

Minutes of the meeting held in the Le Meridien, Chiang Mai, Thailand 29th of June, 2014 to 3rd of July, 2014

Present

In person

Prof. Rameshwar Adhikari Prof. Werner Mormann (WM, Germany)

(RA, Nepal) Dr. Malcolm Purbrick (MP, UK)

Mr. Jiazhong Chen (*JC*, USA) Prof. Christopher K. Ober

Prof. Jiasong He (*JH*, China) (*CKO*, Division IV Past-President, USA)

Prof. Alain Fradet (AF, France) Prof. Greg Russell

Dr. Karl-Heinz Hellwich (KHH, Germany) (GR, Division IV Vice-President, New

Dr. Michael Hess (*MH*, Korea) Zealand)

Dr. Roger C. Hiorns (*RCH*, Chair, France) Prof. Cláudio dos Santos (*CDS*, Brazil)

Prof. Christine K. Luscombe (*CKL*, Prof. Stanisław Slomkowski (*SS*, Poland) Secretary, USA) Prof. Jean-Pierre Vairon (*JPV*, France)

Prof. Stefano V. "Valdo" Meille (SVM)

Prof. Michel Vert (MV, France)

Dr. Graeme Moad (GM, Australia) Prof. Michael Walter (MW, USA)

Via Skype

Prof. Richard G. "Dick" Jones (*RGJ*, UK) Prof. Natalie Stingelin (*NS*, UK) Prof. Tamaki Nakano (*TN*, Japan) Prof. Robert "Bob" Stepto (*RS*, UK)

Note: italicized abbreviations for names are used throughout.

Appendices

Appendix 1: Agenda

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and Reports in Polymer Science and Technology. (The "WEB Project")

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Appendix 6: Current Projects and Task Group Members

Appendix 7: Rules of the Subcommittee on Polymer Terminology Appendix 8: Presentation Slides of the Report to Division IV by *RCH*

Appendix 9: Contact addresses of Members of SPT

1. OPENING SESSION

1.0 Welcome and apologies

RCH welcomed Members to the Subcommittee on Polymer Terminology (SPT) meeting. Warm thanks were expressed to local organizers for facilitating our stay and for organizing the social events.

Apologies were received from Dr. Ted Wilks (TW, USA), Prof. Richard G. "Dick" Jones (RGJ, UK), Prof. Phil Hodge (PH, UK), Prof. Robert "Bob" Stepto (RS), Prof. Pavel



Kratochvíl (*PK*, Czech Republic), Prof. Jaroslav Kahovec (*JK*, Czech Republic), Prof. Natalie Stingelin (*NS*, USA), and Prof. Carmen Scholz (*CS*, USA). A moment of silence was held for Prof. François Schué who passed away earlier this year.

1.1 Chair's Communication

RCH described the aims for SPT. Goals include developing new projects; developing, resolving, and discussing projects in hand; and reporting on project. Other goals include retaining consistency in terminology from project to project; targeting projects that interface with other sciences; increasing accessibility to SPT papers by use of hyperlinks within documents; and increasing the number of women within SPT. KHH mentioned that focusing too much on consistency may prevent progress at times. RCH acknowledged this, but stated that we should be aware of the effect on those outside of SPT when terminology changes are recommended, and any deviation should be supported by good reason.

RCH introduced Redmine to the group. Everybody should have received a password by now. Contact RCH if you have not. The important sections in Redmine are 'Documents' and 'Forum'. SPT members are encouraged to 'watch' projects that they are part of under the 'Forum' section. Members can also 'watch' projects that they are not part of but are interested in, but must not make changes to these projects. Redmine should provide a chronological trace of document uploads. JPV asked if hyperlinks were available to specific points in documents. RCH responded that while hyperlinks are feasible in Word, PDF and PAC publications, and theoretically should allow page-directed links, it was not yet possible. When a manuscript requires page-directed hyperlinks, then the Task Group Leader (TGL) can ask RCH to find out about this. MH requested that instructions be sent out for Redmine. This was done by RCH by e-mail on July 8th 2014. See Appendix 4.

ACTION All

1.2 Approval of the Minutes from the Istanbul SPT meeting in 2013

The minutes were approved pending minor changes from *KHH*.

1.3 Matters arising from the 2012 Minutes

(i) Updating Purple Book access -RGJ

RGJ reported that the Purple Book is now available on the IUPAC website, accessible either from the home page by clicking on the 'Color Books' link to the bottom left, or more directly on the tile that has been placed on the Division IV front page.

A direct link, strongly advised for all SPT members, is: www.iupac.org/fileadmin/user_upload/publications/e-resources/ONLINE-IUPAC-PB2-Online-June2014.pdf

(ii) Current status of the Blue Book and report from Division VIII

KHH reported that the new Blue Book, Nomenclature of Organic Chemistry, IUPAC Recommendations and Preferred Names 2013 was completed by Warren Powell with the help of a few Division Committee members last year. It was also noted that Henri A. Favre, Chair of the former Commission on Nomenclature of Organic Chemistry and one of the authors passed away a few weeks before the completion of the manuscript. The book is available from the Royal Society of Chemistry (RSC) both as a printed copy and online. A PDF and free



access will be provided at a later time after the copyright period for RSC has expired. Further details on the Blue Book are given in Appendix 5.

ACTION *RCH* to check for electronic access for SPT members

(iii) Publications since the Istanbul Meeting

2006-004-1-400 *Abbreviations* – He, Tabak published as, 'Abbreviations of polymer names and guidelines for abbreviating polymer names (IUPAC Recommendations 2014)', J. He, J. Chen, K.-H. Hellwich, M. Hess, K. Horie, R. G. Jones, J. Kahovec, T. Kitayama, P. Kratochvíl, S. V. Meille, I. Mita, C. dos Santos, M. Vert and J. Vohlídal, *Pure Appl. Chem.* **2014**, 86(6), 1003-1015.

2007-008-1-400 *Multilingual Encyclopedia* – dos Santos

(iv) New Projects in preparation

Brief Polymerization – Luscombe. *CKL* apologized for making little progress having been preoccupied with new role as SPT Secretary. Brief discussions have been exchanged with *GM* over e-mail but looking forward to making progress in preparing proposal during SPT meeting (see report on Page 10).

ACTION CKL

Polymers in Tissue Engineering and Regenerative Medicine: a Concise Guide to Terminology - Purbrick. MP described the rationale behind the idea. With rapidly growing application of polymers in tissue engineering and regenerative medicine, terms that are unfamiliar to polymer and materials chemists are widespread. MP met with NS in London, came up with plan and started contacting people in the field. TG members have been identified. Plan to create three formats - 4 page synopsis, full length web document with hyperlinks etc., a full paper in PAC. WM asked what the difference between the full length web document vs. full paper in Pure Appl. Chem. (PAC) was. MP responded that the PAC paper would be a more full comprehensive document. RCH caution that preparation of three documents sounds like a lot of work. MP responded that once a full length document is complete, the others should be easy to complete. MV mentioned that if the document is intended to teach young scientists, complex examples will need be included that may be outside the scope or difficult to include in this document. RCH mentioned that one could reference books for the complex systems. MH requested that any new projects we start should always keep in mind that there is a connection to Wikipedia. RCH mentioned that it might be too much to ask task members to create three new documents as well as on work on Wikipedia. MH responded by saying that he just wanted people to keep Wikipedia in the back of people's mind.

ACTION MH

Brief Microstructure – Stingelin. *NS* reported *via* Skype that she has started working on preparing the proposal and has tentatively begun to assign TG members. It is expected that a first draft of the application form would be prepared by December 2014.

