27 January 2021

Attendees: Derek Craston (Secretary); Takae Takeuchi; David Shaw (Vice president); M. Resat Apak;

Brynn Hibbert; Zoltan Mester (President); Jan Labuda (Past President): Luisa Torsi; Rufus Sha'Ato; Hongmei Li; Maria Filomena Camoes; Ilya Kuselman; Clara Magalhaes; Earle Waghorne; Malarvili Ramalingam; Jiri Barek; Orawon Chailapakul; Susanne Wiedmer

Introductions: Participants confirmed that it was okay for the session to be recorded: recording

started 1.21hrs

#### **Nominations for Next Biennium:**

David Shaw outlined the process for applying to be a member of the Division Committee and for the selection of TMs, NRs and AMs.

#### **Division Awards:**

Jan Labuda updated the committee on progress on the awards. The physical medal will be organised by Jan and Erico Flores. It was suggested that committee members contact their respective Chemical Societies to see if they can contribute to the design or support the award in any way.

#### **Gold Book**

Brynn described the final work needed to complete the Orange Book and the requirement now to amend the Gold Book. An up-date on the Orange book is appended to these minutes.

The division has the advantage that the bulk of terms can be transferred from the Orange Book to the Gold Book. However, there will be a number of terms that will need to be reviewed, including those where there is overlap with other divisions, and those covered by the sub-committees (e.g. the sub-group on solubility and equilibrium data). It was agreed that a task lead and committee will be established for the Gold Book project: Derek Craston, Zoltan Mester, David, Jan, Hongmei Li, Resat Mustafa, Takae Takeuchi, Clara Magalhaes and Maria Filomena Camoes all offered to support this activity.

## Preparation for Biennium/congress - Montreal - IUPAC congress and General Assembly (GA)

The Biennium will take place virtually for the first time. It is up to the Division to decide whether to organise meetings to coincide with the Congress. International time differences will not allow for full day meetings, but perhaps shorter 2-hour sessions can be scheduled across the week. It was agreed that special sessions might be held to:

- 1. Cover an Award ceremony, perhaps in conjunction with the GA
- 2. Launch the Orange book

Zoltan will check what is planned with respect to Young Observers. If this programme is going ahead then we might invite the relevant individuals to our sessions. It was suggested that we might run a bring a friend/young friend to one of the IUPAC sessions or to a divisional meeting prior to the Biennium event. It was also suggested that the award winners (nominees) are invited to future division meetings, as well as those nominated for election on to the committee and task group leaders and members.

## **Sub Group updates**

Brief updates were provided from the leaders of the sub-committees. There was further discussion on the issues of publishing through PAC and the associated delays. A number of examples were cited. Zoltan will continue to pursue this on behalf of the division.

#### **Nest IUPAC Divisions V Meetings**

We should invite task group chairs and subcommittee members to the next meetings

- Next meeting will cover new project ideas as well as feedback on existing projects. David
  outlined the new arrangements for providing project reports. Submission of reports is
  required as soon as possible. It was suggested that members submit ideas for new projects
  prior to the next meeting (end of February).
- A second meeting will take place towards end of March and will cover the output of the IUPAC initiative to review the way that the organisation works and is structured.

#### Other

- It was agreed that those who are active on social media (e.g. Luisa Torsi and Zoltan) would advertise future events and awards (e.g Franzosini Award)
- Luisa agreed to setup a Twitter account for the Division

