



IUPAC
Chemistry and Human Health Division



IFCC
Scientific Division

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

Minutes for the meeting in Concorde Hotel am Studio, Berlin 2011-05-20 – 21, confirmed in Paris 2011-11-08.

- The meeting opened May 20th 9:00 a.m. and the participants were welcomed by the chair. The participants were Urban Forsum (UF), in the position as new TM, Robert Flatman (RF), Dongchon Kang (DK), Gunnar Nordin (GN), Helle Møller Johannessen (HMJ), Ulla Magdal Petersen (UMP), Xavier Fuentes d'Arderiu (XFA), and Françoise Pontet (FP).

Apologies were presented for René Dybkaer, due to conflict in time with the JCGM WG2 meeting on VIM at Sèvres, France, for Jens Gleditsch, who recently change position and is no longer directly engaged in laboratory informatics, for Georges Féraud, Clem McDonald and Gilbert Hill due to lack of funding, and for Ivan Bruunshuus Petersen (IBP).
- The agenda was approved and a timetable for the meeting was scheduled.
- The minutes from the last meeting in Linköping 2010-10-02 – 03 were approved after correction of a few spelling errors.
- Members and corresponding members of Committee and Subcommittee.

UF is welcomed as new TM in C-NPU. IB which now has leaved the second term has been thanked on behalf of the committee.

Corresponding members: Ariadna Pedro Miquel, Spain, is recognized as new corresponding member. It has been noted that an update of the contact information to the corresponding member is needed. E-mail has recently bounced from e.g. Nada Majkic-Singh (Serbia) and Christa Cobbett (Netherlands).

JG has moved to a new position within Norwegian Health Archives, and informs that he is not sure he can serve as corresponding member. If possible he will suggest another representative from Norway.

FP pointed out that her term as chairman ends by this year. If the committee doesn't come up with a suggestion for a new chair, the IFCC will send out a call for nomination in the fall of this year.

FP also leaves as IFCC representative in JCGM WG2. Anyone interested to take this position is asked to contact Ian Young in the IFCC SD that will decide in the fall how to proceed with the election.

GN, currently acting as secretary of the committee, declared that he will also step down after this year, in case no resources were raised in Sweden for the continuous management of the NPU-system in the Swedish health care system.

In the following discussion UF informed that he, although new TM, will not be available for a three year term as chair. RF might be able to serve with minutes, and coordinate communication, but will not have the time to travel to Europe twice a year. UMP also volunteered to do the minutes with some help.

The discussion and suggestions for the constitution of the committee need to be finalized latest in October this year.
- Budget for this meeting.

FP has shared the preliminary budget for the meeting. All IFCC members have received claim forms to be filled in. The cost for other participants is funded by specified IUPAC projects. The travel cost for GN will be covered by Equalis. The cost of accommodation might be sponsored by e.g nominal project in order to spare the money in the urinary calculi project.

The total cost for the meeting is estimated at 7601,58 € for IFCC + 535,29 € for IUPAC + institutional funds.
- The next C-SC-NPU meeting will be in conjunction with the SFBC Congress in Paris, France November 8th - 9th, together with a Silver book revision project meeting November 7th (Monday).
- Report from members:

FP reported from the IFCC Worldlab - Euromedlab – Congress that preceded the committee meeting. The work of SC-C-NPU was represented by a poster on the nominal property project. During the meeting FP and GN also had the possibility to meet with Graham Beastall and other IFCC officials.

After suggestion from SC-NPU Henrik Olesen, RD and UF have been honoured as "IUPAC Emeritus Fellows".

FP and XFA are currently the only IUPAC DC members from the committee. The application from HJ for a DC TM position was unfortunately too late for consideration. Her application for AM is being considered.

A new national representative from India in DC has been appointed: Anjali Rahatgaonkar.

Fabian Meyers would like to see more papers in Chemistry International from the committee

FP reported from the last JCGM WG2 VIM meeting November in Sèvres, France. The final corrigenda sheets to VIM3 have been published, and a common version of VIM3 is now sold by ISO and is available on the ISO website. Authorization for posting the common version on the participating organizations websites, like IFCC, is awaited.

The next version of VIM, VIM4, will probably not be published until 10 years but might then have extended to contain also nominal properties. A subgroup within JCGM has already been organized to work on schemes for the fusion of the VIM and VIN vocabularies.

GN reported that the Swedish national patient overview now has been launched. Laboratory investigations are identified with NPU-codes, to which the laboratories must apply, in order to provide laboratory results within the system. Today laboratory information from a few counties is supplied, but the services are planned to be nationally implemented within a period of two years. Equalis is responsible for a subset of NPU-codes, together with agreed trivial names for the laboratory investigations in the system.

