



*International Union of Pure and Applied Chemistry*  
Analytical Chemistry Division

**Division V Committee Meeting at 49<sup>th</sup> IUPAC General Assembly**  
**WTC Sheraton Hotel, Sao Paulo, Brazil**

Saturday 8 July, 2017, 09:00 to 17.30

Sunday 9 July, 2017, 08:00-16:30

**Minutes**

**Present**

Jan Labuda, Slovakia	TM - President
Zoltan Mester, Canada	TM - Vice President
D. Brynn Hibbert, Australia	TM - Past President
Derek Craston, UK	TM
Takae Takeuchi, Japan	TM
David G. Shaw, USA	TM
Érico M. M. Flores, Brazil	AM
M. Clara F. Magalhães, Portugal	AM
M. Filomena Camões, Portugal	AM
Earle Waghorne, Ireland	NR
Lea Sibulelo Vilakazi, South Africa	NR
Wandee Luesaiwong, Thailand	NR
Serigne Amadou Ndiaye, Senegal	YO
Irene Rodriguez Meizoso, Sweden	YO
Patricia Grinberg, Canada	YO
Jiri Barek, Czech Republic	YO
Nunzianda Frascione, UK	YO
Raychelle Burks, USA	YO

Apologies

Attila Felinger, Hungary - Division Secretary (TM)

Tatiana Maryutina, Russia (TM)

Sandra Rondinini, Italy (TM)

Heli M.M. Sirén, Finland (TM)

Hasuck Kim, Korea (AM)

Slavica S. Ražić, Serbia (AM)

Stefan Tsakovski, Bulgaria (NR)

Huan-Tsung Chang, China Taipei (NR)

Medhat A. Al-Ghobashy, Egypt (NR)

Ales Fajgelj, Slovenia (NR)

Resat Apak, Turkey (NR)

Muhammad Makshoof Athar, Pakistan (NR)

### 1. Welcome (Jan Labuda), introduction and arrangements

The President welcomed all the Div V members and Young Observers and invited them to take a full part in the discussions of the Div V. All participants presented themselves and President cited the reasons for non present members. Erico Flores mentioned about Brazilian Society of Chemistry and Analytical Chemistry in Brazil. President set the meeting time and informed about the visit to Division V by the Secretary General on 8 July, 2017 at 11:00 - 11:30.

### 2. Approval of Agenda

Approved.

### 3. President remarks

President described the improvements in IUPAC webpage and IUPAC strategic plan (<https://iupac.org/who-we-are/strategic-plan/>). Div V activity has been stated in the Teamwork and reports to the Bureau. President Jan Labuda: strategic plan has started since two years and was reformulated. Zoltan Mester suggested preparing a Div V strategic plan for the next biennium. Following the renewal of the IUPAC webpage the Div V has changed its website including that part of the Division V subcommittees. David Shaw also mentioned about improvements in webpage and asked to think about individual projects.

### 4. Reports:

- Division Meeting, Bratislava 19 –21 March, 2016, Minutes and a review of actions arising from the ACD meeting – *Zoltán Mester*. The minutes of this meeting are still missing. Some information is in Teamwork document: ([https://www.dropbox.com/preview/IUPAC%20\(for%20ACD\)/2017%20Sao%20Paulo/TEAMWORK%202017.pdf?role=personal](https://www.dropbox.com/preview/IUPAC%20(for%20ACD)/2017%20Sao%20Paulo/TEAMWORK%202017.pdf?role=personal)).
- 98<sup>th</sup> Bureau Meeting, 8-10 April, 2016, Montreal and 99<sup>th</sup> Bureau Meeting – *Jan Labuda*: Reports on the Bureau meetings have been done by Div V President. Brynn Hibbert mentioned that web-based meetings are suitable and can be performed more often. Jan Labuda told that during a 3 h meeting some participants had problems of internet access. Zoltan Mester is accompanying the website update.
- Jan Labuda has reported information from the Division Presidents meeting on 08 July, 2017 (IUPAC meeting, São Paulo). JL reported about IUPAC investments, publishing activities and Budget Update. Brynn Hibbert said incomes came from Div V activities, e.g., books publication. Div V is a source of incomes for IUPAC, public results, national subscriptions, projects, etc.
- 99<sup>th</sup> Bureau Meeting, Web-based Go To Meeting, 8 April 2017 – *Jan Labuda* showed the IUPAC Income Statement - Summary. Div V will receive few support for 2018, for 2019 it should be slightly better. Filomena Camões: we should pay more attention to the income numbers and asked for that in the next biennium. Jan Labuda: in 2019 it should be about 20% higher than 2018. Jan Labuda also showed the information related to "Finances by 31 May 2017", there are about 20% remaining for 2017 expenses (about USD 7.610,00). Zoltan Mester asked if in 2017 some of Div V projects received funding from other divisions. Jan Labuda: yes, he is coordinating a project involving Divisions VI and VII.