# Orange Book (OB) update 8 August 2020

D B Hibbert, editor

Chapter	PAC Rec/ TR	PAC Rec/ TR	Status
		submitted/ accepted	
1. Fundamental and Metrological Concepts	PAC-REC-18-04-05 Fundamental and Metrological Concepts in Analytical Chemistry	28-Apr-18	Reviewed. 28 March 2019.
	now:	27-Aug-19	Re-submitted with Ch13.
	PAC-REC-2019-0819 Metrological and quality concepts in analytical chemistry	31 Dec 19 R1: 26 Feb 20 R2: 1 Jun 20 Accepted 7 Aug 20 R3: 25 Jan 21	Public Review until 31 Dec 2020
2. Chemometrics	PAC-REC-15-06-05	20-Jun-15 /	Published:
		18-Sep-15	Hibbert, D. B., Vocabulary of concepts and terms in chemometrics (IUPAC Recommendations 2016). Pure Appl. Chem. 2016, 88 (4), 407-443.
3. Extraction	PAC-REC-15-09-03	16-Sep-15 /	Published: Poole, C.; Mester, Z.; Miró, M.;
		27-Mar-16	Pedersen-Bjergaard, S.; Pawliszyn, J., Glossary of terms used in extraction (IUPAC Recommendations 2016). Pure Appl. Chem. 2016, 88 (5), 517-558.
4. Mass and	PAC-TR-17-04-10	27-Apr-17 /	Published: Camões Maria, F.;
volume		22-Nov-17	Christian Gary, D.; Hibbert David, B., Mass and volume in analytical chemistry (IUPAC Technical Report). Pure Appl. Chem. 2018, 90 (3), 563 - 602.
5. Separation	PAC-REC-17-01-11	28-Jan-17 /	Published: Maryutina Tatiana, A.;
		16-Jul-2017	Savonina Elena, Y.; Fedotov Petr, S.; Smith Roger, M.; Siren, H.; Hibbert, D. B., Terminology of separation methods (IUPAC Recommendations 2017). Pure Appl. Chem. 2018, 90 (1), 181-231.
6. Spectroscopy	PAC-REC-19-02-03	01-March-19	Proofs 4-Aug-20
	Glossary of Methods and Terms used in Analytical Spectroscopy	R1: 11-Jul-19 R2: 14-Sep-19 Accepted for public review: 02-Oct-19	Glossary of Methods and Terms used in Analytical Spectroscopy (IUPAC Recommendations 2020), Heidi Goenaga Infante, John Warren, John Chalmers, Geoffrey Dent, Jose Luis Todoli, Joanna Collingwood, Neil Telling, Martin Resano, Andreas Limbeck, Torsten Schoenberger, D Brynn Hibbert, Adam LeGresley, Kristie Adams, Derek Craston
7. Mass	PAC-REC-06-04-06	n/a	
spectrometry			

