

50th IUPAC COUNCIL MEETING Paris, France, 10-11 July 2019 DETAILED AGENDA

Reference should be made to the Agenda Book for background information relating to the agenda items

Day One 10th July 2019

1 [13:00] Introductory Remarks and Finalization of Agenda

[Prof. Zhou]
[For Information]

2 [13:10] Approval of Minutes of 49th Council Meeting and Matters Arising

[Prof. Zhou]

[For Information and Decision; voting by show of hands]

The draft minutes of the 49th Council meeting are in the Agenda book for review.

Motion: *Minutes of* 49th *Council Meeting in São Paulo, Brazil are approved.*

3 [13:20] <u>Ratification of Decisions Taken by Bureau and Executive Committee since 49th General Assembly</u>

[Prof. Zhou]

[For Information and Decision; voting by show of hands]

All decisions taken by the Bureau and Executive Committee through calendar year 2018, since those approved by the Council at São Paulo, Brazil (Minute 3, 49th Meeting), are contained in the following Minutes, which were distributed to National Adhering Organizations on the dates shown:

100^{th}	Bureau (São Paulo, Brazil, July 11 & 14, 2017)	07 September 2017
101 st	Bureau (Bratislava, Slovakia 7-8 April 2018, Draft)	16 January 2019
102 nd	Bureau (Virtual Bureau, 6 April 2019, Draft)	·
156^{th}	Executive Committee (London, UK 18-19 November 2017)	19 January 2018
$157^{\rm th}$	Executive Committee (Alcala, Spain 8-9 November 2018)	07 June2019

A summary of the decisions taken is in the Agenda book.

Motion: Council ratifies all decisions taken by the Bureau and Executive Committee through calendar year 2018, since those approved by the Council at São Paulo, Brazil (Minute 3, 48th Meeting).

3.1 Finance Committee Options Work Group Report

[Prof. Brett]
[For Information]

The Council is asked to review this report, included in the Agenda book, which pertains to IUPAC Structure and organizations.

4 [13:30] Adoption of Recommendations on Nomenclature and Symbols

[Prof. Hartshorn]

[For Information and Decision; voting by show of hands]

Motion: Council formally adopts the Recommendations approved by the Interdivisional Committee on Terminology, Nomenclature and Symbols (ICTNS) and published, or scheduled to be published, in Pure and Applied Chemistry from August 2017 through June 2019.

5 [13:35] Announcement of Nominations for Union Officers and Bureau Members

[Prof. Hartshorn] [For Information]

According to Statute 5.401, Council must elect (1) Officers of the Union and (2) Elected Members of the Bureau at its upcoming meeting in Paris, France.

According to Bylaw 2.221, nominations are due at least two months prior to the beginning of the Council at which the elections will take place.

The nominations for the various positions that fall vacant at the end of 2019 were received by the Secretary General at the IUPAC Secretariat by 10 May, 2019.

Elected Members of Bureau: Five Vacancies

The Bureau consists of the Officers, the eight Division Presidents, Standing Committee Chairs and no less than ten other members elected by Council, who are known as "Elected Members". Elected Members serve a four year term. No National Adhering Organization shall have more than one Elected Member on the Bureau. The statute also states that: "the principle of fair geographical representation of Members shall be taken into account".

At the conclusion of the 49th Council at Sao Paulo, there were ten Elected Members on the Bureau. At the 50th Council in Paris, France, the Bureau will make recommendations to Council as to the number of Elected Members (ten or more) who should be on the Bureau for the succeeding two years. At least five Elected Members will be elected at the 50th Council in Paris, i.e., the minimum number of ten Elected Members less the five Elected Members who continue in office until 2021.

The nominees CV's, Biographies, Photos and Vice President's Statements may be found in the Agenda book.

5.1 Candidates for Vice President

Prof. Javier García-Martínez (Spain)

Prof. Dr. Supawan Tantayanon (Thailand)

5.2 Candidate for Secretary General

Prof. Richard Hartshorn (New Zealand) Second Term (2020-2023)

5.3 Candidate for Treasurer

Mr. Colin Humphris (UK) Second Term (2020-2023)

5.4 Candidates for Members of Bureau

Prof. Zhigang Shuai (China)

Dr. Ghada Bassioni (Egypt)

Dr. Rabeay Hassan (Egypt)

Prof. Mir Wais Hosseini (France)

Dr. Bipul Behari Saha (India)

Prof. Ehud Keinan (Israel)

Prof. Pietro Tundo (Italy)

Prof. Kew-Ho Lee (Korea)

Prof. Gloria Obuzor (Nigeria)

Dr. Carlos Tollinche (Puerto Rico)

Dr. Petr Fedotov (Russia)

Prof. Mei-Hung Chiu (Taipei, China)

Note: If any Elected Members of Bureau who are continuing, or any candidates for Bureau, are elected to a position as Officer, Division President, or Standing Committee Chair, they are not eligible to continue or to be elected to the Bureau at this election for the 2020-2021 biennium. Should that occur there may be additional elected positions to be filled. In addition, only one of the nominees from Egypt can be elected. Should one of them be elected, the other's name will be removed from the ballot for subsequent rounds of voting.