XFA reported that in Spain the authorities have not been interested in the "NPU codes" as such, but more in the NPU syntax. The terms in the NPU system is recently published in Catalan and Spanish (see <http://www.ifcc.org/newRia/pdf/books/Nomenclatura-y-unidades-de-las-propiedades-biologicas.pdf>)

XFA also made reference to the recent letters "Measuring with zero measurement uncertainty a primitive quantity " and "About measuring systems and measurement procedures " published in Accreditation and Quality Assurance.

FP presented the NPU-system at meetings in Rajkot and Nagpur India earlier this year. A summary will be presented in the proceedings of the meeting.

FP was also approached by a person interested in the translation of the NPU-terms into "Gujarati", the language of Gujarat in India. The possibilities has to be further investigated, bearing in mind that neither IFCC nor IUPAC support translation project. The next step might be to invite Chintan Kothari as an IUPAC SC-NPU corresponding member, and to include him in the list of addressees of our minutes and publication announcements.

RF briefed the committee on his experiences from Australia. One problem in Australia, like in many other countries, is that biochemists, IT-people and authorities use "different languages" when talking about communication of laboratory results.

Meetings ahead: The IUPAC General Assembly and the 43rd IUPAC World Chemistry Congress will meet in Puerto Rico in August. FP participates in the meeting with an oral presentation, and a poster.

8. The publication of the NPU database on the IFCC website. FP and GN met with IFCC officials Graham Beastall, Andrew Lyon, and Peter Vervaart on May 16th. An improved IFCC website is expected to be launched within a few weeks. At the new web site a search function is planned for easy access to the content of the flat excel file containing the English terms and NPU codes.

In order to discuss the current and future management of the English version of the NPU database with the Danish Board of Health, it was agreed that an official meeting with IFCC officials should be organized in Copenhagen as soon as possible.

9. Project report: Vocabulary for nominal properties and nominal examinations — basic and general concepts and associated terms (IUPAC project 2004-023-1-700), or the "VIN".

GN distributed a new version of the manuscript including some recent corrections, although not completely adapted after the latest comments from XFA and FP.

The project group has still to achieve consensus regarding some of the issues, e.g. if the concepts 'trueness' and 'uncertainty' at all are applicable for nominal properties. In the discussion it was noted that all scales of measurement, including nominal properties, as originally presented by Stevens are based on simple statistical considerations. This is the basis for the unifying the concepts for all scale types.

Another issue discussed was if properties are nominal by nature or only by definition. Colour was mentioned as an example of a property subjectively defined, while other nominal properties seem to be more natural.

XFA advocated the possibility to produce two alternative manuscripts of the VIN paper. The ambition at this stage must be to produce a manuscript with internally consistent definitions within a few weeks, to be able to submit the manuscript as planned by the end of June. After a two month internal review period in IUPAC a 5 month public review is planned on the website.

10. Project report: The promotion project (IUPAC project 2006-048-2-700).

A leaflet about the NPU system has been produced for the meetings in India where FP participated.

For the Berlin meeting a new folder has been provided and distributed. After typo correction is further distributed to C-SC-NPU. It will also be put on the Danish Board of Health website.

RF volunteered to produce a Wikipedia entry on NPU. A first draft for the entry was circulated during the meeting, and further input expected to RF within 1 month.

The eIFCC should also be used to spread information. Andrew Lyon, the IFCC Communications & Publication Division, has volunteered to take part in the writing in order to promote the presentation of the NPU system on the IFCC web-site.