Chapter	PAC Rec/ TR	PAC Rec/ TR	Status
		submitted/	
		accepted	Published: Murray, K. K.; Boyd, R. K.; Eberlin, M. N.; Langley, G. J.; Li, L.; Naito, Y., Definitions of terms relating to mass spectrometry (IUPAC Recommendations 2013). Pure Appl. Chem. 2013, 85 (7), 1515-1609.
8. Electrochemical methods	PAC-REC-18-01-09. Terminology of electrochemical methods of analysis	30-Jan-2018 R1: 21-Oct-18 R2: 27-Feb-19 Accepted for public review:13- May-19 Accepted 12 May 2019 Published in print 28 April 2020	Published: Pingarrón, J. M.; Labuda, J.; Barek, J.; Brett, C. M. A.; Camões, M. F.; Fojta, M.; Hibbert, D. B.: Terminology of electrochemical methods of analysis (IUPAC Recommendations 2019). Pure App. Chem. 2020, 92, 641-694. DOI: https://doi.org/10.1515/pac-2018-0109
9. Radioanalytical methods	PAC-REC-19-03-02 Vocabulary of radioanalytical methods	01-Mar-19 R1: 01-Jul-19 R2: 24-Aug-19 R3: Accepted for public review:20 Nov 19 Accepted 29 June 2020 Published in print 27 Jan 2021	Published. Chai, Z.; Chatt, A.; Bode, P.; Kučera, J.; Greenberg, R.; Hibbert, D. B.: Vocabulary of radioanalytical methods (IUPAC Recommendations 2020). Pure App. Chem. 2021, 93(1), 69-111.  DOI: <a href="https://doi.org/10.1515/pac-2019-0302">https://doi.org/10.1515/pac-2019-0302</a>
10. Surface	PAC-REC-19-04-04 Glossary of Methods and Terms used in Surface Chemical Analysis	05-Apr-19 R1: 14-Oct-19 R2: Accepted for public review:18 Dec 19 Accepted 12 May 2020 Published in print 26 Nov 2020	Published: Takeuchi, T.; McQuillan, J.; Shard, A.; Russell, A.; Hibbert, D. B.: Glossary of Methods and Terms used in Surface Chemical Analysis (IUPAC Recommendations 2020). Pure App. Chem. 2020, 92, 1781 - 1860.
11. Thermal methods	PAC-REC-12-06-09	n/a	Published: Lever, T.; Haines, P.; Rouquerol, J.; Charsley Edward, L.; Van Eckeren, P.; Burlett Donald, J.: ICTAC nomenclature of thermal analysis (IUPAC Recommendations 2014). Pure Appl. Chem. 2014, 86, 545-553.
12. Bioanalytical methods	PAC-REC-16-11-20	21-Nov-2016 01-Feb-2018 Accepted: 1 Feb 2018 Published in print 26 July 2018	Published: Labuda, J.; Bowater, R. P.; Fojta, M.; Gauglitz, G.; Glatz, Z.; Hapala, I.; Havliš, J.; Kilar, F.; Kilar, A.; Malinovská, L.; Sirén, H. M. M.; Skládal, P.; Torta, F.; Valachovič, M.; Wimmerová, M.; Zdráhal, Z.; Hibbert, D. B.: Terminology of bioanalytical methods (IUPAC Recommendations 2018). Pure Appl. Chem. 2018, 90(7), 1121-1198.

Chapter	PAC Rec/ TR	PAC Rec/ TR submitted/ accepted	Status
13. Quality assurance	PAC-REC-18-08-01 Terminology of quality assurance in analytical chemistry	04-Aug-2018	Reviewed 26-Feb-2019.
	now: PAC-REC-2019-0819 Metrological and quality concepts in analytical chemistry	27-Aug-19 Accepted for public review: 5 Aug 20	Public Review until 31 Dec 2020.  See Chapter 1

1 March 2021

Attendees: Derek Craston (Secretary); Zoltan Mester (President); David Shaw (Vice president); Jan

Labuda (Past President); Rolf Sander; Takae Takeuchi; Jiri Barek; Kim Hasuck; Clara Magalhaes; Brynn Hibbert; Hongmei Li; M. Resat Apak; Maria Filomena Camoes; Earle Waghorne; Luisa Torsi; Erico Flores; Stuart Chalk; Simon Pinho; Orawon Chailapakul; Ilya Kuselman; Franziska Emmerling; ; Petra Krystek; Yu-Ju Chen; Malarvili Ramalingam;

Vasilisa Baranovskaya; Susanne Wiedmer,

It was agreed that the meeting could be recorded

## **IUPAC Analytical Division Awards**

Jan updated the meeting on the new IUPAC awards. The Nomination Committee recommended Dr. Tsuyoshi Minami for the Innovator Award, and Professor Joseph Wang for the Analytical Chemistry Medal. CV's of the two selected candidates are attached. The meeting agreed the recommendations of the Nomination Committee; Zoltan will write to the winners accordingly. Zoltan will also write a thank you note to the external members of the Nomination Committee for their work on this project.

Jan presented suggested templates (attached) for the Medal for discussion. Additional comments are welcome if received by mid-March. Jan will write up lessons learnt from the process and any procedural changes we should consider for next time (Nomination Committee report, attached).