Note: If re-elected the current Treasurer will stand down at the end of 2022 after two more years. The Officers felt it wise to ensure the terms of future Secretary General and Treasurer were decoupled. Mr. Humphris will have served 8 years as an officer at that point - the first two as Acting Secretary General.

6 [13:45] Announcement of Time of Elections

[Prof. Hartshorn] [For Information]

The elections for Vice President and Elected Members of the Bureau will be held at **09:00** hours on 11 July 2019.

Motion: Council approves the appointments of TBD and Jan Reedijk (Netherlands) and Dr. Fabienne Meyers (IUPAC Secretariat) as Election Tellers.

7 [13:50] <u>Statutory Report of President on State of the Union</u>

[Prof. Zhou] [For Information]

The president will report on the challenges and accomplishments of the Union in the current biennium. To further implement the Strategic Plan, IUPAC introduced new programs for different categories of members, approved a new National Subscription model, improved project management and Division/Committee operation, took initiatives in cheminformatics and chemistry for sustainable development, engaged more with the young generation and strengthened collaboration with other international organizations. Apart from making continuous scientific contributions, volunteers in Divisions and Committees also actively participated celebrations of IUPAC Centenary and IYPT2019 organized by Union bodies and NAOs. To celebrate our 100-year history also offers a good opportunity to review the Union's overall conditions and to think about its future. The detailed report is available in the Council agenda book.

8 [14:10] <u>Vice President's Critical Assessment</u>

[Prof. Brett]
[For Information]

The Vice President's critical assessment was submitted to Bureau on 6 April 2019 and is included in the Agenda book. The report examines IUPAC's activities in the context of the strategic plan and mission. It addresses the future development of IUPAC and its scientific priorities for responding to challenges in the chemistry community and globally, as well as ensuring the legacy of the IUPAC Centenary and the International Year of the Periodic Table. It also discusses reviewing the IUPAC structure to effectively respond to future scientific challenges and ensure organizational sustainability.

9 [14:30] Report of Secretary General

[Prof. Hartshorn] [For Information and Discussion]

The Secretary General will report on the operation of the Secretariat and on initiatives taken to advance the work of the Union. The report to Council is presented in the Agenda book with the main headings being:

- Secretariat staffing and workload
- Conference endorsements and gender balance
- Visits to Divisions and Committees
- Strategic relationships
- Procedural issues

10 [14:50] <u>Applications for National Adhering Organization (NAO) and Associate National</u> <u>Adhering Organization (ANAO) Status-Ratification</u>

[Prof. Hartshorn]

[For Decision; voting by show of hands]

There are three applications for National Adhering Organizations.

10.1. <u>Singapore National Institute of Chemistry (SNIC) New NAO Status.</u>

The application and supporting documents are in the Agenda book for review. Bureau has reviewed the application material and recommended their application be put forth to Council vote. The National Subscription has been calculated using the new model approved by Council in 2018. The 2020 subscription for SNIC will be \$12,465 and will be entitled to cast 4 Votes, if approved.

Motion: Council approves the Singapore National Institute of Chemistry (SNIC) as a National Adhering Organization effective 1 January 2020.

10.2. Costa Rica (LANOTEC-CeNAT) NAO Readmission

Costa Rica was notified January 2016 that they were no longer considered a Provisional NAO as they were 24 months in arrears (2014-2015). They submitted a readmission application in October 2017 and paid all monies owed to IUPAC (2014-2018). Their application and supporting documents are in the Agenda book. It is important to note that communication was lost with Dr. Vega-Baudrit due to an email address change and IUPAC did not have a secondary contact person for Costa Rica. The 2020 subscription for LANOTEC-CeNAT will be \$1,000 and will be entitled to cast 1 vote, if approved.

Motion: Council approves the LANOTEC-CeNAT as a National Adhering Organization effective 1 January 2020

10.3. Jordan (Jordanian Chemical Society) NAO Readmission

The Jordanian Chemical Society was notified beginning in November of 2018 that they were approaching 24 months in arrears. We were notified of a change in President and sent email communications between IUPAC and JCS regarding payments between January 2019 through April 2019. It was decided by Bureau that payment had to be made by 29 April 2019 and a readmission application be filed for Council reinstatement. We received payments by the deadline for all monies owed. Their application is in the Agenda book for reference. The 2020 National Subscription for the Jordanian Chemical Society will be \$1,000 and will be entitled to cast 1 vote, if approved.

Motion: Council approves the Jordanian Chemical Society as a National Adhering Organization effective 1 January 2020.