ACTION NS

Brief Semiconductors – Walter. MW introduced the new project by mentioning that there is a project about electronically active polymers already. The goal of this new project would, in contrast, be to communicate to the polymer community terms that are used in the field of optoelectronics. The project will include: (i) commonly studied and/or commercial



semiconductors, their properties and uses; (ii) terminology used when considering semiconductor polymer nomenclature; (iii) commonly used characterization techniques (e.g., hole/electron mobility, electronic spectra, exciton diffusion lengths; and (iv) links to other IUPAC documents. *WM* cautioned that the project should focus on terminology because it is an SPT project.

ACTION MW

(v) New Projects submitted

2013-050-1-400 Definition of Terms Relating to the Ultimate Mechanical Properties of Polymers (Ultimate) – Adhikari

The proposal was submitted last year and reviewers' comments have been received. Changes were made to proposal based on these comments. Concerns raised from referees included the languages used, timeline, and the lack of diversity of task group members. The document has been reviewed in this meeting, and will be sent to *RCH* and then resubmitted in due course once new Task Group members have been confirmed.

ACTION RA

2014-014-1-400 *Terminology for modeling and simulation of polymers* (ModSim) - Meille Project was submitted end of April and was approved; now waiting for official letter indicating start date. The TG consists of SPT members as well as a few people from outside SPT. Generally very positive feedback was received from reviewers. Specifically, reviewers noted that this was a timely proposal with good task members and good list of terms. One reviewer suggested that the TG should include more people from Asia.

1.4 New Project development

RCH emphasized the importance of developing new projects to serve many communities requiring clear definitions, especially those at interfaces with polymer sciences, and maintain SPT activities and funding. To enable development of new projects, committee members were split into two groups and participated in brainstorming sessions led by *CKL* and *RCH*. The conclusions from these brainstorming sessions and subsequent discussions are summarized in Section 2.3.

1.5 Proposal for an SPT Advisory/Administrative Board

RCH mentioned that often times the it would beneficial for the Chair to have an Advisory Board to advise chair about administrative issues. RCH proposed that the Board should consist of RCH, RGJ (former Chair), CKL (SPT secretary), GR (Polymer Division Vice President), CDS (deputy secretary), and JV (SPT Member) The suggestion was opened for discussion to the rest of SPT. After questions raised from JPV, KHH, VM, JH, and MH, the committee voted on the following:

Should the board consist of 6 or 7 people? There was unanimous agreement to have 6 people on the board.

What should the "Board" be called? Advisory Board vs. SPT Board? There was unanimous agreement to have it be called the SPT Board.

Much discussion took place about how often and how the members of the Board should rotate. It was decided that Board members would change whenever their positions with SPT and the Polymer Division change. It was noted that because the Board consists of the



present Chair and the former Chair, this would automatically ensure that there is some continuity within the Board while making sure some changes would occur. JV's replacement will have to be selected when the Board members rotate.

Addendum: During polymer division meeting, Jung-II Jin mentioned that we might have to check higher up in IUPAC to check if we can formalize the Board within the IUPAC structure. It was agreed that *RCH* would approach Fabienne in the coming year to this end.

1.6 Social Events

Warm thanks were extended to Prof. Voravee Hoven for her organization of the Saturday evening meal, and also for the tour planned for the following Wednesday.

1.7 Timetable for the Chiang Mai meeting

A prepared project timetable was displayed; everyone agreed upon that shown in Appendix 2.

2. Projects

2.0 Projects submitted to ICTNS & public review

2005-005-2-400 (**2011-033-1-400**) *Terminology of Properties of Macromolecules in Solution* – Stepto

Objections were raised by referees about symbol c for concentration and this delayed the document for publication. However, after pointing out that the Green book allows the use of this symbol, it was recommended and accepted for publication. MH, PK, JV and RS have had e-mail exchanges the past few months and all are happy about the publication. There will not be a follow-on project but a revision might be worked on in 10 years time.

2.1 Projects in the final stages of preparation

1999-051-1-800 (2006-006-1-800) Source Based Nomenclature for Modified Polymer Molecules – Jones & Kitayama

Since the Istanbul meeting, a 13th draft was prepared. This was circulated for comments and observations from task group members, which in all but one case were received by the due date. Changes were incorporated and a 14th draft was prepared. This was considered to be the final draft, so in concordance with agreed practice and support from the SPT Chair, it was circulated not only to task group members but also to the full memberships of SPT and Division VIII for their comments and observations. A number of responses were received and, where reasonable, every effort was then made to take the observations into account; of particular note were suggestions from JV, MV and JK from within SPT, and from Andrey Yerin and Ture Damhus in Division VIII. At this stage, everyone with a right to comment had had ample opportunity to express their views so a 15th and truly final draft was prepared which was presented to the President of Division VIII for his consideration and approval for submission. He made some very pertinent observations, among which was advice on the structure of the document, possible ambiguities and residual nomenclature issues. The last of these concerns was viewed alongside the advice given by other TGMs and all outstanding issues were eventually reconciled to our mutual satisfaction. This final version will be submitted for review.

ACTION RGJ



2003-042-1-800 Source Based Nomenclature for Single-Strand Organic Polymers – Jones Following advice and guidance received at the meeting of the TG last year in Istanbul, a 13th Draft was produced. This received further useful input from TGMs and an extended critique from one in particular. A response to the latter was prepared by *RGJ* and circulated along with a 14th Draft in the middle of May with a request that TGMs should engage with the issues in contention and send comments and observation to me within the month. None were received and therefore the Chair was advised that the document was ready for circulation to the full membership of SPT and the members of Division VIII. The Chair agreed to this circulation. A draft will soon be submitted to Division VIII for review.

ACTION RGJ

2.2 Projects for deliberation within Task Groups

2.2.1 Polymer Division projects

2003-060-2-400 *Terminology on Separation of Macromolecules* – Hess

The project was started in 2003 and was terminated, and revitalized last year to start again in January for one year. *MH* is reviewing what had been done previously. By September he will provide a new draft. Project needs to be extended and TGMs need to be redefined. The project should be completed next year, and therefore a new Project Application form should be generated to be sent to *RCH* within 6 months.

ACTION MH

2006-028-1-400 Terminology for Conducting, Electroactive and Field-responsive Polymers – Vohlídal

RCH, MW, and CKL updated some critical definitions. The altered document will be forwarded to JV by CKL.

ACTION JV

2007-008-1-400 *Multilingual Encyclopedia* – dos Santos

Glossary is online and *CDS* presented comments from reviewers to task group. One of the concerns from reviewers was that some of the translated words are not approved by the National Organizations. SPT should write to National Organizations to get their opinion. Website currently says that definitions are pending approval from NAOs. Translators will provide documents that *CDS* can send to Organizations.

The 2nd part of the project will be submitted, which will focus on translating languages that are not based on the Roman alphabet. Goal is to submit this new project within the next 2 months.

CDS raised the issue of the role of IUPAC in maintaining the website because this is a type of project that needs continuous upkeep. Currently the website is kept at CDS' institution and not on IUPAC.org so that website can be readily changed while getting things changed on IUPAC website is difficult.

ACTION CDS

2008-015-1-400 *Preferred Names of Polymers* – Mormann

The document will be a collection of preferred names of units that will have to be used to name polymers. So far, a table has been created with list of preferred names, acceptable names and unacceptable names of units. Additionally, a table with chemical formulae, IUPAC structure-based name, IUPAC source-based name and traditional name of commonly used



polymers has been created. Some of these names need to be clarified based on the new Blue Book about preferred names for monomers, *versus* preferred names for SPT. A draft text has been prepared for the document and references need to be added. *KHH* will have table ready for the source-based in one month. *WM* is ready to implement everything in one week after that. The goal is to have the first draft ready by September 30th, and to have the project finalized within 9 months.

ACTION WM and KHH

2008-020-1-400 *Revision of the Division IV Web-based Terminology Guidelines* – Hodge *PH* currently has the latest draft of this document and should be incorporating the latest comments from *JK* into this draft. See Appendix 3 for full report.