## **Publications**

Rolf shared a suggested new process that would improve the review of IUPAC recommendations (attached). Clara and Brynn agreed with the proposal and offered to provide additional content. Openness and transparency is critical to the work of IUPAC, and hence any new process should ensure that comments and responses are visibility to the public during the review process. Rolf and Brynn will provide an updated proposal for submission to ICTNS.

#### **Projects**

David shared the Project Report Summary. Projects reports have been received from all but two of the project leads. An additional column will be included to flag items that may have delays that will affect completion. A project is complete when the secretariat receive a link to the published work. It is possible to extend project timelines or to amend if necessary. The only proposal in the system at the moment (Pedro Carvalho) has just been approved.

## **Future Projects**

There was discussion on a number of project ideas:

1. The international symposium for solubility phenomena scheduled this year at Los Alamos will occur on-line, with the next taking place in person in Portugal in 2022. There is opportunity to hold a workshop (Webinar) on measurement uncertainty in solubility and equilibrium data. Simon / Clara will prepare a proposal.

- 2. Analytical science and plastic waste. What is extent of issue? Can we provide guidelines on reuse and recycling? (Derek to consider role of IUPAC in this area following discussions with the relevant industries)
- 3. Impact of Covid measurement and diagnostics emerging requirements for IUPAC. This links with the question of what is the role of PCR instruments post COVID? (Zoltan and Derek to develop a draft proposal)
- 4. Remote analytical laboratories. What are the design and conceptual issues that are likely to emerge when operating laboratories (and potentially sharing laboratory infrastructure) remotely? (Zoltan)
- 5. Critical evaluation of solubility data of pharmaceuticals (Derek to identify industry contacts: Hongmei Li is also interested in this project including aspects relating to particles and biosimilars)
- 6. Gold Book. The Division needs to support the Gold Book project by conversion of the Orange Book and terms in solubility and equilibrium constants in collaboration with (and completely joined up with) other Divisions. Clara offered to pull together a project proposal to cover future actions relating to the Gold Book.

Zoltan to brief the next meeting on the Education Project and IUPAC strategy work; Stuart will cover fair data and related BIPM activities.

Next meeting 7 April 2021

7 April 2021

Attendees: Derek Craston (Secretary); Zoltan Mester (President); David Shaw (Vice president); Jan

Labuda (Past President); Takae Takeuchi; Jiri Barek; Clara Magalhaes; Brynn Hibbert; Hongmei Li; Maria Filomena Camoes; Luisa Torsi; Stuart Chalk; Orawon Chailapakul; Ilya Kuselman; Franziska Emmerling; Petra Krystek; Yu-Ju Chen; Malarvili Ramalingam;

Vasilisa Baranovskaya; Montserrat Filella

**Apologies:** Erico Flores; M. Resat Apak; Kim Hasuck: Mariela Piston

## Planning division meetings for the General Assembly (GA)

There is no plan to run any divisional meetings during the GA, other than the award ceremony and presentation and the launch of the Orange Book. Sub committees are welcome to hold events during this week, and have these recognised by IUPAC: however, first feedback suggests that this will not be necessary (SSED have meeting planned [ISSP] in July)

#### Award ceremony and presentations

Jan presented progress in designing and commissioning the medals. A discussion then ensued on the preferred design, and in particular, on the option to leave blank space on one side to potentially engrave the name of the winner and the year of the award. Jan will now progress and work on locating a company to produce these. A few manufacturers have already been identified and some of these have been approached. It was recommended that a producer is selected based on quality, ease of ordering (low administrative burden) and cost. [Action Jan]

This year's winners have been notified and both have accepted. The aim will be to present these alongside associated lectures which will be organised to coincide with the GA. The event will be streamed and potentially linked to the IUPAC Conference that runs alongside of the GA. [Action Zoltan]