[15:25-15:45 Refreshment Break]

11 [15:50] Reports of Division Presidents (Written reports will be received and 10 minutes allowed for questions and discussion on each)

[Prof. Hartshorn]

[For Information and Discussion]

- 11.1. [15:50] Division I Physical and Biophysical Chemistry Division
- 11.2. [16:00] Division II Inorganic Chemistry Division
- 11.3. [16:10] Division III Organic and Biomolecular Chemistry Division
- 11.4. [16:20] Division IV Polymer Division
- 11.5. [16:30] Division V Analytical Chemistry Division
- 11.6. [16:40] Division VI Chemistry and the Environment Division
- 11.7. [16:50] Division VII Chemistry and Human Health Division
- 11.8. [17:00] Division VIII Chemical Nomenclature and Structure Representation Division

12 [17:10] Approval of Divisional Rules

[Prof. Hartshorn]

[For Information and Vote]

Statute 10.3 provides that Divisions may adopt rules for their operations in addition to those specified elsewhere in the Statutes and Bylaws. Those rules must be approved by Council. The sets of rules are presented in the Agenda book.

Motion: Council approves the proposed sets of Division Rules.

13 [17:15] Approval of Elected Officers of Division Committees

[Prof. Hartshorn]

[For Decision; voting show of hands, or by simple majority (Bylaws B 2.2.3 and B 3.15)

Officers of the eight IUPAC Divisions are listed below for approval by the Council.

Position	Division I	Country	Term of Service	
President	Dr. Tim Wallington	USA	2020-2021	
Past-President	Prof. Ron Weir	Canada	2020-2021	
Vice President	Prof. Pierangelo Metrangolo	Italy	2020-2021	
Secretary	Prof. Attila Csaszar	Hungary	2020-2021	
Position	Division II	Country	Term of Service	
President	Prof. Lars R. Ohrström	Sweden	2018-2021	
Past-President	Prof. Jan Reedijk	Netherlands	2018-2021	
Vice President	Javier Garcia-Martinez	Spain	2018-2021	
Secretary	Prof. Dan Rabinovich	USA	2020-2021	
Position	Division III	Country	Term of Service	
President	Prof. Nikolay E. Nifantiev	Russia	2020-2021	
Past-President	Prof. Francesco Nicotra	Italy	2020-2021	
Vice President	Prof. Amelia P. Rauter	Portugal	2020-2021	
Secretary	Prof. Sławomir Jarosz	Poland	2020-2021	
Position	Division IV	Country	Term of Service	
President	Prof. Christine Luscombe	USA	2020-2021	
Past-President	Prof. Gregory Russell	New Zealand	2020-2021	
Vice President	Prof. Igor Lacik	Slovakia	2020-2021	
Secretary	Prof. Paul Topham	UK	2020-2021	
Position	Division V	Country	Term of Service	
President	Dr. Zoltan Mester	Canada	2018-2021	
Past-President	Prof. Jan Labuda	Slovakia	2018-2021	
Vice President	Dr. David Shaw	USA	2020-2021	
Secretary	Dr. Derek Craston	UK	2020-2021	
Position	Division VI	Country	Term of Service	
President	Prof. Hemda Garelick	UK	2020-2021	
Past-President	Prof. Rai Kookana	Australia	2020-2021	
Vice President	Prof. Roberto Terzano	Italy	2020-2021	
Secretary	Prof. Annemieke Farenhorst	Canada	2020-2021	
Position	Division VII	Country	Term of Service	
President	Prof. Rita Cornelis	Belgium	2020-2021	
Past-President	-	21510111	2020 2021	
Vice President	Dr. Helle Moller Johannessen	Denmark	2020-2021	
Secretary	Prof. Vladimir Gubala	UK	2020-2021	
Position	Division VIII	Country	Term of Service	
President	Prof. Alan Hutton	South Africa	2020-2021	
Past-President		-		
Vice President	Dr. Michelle Rogers	USA	2020-2021	
	Prof. Risto Laitinen	Finland	2020-2021	
Secretary	Pioi. Risto Laitinen	rilland	2020-2023	

Motion 1: Council approves the results from elections of Division Committee Officers.

Elections for Divisional Titular Members have been completed. The proposed 2020-2021 Division Rosters are in the Agenda book for reference.

Motion 2: Council receives the results from elections of Titular Members of the Division Committees.

[17:20] Closing Remarks [Prof. Zhou]

Reminder: Elections will begin at 9:00 am Thursday 11 July. All Delegations must be in the Council room and seated to begin promptly. Doors will be closed-no late entry.

END OF DAY ONE - COUNCIL RECEPTION 18:00

Day Two 11th July 2019

14 [09.00] Election of Officers of the Union and Elected Members of Bureau

[Prof. Hartshorn]

[For Decision of Union Officers and Elected members of Bureau; voting by written and secret ballot (Bylaw B 2.22)]

An introduction to the election process for the 2019 Council Meeting is included in the Agenda book. The election slate (nominees for Vice President, Secretary General, Treasurer and Elected Members of the Bureau) and information about each of the candidates may also be found in the Agenda Book. [see Agenda item 4]

- **Motion 1:** Council ratifies the election of the new Vice President, Secretary General, Treasurer and Elected Members of the Bureau at the 50th General Assembly in Paris, France.
- 14.1 Three members of the Executive Committee will be elected by Bureau from the elected members of Bureau. This will occur at the Bureau meeting that will be held on 12 July. Nominations for these three positions must be received by lsoby@iupac.org and rhartshorn@iupac.org before 8 am on 12 July.
- 15 [9:30] Bids for and voting on Site and Dates of 53rd General Assembly and 50th Congress

[Prof. Hartshorn]

[For Decision; vote by delegations; simple majority (Bylaw B 2.23]

The vote for 2025 will follow the pattern of the elections used for Officers of the Union (By-Law 2.2.2.2). If no bid receives a majority on the first ballot, the bid receiving the fewest number of votes will be eliminated and another ballot will be conducted.

