



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



**IFCC**  
**Scientific Division**

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

Minutes for the meeting 2011-11-08 – 09

Venue: Paris, Élysées La Défense, 3<sup>rd</sup> floor, meeting room “Liège”.

1. The meeting was opened November 8<sup>th</sup> at 9:15 a.m. and the following participants were welcomed by the chair: Rene Dybkaer (RD), Georges Féraud (GF), Urban Forsum (UF), Robert Flatman (RF), Xavier Fuentes d'Arderiu (XFA), Ulla Magdal Petersen (UMP), Helle Møller Johannessen (HMJ), Gunnar Nordin (GN), and Françoise Pontet (FP).

For November 9<sup>th</sup> also Daniel Karlsson (DaK) and Dongchon Kang (DoK) joined the meeting. Apologies were presented for Clem McDonald and Gilbert Hill due to lack of funding.

2. The agenda was approved and a timetable for the meeting was scheduled.
3. The draft minutes from the last meeting, in Berlin 2011-05-20 – 21, was approved after a minor spelling correction.
4. Members and corresponding members of the IFCC committee and IUPAC sub-committee.

The IFCC committee, C-NPU, consists of 5 titular members (TM) and one senior consultant. By the end of 2011 XFA and FP leave their second term of duty as TM. The remaining members for 2012 are thus UM, RF and UF an RD as consult. RF was unanimously supported to candidate for chairmanship. The IFCC SD will bring up the issue of chairman at their next meeting, and the nomination procedure for two new TM.

SC-NPU continues its activities through IUPAC div VII projects, whichever state of C-NPU.

Members of IUPAC SC consist of members of the different IUPAC projects

Corresponding member status is also applicable from the IUPAC side. It was decided to invite Chintan Kothari (India) and Minyong Li (China) as corresponding members to SC-NPU.

5. Budget for the meeting. Due to a misunderstanding, the Berlin meeting cost, three nights and travels for TM for travels and an expensive meeting room, has become a burden to the budget for this year. For this reason there is no money left for this meeting. The need for this meeting has been reported to the IFCC by FP, but so far without any response. All meeting attendants have received e-mail from FP indicating how the individual cost should be covered. The meeting room costs for this meeting will be covered by institutional budget from FP. The costs for breaks and lunches have to be paid for individually.
6. Date and place of next meeting. To restrict the costs, only one meeting with SC-C NPU is planned for 2012. There are conflicts in time between the IFCC GA in Koala Lumpur and an Australian meeting which engages RF and a terminology meeting engaging UF. For this reasons a meeting in second half of April is suggested in Denmark, in conjunction with an IHTSDO meeting. The exact date to be communicated later.
7. Report from members.

Several papers have been published recently in Accred Qual Assur, e.g. XFA on “Scalar and ordinal quantities” and about “measuring systems and measurement procedures”, and RD on “Definitions of ‘measurement’”. GF has submitted a paper on ecotoxicology.

FP reported that the French translation of NPU concepts has been finalized and is published on the SFBC-website. This will improve the visibility of the NPU terminology in France.

It was also reported a growing interest from Norway in the NPU terminology.

GN reported from the ongoing investigation within the Swedish Board of Health with the aim to propose a final organisation for maintenance of SNOMED CT and the NPU-terminology in Sweden. The report will be published in December 2011.

DoK is in charge of a large project for collection of health care data from a 10 million population cohort in Japan.

RD participated in the summer meeting 2011 with the VIM-group. A 4<sup>th</sup> edition of VIM will be published, but probably not within 10 years. Issues dealt with for this publication is how to incorporate nominal properties, and the ‘New SI’ with new definition of base units. There are some discussions about ‘the mole’. Michael Khüne, new director of BIPM, has also raised some questions about the work of the group.

GF reported that he was unable to participate in the last CCU meeting, but gave a briefing of the ongoing discussions on changing the definition of the kilogram. The two projects the Watt balance and the Avogadro experiment now give results that are very close, but the uncertainties still do not overlap.