#### **Orange Book Launch**

Brynn described progress on the book and confirmed that we will not be in a position to launch in August. Some chapters have not yet been published in PAC and it will certainly not be approved by RSC editorial team until later this year. It was agreed that a "soft" launch event during the GA would be appropriate that might include some of the chapter authors. Brynn will set out plans accordingly. [Action Brynn]

#### FAIR (Findability, Accessibility, Interoperability, and Reuse of digital assets) data

Stuart outlined the aims of the BIPM organised task group on the Digital S.I. including the discussion at the recent workshop <a href="https://www.bipm.org/en/bipm-workshops/digital-si?p">https://www.bipm.org/en/bipm-workshops/digital-si?p</a> I back url=%2Fen%2Fsearch%3Fp p id%3Dsearch portlet%26p p lifecycle%3D1%26p p state%3Dnormal%26p p mode%3Dview%26 search portlet javax.portlet.action%3Dsearch

The scope and aims of the task group were described. The division members expressed an interest in this initiative and looked forward to learning more as the activity progresses.

#### **Education and analytical project**

Zoltan provided the latest position with this project which has been difficult to progress due to Covid impacts. The aim will be to relaunch again in September. Clara mentioned that the SSED might wish to get involved in this project linked to their interest in education in solubility and related discussions with the Committee on Chemical Education. The SSED is also working across divisions on a glossary of terms in solubility linked to the update of the Gold Book

#### **IUPAC** strategy review

The strategic review of the IUPAC organisation has been published and will be discussed at the GA. The main change proposed is a split of the activities of the assembly in to two constructs; an executive/operational committee and a scientific committee. David agreed to share the reports with all divisional committee members.

#### Status of the work of the nominating committee

David thanked the division committee members for registering their vote in a timely manner. Results of the voting, and the composition of the division committee for the next biennium, will be announced shortly.

21 September 2021

Attendees: Derek Craston (Secretary); Zoltan Mester (President); David Shaw (Vice

president); Jan Labuda (Past President); Takae Takeuchi; Jiri Barek; Clara Magalhaes; Brynn Hibbert; Hongmei Li; Maria Filomena Camoes; Orawon Chailapakul; Ilya Kuselman; Malarvili Ramalingam; Vasilisa Baranovskaya; Montserrat Filella, Erico Flores; M. Resat Apak; Kim Hasuck: Orawon Chailapakul, Earle Waghorne, Rufus Sha'Ato; Danny van Oevelen, Lucy Charles, Nicola Sangiorgi, Alice Bowen, Tien Quach, Jingbo Liu, Aura Tintaru, Ivo Leito, Thalappil

Pradeep, Fabiana Piscitelli, Ruchi Gupta, Alessandro Minguzzi

**Apologies:** Petra Krystel, Serigne Amadou NDIAYE, Mariela Piston, Franziska Emmerling, Hye Ryung Byon, Yu-Ju Chen, Luisa Torsi

### 1. Divisional overview

After a successful election, a new division committee will be formed at the beginning of 2022 (see attached). Zoltan welcomed all of the new members, young observers (YO) and thanked those on edge of time zones for joining the session

Formal congratulations were extended to Prof Brynn Hibbert on his appointment as an IUPAC Emeritus Fellow for Division V.

[no actions]

## 2. Feedback from biennium meeting

This was hosted by the Canadian Chemical Society, albeit that it took place virtually. The Division did not run any meetings but instead streamed two lectures from our inaugural award winner <a href="Prof Tsuyoshi Minami">Prof Tsuyoshi Minami</a> and <a href="Prof Joseph Wang">Prof Joseph Wang</a>. These are still available through youtube (see associated links). Special thanks were given to Jan Labuda and Erico Flores for chairing the Awards Committee.

The main feedback points from the IUPAC Council meetings were:

- Ehud Keinan was elected incoming Vice President with Javier García-Martínez becoming President
- There was much discussion on the newly formed concept of revamping IUPAC to split the Bureau into two; with a more science facing / science board dealing with the work of the Union, and an administrative management Board handling operational matters.
- The finances for the year were balanced, mainly due to the lack of a General Assembly and associated travel costs. Also, US funding for salary support was received during the pandemic which meant that IUPAC avoided incurring further losses.