ACTION PH

2009-047-1-400 Stereochemical Aspects in Polymer Science – Hellwich & Moad

In their TG meeting, situation of the project was discussed and it was concluded that the composition of the TG and workload does not allow for preparation of the document. The possibility to quit the project or create short addendum to the original document instead of creating new revised document was discussed. It was decided that an addendum should be created. The TG members decided upon 5 topics that would be included in the addendum. The goal is to finish the draft addendum by the end of the year.

ACTION KHH

2010-007-1-400 Terminology for Chain Polymerization – Moad

The TGMs managed to go through the entire current draft in meeting. Most of the current issues were discussed that will allow the completion of the document. *GM* found a number of terms in the kinetic document that will need to be used to revise the current document. The goal is to complete document within one year.

ACTION GM

2010-036-1-400 *List of Keywords* – dos Santos & Slomkowski

This project is close to completion. One round of exchanges of document by e-mail is all that is needed to finalize the document. By mid-October, the draft should be ready for final consideration. The goal is to submit the final version *RCH* by November followed by one month of consideration with SPT.

ACTION SS

2011-013-2-400 *Updating Wikipedia: Synchronizing Polymer Definitions and Terminology* – Hess

This project ended in December 2013. A report was given and printed in the March volume of Chemistry International. The next step is to prepare a new project proposal to continue with the work that focuses on the insertion of windows with definitions onto the websites. Additionally, entirely new Wikipedia entries for terms that are not on Wikipedia will be created. So far 2-3 new entries have been produced. It was also noted that some of the "stubs" on Wikipedia need to be edited. Stubs are entries on Wikipedia that are only 120-130 words that Wikipedia does not approve of. The work for sorting out these stubs will be distributed amongst TGMs. *MH* encourages all SPT members to check these stubs and provide a complete definition/treatment of the terms if useful:



http://en.wikipedia.org/wiki/Category:Polymer_stubs Also plans are in place to monitor changes on Wikipedia with TGMs and students in their groups. The next proposal to address these issues will be produced within 3 months. *CKO* noted that care should be taken to ensure that there is a significant difference in scope between this proposal and the old one. *CKO* would be happy to look at the proposal prior to submission.

ACTION MH

2012-001-1-400 Terminology of Nanomaterials and Nanotechnology in Polymer Science – Ober & Jones

In the TG meeting, the TGMs went through the document to remove terms that are not closely related to the goal of the document. In addition to this, the document contains a lot of terms related to lithography so the plan is now to move lithography related term to a different section of the document. RGJ has agreed to format document when it is ready. Moving forward, most of project will be done by e-mail exchanges till next meeting. The goal is to complete the document next year.

ACTION CKO

2012-042-1-400 Terminology Relevant to Lactic Acid-based Polymers: Synthesis, Structure, Properties, Applications and Degradation – Vert

In the 3-hour TG meeting, the TGMs discussed the introduction of the document and went through nomenclature. While much progress was made, there was not enough time to cover terminology. Work will continue individually throughout the year.

ACTION MV

2012-048-2-400 A Brief Guide to Polymer Terminology – Hiorns and Vohlídal

RCH reported that much progress has not been made because of personal health reasons and because of taking over as the Chair of SPT. The TG went through terms from the first 3 chapters to determine which chapters should be in the brief guide. RCH ensure that terms included in JV's will be incorporated and will send an update in September. The goal is to finish the document by next year.

ACTION RCH

2014-014-1-400 *Terminology for modeling and simulation of polymers* (ModSim) - Meille During the TG meeting, only *GR* was present with *TN* participating by Skype. *GM* was also present as observer. The meeting focused on issues raised by the proposal reviewers including adding additional members to the TG and also focusing the work on specific topics. The issues raised will be circulated to the whole TG by e-mail for further discussion. A brief discussion about to organize the document also took place. It was decided that the work will begin by creating a list of terms, followed by the writing of the introduction. Some work was initiated to create the list of terms in the TG meeting.

ACTION VM

2.2.2 Interdivisional projects

2001-081-1-800 Terminology and Structure-Based Nomenclature of Dendritic and Hyperbranched Polymers – Fradet & Kahovec

Significant progress has not been made since last year. Mistakes have been found in the document as well as complicated examples that are very difficult to name. The TG decided to



give dendrimers two names: one based on the old system where the names are more simple, and the another new system where the name is more complicated. The goal is to complete the draft by September.

ACTION AF

2011-035-1-800 Terminology & Nomenclature of Inorganic & Coordination Polymers – Jones

Due to a considerable load of work generated by the Source and Modified projects, *RGJ* was unable to advance this project. It is expected that the project will be reactivated in the new year once the aforementioned projects are completed.

ACTION RGJ

2013-001-1-800 Structure-based nomenclature for regular linear star, comb and brush polymers – Chen

The first draft was discussed during the TG meeting and a very productive discussion was had. The main discussion focused on whether or not the brackets could be shifted to make it easier for the polymers to be named. The work will continue offline during the next year.

ACTION JC

2.3 New projects

(i) New Projects in preparation

Rubber Elasticity - Adhikari

In two weeks, RA will have a list of thoughts prepared. RS, MH, and JH have agreed to part of the TG, but RA is looking for additional members. It is expected that this will take up to a year to complete the application form.

ACTION RA

Brief Polymerization – Luscombe

A meeting was held with *GM*, *RCH*, and *JPV* where a draft proposal was prepared. The goal is to complete the proposal within one month.

ACTION CKL

Polymers in Tissue Engineering and Regenerative Medicine: a Concise Guide to Terminology - Purbrick

MV, RA, SS, CKL, and RCH were present at the meeting. Modifications were made to the proposal, which should be complete within a couple of weeks.

ACTION MH

Brief Microstructure – Stingelin

NS was absent so proposal preparation will happen by e-mail exchanges with *NS* and *VM*. First draft application form expected end-December 2014.

ACTION NS

Brief Semiconductors – Walter

CKL, RGH and MW worked together to complete proposal. Additional TG members to ensure greater global diversity were identified. The objectives of the proposal were redefined to make the work be more about terminology rather than a description on device fabrication, and



characterization. The goal is to have three documents as in the Tissue Engineering project, and to make sure that the documents are useful to researchers, students, and those in industry. Aiming for September 2014 to complete and submit proposal.

ACTION WM

(ii) New Projects from brainstorming session

Siloxanes – Slomkowski MW, VM as TGMs
Aim to have proposal ready within one month.

ACTION SS

Ionic liquids / polymer inorganic devices – interdivisional project - Ober *VM*, *CKL*, and *GM* as TGMs Aim to have proposal ready within one month.

ACTION CKO

Polymers for bioelectronics - Walter RCH, VM as TGMs
Aim to have proposal ready within two months.

ACTION MW

Mediatized terms – interdivisional project – dos Santos *MP*, *CKL*, *RCH* as TGMs Aim to have proposal ready within two months.

ACTION CDS

Degradation/degradability (combined with polymer recycling idea) - Vairon MV, RA, MH, RCH, CDS, CKL, AF, MW, MP as TGMs. 5 months to very rough draft of proposal.

ACTION JPV

Modified extended short hand names - Vert

Develop short hand names for retained names that are otherwise complicated to develop for otherwise well-used systems in medicine/drug delivery etc. Current names are often too long and polymer frequently have large groups attached. Some polymers also change structure when, for example, applying light. Modified of genes and peptides often do not have names based on current organic nomenclature.

GM, MP, KHH, RCH as TGMs

Aim to have proposal ready within 6 months.

ACTION MV

Polymers for 3D printing - Walter GM, CKL, CKO, JH as TGMs December deadline for draft application.

ACTION MW

Html version of PB2 - Moad



CKL as TGM. Approach *RGJ* as well. 2 months to proposal.