### 5. Reports from Subcommittees to the Division

- **Subcommittee on Solubility and Equilibrium Data (SSED)** - *M. Clara Magalhães, David Shaw*: Clara Magalhães (SSED sub-committee chair) presented a report from July 2016 to July 2017. CM mentioned about the merging two previous committees (Solubility and Equilibrium Data) and presented Power Point slides for this report.

**At 11:00 h a short interruption to receive the Secretary General of IUPAC (Richard M. Hartshorn, New Zealand): after a short introduction, he asked how can he help the Div V. He will be in charge for more two years and asked for a special care for new changes or trends in Chemistry as , eg., sustainability.**

Following the SSED report David Shaw mentioned that makes no sense to separate solubility of equilibrium data. He mentioned another meeting on 06 July about how to evaluate data, use of network, how to improve data availability for chemists. Clara Magalhães showed the publications of two volumes in 2016 and 2017 (volumes 89 e 104), still incomplete SDS volumes to be published (volume 92/part 2 and 95/part 3), publications in Pure and Applied Chemistry journal, interest groups. She also showed projects still running. She talked about the last sub-committee meeting and informed about the next meeting in September 2017 (Graz, Austria that will be in cooperation with Franzosini award for young contributor for ISSP meetings). Zoltan Mester asked about standard format for data generation. David Shaw clarified that this is not a single database but also brings information traceable for the publication, stability constants e solubility and equilibrium. Zoltan Mester suggested a database for all data of this subcommittee in a standard and friendly format if possible. Clara Magalhães and David Shaw agreed and will evaluate this possibility.

- **Subcommittee on pH** – *M. Filomena Camões*: Filomena Camões (sub-committee chair) presented some slides about this sub-committee activities. Comparison of data is difficult because data format is different. It is important because equilibrium data are one of the main sources of uncertainty in Analytical Chemistry. She reported about metrological problems for industry and comments about Teamwork issue nr. 16, January 2012. ; The webpage was described as well as pointed out the activities as, e.g., promoting a general understanding about data, establishing and dissemination of traceability, addressing new challenges. Projects still running were mentioned, EURAMET- focus on an unified pH scale. This sub-committee produced a guide to access and use data; CCQM is working together. She informed a trip to Brazil in September/2017 in Belo Horizonte to a meeting. She mentioned about pH measurements in non aqueous medium, projects on biofuels (pH for olive oil and other oils)

**6. Reports from Task Groups OB** – *D. Brynn Hibbert*: Brynn Hibbert presented a full description of OB project. He mentioned that the revision of the Orange Book is in the final step. He described the advances for each of the twelve chapters. E.g., Chapter of Sampling and Sample Preparation is being revised by Zoltan Mester, C. Poole, J. Pawlizyn, S. Pedersen-Bjergaard, M. Miró (IUPAC Technical Report; Pure Appl. Chem. 2016, 88 (7), 649-687 and Pure Appl. Chem. 2016, 88 (5), 517-558). He mentioned about publication with RSC, 1000 pages (manuscript submitted by 31 March 2018). More information on [https://www.dropbox.com/preview/IUPAC%20\(for%20ACD\)/2017%20Sao%20Paulo/ReportonOrangeBook.pptx?role=personal](https://www.dropbox.com/preview/IUPAC%20(for%20ACD)/2017%20Sao%20Paulo/ReportonOrangeBook.pptx?role=personal)

Earle Waghorne mentioned that there is a project managing system for OB and others and why this system was not being used. M. Filomena Camões and Brynn Hibbert answered that it not so simple. Christopher Brett also added some comments about OB.