11. Project report: Silver Book Revision. It was reported that 6 000 \$ has been admitted from IFCC and IUPAC for the project. Anders Thor has been added to the group for the coming meeting in Paris. Drafts of eight of the ten chapters have at this moment been distributed for comments.
- It has been discussed whether the spectrum should be broadened to the field outside the medical laboratory science. The decision has been not to broad the concept. pH is e.g. treated only in a biological context, not in its full context of chemistry.
- GN suggested that “elasticity” ought to be included as this kind-of-property is in use within the field of laboratory science.
- According to a current paragraph in Wikipedia the Silver Book deals with “clinical chemistry”. UF volunteered to have the statement corrected.
12. Report from a meeting with IFCC Committee on Molecular Diagnostics (C-MD).
- FP and GN met with C-MD, chaired by Mauro Pazzagli, May 18th in order to discuss possibilities for collaboration on the revision and development of NPU codes within the field of molecular diagnostics. A short introduction and presentation of the NPU system was provided for the Committee.
- It was pointed out that C-MD primarily is not engaged in the field of nomenclature, but more on methodological issues. It was therefore discussed whether collaboration with other parties, such as CLSI, would be more appropriate in the field of nomenclature.
- It was stressed that the ambition of C-NPU is not to create new data sources, but more to collect existing information from e.g. IUBMB, CLSI, Hugo and others and use this information within the NPU system. The scope of a possible collaboration between C-MD and C-NPU must in any way be clearly defined.
- C-NPU discussed how to proceed. The major aim of the project should be to update the former document. UMP mentioned that HFE is not good enough as an example of the limitation of the current model, and promised to provide more proper examples, such as: DNK35855 Pt—Chromosome 7; Uniparental Disomy(0; maternal; paternal) = ?. UF also pointed to the Gene Regulation Ontology (<http://www.ebi.ac.uk/Rebholz-srv/GRO/GRO.html>), with information that also must be considered into a possible project.
- At this time point the meeting adjourned after the first day. XFA and DK apologized for the second day of the meeting.
13. Follow up of items left for further discussions after last C-SC-NPU meeting in Linköping.
- Replacement of code source for the definition of proteins (excluding enzymes). Swiss Prot (Uni Prot) is now used for new concepts. A possible stand alone project could be to systematically replace all older references to Swiss Prot. The work could be organized e.g. as a master student project in bioinformatics for someone with a chemical background. UF promised to investigate the possibility within Linköping University, and GN within Uppsala University in Sweden.
 - Replacement of ATCC and CAS as code sources was discussed parenthetically. In case of a future decision is taken to exchange also these code sources, this must be organized as dedicated projects with necessary resources.
 - The need of a “new promotion project”. An EU call for “network of excellence” within FP7 was mentioned in Linköping as a possible source for financing the project. It was concluded that the application period probably is closed now. The Smart Open Services for European Patients (EPSOS) project was mentioned and the possibilities that the project already might have done a decision to use LOINC codes, at least for measurement units. More information to be searched.
 - ICD International common definition for drugs, used worldwide, will have to be checked for compatibility with the NPU terminology.
 - Wikipedia could be part of a new promotion project, as well as participation at congresses for the promotion of NPU. A possible project would also try to relate with national authorities and with the political society, and to follow up on the promotion at the IFCC and IUPAC websites. Collaboration expected with the IFCC Communication and Publication Division and the IUPAC Education Division. Other tasks have been pointed for this new PR project : maintainance of the new folder, and creating a CD-Rom for dissemination of NPU publications and terminology. A group of UM, HJ, GN, RF with GN as leader was proposed for the preparation of the proposal.
 - A possible project for definition of the super ordinate concepts for VIM and VIN, as an IUPAC project? The discussions postponed. If realized, the results could be an input to VIM4. After discussion it was decided to wait for the further discussion in VIM group and for the publication of VIN.
 - A possible project for describing principles for and calculation of uncertainty of examined nominal property values (collaboration with ISO TC 69) has to be discussed with ISO TC 69. GN is to contact persons with knowledge about the current status of work in this field, e.g. Anders Thor, Tomoko Sakaguchi and Dan Tholen.
 - A possible project for standardization of symbols, or international abbreviations, covering the combination of one kind-of-property and one component to be used on labels, tables and instrument displays. Due to the problem of maintaining such a system, the immediate plans for a project was abandoned. A possible future project should be organized together with industrial corporate members. Sooner or later the IFCC publication (I) needs to be updated. Today we have 137 kind-of-properties up to 32 characters long (in short form), 141 systems up to 29 characters, in the NPU system. The need for short form of the terms will be less in the future, due to other technical possibilities such as “mouse over” functions for revealing full and non shortened terms.

The need for short terms must be further investigated together with instrument vendors and scientific journals. Knowing the interest expressed by XFA in this field, XFA will be asked to address possible corporate members and journals and investigate the interest for collaboration. Thereafter SC-C-NPU will decide on a possible project.

14. Project report: The final manuscript on the NPU terminology, "Properties and Units in the Clinical Laboratory Sciences Part XXIII" (IUPAC project 2006-012-1-700).

HMJ and UMP reported that the manuscript now has been submitted to PAC. The manuscript should also be sent to IFCC for dual publication. The project group is appreciated for a very good work.

After the publication of this document, the coming update of the Users Guide has to be based on this publication.
15. Project report: The project for non-referenced terms (IUPAC project 2010--035-2).