ACTION GM

Brief guide on polymer characterization - Hess CDS, GM, VM as TGMs December deadline for proposal.

ACTION MH

Adhesion, adhesive polymers and associated terminologies - Vairon

(iii) New projects from brainstorming session to be considered at a later date

Polymer inorganic hybrids – *RA* will consider the idea. Given 6 months to e-mail *RCH* ideas. *Evaluation of polymer crystals* – *SVM* will further consider the idea and investigate over the next year as to whether or not the project is viable.

ACTION RA and SVM

2.4 Feasibility Studies

NB Feasibility studies will now be performed using the Project Application as a catalyst to investigate whether or not a project is viable. Therefore this section will be removed in the next Agenda.

FS-23 Elastic Properties of Polymers – Adhikari See 2.3 (i).

FS-24 *Constitutionally-dynamic Polymers* – Vohlídal

No comments on this received. For the next meeting, either to be transferred to an Application form or removed.

Action: JV

FS-27 *IUPAC Certification Standards for Polymer Science Journals (IQPAC)* – Hiorns This project could not be advanced. The apparition of Brief Guides will be useful in going forward to this goal. Once the Brief Guides have been published, the project application form will be modified in discussion with representatives from the publishing industry. Meantime this project will be shelved.

ACTION RB and RCH

2.5 Project Extensions

It was agreed that the following projects should seek an extension:

2008-015-1-400 *Preferred Names of Polymers* – Mormann

ACTION WM

2.6 Group Participations

See Appendix 6.

3.0 ANY OTHER BUSINESS

WM mentioned that TGLs of all nomenclature containing projects should consult KHH and



JC at an early stage of the project. Once agreement on nomenclature has been reached changes should be made only after consulting these two nomenclature specialists. KHH prefers being asked questions about a specific nomenclature problem rather than correcting (proof reading) documents on short term notice.

The following issues were raised during the New Projects' Brainstorming Session:

(i) Reviewing of papers every 10th year

Glossary of basic terms is something that should be reviewed multiple times and there should be a formal procedure to review. *KHH* mentioned that there used to be a list of all documents till 90s which was discontinued because it was an old DOS that was used to main the documents.

ACTION RCH will check to see what documents are in their 10th year

(ii) Website for all SPT papers

The improvement of the IUPAC-website was given high priority by the President, Marc Cesa, who recently installed an ad-hoc task group of the Bureau with the task to collect suggestions for changes and to set up a task group to implement the changes. It is expected that the IUPAC website will be fully operational by the next General Assembly in 2015 [see Appendix 5]. It was recognized that it is important and useful to have all SPT papers in one place. *RCH* reiterated the importance of responding to the IUPAC website questionnaire.

ACTION everyone

- (iii) SPT expressed thanks to RCH and CKL for the organization of the meeting, meals and social events, the latter of which were a great highlight.
- (iv) *GR* raised the issue of the timing of the SPT meetings for alternate years during the Polymer Division (PD) meeting. It is noted here to facilitate discussion in the coming year. Specifically, some SPT members find it difficult to be on the road for two consecutive weeks: one week for SPT and PD meetings followed by another week for the Macro conferences. It was agreed that this issue will be discussed amongst SPT members at a future time.

3.1 **2015** Meeting

Bexco, Busan, Korea. General Assembly: August 6-13th 2015; World Chemistry Congress: August 7-14th 2015.



APPENDIX 1: AGENDA

Meeting Agenda Chiang Mai, Thailand, 30th June to 3rd July 2014

Summary

Time	09:00	10:30	10:50	12:00	14:00	15:30	15:50	17:15	17:30	
Monday	SPT		SPT			Break	Projects	SPT	Close	
Tuesday			Duoineta	Lunch	Projects				Close	
Wednesday	D	Break	Projects						Close	
Thursday	Projects		SPT and		T					
			Close		Tour					

MONDAY 30TH JUNE

Time	Item	Subject				
09:00	1.0	Welcome and Apologies				
	1.1	Chair's Communication				
	1.2	Approval of Minutes from the Istanbul SPT meeting of 2013				
09:30	1.3	Matters arising from the 2013 Minutes				
		(i) Updating Purple Book access (RGJ)				
		(ii) Accessing the Blue Book (KHH)				
		(iii) Publications since the Istanbul meeting (see Appendix 1)				
		(iv) New Projects in preparation (RA, CKL, MP, NS, MW; see Appendix 1)				
		(v) New Projects submitted (VM; see Appendix 1)				
10:10	1.4	New Project development				
10:30		Break				
10:50	1.5	Proposal for an SPT Advisory/Administrative Board				
	1.6	Social Events				
	1.7	Timetable for the Chiang Mai meeting (Appendix 2)				
12:00		Lunch				
14:00	2.0	Project work				
15:30		Break				
15:50	2.0	Project work				
17:15	2.1	Reports				
17:25		Housekeeping				
17:30		Close				
		ST ND				

TUESDAY AND WEDNESDAY 1ST AND 2ND OF JULY

09:00	2.0 continued	Project work
10:30		Break
10:50		Project work
12:00		Lunch
14:00	2.0	Project work
15:30		Break
15:50	2.0	Project work
17:15	2.1	Reports
17:25		Housekeeping
17:30		Close

THURSDAY 3RD OF JULY

Project work



10:30		Break
10:50	2.2	Reports
11:05	2.3	New Project development – prioritization
	2.4	Feasibility studies (Appendix 1) (Rubber)
	2.5	Project Extensions
	2.6	Group participations
11:50	3.0	Any other business
	3.1	2015 Meeting: Bexco, Busan, Korea. Dates to be confirmed.
		Housekeeping
12:00 Photo		Close

CKL and RCH, 15th of May, 2014.

AGENDA Appendix 1. List of Projects

Feasibility Studies

NB For an FS to progress it will be necessary to table a completed project application.

FS-23 Elastic Properties of Polymers – Adhikari

FS-24 Constitutionally-dynamic Polymers – Vohlídal

FS-27 IUPAC Certification Standards for Polymer Science Journals (IQPAC) - Hiorns

New projects in preparation for submission for funding

Ultimate Mechanical Properties - Adhikari

 ${\it Brief Polymerization}-Luscombe$

Polymers in Tissue Engineering and Regenerative Medicine: a Concise Guide to Terminology - Purbrick Brief Microstructure — Stingelin

Brief Semiconductors - Walter

Projects submitted for funded or recently awarded funding

2014-014-1-400 *Terminology for modeling and simulation of polymers* (ModSim) Meille

Projects seeking extension

2003-060-2-400	Terminology on Separation of Macromolecules – Hess
2006-028-1-400	Terminology for Conducting, Electroactive and Field-responsive Polymers –
Vohlídal	
2007-008-1-400	Multilingual Encyclopedia – dos Santos
2008-015-1-400	Preferred Names of Polymers – Mormann
2010-036-1-400	List of Keywords – dos Santos & Slomkowski
2011-013-2-400	Updating Wikipedia: Synchronizing Polymer Definitions and Terminology – Hess

Projects running

Polymer Division projects

2003-060-2-400	Terminology on Separation of Macromolecules – Hess
2006-028-1-400	Terminology for Conducting, Electroactive and Field-responsive Polymers –
	Vohlídal
2007-008-1-400	Multilingual Encyclopedia – dos Santos
2008-015-1-400	Preferred Names of Polymers – Mormann



