be used with 'procedure' as a variable! A paper on the database maintenance is recommended to be published by the IUPAC PR group.

- 19 Status for the revision of prEN 1614. Comments to GN within a month to be forwarded to DK. At the final draft RD should be consulted (for check of consistency with the revised VIM). In Denmark work with concept modelling has been started, for which UM will ask for more information.
- Application to the 6<sup>th</sup> or 7<sup>th</sup> framework of the EU for the maintenance of the NPU database. A project needs endorsement from several European scientific organisations as a cross border project for education and spread of the use of the NPU system in Europe. FP will discuss with Xavier Fuentes Arderiu as a possible project leader. Victor Blaton, FESCC President, should also be asked to forward a letter, drafted by HO, to its European members.
- Ongoing project: Terminology for observations in scientific vocabularies, IUPAC project 2004-023-1-700. The project should be restricted to nominal examinations and results without dimensions

- and units. GN promised to support FP with comments on how to restrict the project.
- New project proposals: Mapping of IFCC-IUPAC laboratory coding system to SNOMED CT Submitted 2006-008-1. No reviewing comments so far. It was suggested to FP at the DC meeting to use the terms 'secreterial assistance' instead of 'salary'. UM described the background for the project. Compared to NPU it was noted that SNOMED uses 'measurement procedure' and 'property' differently. It was discussed into which languages other than English SNOMED could have been adapted.
- New project proposals: Codes for dedicated kinds of property in clinical physiology. Anders Thurin has been asked to elaborate further on the proposal. It is important that the reviewers of the project should be physiologists. The LOINC code structure should be considered although no co-operation is suggested. GN reports to DK and Thurin. It was briefly discussed whether IUPAC is the proper sponsor of a project in this field or an IFCC WG or committee might be better.
- New project proposals: Securing and structural updating of information in the NPU coding system and its environment. 2006-012-1. Suggested project leader UM. The project should cover experiences from the maintenance of the database so far. It should provide references for terms and for units.
- Future project proposals: A "SC/C-NPU activity promotion" was discussed, containing a strategy for promoting SC-NPU achievements. FP suggested as project leader with XFA and PSA as project members. Expected impact: increased counts on webpage visits.
- Future project proposal. PSA continues preparing the "the botanical name project", with the purpose to clarify the use of botanical names in e.g. tests for specific allergens.
- FP reported from the IUPAC Division VII meeting in Atlanta, March 26th.

  The division projects for drug effects in biological assays and drug interferences in assays in clinical medicine was discussed as possible cooperation projects between the fields of toxicology and pharmacology and of NPU, as NPU codes may be used to defined properties.

The C-NPU work on new name and unit for HbA1c is of interest also for IUPAC. Should be sent to Paul Erhardt when finalized.

An electronic news letter will be produced by Tom Perun. FP has provided him with C-NPU info.

C-NPU is covered on a poster of Paul Erhardt (a copy of the poster is available for C-NPU).

Mukund S Chorghade, secretary of the Division VII, should be sent a short project pre-proposal, prior to the final project proposals. All projects have to be prioritized.

The term for UF in ICTNS is over, and UF is replaced by John Duffus.

For the Congress in connection with the IUPAC General Assembly (August  $4^{th} - 11^{th}$  2007) in Turino, a symposium on Metrology in chemistry will be organized in collaboration with IUPAC Division V. The scope of the symposium has still to be decided, and collaboration e.g. with CCQM and JCTLM might be discussed.

- 28 Rules for use of prefixes in the enzyme units in the database were discussed. Most current entries were once collected from the Kennedy Institute.
- Prefixes and arbitrary units in the database. 'Arbitrary units' are used either for recognized and internationally agreed units, e.g. by WHO, outside the SI, or alternatively for locally defined arbitrary units. An example are units used for allergen specific IgE, '10<sup>3</sup> int. unit/L'. In Denmark ambiguities arise with use of double codes with different units among the laboratories. As noted by RD, the prefix is included in the unit, and is immutable for the NPU code. No consensus was reached and the problem was referred to a possible 'project of prefixes'.
- 30 Miscellany. Nothing to report.
- Next meeting. Next IUPAC division VII meeting will be in Brussels in December 2<sup>nd</sup> 3<sup>rd</sup>. The possibility is suggested to have our next C-NPU meeting on December 4<sup>th</sup> and 5<sup>th</sup>. FP will ask for sponsoring. Decision and organization will be made by e-mail.
- 32 Closing at 2006-04-10 at 1.00 PM.