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

Draft minutes for the SC_C-NPU meeting at Crown Plaza Hotel, Glasgow, Scotland 2009-08-03–04

1. The meeting was opened August 3rd at 09:00 and participants were welcomed by Françoise Pontet, chair of the committee.

   Present members: Ivan Bruunshuus Petersen (IBP), Françoise Pontet (FP), Gunnar Nordin (GN, item 1—17), René Dybkær (RD), Ulla Magdal Petersen (UMP), corresponding members Helle Møller Johannessen (HMJ) and Georges Férard (GF, item 17—29).

   Apologies were presented for Daniel Karlsson (DK), Gunther Schadow (GS), Urban Forsum (UF), Xavier Fuentes-Arderiu (XFA) and for Ian Young (IFCC liaison for C-NPU).

2. The draft agenda was approved after some renumbering of the items.

3. The minutes from the meeting in Paris 2009-04-26 – 28 was approved after a few minor corrections.

4. Members and corresponding members.

   Jarkko Ihalainen (JI) has declared the intention to resign as titular member. The formal procedure for replacing JI was not clear for the committee.

   FP reported from meeting with IUPAC Div VII Committee 2009-08-01 that the ambition is to strengthen clinical chemistry in IUPAC. A new IFCC member from 2010 would be welcomed, as well as representation from medical informatics industry. Ashi Kasia, from Pharma Uida, Japan, in the IFCC committee on reference systems for enzymes (C-RSE)?? More suggestions of corporate members are welcomed.

5. Budget for the meeting. The funding from IFCC and IUPAC for the meeting was reviewed. Thanks are due to the other organisations providing funding for participants: NLM for Clem McDonald (Silver book project), Danish Board of Health for (UMP and HJ), personal funding for Gilbert Hill (Silver book project).

6. Date and place of next meeting. It was decided that the next meeting with SC-C-NPU will be at Corfu, Greece, April 16th – 20th 2010 in conjunction with IFCC General Conference. Time for Committee meetings has been reserved at April 16th and 17th.

7. René Dybkaer's book "An Ontology on Property for physical, chemical and biological systems" has been revised. The text might now be prepared for electronic publication on the IUPAC web site, with links from IFCC website.

8. Report from members, including report from JCGM (WG1 - GUM and WG2 - VIM).

   RD reported that WG1 works with the publication of supplements to GUM. A supplement on uncertainty estimate by Monte Carlo simulations has recently been published, and papers on the treatment of "several outcome quantities" (e.g. calibration curves) and "conformance testing" (e.g. is a certain value different from another) are under preparation.

   For WG2 was reported that the term has ended for RD, who until now has represented IFCC together with FP in WG2. RD has accepted to represent IUPAC in WG2 together with Paul de Bievre. The work with publication of VIM3 at various instances is now finished. A list of errata to VIM3 remains to be published. The preparation of a VIM4 is planned, and WG2 asks for suggestions of new concepts to be added in this edition.

FP reported from IUPAC div VII DC meeting 20090730—31, where IUPAC Bureau vice president, Nicole Moreau, presented the International Year of Chemistry 2011 as the big event. Suggestions for speakers, publications, and supporting ideas are asked for.

Fabienne Meyer, managing editor of Chemistry International, asked for any type of material to be published in the journal.

FP also reported that she has been suggested to be president elect of Division VII, replacing Douglas Templeton as president from 2012. SC-C-NPU expressed its support for this suggestion. The Division VII secretary, Mukund Churgade, will be replaced 2010.

A 'discussion board' - IUPAC Forums – is available for all subcommittees to use. It was discussed if the IHTSDO mapping project could be a trial project for SC-NPU to communicate through IUPAC Forum.

9. The IHTSDO and IFCC-IUPAC (C-NPU) project (IUPAC project 2006-008-1-7(00).)

UM reported that the purpose of this pilot project is to check the new IHTSDO information model for observables by mapping all new requests for coded properties. At maximum 200 properties should be mapped by SC-C-NPU and 400 properties should be mapped by LOINC. At this time point 130 NPU concepts are fully mapped to SNOMED CT, of which 25 have been received from IHTSDO. 100 NPU properties should be sent to IHTSDO, but is not yet delivered.