RF participates in a Pathology, units and terminology standardization group (PUTS) in Australia, together with NeHTA and a Standardization organisation, with the ambition to standardize the terminology of common laboratory tests, including display names.

FP reported from the Puerto Rico IUPAC div VII DC meeting. HMJ is now an associate member of the division. She is allowed to participate in meetings, but with no cost covered. RD, UF and Henrik Olesen are distinguished emeritus fellows of IUPAC. After discussion SC-C-NPU decided to propose Anders Kallner from Sweden as a new distinguished emeritus fellow.

For information was mentioned that for future IUPAC projects also budget for printing should be searched for.

DK reported from activities within IHTSDO. A survey was this summer sent to member countries on the use of laboratory terminology. The result can be summarized as follows: US support the LOINC system, Denmark and Sweden the NPU system, and UK the Read Codes.

8. A Wikipedia entry for NPU. RF presented the suggested text and some final suggestions were made.

A lunch break was made between 12.00 and 14.00, including possibilities to visit at the two posters at the SFBC congress (see 12).

9. The future of SC-C-NPU. The members shared their visions for the group.

The mapping between the NPU system and Snomed CT is crucial for the future of NPU. A mapping to Snomed CT might even be a first step towards an improved understanding between the LOINC and NPU systems.

The Snomed CT mapping is an important argument for IFCC and IUPAC to increase their activities and also seek endorsement from other organisations, e.g. in the field of informatics. It ought also to be considered if SC-C-NPU could be raised to a more permanent position.

The future meeting modes of SC-C-NPU were discussed. The possibility to arrange fewer physical meetings and more frequent web meetings was mentioned as one possibility to improve the efficiency.

10. Preparation for the meeting with IUPAC, IFCC, IHTSDO, and concerned authorities November 10<sup>th</sup> at Fondation de la Maison de la Chimie, 28 Rue Saint Dominique, in Paris.

After discussions SC-C-NPU agreed that future resources from IFCC and IUPAC will be needed for continuous theoretical support of the terminology. For the maintenance of the terminology however, another organisation, such as IHTSDO or another authority is preferred.

The following tentative agenda for the Nov 10<sup>th</sup> meeting was drafted.

1. Welcomes and short introduction of the attendees and their roles
  2. Background for this meeting and overview of the current situation. Presentations by stakeholders and C-SC-NPU representatives
  3. Other examples of maintenance and development of information in IFCC and IUPAC databases (compare IUBMB/IUPAC for enzymes, IUPAC periodic table of chemical elements, IUPAC Gold Book, JCTLM for Reference Measurement Procedures and Reference Materials, etc)
  4. Separation of the scientific development of the NPU from the maintenance of the terminology
  5. Legal aspects and ownership (licence, disclaimer, etc).
  6. Relationship between NPU terminology and SNOMED CT
  7. Review of the DRAFT AGREEMENT
  8. The future of C-SC-NPU
  9. Conclusions
11. Project report: Vocabulary for nominal properties and nominal examinations — basic and general concepts and associated terms (IUPAC project 2004-023-1-700). Several valuable comments and suggestions have been received during the IUPAC reviewing process. The comments have been reviewed primarily by RD, UF and GN. Some of them are corrections, easily implemented, in a revised version of the manuscript as presented by GN. Other comments need further consideration within the project group. It was agreed to change the order of concepts in order to make the definitions more easily understood.
12. Project report: The promotion project (IUPAC project 2006-048-2-700) was closed last June. FP gave a talk at the IUPAC Congress in Puerto Rico 2011. Among other activities were mentioned one poster on VIN and one on the activities of SC-C-NPU at the SFBC congress in Paris. At the Berlin meeting it was agreed that a new promotion project should be proposed (GN lead).
13. Project report: GF reported from the Silver Book revision group meeting prior to this meeting, November 7<sup>th</sup>, in Paris. CM and GH could not participate.

In the revised Silver Book a capital L will be the recommended symbol for the litre. The SC-C-NPU therefore decided to change to capital L in the database.