# [no actions]

## 3. Digital IUPAC – Implications for division

A comprehensive update was provided by David Shaw on IUPACs efforts on digital standardisation. It was advised that all new initiatives/projects should consider the FAIR principles (Findable, Accessible, Interoperable, Reusable) in the dissemination of results, and to ensure machine readability **[no actions]** 

## 4. Key projects:

## a. Orange Books

Brynn provided an introduction on the Orange Book to new members and YOs. Everyone can have access to the Dropbox site where the latest version resides. The book now needs to undergo a review by the Division, and a list of actions for volunteers can be found on Dropbox. Our reviews need to be complete by end of

this month. If you have time, please let Derek know and he'll nominate you to review a chapter.

#### **Action**

## **Contact Brynn for drop box access**

# Reviews to be completed by the end of this month

#### **GOLD Book**

Brynn provided an introduction to the upcoming upgrade of the Gold Book. Clara and Zoltan are heading up the project teams for the Division. Stuart Chalk is leading the overall project, and while there is no timeline for completion we should aim to do within a year, given that the work falls nicely on the back of the new version of the Orange Book.

## Green Analytical Chemistry (GAC) - Elia Psillakis

An overview to the project objectives was presented. Derek offered to join task group and suggested getting strong industry involvement from the outset

#### AOB

- Fabiana to arrange a focus call with YOs to discuss involvement and engagement with the Division. It was agreed that this should take place before the next Divisional meeting
- Derek Craston /David Shaw to take regional engagement offline
- Next divisional meetings to be scheduled for the end of October and end of November
  - o 10 November 2021
  - o 7 December 2021

10 November 2021

Attendees: Derek Craston (Secretary); Zoltan Mester (President); David Shaw (Vice president);

Takae Takeuchi; Jiri Barek; Clara Magalhaes; Brynn Hibbert; Hongmei Li; Maria Filomena Camoes; Orawon Chailapakul; Ilya Kuselman; Malarvili Ramalingam; Vasilisa Baranovskaya;

Montserrat Filella, Erico Flores; Kim Hasuck: Earle Waghorne, Danny van Oevelen, Nicola Sangiorgi, Alice Bowen, Tien Quach, Jingbo Liu, Aura Tintaru, Ivo Leito, Thalappil Pradeep,

Fabiana Piscitelli, Ruchi Gupta, Alessandro Minguzzi, Lucy Chuck, Louise Jingbo, Petra Krystel, Serigne, Amadou NDIAYE, Mariela Piston, Franziska Emmerling, Hye Ryung Byon, Yu-Ju Chen,

Luisa Torsi, Susanne Wiedmer, Franziska Emmerling; Raychelle Burks;

Apologies: M. Resat Apak; Jan Labuda (Past President) Tien Quach; Rufus Sha'Ato

## **Engagement**

David outlined some of the ways that people can get involved in the work of the Division, and in general IUPAC activities. For example, the Digital IUPAC initiative is cross cutting and of high importance as we seek to standardise all forms of chemical data and information so that it is generally accessible and machine readable.

At the divisional level then there are several sub-committees (Metrology, pH, Solubility and equilibrium data, critical evaluation of data) that would welcome additional participation. This is likely to include a subcommittee for early and mid-career scientists (document attached). In addition, the business of the division is delivered through projects, and there is opportunity to contribute to active projects (see <a href="https://iupac.org/who-we-are/division-details/?body">https://iupac.org/who-we-are/division-details/?body</a> code=500) and/or to propose new ones that align with IUPAC objectives.