**Report on the 'Human Errors', Project 2016-007-1-500 - Brynn Hibbert (the order of this topic was changed in the original agenda)**: Brynn Hibbert mentioned about his papers in Accred. Qual. Assurance/2016 and Talanta/2017 journals and also about an accepted paper in Talanta/2017. He also described about key findings. About a question related about a possible relationship between ISO and IUPAC, Brynn answered that both are independent institutions but interaction is possible and even welcome. Filomena Camões added that IUPAC is a scientific institution and ISO not but companies must follow the ISO recommendations but not necessarily the IUPAC recommendations.

**At 14:30 h a short interruption to receive the representatives of Committee on Chemistry Education (Dr. Mustapha and his colleague). They mentioned about efforts for cooperation with Div V and other divisions and committees in order to get joint projects between Chemistry Education and Div. V.**

Break for coffee break (15 a 15:20 h, 08/07/2017) and picture of participants:



## 7. Project policy of the Division

### - Review of Project Progress Reports

- i) Division projects – *Jan Labuda*: President showed the status of Div V projects. It was noticed that there were two repeated projects (Belli) and one of them was cancelled and remaining funds should be transferred to SSED sub-committee. Eight projects were completed (Bonardi/2003, Malek/2010, Voigt/2011, Pauliszyn/2011, Eisseltova/2012, Apak/2013, Magalhães/2014, Kuselman/2014). Filomena Camões: IUPAC should ask for reports for chairpersons and evaluate if project is on progress or not to decide for prolonging it or to cancel. Jan Labuda will ask for IUPAC treasurer an update about the status of projects, if they are active or not. Zoltan Mester asked to hear from the authors if they still will be active before deciding to extend them for more time. Funds for the SSED projects have been spent in spring 2016 and it seems that new projects included in the proposed project list (Oracz, Eyssetova, Filella 2x) cannot be supported financially from the Div V funds within this biennium. It was decided to prolong end dates of project indicated till the end of 2017. Recommendation about keeping or not the projects was made as follows:

#### 2001-063-1-500 Smith - situation?

2005-035-2-500 Belli - will be closed

2002-044-1-500 Scharlin - will be finished in 31 Dec 2017 (should be coordinated by Alex De Visscher)

2005-035-2-500 Belli - to keep it

2008-025-1-500 Filella - will be finished in 31 Dec 2017

2009-006-1-500 Ellison - will be finished in 31 Dec 2017

2010-030-1-500 Chai - will be closed

2010-052-1-500 Pingarron - closed in June - will be finished in 31 Dec 2017

2011-043-1-500 Shaw - project is completed - will be closed

#### 2011-046-1-500 Maryutina - situation?

2011-047-1-500 Labuda - with respect to revisions of the OB chapter should be prolonged to Dec 2018

2011-065-3-500 Bendova - will be closed (more expenses than fund)

2011-004-1-500 Gamsjager - since last October under Clara Magalhães' coordination (but is not finished) - It will be prolonged to 2018.

2012-006-1-500 Lorimer - should be finished in 30 June 2017 ("zero" funding)

2012-008-1-500 Hefter - money spent, needs extension of period - will be finished in 31 Dec 2017

2012-022-1-500 Eyssetova - will be finished

2012-030-1-500 Guminski - she already finished the project and published the results

2012-031-1-500 Shaw - will be finished in December/2017  
2013-013-1-500 Camoes - will be finished in December/2017  
2013-015-1-500 Apak – planned end date 30 June 2018  
2013-025-2-500 Westwood - will be finished in 31 Dec 2017  
2013-034-1-500 Gaune-Escard - will be prolonged  
2014-025-1-500 Hibbert - planned end date 31 Dec 2018  
2015-008-2-500 Apak - will be finished in 31 Dec 2018  
2015-020-2-500 Leito - planned end date 30 June 2018  
2015-021-1-500 Hibbert - will be finished in 31 Dec 2018  
2015-024-2-500 Hibbert - will not use this money (will try to make another project with Vin and Gum)  
2015-028-2-500 Camoes - will be finished in 31 Dec 2017  
2015-044-2-500 Bendova - planned end date 31 Dec 2018  
2015-051-1-500 Voigt - planned end date 30 June 2018  
2016-003-1-500 Atanassova - planned end date 30 June 2018  
2016-004-1-500 Filella - must be prolonged  
2016-005-1-500 Nordstrom - planned end date 30 June 2018  
2016-007-1-500 Kuselman - planned end date 30 June 2018  
2016-043-1-500 Shaw - will be finished in 31 Dec 2017  
2017-05-3-500 - Labuda - The project has just started.