2008-020-1-400	Revision of the Division IV Web-based Terminology Guidelines – Hodge	
2009-047-1-400	Stereochemical Aspects in Polymer Science – Hellwich & Moad	
2010-007-1-400	Terminology for Chain Polymerization – Moad	
2010-036-1-400	List of Keywords – dos Santos & Slomkowski	
2011-013-2-400	Updating Wikipedia: Synchronizing Polymer Definitions and Terminology – Hess	
2012-001-1-400	Terminology of Nanomaterials and Nanotechnology in Polymer Science — Ober & Jones	
2012-042-1-400	Terminology Relevant to Lactic Acid-based Polymers: Synthesis, Structure, Properties, Applications and Degradation — Vert	
2012-048-2-400	A Brief Guide to Polymer Terminology – Hiorns and Vohlídal	
Interdivisional pr	ojects	
1999-051-1-800	(2006-006-1-800) Source Based Nomenclature for Modified Polymer Molecules – Jones & Kitayama	
2001-081-1-800	Terminology and Structure-Based Nomenclature of Dendritic and Hyperbranched Polymers – Fradet & Kahovec	
2003-042-1-800	Source Based Nomenclature for Single-Strand Organic Polymers – Jones & Kitayama	
2011-035-1-800	Terminology & Nomenclature of Inorganic & Coordination Polymers – Jones	
2013-001-1-800	Structure-based nomenclature for regular linear star, comb and brush polymers –	Chen
Projects in the f	inal stages of preparation	

2001-081-1-800	Terminology and Structure-Based Nomenclature of Dendritic and
	Hyperbranched Polymers – Fradet & Kahovec
1999-051-1-800	(2006-006-1-800) Source Based Nomenclature for Modified Polymer Molecules –
	Jones & Kitayama

Projects submitted to ICTNS & public review

2005-005-2-400 (2011-033-1-400) *Terminology of Properties of Macromolecules in Solution* – Stepto

Publications since the Istanbul meeting

2005-043-2-400 *Self-Assembly and Aggregation in Polymers* – Ober & Jones, published as, 'Terminology for aggregation and self-assembly in polymer science (IUPAC Recommendations 2013)', R. G. Jones, C. K. Ober, P. Hodge, P. Kratochvíl, G. Moad and M. Vert, *Pure Appl. Chem.* **2013**, *85*(2), 463-492.

2006-041-1-400 Glossary of Thermal and Thermomechanical Properties of Polymers – Hess, published as, 'Glossary of terms relating to thermal and thermomechanical properties of polymers (IUPAC Recommendations 2013)', M. Hess, G. Allegra, J. He, K. Horie, J.-S. Kim, S. V. Meille, V. Metanomski, G. Moad, R. F. T. Stepto, M. Vert and J. Vohlídal, *Pure Appl. Chem.* **2013**, *85*(5), 1017-1046.

2006-004-1-400 Abbreviations – He, Tabak published as, Pure Appl. Chem. **2014**, 86(6), 1003-1015.



Appendix 2: Timetable of Task Group Discussions

APPEND	APPENDIX 2. Preliminary SPT Schedule							
	9:00 to 10:20	10:3 0 to 10:5 0	10:50-12:00	12 to 2	2 to 3:30	3:3 0 to 3:5 0	3:50 to 5:15	5:15-5:30
Mon 30th	SPT		SPT		Stereochemical - Hellwich/Moad, Meille, Kahovec, Meille, Nakano, Stepto, Vert Multilingual - dos Santos, He, Russell, Valdo Field-Responsive Polymers Vohlídal, Hiorns, Luscombe, Ober, Jones, Stingelin, Walter	_	Field-Responsive Polymers Vohlídal, Hiorns, Luscombe, Ober, Jones, Stingelin, Walter	Reports / Housekeep ing
Tue 1st			Brief Terminology Hiorns/Vohlídal, Boucher, Do, Hodge, Jones, Kratochvíl, Luscombe, Moad, Ober, Stingelin, Walter, Vairon		Dendritic - Fradet Kahove c, Chen, Hellwich, Mormann, Stepto, Vohlídal, <mark>Wilk</mark> s		Dendritic - Fradet Kahovec, Chen, Hellwich, Mormann, Stepto, Vohlídal, Wilks	Reports (Dick)/ Housekeep ing
	<i>Lactic</i> – Vert, Chen, Scholz, Vohlídal Hellwich, Nakano, Scholz		Lactic – Vert, Chen, Scholz, Vohlídal, Hellwich, Nakano, Scholz		Brief Chain – Luscombe, Moad	Bre ak	Separations – Hess Kratochvíl, Moad, Stepto Brief Semi – Walter	
Wed 2nd	ModSim – Meille, Muthukumar, Russell, Rutledge, Stingelin, Nakano, Raos	Brea k	Chain Polymerization – Moad Hodge, Jones, Luscombe, Nakano, Penczek, Russell, Stepto, Vairon	Lunch	Stars – Chen, Wilks, Hellwich, Fradet, Hiorns, Purbrick, Nakano		Stars – Chen, Wilks, Hellwich, Fradet, Hiorns, Purbrick, Nakano	
	Preferred – Mormann, Chen, Hellwich, Wilks		Preferred – Mormann, Chen, Hellwich, Wilks		Ultimate – Adhikari Hess, Henning, <mark>Stepto</mark>		Ultimate – Adhikari Hess, Henning, <mark>Stepto</mark>	Reports / (Bob) Housekeep
	Tissue – Purbrick, Stingelin Scholz, Luscombe, Vert		Tissue – Purbrick, Stingelin Scholz, Luscombe, Vert		Keywords – Slomkowski, Adhikari, dos Santos, Hiorns, Jones, Luscombe, Nakano, Purbrick, Stingelin, Walter		Keywords – Slomkowski, Adhikari, dos Santos, Hiorns, Jones, Luscombe, Nakano, Purbrick, Stingelin, Walter	ing
Thur 3 rd	Nano – Ober, Jones Stingelin, Luscombe, Meille, Walter, Purbrick, Reichmannis, Schmidt, Hayakawa, Ueda, Carter, Slomkowski Updating Wikipedia Hess, He, Hiorns, Jin, Jones, Moad, Ober, Stingelin, Walter		SPT			T	our	

Colour code: nomenclature, terminology, both; possibly by Skype depending on connection/time zone etc.



Appendix 3: Report from on Project 2008-020-1-400: A Brief Guide for Authors of Papers and Reports in Polymer Science and Technology. (The "WEB Project")

I am sorry not to be able to be with you in Chang Mai, but hope you all have a productive and interesting meeting. Many of the TGMs on the "WEB Project" will also not be in Thailand so I thought it would be useful to send this brief report to update you on progress.

The TGMs are: Philip Hodge, Karl-Heinz Hellwich, Roger Hiorns, Richard Jones, Jaroslav Kahovec, Christine Luscombe, Malcolm Pubrick, Natalie Stingelin, and Edward Wilks. Hereafter they are referred to simply by their initials.

This project has been running for more than 5 years and the finance provided is now fully spent. In an attempt to speed up progress PH organized a Meeting in London of those members of the TG that could easily and cheaply attend. Prior to this I had sent a copy of Version XIV to KHH and TW. Their replies were received before the London Meeting held on 2nd May 2014. NS had kindly organized the use of facilities in Imperial College. The Meeting was attended by PH, RH, RJ, CL and MP. We spent all day going through Version XIV, bearing in mind and considering the comments received from KHH and TW.

After the Meeting copies were also sent to JK and NS. Pavel K also responded.

All the comments are now being finally reviewed and, if considered appropriate, incorporated by PH. The Version obtained will be sent to RGJ to be put it into the correct IUPAC format. Some Tables will also be expanded to include extra columns. We had hoped to achieve this in time for the Chang Mai Meeting but due to limited availability of PH this has not proved to be possible. It should, however, be ready in about 4 weeks time.

The aim is to get a final Version to all TGMs etc shortly. Hopefully the end is in sight!