Three proposals to host the General Assembly and World Chemistry Congress in 2025 were received. The letters of Intent to host 2025 were received by the deadline of 15 February. Full bid proposals were received by 30 March 2017 for Bureau review shortly following the 6 April 2019 meeting. Bureau agreed that all bid proposals were eligible to present at Council and asked that additional information regarding each country's VISA program and any missing information or clarification be included the final proposal. The three bid proposals are in the Agenda book.

Ten minutes for each bid proposal. For efficient use of time, these may be presented during the election process.

- 15.1. Malaysia: Institute Kimia Malaysia (IKM)
- 15.2. Nigeria: Nigerian Chemical Society (NCS)
- 15.3. Thailand: Chemical Society of Thailand (CST)

The bid receiving the majority of votes cast will be deemed selected to host the 2025 WCC/GA.

16 [10:15] <u>Reports of Standing Committee Chairs</u> (Written reports will be received and 10 minutes allowed for questions and discussion on each). For efficient use of time, these may also be presented during the election process or voting on General Assembly and World Chemistry Congress bids.

[Prof. Hartshorn]

[For Information and Discussion]

- 16.1. [10:15] Committee on Chemistry Education (CCE) [Prof. Jan Apotheker]
- 16.2. [10:25] CHEMRAWN Committee [Dr. Carlos Tollinche]
- 16.3. [10:35] Committee on Chemistry and Industry (COCI) [Dr. Carolyn Ribes]
- 16.4. [10:45] Committee on Publications and Cheminformatics Data Standards (CPCDS) [Ms. Bonnie Lawlor]
- 16.5. [10:55] Interdivisional Committee on Terminology, Nomenclature and Symbols (ICTNS) [Prof. Jurgen Stohner]
- 16.6. [11:05] Interdivisional Committee on Green Chemistry for Sustainable Development (ICGCSD) [Prof. Pietro Tundo]
- 16.7. [11:15] Project Committee (PC) [Prof. Doug Templeton]
- 16.8. [11:25] Evaluation Committee (EvC) [Prof. Christopher Brett]

17 [11:35] Presentation of IUPAC service awards

[Prof. Hartshorn and Prof. Zhou]

[For celebration]

COUNCIL LUNCH 12:00-13:00

18 [13:00] Financial Reports

[Mr. Humphris]

[For Information and Discussion]

18.1. Biennial Report of Treasurer

It is important that Council members understand that the Union is in poor financial health.

Council members should note that over the biennium 2017/18 we recorded a loss of (\$215,552) (see below 2017/18 Financial performance and in the Agenda book, item 18.1. Although this was in large part due to an un-realized loss in value of our investments following stock market falls at the end of 2018, the two years include

pointers to an unsustainable future unless IUPAC changes. At the 2018 meeting, the Finance Committee was sufficiently concerned about the outlook that it commissioned a Financial Review Working Group to consider what we should do if faced with material shortfalls >\$200,000 in income. The concerns were founded on:

- the impact of the planned change of formula for National Subscriptions for 2019 onwards and the possible loss of NAOs,
- the ambitious budget for 2018/19 to grow income rapidly from the Company Associate (CA) and Affiliate Members (AMP) programmes (e.g. for CA's from income of just \$5,950 in 2016 to \$55,000 in the proposed 2019 budget),
- the difficult trading conditions for publishing,
- an uncertain outlook for the financial markets.

The report is included in the Agenda book (item 3.2) edited only to remove some staff confidential information. The conclusions were endorsed by the Finance Committee at its 2019 meeting and it is recommended reading. You should note that since the work began many of the original concerns have become real. IUPAC has suffered the loss of member countries e.g. Brazil., together with other income from National Adhering organizations following the decision to adjust the Puerto Rico subscription for 2018 onwards and the default of Pakistan. We have also faced some difficulty growing new income (CA and AMP). In addition, we now face a major uncertainty and disruptive change over publishing income with Europe driving a change to open access (Plan S). This places our publishing income of typically \$200,000 p.a. at risk but the impact is difficult to quantify at this stage. However, it means that the Working group recommendations are highly pertinent for both the short (the next budget cycle) and longer term (into our next century).

When we put together the first look for the budget 2020/21 on a business as usual basis and taking into account all recent known changes, the biennium result was a loss of ~\$500k. Losses on this scale are simply not sustainable and the Union could become inoperable over the next 4-6 years. Addressing this is therefore a matter of priority.