ii) SSED projects – *Clara Magalhães (already discussed in item "i")*. Filella will be noticed that no more projects would be approved before finishing the ones under progress. Jan Labuda will send a message for Div V members asking for new projects up to the end of this year.

iii) Interdivisional projects, projects under completion – *Zoltán Mester*. 02 proposals, 2016-041-1 (Filella, SSED) e 2016-042-1 (Filella SSED).

iv) Projects with difficulties or with limited progress – *Zoltán Mester* told about some projects with little progress.

- **Proposal in review** – *Jan Labuda*. Zoltan Mester suggested to use the sale/balance of operations USD 3.794,44 to support accommodation of this year and partial of next meeting (coffee break, etc). Approved

- **Call for New project proposals**- *Jan Labuda* asked for new projects up to 31<sup>st</sup> October 2017.

## 8. Short reports from liaisons throughout the biennium

a) Interdivisional Committee on Terminology, Nomenclature and Symbols (ICTNS) - *Attila Felinger* - *AF was not present in this meeting/2017*.

b) Committee on Chemical Education (CCE) - *Filomena Camões*. She is associated member of CCE, reported main activities in congress of Chemical Education (this year it will be in Malaysia). There is a session in this congress with activities for teaching chemistry, not so obvious for chemical skills and related to projects. She mentioned about a session in July 09/IUPAC meeting for discussion about the future of chemical sciences. It is not sure if Dr. Mustapha (Turkey) will be changed due to political turbulences in his country but she will contact him to clarify the situation.

c) Committee on Chemical Industry (COCI) - *Jan Labuda*. Regular committee, very active group and secretary (in UK) with activities in two directions: keep the contact between chemistry and chemical industry and second main goal to obtain new members supporting IUPAC.

## IUPAC Analytical Chemistry Division

There will be a committee's meeting today (July 09) during the lunch time. Visit to Chinese chemical productions.

- d) Committee on Publications and Cheminformatics Data Standards (CPCDS) - *Brynn Hibbert*  
*He reported the activities.*
- e) Committee on Chemistry Research Funding - *Jan Labuda*. *There was no contact since the last year from that Committee.*
- f) Pure and Applied Chemistry Editorial Advisory Board (PAC-EAB) - *Zoltán Mester*  
PAC is a publication of IUPAC; there is a discussion to name change and a contract to De Gruyter publisher under progress.
- g) International Committee on Weights and Measures/Consultative Committee on the Amount of Substance (CIPM/CCQM) - *Zoltán Mester*. *Filomena mentioned about CCQM. ZM is involved in committee meeting of Mol and related issues. There was an early meeting in April where discussion about definition of Mol and effort to set artifacts definition (e.g., kilogram).*
- h) ISO-Committee on Reference Materials (ISO/REMCO) - *Aleš Fajgelj*  
*There was a meeting last week (July/2017) in Berlin; production of CRMs, ISO standards for reference materials.*
- i) Joint Committee for Guides in Metrology (JCGM) - *Zoltán Mester*  
*No additional reports*
- j) Joint Committee for Guides in Metrology Working Group1 (JCGM WG1) – (Steven Ellison (UK), Juris Meija (Canada)) - *Zoltán Mester*  
*Report in Dropbox*
- k) Joint Committee for Guides in Metrology Working Group 2 (JCGM WG2) – (Gunnar Nordin (Sweden) - *Zoltan Mester*  
*No reports*
- l) Inter-Agency Meeting (IAM) - *Zoltán Mester*  
*Zoltan Mester is not involved anymore*
- m) EUChEMS - *Slavica Razic, Jan Labuda*  
*Jiri Berek, Irene and Filomena mentioned about Analytical Chemistry difficulties for funding and motivating young generation. It is difficult to teach or discuss Analytical Chemistry issues in the final semester of graduation courses, other disciplines are more visible to students (they remember titration and simple things).*
- n) African analytical network - *Nelson Torto, Zoltán Mester*  
*No reports*
- o) CITAC – (*Ilya Kuselman/ Aleš Fajgelj*) - *Zoltán Mester* - *No reports. Filomena Camões: Dr. Ricardo/Portugal (see below) will be a member for the next biennium*
- p) CODATA – *Clara Magalhães* - *Representative of IUPAC in CODATA: two branches, evaluation and publication and technical branches. Nobody contacted Clara, few information: she can not be a representative of ACD if she did not receive any information. She did not receive funds for travel. Next meeting should be in September/2017.*