Phil Hodge, 23rd June 2014

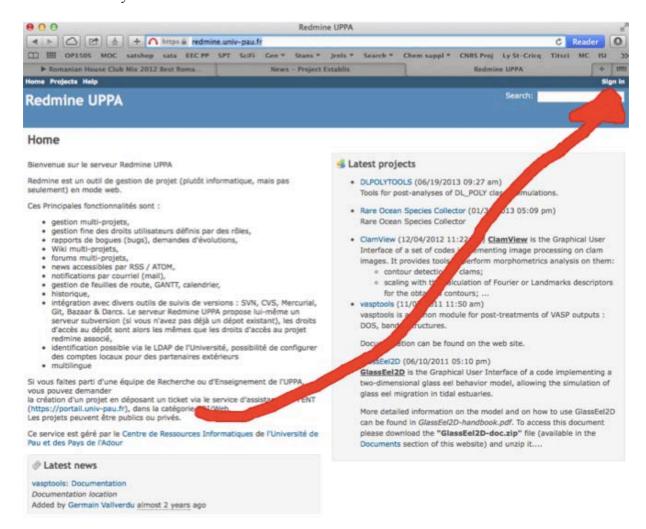


Appendix 4: Instructions for accessing Redmine

Edited e-mail from RCH dated March 26th 2014 and July 8th 2014

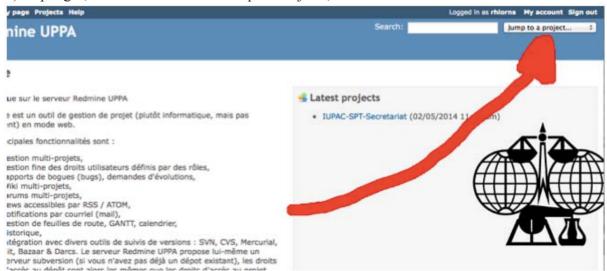
How does it work?

i) Click on https://redmine.univ-pau.fr and sign-in (see picture below) with your given codes. E-mail *RCH* if you do not have these.

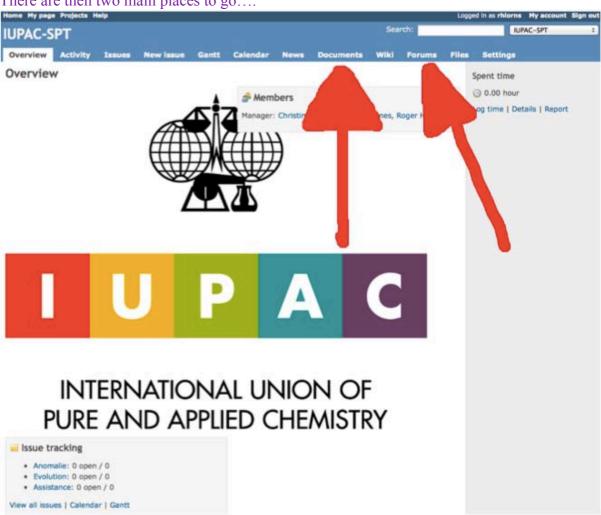




ii) Top-right, click on the button 'Jump to Project', and choose 'IUPAC - SPT'.



There are then two main places to go....





DOCUMENTS - your reference library

Click on this tab and you can download and upload from this library. Nearly all SPT publications are here.

FORUMS - your place to exchange

Two folder per project: one for draft manuscripts; one for related work (refs, application file etc.) ONLY modify your project page.

The clever stuff....

If you click on your Project Manuscript folder, you'll see a star called 'Watch' Click on 'watch' and Redmine will send you an e-mail each time someone makes an update.

Ground rules

i) do not delate documents

- ii) each Project area is the responsibility of the Project Leader.
- iii) everyone can 'watch' any folder that they want to
- iv) only members to a project upload
- v) no music!

Benefits:

- spreads best practise
- we can ensure we don't walk on each others' toes
- tracks prior versions
- we can get auto-mails that give the direct link to the project page; you choose which ones to receive by using 'watch'
- library to share files
- file sizes are limited to 100Mb, so we don't get stuck with heavy e-mails
- free
- you can change the interface language to one of about 40 in the 'My account' page.

Some of you are used to using Dropbox; I'd be very grateful if you'd upload occasional documents to Redmine to help spread information.

If receiving excess mails:

Click on https://redmine.univ-pau.fr and login.

Go to 'My Account'

Choose to receive email notifications "Only for things I watch or I'm involved in" Go to Forum and check that you have **clicked on** 'Watch' (i.e. 'unwatch' is showing) for the folders you want to follow.

If this does not work, then you will have to manually check all folders for the ones you want to watch.



Appendix 5: Report on Blue Book and IUPAC Division VIII Activities

Dr. Karl-Heinz Hellwich

Postfach 10 07 31 63007 Offenbach

Phone: xx49/6041/9621785

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Fax: xx49/69/716731-19

30 June, 2014

Report on IUPAC and IUPAC Division VIII Activities

The new Blue Book, *Nomenclature of Organic Chemistry, IUPAC Recommendations and Preferred Names 2013* was completed by Warren Powell with the help of a few Division Committee members last year. I note also, with much sadness, that Henri A. Favre, who was the Chairman of the former Commission on Nomenclature of Organic Chemistry and one of the authors of the new Blue Book died just a few weeks before the completion of the manuscript for this book.

The book is available from the Royal Society of Chemistry (RSC) both as printed copy and online. A PDF and free access will be provided only at a later time after the period during which RSC Publishing by contract has the exclusive right of distributing this book has expired.

The main feature of this book is the official publication of the concept of IUPAC Preferred Names (PINs). Unfortunately, there have already been a number of errors and inconsistencies detected in this new Blue Book, so that we are currently in the process for their solution and suitable publication as well as establishing ways of communication in this context and last but not least measures in order to prevent similar situations for future projects.

During the last weeks since January there has been an intense e-mail discussion between Warren Powell, the remaining author, Gerry Moss (maintaining the IUPAC nomenclature home page at www.chem.qmul.ac.uk/iupac), Andrey Yerin (programmer of the nomenclature software ACD Name), and to some extent Ture Damhus (Secretary) and Karl-Heinz Hellwich. Currently known errata are accessible on Gerry Moss' web page, but still need a cross checking.

As you see the Blue Book with some 1600 pages is a very large book. Users often do not want to study large books on recommendations. We therefore look forward to completing the Brief Guides to the Nomenclature of Inorganic Chemistry this year, and on Organic-Chemical Nomenclature soon thereafter.

We also anticipate significant progress being made on developing Preferred IUPAC Names (PINs) for inorganic compounds and for polymers. The document "Specifying the Coordination of Ligands to Central Atoms: Detailed Description of Grammar in the Kappa (κ) Convention" shall be a first step in this direction.



Key project work includes further development of the International Chemical Identifier (InChI). One of the last projects approved is particularly on the "Implementation of InChI for chemically modified large biomolecules" (2013-010-1-800). A recent publication on the development of InChIs can be found in *Chem. Int.* **35**(6), 12 – 15 (2013) (A. Yerin, A. McNaught, S. Heller, InChI – The IUPAC International Chemical Identifier, Current Status and Future Development in Relation to IUPAC Activities).

The first Division VIII project approved this biennium is "End-of-line hyphenation of systematic chemical names" (2014-003-2-800) which aims at giving recommendations where a chemical name can be meaningfully divided. The working party consists of Albert Dijkstra (fatty acids), Jan Reedijk, Richard Hartshorn (both inorganic), Ted Wilks, Jiazhong Chen (both Dupont, polymer chemists), and Karl-Heinz Hellwich.

A project currently under consideration by the Project Committee is "Nomenclature of carbon nanotubes and related substances".

This year's meeting of the Division Committee is scheduled for August 3 - 4, 2014 in Bangor.

Unfortunately, the biennial budget allocation to Division VIII like that to the other Divisions has been reduced by 15 % as compared with the last biennium. Because of the tighter financial situation also the procedures for reimbursement have been changed. In general, from this year on expenses can only be reimbursed if the Claim Forms are accompanied with the corresponding receipts. The former per diems, a certain fixed amount of money reimbursed per meeting day, still exist but are now maximum values up to which subsistence costs can be claimed.