18.2. Report of Finance Committee

The Finance Committee met face to face in February 2018 and February 2019 and quarterly via the internet to review the performance of both the Investment Portfolio and our advisors. The approved minutes of the 2018 Meeting and the approved minutes for 2019 are included in the Agenda book for information. Please note that the financial information contained in these minutes was at the time of the meetings before the financial books were finally closed for audit.

At the 2019 meeting the Finance Committee:

 Supported the EC decision to terminate CHEMRAWN and bring this to Bureau and Council for approval.

- The FC articulated that the funds in the CHEMRAWN Restricted Account, which are incorporated into the IUPAC Endowments funds, belong to IUPAC to manage.
- Noted the limited sponsorship for IUPAC activities in relation to IUPAC 100 and for the International Year of the Periodic Table (IYPT). It also noted that the funding and disbursements in relation to IYPT lay outside of the IUPAC books as these were not under IUPAC control.
- Kept our investment policies under review
- Emphasised the need to recruit new NAOs given the outlook for lower National Subscription income
- Fully endorsed the recommendations of the Financial Review Working Group
- In consideration of the 2020/21 Budget it therefore made 3 core recommendations to Bureau for Council whilst emphasizing the need to move as quickly as possible to a balanced budget:
 - a) For a budget that includes a desire to prioritize project expenditure whilst reflecting the trend to increasing numbers of cross Division projects (via the Project Committee), Cheminformatics and Sustainable Development. The recommended closure of CHEMRAWN. Reduction of increasingly expensive international travel for meetings through the use on modern web-based meeting and webinar technologies. The Budget assumes that Executive Committee and Bureau meetings would only be face to face at the General Assembly. The Finance Committee is already meeting quarterly via "go to meeting". Operations budgets are reduced assuming off year Division and Committee meetings will be held virtually. Altogether this halves the deficit to \$250k it does not provide a balanced budget. More therefore has to be done; therefore recommendation **b**.
 - b) That IUPAC undertakes a complete review of its structure and processes so that we can ensure that we undertake our core science work as effectively as possible whilst enabling those who have interest in our work to engage in and support it International organisations, industry, foundations, and government agencies.
 - c) Establish a "Centenary Endowment Fund" to help raise income. This will require hard work across the Union and is not a "magic bullet".

18.3. Accounts for 2017/2018

18.3.1. Profit and Loss Statements

The P&L statements are included in the Agenda book and in brief form below. Over the two years they show a combined loss of (\$215,552). This is driven primarily by an adverse but unrealized swing in the value of the investment portfolio that occurred

substantially during Q4 2018 of (\$304,024) and the decision to withdraw funds (\$63,677) to settle pressing volunteer expense claims in December 2018. [*Total* \$367,701] At an operating level 2018 would have shown a small surplus, est. \$120k.

Other income variations from budget of note were:

- In 2018 National subscriptions down \$33k due to pending payment of Puerto Rico (negotiated to the 2019 NS level of \$5,015), non-payment of Jordan (2 years), Bangladesh (\$1,984.50), Mozambique (\$1,102.50). Jordan is currently 24 months in arrears (second time). Bangladesh and Mozambique are currently 12 months in arrears and are not subject to automatic removal. Note: Bangladesh has paid their 2018 NS and Jordan has paid their 2017, 2018 and 2019 NS since this figure was reported. Puerto Rico paid \$5,015 vs. budgeted \$22,035.
- Following the Council decision on Company Associate subscriptions in São Paulo, Company Associate subscriptions were well up versus 2017 but below an ambitious plan.
- Affiliate member subscriptions slightly down from 2017 and also below the ambitious budget as we transitioned USA-ACS members to IUPAC.
- There was no income from publishing databases, otherwise publishing remained on plan in both years.

Expenses:

- In the main expenses were managed to plan over the two years.
- Secretariat costs below plan in 2018 by \$94.8k predominately due to total staff costs. The full budgeted salary increase was not undertaken and Jay Lucido's resignation meant a period with one less staff. This may have been a financial benefit but served to underline the importance of the controller role in IUPAC. Council members should note however that Jay continued to support IUPAC in his spare time and has helped to bring our new controller, Tammy Bridges, up to speed. His commitment has been recognized.
- Total travel and meetings on plan.

A summary of the P&L is shown below:

	TUPACT	icome Sta	atement - S	um	mary		
			2017 Actual		2018 Actual	2018 Annual Budget	2018 Actual vs Budget Variance
Incon	ne						
Pr	ogram Income	\$	1,206,634	\$	1,177,861	\$ 1,291,319	(113,4
	rect Public Support		15,541		20,000	36,000	(16,0
Inv	vestments		445,541		(210,110)	141,000	(351,1
Sp	onsorship Revenue		0		27,821	0	27,8
M	erchandise Revenue - Pins		0		1,210	0	1,2
Total	Income		1,667,716		1,016,782	1,468,319	(451,5
Gross	s Profit	\$	1,667,716	\$	1,016,782	\$ 1,468,319	(451,5
Expei	nse						
Av	vards, Grants & Contribution		28,749		40,551	0	(40,5
Fix	ked Costs - Salaries & Benefits		540,447		512,403	607,952	95,5
Le	ase, Insurance & Bank Fees		95,838		99,623	83,832	(15,7
Ge	eneral & Administrative Expenses		90,049		71,504	60,795	(10,7
Co	ontracted Services		83,199		147,845	63,750	(84,0
De	epreciation Expense		38,684		45,185	46,104	9
Ot	ther Expenses		27,392		28,527	28,100	(4
Tr	avel & Meetings		656,338		433,261	423,559	(9,7
М	iscellaneous Expense		(35,536)		10,484	0	(10,4
Total	Expenses	\$	1,525,160	\$	1,389,383	\$ 1,314,092	(75,2
Net C	Ordinary Income / (Loss)	\$	142,556	\$	(372,601)	\$ 154,227	(526,8
Othe	r Income & Expenses						
	ther (Income)		(587)		(355)	0	3
Ot	ther Expense		(9,550)		(4,001)	10,000	14,0
Net C	Other Income / Expense	\$	(10,137)	\$	(4,356)	\$ 10,000	14,3
	nal Income / (Loss) for the period	\$	152,693	\$	(368,245)	144,227	(512,4

18.3.2 Balance Sheet as of 31 December 2018

The full balance sheet included in the Agenda book shows a healthier position at the end of 2018 in comparison with December 2017. Cash available was in excess of liabilities although Council members should note that the line of credit (\$350,000 LoC) remained at \$311,094,; we had hoped to clear this ahead of the expenses that will follow during 2019. By end May 2019 the LoC was paid down to \$127,000 (monthly interest ~\$600. Council members should note that this line of credit is intended to help balance cash flow and not as a primarily funding source.

Accounts Receivables were down to \$175,693 from \$305,638 at the end of 2017. Similarly Accounts Payable were \$789,372k at the end of 2018, a significant improvement on 2017Upon advice from our Auditors, the database began depreciating in January 2019 and work in progress is shown as zero for this item in the detailed Balance Sheet- Work undertaken on User Authentication and a partial amount of the "CI Digital First" effort is currently in the depreciation schedule.

The balance sheet is shown below for reference:

					IUPAC Bala						
					As of 31 Dece	ember 20	18				
										2017	
							2017		2018	Va	aria
ASSI	ETS	_								-	
		Curre								-	
		Check		ivings ing/Savi	nas		202.097		200 224	+	7
		TOLAT	CHECK	ilig/Savi	ligs		303,987		380,224	+	
		Accou	nts Re	eceivable	9						
				nts Rece			305,638		175,693	((12
							,		,		•
		Other	Curre	nt Asset	s						
			Unde	posited	Funds		0		606		
			Inven				0		0		
				Tax Rec			907		627		
					Expenses		4,822	-	27,132		2:
		iotal	Otner	Current	ASSETS		5,729	\vdash	28,365	-	2
	Tota	l Curre	nt Acc	ets			615,353	+	584,281		(3:
	TOLA	Curre	III MSS	CLO			013,333	+	304,201		(J
	Fixed	d Asset	S								
	_	l Fixed		S			192,078		175,536		(1
							,		,		•
	Othe	r Asse	ts								
		Secur	ty De	osits			3,565		3,565		
		Total	Marke	eta bl e Se	curities		4,097,527		3,729,826	((36
						_		-		-	
	Tota	l Othei	. ^	 			4 101 002		2 722 201		126
	TOta	Other	ASSE	ıs			4,101,092		3,733,391	-	(36
тот	AL AS	SETS				\$	4,908,523	\$	4,493,208	5 ((41
		C 0 FC									
LIAE		S & EC	UITY								
		Curre	nt Liak	oilities							
			Accou	unts Pay	able						
					ts Payable		198,792		89,732	((10
			Total	Credit C	ards		1,053		4,798	-	
			Othor	Curront	liabilities						
					t Liabilities ayroll Liabilities		49,035		41,746		(
					nearned Membership Income		50,702		158,978		10
					ed Publication Inc		125		0		
				Deferre			19,351		15,640		(:
				Total Sh	nort-term Notes Payable		350,000		311,094		(3
					urrent Liabilities		469,213		527,458		58
		Total	Curre	nt Liabili	ties		669,058		621,988		(4
	T	Lich!	: at				((0,050	-	634.000	-	10
	iota	l Liabi	rues				669,058	+	621,988		(4
	Equi		c ct ···	/ Donar	Restriction		204,357	\vdash	204,357		
					r Restriction		111,809		108,761	+	(:
				d Net Ass			3,770,606	+	3,926,347		15
					oss) for the period		152,693	\vdash	(368,245)		(52)
				, , , , ,	,		_32,033		(223)2.3)		,
	Tota	l Equit	У				4,239,465		3,871,221	((36