q) EURACHEM - *Filomena Camões*

Filomena Camões: she is not a member of secretariat of EURACHEM but Dr. Ricardo/Portugal is a member of projects task force. Ricardo attended the General Assembly (last meeting of EURACHEM in Chipre). There is information from a colleague that IUPAC will publish VIM for technical analysis. There is a new committee where Ricardo is participating.

**9. Discussion/update on SI/redefinition** - Update on the IUPAC mole project - *Zoltán Mester*  
*Zoltan Mester is a membership. It will be discussed in the proper session*

**10. Report on the 'Human Errors'**, Project 2016-007-1-500 - *Brynn Hibbert*– *This issue was already discussed after "6"*.

**11. Division membership and structure for 2018 – 2019 biennium** – *Zoltán Mester*: He presented the next Div V members for 2018-2019 biennium. He pointed out the need to comply with regional, gender, etc distribution and presented the elected members. The Bureau will be contacted to have the confirmation if Attila Felinger/Hungary will accept the nomination. Petraa Krystek: she will confirm the acceptance. There is a good balance considering gender and geographic distribution (26 members).

DP	Zoltan Mester	Canada
DVP	Erico M. M. Flores	Brazil
DS	Takae Takeuchi	Japan
PP	Jan Labuda	Slovakia
<b>TM</b>		
Solubility and Equilibrium	David G Shaw	USA
Mass spectrometry	Medhat A Al-Ghobashy	Egypt
Spectrochemical Methods	Irene Rodríguez Meizoso	Sweden
Separation	Attila Felinger	Hungary
Electrochemistry	Sandra Rondinini	Italy
New technologies / metrology	Derek Craston	UK
<b>AM</b>		
	Maria Clara Magalhães	Portugal
	Maria Filomena Camoes	Portugal
	Tatiana Maryutina	Russia
	Jiri Barek	Czech
	Petraa Krystek	Holland
	Ilya Kuselman	Israel
<b>NR</b>		
	Brynn Hibbert	Australia
	Hongmei Li	PRC
	Winfield Earle Waghorne	Ireland
	Mustfa Culha	Turkey
	Wandee Luesaiwong	Thailand
	Bogusław Buszewski	Poland
	Mariela Pistón	Uruguay
	Frank Vanhaecke	Belgium
	Serigne Amadou Ndiaye	Senegal
	Susanne Wiedmer	Finland

**12. ACD representatives to other IUPAC bodies, external committees 2018 – 2019 - Zoltán Mester**

Jan Labuda presented the members (there is a copy in the brochure of Teamwork).

Internal:

ICTNS: M. Clara Magalhães

CCE: Maria Filomena Camões

COCI: Jan Labuda

CPCDS: Div V. Brynn Hibbert was changed of CPCDS by David Shaw

PAC-EAB: Zoltan Mester will continue.

Div VIII Chemical Nomenclature and Structure Representation: Maria Clara Magalhães.

External:

CIPM/CCQM: Zoltan Mester and Derek Craston (Ales Fajgelj was changed);

ISO/REMCO: Ales Fajgelj was substituted by Ilya Kuselman.

JCGM: Zoltan Mester

JCGM WG1: Steven Ellison, Juris Meija

JCGM WG2: Zoltan Mester, Gunnar Nordin

IAM: Zoltan Mester

EUCHEMS: Slavica Razic was changed by Jiri Barek and Jan Labuda

African Analytical Network was substituted by SEANAC (African Network of Analytical Chemists): Nelson Torto was changed. Zoltan Mester suggested to remove this organization and change to Federation of African Society of Chemistry (this will be the next institution linked to Div V): new representative Serigne Amadou Ndiaye

CITAC: Ales Fajgelj was changed by Ilya Kuselman

CODATA: M. Clara Magalhães and James Sangster

EURACHEM: Maria Filomena Camões.