One task that will require support is the award programme which the division plans to run in all future biennium (the time between IUPAC Congresses). A group of people is required to lead this programme, and this should be agreed at the next divisional meeting. Similarly, nominations will be sought at the next meeting for members of the division that will provide representation on other IUPAC and non-IUPAC committees of relevance to our mission (preliminary list attached; additions and revisions are needed).

## **Projects**

Comprehensive overviews of many of the current projects were provided by the chairs of the relevant sub committees: Ilya Kuselman (metrology in chemistry; presentation attached), Clara Magalhaes (Solubility and Equilibrium Data), Maria Filomena Camoes (pH) and David Shaw (Interdivisional subcommittee on the critical evaluation of data).

Fabiana Piscitelli (LC-MS method validation) and Luisa Torsi (Wearables Devices) provided introductions to potential new projects (Draft copies attached for awareness and expressions of interest)

## **Orange Book**

Brynn Hibbert confirmed that the Orange Book is finally completed. Zoltan Mester is now in receipt of the final version which is to be sent to ICTNS for IUPAC approval. Once signed off the document will be sent to RSC for publication (Copy attached). Brynn thanked all members of the committee who had contributed to the recent internal review. Zoltan acknowledge Brynn's efforts, energy, and persistence in completing this major task.

## **Next Actions**

A recording of this meeting can be obtained by clicking on the following link: <a href="https://www.dropbox.com/s/xx3r6otzaaohx0w/GMT20211110-122903">https://www.dropbox.com/s/xx3r6otzaaohx0w/GMT20211110-122903</a> Recording.m4a?dl=0
The next meeting 7 December 2021

7 December 2021

Attendees: Derek Craston (Secretary); Zoltan Mester (President); David Shaw (Vice president); Jan Labuda

(Past President); Takae Takeuchi; Clara Magalhaes; Brynn Hibbert; Maria Filomena Camoes; Mustafa Resat Apak, Ilya Kuselman; Malarvili Ramalingam; Stephen Worrall, Erico Flores; Danny van Oevelen, Nicola Sangiorgi, Ivo Leito, Thalappil Pradeep, Fabiana Piscitelli, Ruchi Gupta, Alessandro Minguzzi, Chuck Lucy, Louise Jingbo, Petra Krystel, Yu-Ju Chen, Luisa Torsi,

Susanne Wiedmer: Montserrat Filella

Apologies: Jiri Barek

## **Orange and Gold Book**

Final comments from ICTNS are expected by the end of this month which will be addressed at the beginning of January before submitting to RSC. The Orange Book chapters will be reviewed as part of the Gold Book project. Clara is working on terms in solubility and equilibrium data and is on the joint committee that is responsible for the Gold Book update. Brynn requested clarity on what might be allowed in terms of amendments without the requirement for a full IUPAC review.

Huge thanks were given to Brynn and the division for the timely review.

## Formal decision on early career subcommittee

A ToR was prepared and circulated and discussed at the meeting. Six people are interested in joining/supporting the subcommittee. The committee debated the definition of "early career" and it was agreed that this should not be too restrictive to encourage wide participation from scientists from academia and industry. The committee voted in favour of the formation of this new subcommittee. It was recommended that the team revise the ToR to clarify terms of membership and the process for electing a Chair.

(For information, Luisa mentioned the Heinrich Emanuel Award for scientists under the age of 45, and encouraged people to advertise this through individual networks:

https://www.merckgroup.com/en/research/grants-and-awards/heinrich-emanuel-merck-award.html)

#### Update on new projects currently under preparation

Overviews were provided on some new projects under development. Specifically

- Luisa Torsi (Wearables Devices): Derek to check if project has formally been submitted to IUPAC.
- Fabiana Piscitelli (LC-MS method validation): final draft shared with interested parties with the aim of submitting in the weeks ahead (Joint with Division 7 and 6)
- Louise Jingbo (Lab automation): Focus on instruments for the measurement of nanomaterials for energy and medical applications. This is in the early stages of establishment: those interested in being involved should email Louise.
- T Pradeep (Atomically Precise Clusters). Idea and concept to be developed
- Alessandro Minguzzi: Early-stage idea for a project that will seek to find a mechanism for IUPAC to
  provide formal recognition to literature that uses IUPAC nomenclature; beginning with symbols, books
  and self-certification. It was suggested that Alessandro links with Stuart Chalk (digital project), division 1
  and Chuck Lucy. Maria Filomena mentioned some of the issues relating to the use of acronyms (such as
  BOD for biological oxygen demand).