18.3.3 Cash Flow Report for 2017/2018

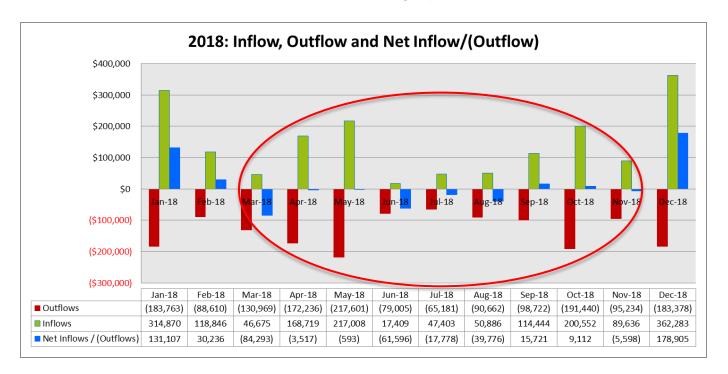
The cash flow summaries are shown below and are a familiar picture. The pressure on cash throughout and at the end of the year is clear and a direct result of:

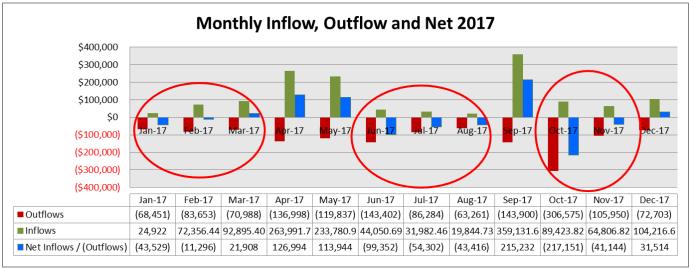
- Absence of mechanisms to control when income is received especially National Subscriptions.
- When payments need to be made as a result of projects and operations.
- The fact that we are operating close to break even. The situation will worsen if expenditure exceeds income.

The charts include the investment and dividend income from the investment portfolio. The full Cash Flow report is in the Agenda book.

The comparison of 2017 vs. 2018 shows that:

- 2018 had 3 months of net cash positive
- Almost the full year of 2018 required close monitoring of income vs. expense and required use of cash from the LoC and two "holds" on payouts to volunteers.
- NS from China/Beijing for 2017 was realized in January 2018 and the 2018 NS realized in late December 2018.





18.4 <u>National Adhering Organizations in Arrears</u>

The 2018 National Subscription Status is as follows:

Jordan was 24 months in arrears but has paid their 2017 and 2018 NS as well as 2019 NS. Jordan has also filed for formal readmission and approval by Council.

Pakistan (Provisional NAO under a Readmission Policy) is out of compliance, as we did not receive their 2019 NS payment by 31 December 2018. Communication is ongoing with clear indication of their obligations under the readmission policy but no

payment was received by 29 April 2019. They have been notified that they are not eligible for NAO consideration at Council 2019.

The National Subscription 2018 summary is below, reflecting an adjustment in Puerto Rico's 2018 NS. *Note: Some NAOs assess their transaction fees to us and we do not receive the total amount due.*

NAO's 2018	2018 Paid (USD)	2018 Budget NS
Total	\$871,809.68	\$891,595.44
Mozambique		\$1,102.50
Puerto Rico Shortage		\$17,020.00
Cuba Non Payment		\$1,000.00
IUPAC Loss on Fees		\$663.26
Budget v. Actual (loss)		-\$19,785.76

Brazil paid their 2018 National Subscription and notified IUPAC that they will withdraw from IUPAC effective 1 January 2019. Current members from Brazil have been encouraged to continue their engagement with IUPAC by becoming an Affiliate Member, which allows them to be nominated as an Associate Member of Divisions and Committees. In the meantime, Bureau approved continuation to end of term 12/31/2019 of the four current Division members from Brazil.

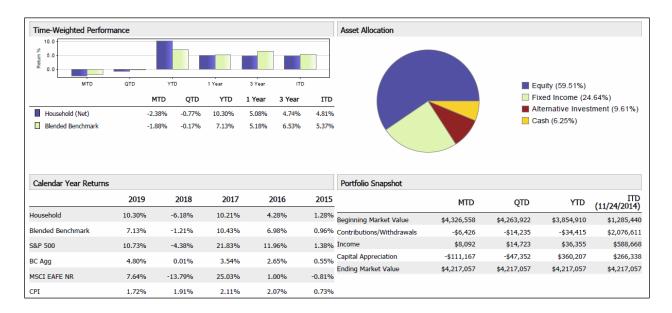
The Total 2019 National Subscription adjusted for the loss of Brazil and Pakistan is \$827,593 vs. Budget \$870,297. Accounts Receivables as of end May 2019 are \$348,874 (40% of due).

18.5 Other Income

18.5.1 <u>Investment Portfolio</u>

The Investment Portfolio is reviewed by the Finance Committee with our advisors on a quarterly basis.