The main problems recognised so far concerns 'aspect of time' (for example excretion tests), and the lack of reference to international reference preparations in SNOMED CT (for the definition of International Units). The pilot project will end mid September. October 1st 3rd the results will be evaluated at an IHTSDO meeting in Washington, where DK and FP are expected to attend. After the pilot project a new project period will start (2 year? Real work. Small modification needed (e-mail from FP).

IFCC has still not formally agreed to the continuation of the project. IUPAC will follow. Jocelyn Hicks and Howard Morris (IFCC) have raised the question if the goal is 1 or 3 terminologies (that is LOINC, NPU and SNOMED)?

FP has for discussion listed the major differences between the LOINC and the NPU-systems:
A) Terms and units are strictly defined in NPU, which allows all concepts in NPU to be translated into any language.
B) NPU lacks the concept 'duration', but can handle time aspects as procedure information.
C) NPU is generally 'patient focused', while LOINC is more 'sample focused'.

Scale (property value set) has now been included in the NPU, although the field does not yet appear in the exported term list file in English from LabTerm, and differs thus not from LOINC in this respect.

"Panel request codes" which exists in the LOINC might be compared with the creation of regional NPU codes.

10. Project report. Database promoting (IUPAC project 2006-048-2-700)

FP reviewed the poster to be presented today at the IUPAC Congress. UMP will present a poster at the Medical Informatics Europe (MIE) Conference in Sarajevo August 30 – September 2nd. FP and UM will lecture at the Balkan Regional Conference Sept 16 – 19th (joint meeting between Balkan Clinical Laboratory Federation and 5th meeting of Macedonian National Congress of Medical Biochemists).
GN will give a presentation of NPU at the NML (Nordisk Medisinsk Laboratoriegruppe) Congress in Visby, Sweden, September 9th - 11th

11. A draft manuscript, prepared by Henrik Olesen, on the management of the NPU terminology has been circulated. After revision this paper can be delivered as Project report 2006-012-1-700.

The information model for the new database is part of the project, but not included in the manuscript. How this should be published has therefore to be decided later.

12. The project Nominal properties (IUPAC project 2004-023-1-700) arranged a separate meeting in Glasgow August 2nd. RD, FP, and GN participated and a third of the entries were reviewed. The project must be completed during 2009 in order be included in the Silver Book revision. Pertinent examples from outside the clinical laboratory medicine should be included in the final document, but edited to NPU structure if decided by the project. The work will have to continue by e-mail. GN promised to produce a new draft.

13. NPU database on the IFCC website

    No progress to report. In case the terminology should be managed by IFCC a terminologist must be engaged by IFCC, compared to the case the NPU terminology only will be published on the web site.

    The software currently used to manage the terminology in Danish (LabTerm), might be possible to use by other countries. EQUALIS as the Swedish release centre will contact Danish Board of Health and discuss the possibilities for use of LabTerm.

14. Information about NPU documents on the IUPAC and IFCC websites was demonstrated.

15. Properties and units for urinary calculi (IUPAC project 2001-070-1-700).The since long time drafted manuscript has been discussed several times. Un unresolved issue has been the description of localization of calculi. Scandinavian Association of Urology has suggested a classification system for urinary stones upper, middle, and lower calyx, upper, middle and lower urether. If adopted this classification simplifies the description of localization of calculi with the NPU syntax. GN will provide a new version of the manuscript.

16. Properties and units for function examinations (IUPAC project 2001-067-1-700). Also discussed since long time. The basic properties used for function examinations are defined in the current NPU-system. Dose and quantity are reported under a common header for the examination. In clinical practice functional examinations are often named by the procedure and not by the measured property. The list terms in NPU should describe a patient property.

    Two prior publications dealing with the terminology for functional examinations have been identified: Allgén et al. (1982). "Nomenclature of function tests." Scand J Clin Lab Invest 42(467-472) and Férard et al (1992). "Quantities and units for metabolic processes as a function of time." Pure Appl. Chem. 64(10): 1569-1575.

17. In NPU 79 different concepts concerning enzyme activity have an incorrect reference to 'IFCC 1998'. IFCC C-RSE has confirmed that the proper reference for ALT, AST, CK, GGT and LDH should be "IFCC 2002" and for Amylase "IFCC 2006". For ALP the reference system has not been approved. It was decided that the term "IFCC 1998" should be corrected to "IFCC 2002" within the existing NPU concepts for the enzymes above, with the exception of ALP. The existing entries for ALP "IFCC 1998" should be withdrawn.