A pilot has been made for 200 elements and a draft distributed. To follow is a test with 400 elements. The outcome will be a publication, as well as a part of the future database.
16. NPU and IHTSDO (Projects #2006_008, chaired by UM and #2009_005, chaired by UF).

Status for the Mapping project (008); the establishment of a complex SCT observable model, the mapping of NPU concepts to Snomed CT. The mapping started with a six axes to SCT, inspired by LOINC. Problems with the data model was discovered, and caused IHTSDO to redo the observable axis <http://iupac.org/web/ins/2006-008-1-700>. When the present draft model for Observable Entities is finalized, the project will have to be reevaluated, as the SNOMED CT model then will be more complex than the one first planned for. The mapping will demand more resources than originally assumed, and the functionality now implemented in the LabTerm soft ware will be insufficient. The IUPAC will therefore be addressed to prolong the project, underlining that this project already has created great input to the development of Snomed CT. Further discussions to follow next meeting in Paris. FP has been addressed by a letter from Martin Severs, IHTSDO, dated 2011-04-15, asking for an update of the IFCC-IUPAC policy regarding cooperation. In the reply FP pointed out on behalf of IFCC and IUPAC that no policy has been changed, and that the outcome of the meeting in Bethesda October 2009 and the pilot mapping project is still to be reported.

For information UF briefed discussions he had with Ken Spackman from IHTSDO, at a recent meeting in Budapest.

In summary the SC/C-NPU is pleased to see the outcome of the work with a new model for SNOMED CT observables. Providing NPU terminology properly linked to, or included within, SNOMED CT, will be of great valuable for both IHTSDO and for IFCC and IUPAC. Both terminologies will benefit from each other, and it will e.g. be easier for NPU to refer to SNOMED codes for procedures. This information was also drafted in letters on behalf of IFCC and IUPAC to be forwarded to IHTSDO in order to further clarify the situation.

The future management of the NPU system will be further discussed at the coming C-NPU meeting in Paris. The possibility to invite Lene Asholm from Danish Board of Health also to this meeting was mentioned.
17. Current terminology issues for the database, as raised by release centres in Denmark and Sweden:

Properties with a given clinical context. Laboratories frequently request codes for reporting data of laboratory investigations in relation to a specific clinical context. Examples are drug concentration as peak and trough values, properties in samples from patients drawn pre- and post dialysis respectively for patients with renal insufficiency, or properties of samples drawn at a specified time after meal, after intake of a drug, etc. After discussion SC-C-NPU agreed to continue with the current policy that clinical information should not be included in the definitions. Very strong argument must be presented if such information should be included. A more proper alternative would be to refer to Snomed CT codes for this additional clinical information.

A suggestion has been made to replace QU-codes (non defined concepts) with MeSH codes as a source for description of complement activity. This was agreed upon, although the terms will be somewhat less specific than the current un-sourced terms. These are examples of the type of switch of code sources that will be dealt with in the definition project.

Units for properties in the system Urine. Is it possible for laboratories to use the unit "mg/mL" in place of "g/L" because the numerical values of the results are the same? In order to follow the SI laboratories should be encouraged to express their results with litre as the denominator in the unit.

The use of the concepts 'Screen' (6 NPU codes) and 'Confirm' (61 NPU codes). We have no definitions of these two concepts. It might be preferable to define measurement principles such as e.g. "immunology" and "mass spectrometry" in place of "screening" and "confirmation". In microbiology, there is no use of "screens", as those are not reported. The terms "Confirm" is probably used with different meanings in different context. The search for definitions might be a part of the definition project. It might even be possible to organize a dedicated meeting to further discuss the use of the terms.
18. Project report. The revision of the Urinary calculi manuscript. (IUPAC project 2001-070-1-700). The work has not been prioritized since last meeting.
19. Miscellany

Anders Kallner has asked whether the committee will react on the recent announcement from AACC on a switch from SI to conventional units. Although the SC-C-NPU does not agree, the possibility to act seems to be limited. Mauro Panteghini as editor of CCLM will be addressed in order to ensure that CCLM will not follow the AACC.

Publication of the NPU documents on the web site. The publication on the IFCC and IUPAC websites is still not complete and it is noted that there are possibilities to improve the visibility of NPU documents on the respective websites. IFCC gives just a list of publications.

20. FP thanked all participants for active and constructive discussions. Next meeting will be in Paris 2011-11-08—09.

The SC-C-NPU meeting closed Saturday 21st at 6 pm.

[GN 2011-07-31/FP 2011-08-12]