"IU" will be suggested as abbreviation or a symbol for the WHO International Units, compared to the "int.unt" now used in the NPU database. The SI brochure will be consulted in order to decide if "IU" should be regarded as either a symbol or an abbreviation. The term "IU" will be suggested to be used in all languages, as is the case for unit symbols.

In the examples of dedicated kind-of-properties the sign "?" will be replaced with an indicative value, to make the understanding easier.

A new chapter, differential arbitrary kind-of-properties, is still looking for examples.

NPU-codes will not be presented, but in one chapter LOINC and NPU concepts are compared shortly using three examples.

The 1 000 references in the old version will be reduced to approximately 100 in the revised version.

The use of the percent sign will be accepted, e.g. for the expression of ratio between two substance rates. A value "0,5" thus equals "50 %". Possible restrictions will be checked with ISO 80000-1.

After this revision group meeting there remain still some issues to be solved and some inconsistencies to be checked. The revision group still wait for input on VIN. Hopefully the project can be finalized by the end of 2011 this year, when a draft manuscript could be circulated.

GF also reported that he has started the writing of a 4-page leaflet, as a "Silver Book summary".

At this time GF is apologized for leaving the meeting.

14. Project report: The revised version of the manuscript on the NPU terminology, "Properties and Units in the Clinical Laboratory Sciences Part XXIII. The NPU terminology, principles and implementation - a user's guide (Technical Report 2011) (IFCC-IUPAC)." (IUPAC project 2006-012-1-700) are submitted to both PAC and CCLM.

15. Project report: The project for definition of non-referenced terms (IUPAC project 2010--035-2). Many terms used in the database still lack references, e.g. "particulate matter", "antibodies to a Ascaris suum", "persistent diarrhoea microorganisms". The purpose of the project is to investigate possibilities to find references or suggest definitions to some of these terms, which will improve the terminological quality of the NPU system. The outcome is expected to be presented at the spring SC-C-NPU meeting.

16. Project report: The Mapping project (008)

The original project was based on the old Snomed CT model, which is no longer valid.

The new and more complex observable model is now established, although the Snomed CT style guide is still in a draft version. According to the work plan there is now a need for a test of concepts within laboratory medicine for a significant number of items for this new model.

This IUPAC project has been prolonged and there is money left. Before summer 2012 it must be decided if the project shall be extended or redefined, in a mapping project with the new model.

As far as we understand no mapping between LOINC and IHTDSO has been started.

At this time RD and RF HAD TO apologized for leave the meeting.

17. Project report Urinary calculi. (IUPAC project 2001-070-1-700). Errors are found by UM. Equalis waits for resources to prepare more work.

18. During the fall 2011 SC-C-NPU was asked for a formal description of the measurand CDT, as defined by the IFCC WG for CDT. In the discussions that followed, the need for a general rule for values with units, like "mg/g", "pmol/mol" was highlighted.

Fractions, such as mass fraction can be expressed by their values together with the unit "mg/g", with the unit "1", or the unit "%". Should one of the writings be preferred? Should they represent one single or three different concepts in the database? Another possibility is to regard the "%" as a mathematical sign for 0,01 within the value field, and thus not as a unit.

In the discussion was referred to the SI brochure (5.3.7) and to the discussion in the Silver Book revision group. No decision was made.

It was decided that GN shall write to CDT WG to clarify the SC-C-NPU position regarding the description of CDT, and that we suggest the use of the unit 'mmol/mol'.

19. Current terminology issues for the database.

NPU codes for some 300 new concepts have been created this year, reported HMJ and UMP.

One question raised recently is why "Csf-Albumin; relative mass concentration(Csf/P)" and "Csf-Albumin; relative substance concentration(Csf/P)" represent two different properties in the database. If a kind-of-property "concentration ratio" could be accepted, these two concepts would reduce to one. The question was left, without decision, for further discussions.

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

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20. Miscellany. All other issues seem to have been covered during the discussions above.  
FP was thanked for her successful service and lead of the committee for several years.
21. The C-NPU meeting closed on Wednesday Nov 9<sup>th</sup> at 18.00

[GN 2011-11-08—09/20120104]