René Deplanque, IUPAC **Secretary General**, resigned from this office early this year, and during the Bureau meeting in April Colin Humphris, UK, was elected Acting Secretary General.

As you may know, the Secretary, officially: Managing Director, John Petersen who only started his service in 2012 had to quit this office again in September 2013 for health reasons. Currently, a new Managing Director is searched for. The call for applications was published on the IUPAC website several weeks ago.

Also Bryan Pearson who was responsible for the IT and web services at the IUPAC Secretariat gave in his notice at the end of the last year and left IUPAC right after Christmas.

In the meantime the work at the Secretariat is temporarily supported by the Treasurer, John Corish, and the work in relation to the Secretary is done by the Acting Secretary General, Colin Humphris, and Fabienne Meyers.

You all know that the IUPAC website is in a bad shape. This situation was given high priority by the President, Marc Cesa, who recently installed an ad-hoc task group of the Bureau with the task to collect the requirements for the IUPAC website. The aim is that on the basis of the recommendations made by this group another group to be formed will then accompany and observe the work of the programmers – either a repair and improvement of the current website or a replacement by a newly programmed one. The goal is quite ambitious: to have the



IUPAC website fully functioning by the next General Assembly which will be in August 2015.

The IUPAC journals Pure and Applied Chemistry and Chemistry International as of January 1 this year are being contracted with the publishing house deGruyter. This means that distribution channels, subscription rates and also production procedures have changed.

Recent requests by some congress organisers for a retrospective financial support of IUPAC sponsored conferences led to a decision at the last Bureau meeting that in the future these conferences shall be called "IUPAC endorsed" conferences.

Karl-Heinz Hellwich

President

IUPAC Division of Chemical Nomenclature and Structure Representation



Appendix 6: Current Projects and Task Group Members

Project code and name	Active TG Members
SPT PROJECTS	
2003-060-2-400 <i>Separation of Macromolecules</i> (is also called 2013-049-1-400)	Hess, Chang, Kratochvíl, Moad, Stepto, Vohlídal
2006-028-1-400 Electric Field Responsive Polymers	Vohlídal, Hiorns, Jones, Luscombe, Ober, Stejskal, Stingelin, Walter
2007-008-1-400 Multilingual Glossary	dos Santos, Barón, Fradet, He, Hess, Kitayama, Kubisa, Meille, Vohlídal
2008-015-1-400 Preferred Names for Polymers	Mormann, Chen, Hellwich, Wilks
2008-020-1-400 Revision of "IUPAC Recommendations on Macromolecular Nomenclature; Guide for Authors of Papers and Reports in Polymer Science and Technology"	Hodge, Hellwich, Hiorns, Jones, Kahovec, Luscombe, Mormann, Stingelin, Walter, Wilks
2009-047-1-400 Definitions and Notations Relating to Stereochemical Aspects in Polymer Science	Hellwich, Moad, Kitayama, Meille, Nakano, Stepto, Vert
2010-007-1-400 Terminology for Chain Polymerization	Moad, Hodge, Jones, Kitayama, Luscombe, Matyjaszewski, Nakano, Penczek, Russell, Stepto, Vairon
2010-036-1-400 Keywords	Slomkowski, Adhikari, dos Santos, Kubisa, Hiorns, Jones, Luscombe, Nakano, Purbrick, Russell, Stingelin, Walter
2011-013-2-400 Updating Wikipedia: Synchronizing Polymer Definitions and Terminology	Hess , dos Santos, He, Hiorns, Kubisa, Jin, Jones, Moad, Ober, Rumbles, Stingelin, Walker, Walter
2012-001-1-400 Terminology of Nanomaterials and Nanotechnology in Polymer Science	Ober & Jones, *Carter, *Hayakawa, Luscombe, Meille, Purbrick, *Reichmannis, *Schmidt, Slomkowski, Stingelin, *Ueda, Walter *consultants
2012-042-1-400 Terminology of Lactic acidbased polymers	Vert, Hodge, Nakano, Penczek, Purbrick, Scholz, Slomkowski, Vohlidal, DIV VIII representative (Hellwich)
2012-048-2-400 A Brief Guide to Polymer Terminology	Hiorns, Vohlídal, Boucher, Do, Duhlev, Hodge, Jones, Kratochvíl, Luscombe, Moad, Ober, Russell, Slomkowski, Stepto, Stingelin, Walter, Vairon, Vert
2014-014-1-400 Terminology for modeling and simulation of polymers (ModSim)	Meille, Muthukumar, Nakano, Raos, Russell, Rutledge, Stingelin
INTERDIVISIONAL PROJECTS	
1999-051-1-800 <i>Source Based Nomenclature for Modified Polymers</i> (is also called 2006-006-1-800)	Jones, Kitayama, Fradet, Hellwich, Hodge, Kahovec, Ober, Vert, Vohlídal, Wilks
2001-081-1-800 Dendritic & Hyperbranched	Fradet , Chen, Hellwich, Kahovec, Mormann, Stepto, Vohlídal, Wilks
2003-042-1-800 Source-Based Nomenclature of	Jones, Kitayama, Hellwich, Hodge, Kahovec,



Single-strand Organic Polymers [includes	Kratochvíl, Mormann, Ober, Stepto, Vohlídal,		
copolymers]	Wilks		
2011-035-1-800 Nomenclature of Inorganic	Jones, Batten (Blight) Damhus, Hiorns,		
Polymers (TINCOP)	Kahovec, Öhrström, Reedijk, Walter		
2013-001-1-800 Structure-based nomenclature	Chen, dos Santos, Fradet, Hellwich, Hiorns,		
for regular linear star, comb and brush polymers	Nakano, Pubrick, Wilks		
NEW PROJECTS I	IN PREPARATION		
FS-23 Rubber elasticity	Adhikari		
FS-24 Constitutionally-dynamic polymers	Vohlídal		
Brief polymerization	Luscombe		
Polymers in tissue engineering and regenerative medicine	Purbrick		
Brief microstructure	Stingelin		
Brief semiconductors	Walter		
Ionic liquids/polymer inorganic devices	Ober, Luscombe, Meille, Moad		
Polymers for bioelectronics	Walter, Hiorns, Meille		
Mediatized terms	dos Santos, Hiorns, Luscombe, Purbrick		
Biodegradation/degradability	Vairon, Adhikari, dos Santos, Fradet, Hess, Hiorns, Purbrick, Walter, Vert		
Modified extended short hand names	Vert, Heinz, Hiorns, Moad, Purbrick		
Polymers for 3D printing	Walter, He, Luscombe, Moad, Ober		
Html version of PB2	Moad, Luscombe		
Brief guide on polymer characterization	Hess, dos Santos, Meille, Moad		
Adhesion, adhesive polymers and associated terminologies	Vairon		