# Finalizing the list of representatives for groups that the division has relationships with

The following representatives were agreed:

- IUPAC Committee on Chemistry Education (Zoltan to confirm Chuck Lucy)
- IUPAC Committee on Chemistry and Industry (Jan Labuda)
- Committee on Publications and Cheminformatic Data Standards (CPCDS). No formal link exists but
  historically there has been strong interaction which should continue in the future. David will raise meeting
  attendance with Liam McQuin orking relationship which we consult with frequently. Formal invitation to
  meetings as an observer for a younger/newer person, David to investigate.
- International Committee on Weights and Measures/Consultative Committee on the Amount of Substance: Derek to check with Hongmei Li
- Ilya to continue to represent IUPAC on ISO TC on Reference Materials and on CITAC.
- Zoltan will continue with Joint Committee for guides in metrology and working group 2. Zoltan has approached Brynn to join working group 1.
- European Chemical Society (EUCHEMS). Yuri Barek to continue to be our representative

- EURACHEM formal role to be discussed offline (Maria Filomena is current representative)
- ICTNS. Clara to continue as Division representative
- PAC Editorial Board: Zoltan to continue as our representative.
- CAMS UK initiative on analytical chemical science Derek to update at next meeting
- Codata to be discussed further offline

David will update the list with amends to committee titles and representatives.

## **Awards Committee**

- Past president chairs this committee which will be Zoltan (David to discuss with Zoltan). Jan also to continue serve on committee.
- External committee members need to be identified.
- Fabiana expressed interest in being involved on this committee
- The Early Career Subcommittee to be involved in the "emerging scientist" award.

#### AOB

- IUPAC webpage needs to be updated to reflect all of our activities: David to work with Fabienne Myers to achieve this.
- Encouragement given to subcommittees to meet in January
- Full committee meeting to be scheduled in February

## Screen shot on vote for the establishment of the early career sub committee

00:57:38	Zoltan Mester: would you support the	establishment of a new early career sub committee?
00:57:39	T. Pradeep: Yes.	•
00:57:42	Charles Lucy: Yes	
00:57:43	Stephen Worrall: Yes	
00:57:45	Danny van Oevelen: yes	
00:57:46	Petra Krystek: yes	
00:57:46	Louise jingbo.liu@tamu.edu: Yes	
00:57:47	Luisa Torsi: yes	
00:57:49	Alessandro Minguzzi: Yes!	
00:57:53	Brynn Hibbert: yes	
00:57:53	TakaeTakeuchi: yes	
00:57:53	DavidShaw: yes	
00:57:55	Ruchi Gupta: Yes	
00:57:56	Fabiana Piscitelli: Yes	
00:57:56	zina kuselman: Yes	
00:57:56	Malar: Yes	
00:57:59	Zoltan Mester: yes	
00:58:02	Nicola Sangiorgi: yes	
00:58:03	Ivo Leito: Yes	
00:58:05	YuJu Chen: yes	
00:58:08	Maria Camoes:yes	
00:58:09	MUSTAFA REŞAT APAK: Yes-Re	esat
00:58:09	claramagalhaes: yes	
00:58:09	David Palkech: Yes	
00:58:16	Luisa Torsi: yes	
00:58:17	DavidShaw: yes	
00:58:20	Érico Flores - UFSM: Yes	
00:58:34	Derek Craston: yes	
00:58:36	Susanne Wiedmer: yes	