18. Structure of results from genetic testing – the proposed LOINC model.

    Pedro Alia Ramos (PAR) will participate in project on supplementing the 'genetics' document. PAR will introduce the NPU terminology at the AACC meeting in Copenhagen in October. FP has provided input. HMJ will participate at the meeting. FP will contact Ian Young of the C-MD and try to find a chair for a project on investigating the suggested LOINC model for results

19. Reference to IUPAC International Chemical Identifier (InChI). The IUPAC International Chemical Identifier (InChITM) is a non-proprietary identifier. The InChI Trust, a not-for-profit organisation has been created to expand and develop the InChI. The Open Source chemical structure representation algorithm is formally launched this week. Originally developed by the IUPAC, the InChI is an alpha-numeric character string generated by an algorithm. The InChI was developed as a new, non-proprietary, international standard to represent chemical structures. The Trust aims to develop and improve on the current InChI standard, further enabling the interlinking of chemistry and chemical structures on the web. The connection with IUPAC is maintained through IUPAC's InChI Subcommittee.

Prior to the meeting FP, GN and RD met with Steve Heller (or Alan McNaught??). The simple way to achieve the InChI code is currently through "Chem Spider" at http://www.chemspider.com/'.

The converting from CAS to InChKey references in the NPU terminology could be a project in 2010. Older CAS references will be kept if the future database has a full history of changes (as is now the case in the LabTerm). FP will look into possibilities of making a call for candidates for a Task Group Chair (TGC) for an interdisciplinary project. Such a project should ascertain if coding via the InChKey gives access (directly or indirectly) to terms for the coded compounds.

Reference to SwissProt for proteins. This Expasy database has been suggested as a more reliable reference than MeSH for proteins. The Expasy enzyme database is already the source for enzyme identifiers and terms. The SwissProt terms for individual proteins may not appeal to users. UMP and HMJ will test its usability in daily use and circulate examples from both databases.

20. Policy for references for the concepts in the NPU database. Continuation of earlier discussions. References for different types of element concepts. All concept sources in the database were analyzed and the sources classified for use for different types of concepts. Where more than one source exist for the same type of concept (10 for microbiology!), they need to be evaluated by experts and given priority or possibly replaced. This topic could also be the object of a future project, whose TGC is to be found. The updated information should go into the continually updated User's Guide.

21. Project report: Silver Book Revision. GF reported progress for chapters 2, 7, 9, 10, no news for chapters 3, 4, 5, 6, and 8. The aims are to achieve necessary changes and to improve readability. CMD has reported technical problems with tables in the e-version – consistency between the 2 versions should be ensured. Introductions to each of the chapters with repeat of relevant information could improve the readability. Notably, the introduction to chapter 9 and the index will be made more user-friendly. For the paper copy, a bookmark will be provided, and matching links will lead the reader for the e-version.

The project group will meet in Glasgow August 5th – 6th.

22. Fund raising Inquiries have been made to Claude Giroud (BioRad), with a negative reply so far for 2009. FP will follow up on the further contacts

23. Undefined (QU) concepts in the database. They need to be defined in the form of an IUPAC project. A TGC is to be found, who will produce a proposal

24. Stock notations in the database. If the InChI expression does not lead to a name, we could check the nomenclature colour book – what is the proper way to express chemical elements? Sodium-ion or Sodium(I)? C-NPU does not own any property, not even literature without using the IFCC and IUPAC budgets.

25. NPU codes for allergen antibodies

The CLSI standard "Analytical Performance Characteristics and Clinical Utility of Immunological Assays for Human Immunoglobulin E (IgE) Antibodies and Defined Allergen Specificities" (I/LA20-A2) is now published. The document will be made available for the Danish and Swedish release centers. Possibilities should be investigated how documents of this type can available for SC-C-NPU and the property of IFCC or IUPAC.

If it becomes impossible to create codes for antibodies against all the different antigen mixes in the market, a solution is to replace the specification of CLSI codes for the antigen mixes with 'procedure'. UMP and HMJ circulate examples of the demands for 'panel' codes.

26. Kinds of Property for Histological Examinations. A possible project as discussed at the Antalya meeting. Postponed to next meeting

28. Miscellany. Nothing to report

29.   The C-NPU meeting will close on Tuesday 4thth

[item 1 – 17: GN, item 18 – 29 UMP, 2009-08-29]