Appendix 7: Rules of the Subcommittee on Polymer Terminology

- 1. The **membership** of the Subcommittee shall be decided by its **Official Members and approved by the Polymer Division Committee**. The Official Members are nominally those listed within the IUPAC Division IV webpages, but the official membership may be changed at any time with the agreement of the current Official Members.
- 2. Besides the Official Members, there are **Consultants** (former members who are still active), **Correspondents** (persons with only a loose connection with the Subcommittee), and **Observers** (persons who are invited by the Chairperson of the Subcommittee and approved by the Official Members of the Subcommittee).
- 3. No person shall be an **Observer** for more than two years but in the light of evidence of their contribution to the work of the Subcommittee they shall thereafter be invited to be Official Members.
- 4. The Subcommittee will usually meet annually (normally associated with an IUPAC General Assembly or a World Polymer Congress). Any Official Member who fails to attend two consecutive meetings of the Subcommittee and fails to make substantial written contributions to the work of the Subcommittee over the same period of time shall have their membership withdrawn.
- 5. No person shall remain an **Official Member**, **Consultant** or **Correspondent** of the Subcommittee who in the collective judgement of the Chairman, the Secretary, the Polymer Division President and Division Secretary have abused their membership and thereby their association with the Polymer Division.
- 6. **The list of the Consultants, Correspondents and Observers** will be reviewed annually by the Official Members. In addition, names can be added or removed at any time with the Subcommittee Chairperson's approval.
- 7. Initiatives for polymer terminology and nomenclature projects or feasibility studies may be placed before the Subcommittee by any interested party.
 - **New projects** should normally be launched as feasibility studies approved by the Subcommittee. The acceptance of a project or a feasibility study will normally be decided upon by the approval of the majority of the Official Members present at the meeting where it is proposed and will be subject to the Subcommittee Chairperson's approval.
- 8. Although in principle anybody can **submit a project proposal** directly to the IUPAC Secretariat, the agreed procedure for members of the Subcommittee is that a Project Submission Form is completed by the Task Group Leader of the proposed project and sent to the Subcommittee Chairperson who submits the form.
- 9. The names of the **Task Group Leaders** for official IUPAC recommendations and other projects are subject to the approval of the Subcommittee Chairperson and at least one Task Group Leader shall be an Official Member of the Subcommittee.
- 10. Provided they have relevant expertise, **Membership** of the task groups for official IUPAC recommendations and other projects is open to all Official Members,



Consultants, Correspondents and Observers, subject to the approval of the Subcommittee Chairperson and the Task Group Leader.

Any member of a task group is free to propose additional, external members who could start as Observers or Correspondents with the approval of the Subcommittee Chairperson.

No Task Group Member should over commit through membership of too many Task Groups.

- 11. The **budgets** for individual projects will be made available by the Task Group Leaders for the use of the Subcommittee Chairperson to help attendance at the annual meetings of the Subcommittee.
- 12. The use of project budgets by Task Group Leaders for Task Group Meetings on individual projects shall be with the agreement of the Subcommittee Chairperson.
- 13. Task Group Leaders shall report progress to the annual meetings of the Subcommittee either in person or by asking another to represent them. It is expected that there should be clear evidence that they are driving their project(s) towards completion.
- 14. The **authorship** of a document prepared by a task group approved by the Subcommittee is decided by the Subcommittee Chairperson in consultation with the Task Group Leader(s). Membership of a task group does not automatically mean authorship.
 - Authors will normally be listed with the Task Group Leader(s) preceding the other authors and with Task Group Leader(s) and other authors being listed, respectively, in English alphabetical order. In the case of a dispute, the matter will be decided by a majority vote of the official subcommittee members present at the meeting at which the authorship is being decided.
- 15. Each **official IUPAC recommendation** prepared by the Subcommittee shall list the Official Members of the Subcommittee during the period of its preparation, as well as those consultants, correspondents and observers who, in the opinion of the Task Group Leader(s) and the Subcommittee Chairman, contributed significantly to the document. In the case of a dispute, the matter will be decided by a majority vote of the Official Members present at the meeting at which the names to be listed are being decided.
 - If the period of preparation of an official IUPAC recommendation started before 2002, when Commission IV.1 was in existence, the recommendation shall also list the Titular Members of the Commission during that period and list the Associate Members and others who, in the opinion of the Task Group Leader(s) and the Subcommittee Chairman, contributed significantly to the recommendation.
- 16. The **publication of translations of official IUPAC recommendations** by members of the Subcommittee have to be brought to the attention of the Chairperson and the Secretary of the Subcommittee and the IUPAC Secretariat (presently Fabienne Meyers). The translation should be identified as such and the original IUPAC cover page should precede the translation.



Appendix 8: Presentation Slides of the Report to Division IV by *RCH*



DIVISION IV - POLYMER DIVISION

Subcommittee on Polymer Terminology

Thailand, 2014



Matters arising since Istanbul 2013

SPT

Purple Book

IUPAC COLOUR BOOK WEBPAGE

http://www.iupac.org/fileadmin/user_upload/ publications/e-resources/ONLINE-IUPAC-PB2 -Online-June2014.pdf



Nomenclature

All projects to pass through Jiazhong and Karl-Heinz prior to publication





Matters arising since Istanbul 2013 SPT

Redmine

Secure exchange forum with auto-e-mailing capacity





Matters arising since Istanbul 2013

SPT

SPT Board

Role

advise chair on administrative decisions for greater efficiency for example - supporting projects through admin process

help organise Agenda

forwarding electronic methodologies - SPT communication SPT administrative memory

purely administrative

no deliberations on nomenclature or terminology small group



Matters arising since Istanbul 2013 SPT

SPT Board

Membership

Roger (Chair, casting vote) Christine (Secretary) Dick (Past Chair) Greg (DPVP) Claudio (Deputy Secretary) Jiri (SPT Member)

Membership to be reconfirmed when officers change position allows continuity. SPT Member to be by vote.

SPT Secretary and Chair

Christine (Secretary) and Roger have taken up their positions





Publications since Istanbul

SPT

2006-004-1-400 Abbreviations – He, Tabak published as, 'Abbreviations of polymer names and guidelines for abbreviating polymer names (IUPAC Recommendations 2014)', J. He, J. Chen, K.-H. Hellwich, M. Hess, K. Horie, R. G. Jones, J. Kahovec, T. Kitayama, P. Kratochvíl, S. V. Meille, I. Mita, C. dos Santos, M. Vert and J. Vohlídal, *Pure Appl. Chem.* 2014, 86(6), 1003-1015.

2007-008-1-400 Multilingual Encyclopedia – dos Santos



SPT

Projects Submitted for Public Review

2005-005-2-400 (2011-033-1-400) Terminology of Properties of Macromolecules in Solution

Projects in Final Stages of Preparation

 2006-051-1-800
 (2006-006-1-800) Source Based Nomenclature for Modified Polymer Molecules

 2003-042-1-800
 Source Based Nomenclature for Single-Strand Organic Polymers



SPT

New Projects Approved Since Istanbul

Project Applications under Review

2014-014-1-400 Terminology for modeling and simulation of polymers (ModSim) - Meille

2013-050-1-400 Definition of Terms Relating to the Ultimate Mechanical Properties of Polymers (Ultimate) - Adhikari





Finishing within a year

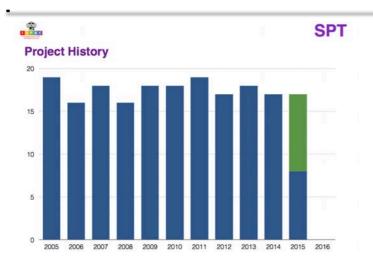
o God

SPT

Project History

Submitted projects: 2
Running projects: 15
Submitted or to be completed with a year: 9

End 2015 we will only have 2+15-9 = 8 projects running.







SPT

Projects for Draft Application Forms

DIV IV

1st tranche

Ultimate Mechanical Properties - Adhikari Rubber Elasticity - Adhikari Siloxanes - Slomkowski

2nd tranche

Brief Guide on Polymer Characterisation - Hess Extended Modified - Vert Degradation - Vairon html of PB2 - Moad

3rd tranche

Evaluation of Polymer Crystals - Meille Polymers for 3D Printing - Walter





SPT

Projects for Draft Application Forms

With Education or other divisions or both

Polymer in Tissue Engineering and Regenerative Medicine:
A concise guide to Terminology - Purbrick
lonic liquids/polymer inorganic devices - Ober
Polymer Semiconductors - Walter
Brief Polymerization - Luscombe
Brief Microstructure - Stingelin

Media Terms - dos Santos Polymers for bioelectronics - Walter

To the Projects Committee

Educating Updating Wikipedia: Synchronizing Polymer Definitions and Terminology – Hess



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