M. Clara Magalhães, Zoltan Mester and Maria Filomena Camões mentioned a problem related to nominations because the members are selected in the middle of the current year for the next biennium starting in January of next year but the elected people that will be involved in future activities are not present in this meeting to have a more easy transition. David Shaw and Zoltan Mester agreed to make more efforts to keep Div V members in contact between them.

**13. Review of Division operations – Jan Labuda, Zoltán Mester**

a) Division funds

Jan Labuda presented the budget related to Div V funds. We have still time to receive new proposals up to the end of this year. It can be funded in cooperation with other divisions.

b) Division priorities and core business

Jan Labuda: Strategic plan of IUPAC, to insert Div V information.

c) Task Groups

Jan Labuda: people solving problems in Task Groups should perform it within the proposals (projects). Chair of task groups should ask for funding.

d) Division Elections –fields of interest

Zoltan Mester: it can be discussed in March/2018 with new elected people. 08 topics of interest, bioanalytical chemistry. IUPAC webpage will change (May 2018);

e) Engagement of Division members

Jan Labuda suggested to contact members of National Representatives to send possible topics of interest.

f) Other



**14. Division key products - All**

- a) Orange Book - Zoltan Mester: Orange Book project is coming slowly but sure to the end. It will provide more funds for IUPAC
- b) SC-database - no suggestions
- c) SDS
- d) CI articles - no suggestions
- e) Web page - already discussed
- f) Teamwork - already discussed
- g) Division brochure - no suggestions, Div V never had that.
- h) Conferences and workshops - It is not applied for IUPAC support. Jan Labuda: we could ask for support for young students to participate in scientific meetings.
- i) Any other initiative - no suggestions

**15. Interdivisional meetings**

- a) Inter-divisional meeting of Divisions I, II, and V, in room Div I, Sunday, 9 July at 11:30 - 12:15, chair: Jurgen Sthoner (I) - A project for compilation of existing publish work for definition of quantitative amount of substance and the definitions of unit was presented. Project Output: Technical Report published on doi:10.151/pac-2016-0808 2017 (new definition of mole).
- b) Inter-divisional meeting of Divisions V and VI, in room Div VI, Sunday, 9 July at 11:30 - 12:15, chairs: Jan Labuda (V) and Petr Fedotov (VI)

**16. Next ACD meetings**

The next Div V meeting will occur in the beginning of the next year after the Bureau meeting. It will be in Nara, Japan. Earle asked if it could be in another place to be more inexpensive for most of people. Zoltan Mester commented that now we have five people from East Asia and in Japan it could be a good balance to organize the next meeting in Asia (Nara, Japan -Approved).

**17. AOB**

**Other Meetings**

- a) Division Presidents and DVP, Standing Committee Chairs, vice chairs, and Secretaries briefing, Saturday, 8 July (08:00-09:00)
- b) IUPAC-NIST data series/Springer/NIST/Copyright, Friday, the 7 July at 2:00 pm in the room Degas / Saturday, 8 July, 2.00-3.00 p.m.
- c) COCI annual meeting, Sunday, 9 July, 08:00 - 12:00, 13:00 - 17:00
- d) CCE Sunday, 9 July (08:00-16:30), Monday, 10 July at 09:00 - 15:00
- e) IUPAC 100 (Mary Garson), Monday, 10 July at 14:00 - 16:00
- f) Interdivisional Discussion of Critical Evaluation of Chemical Data, Project 2016-043-1-500 (Shaw) - Tuesday, 11 July at 09:00-12:30
- g) Division Presidents, Tuesday, 11 July (11:00 - 13:00)
- h) Bureau, Tuesday, 11 July at 14:00-18:00, Friday, 14 July (*including newly elected members and incoming DPs and Chairs*) at 9:00-12:00
- i) Orange Book, Project 2012-005-1-500 (Hibbert) – Wednesday 12 July at 09:00 - 12:30
- j) IUPAC Council Meeting, Wednesday, 12 July 2017 at 09:00 - 12:30, Thursday, 13 July at 09:00 – 17:00