December 2018 was an extremely volatile time in the market and the market value of the investment portfolio fell to \$3,854,910 before recovering rapidly at the beginning of 2019. At the end of May 2019 it recovered by \$362,147 and the portfolio stood at \$4,217,057 with summary data as follows:



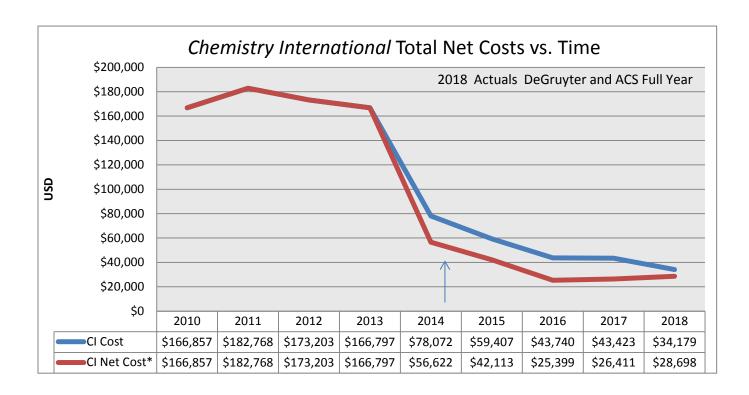
2018 Investment and Dividend earnings, before fees, was \$138.6k compared to budget plan of \$141k (3.60%). Earnings net of fees were \$94.6k which was a 2.46% return.

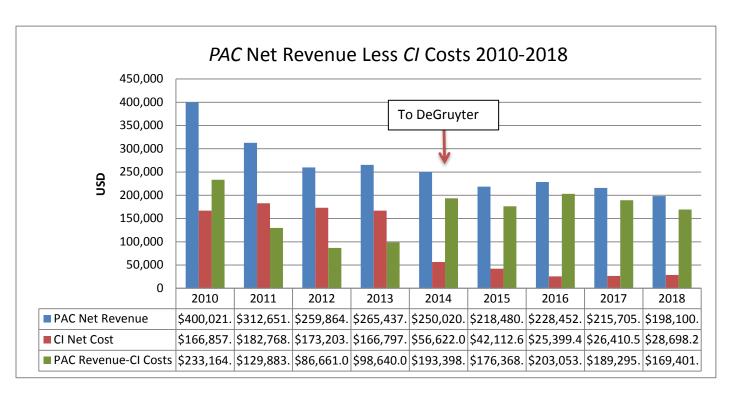
18.5.2 Publishing

IUPAC's net share of publishing income from PAC and CI from the agreement with DeGruyter in 2018 was 149,019 € (\$169,401 (€@\$1.1).This number is shared with Council members to allow year on year monitoring of publishing performance. In the published accounts the phasing is different as a result of the agreement. Final settlement invoices and payments are made in April of following year along with a PAC advance payment of €100,000 now negotiated for future years. The year-end payment of 80,091€ (\$88,100 (€@\$1.1) for 2018 made on 18 April 2019 and is recorded in the 2019 accounts and subject to the 2019 audit. (as in previous years)

Considering year on year publishing performance, the long run trend is for *CI* net costs to IUPAC continues to fall. We intend to maintain this trend by moving to more digital access and developing a new CI *Digital First* platform on the IUPAC website for more immediate news following the change to quarterly *CI* publication.

During 2019 CI Net costs are actually increasing as due to the hire of the freelancer to assist Dr. Fabienne Meyers is at 3,000 €issue, 2019 may be worse, given the "special editions" this special year and increase in page counts.





18.5.3 Company Associates

The São Paulo Council Meeting approved changes to the status of Company Associates and the subscription structure. This was implemented for 2018 and included an increase over time for the current heritage (2017) CAs to the target annual subscription of \$2,500 per CA. New CAs are charged \$2,500 starting in 2018.

In 2018, earnings rose by \$16k, although this was short of the ambitious budget (\$30k). Budget expectations from the next biennium have been adjusted lower.

Currently (as of June 07, 2019) IUPAC has 2 Permanent CAs; 2 25 years which expire in 2036; 27 CA's with a new CA from Senegal! We clearly need to encourage the IUPAC leadership organizations to focus on the CA program and encourage companies to become involved in the all the work across IUPAC to attain material income.

18.5.4 Affiliate Member Program

Council in Sao Paulo also approved changes to the Affiliate Membership Program.

The revision included a price increase for base membership to \$50 p.a. The AMP benefit of receiving a print copy of CI as a default was changed to receiving authenticated digital access at De Gruyter's site. Those that want a print copy of CI pay an additional \$25.00 to offset the costs. AMPs can join through their NAO Coordinator earning the NAO \$20.00 of the \$50.00. We have also implemented an improvement for receiving IUPAC "direct" payments for AMPs to provide easy application and payment of the AMP fee online with payment by credit card.

The 2019 Affiliate Membership program historically coordinated by ACS is now managed directly by IUPAC and the full subscription amount is credited to IUPAC. This has increased workload, but the process improvements in database to website linkage, electronic access to documents, official membership card and payments via STRIPE gave us an ability to transition the ACS members.

Despite the subscription increase overall income fell from \$30k in 2017 (which included a December 16 ACS payment) to \$25k in 2018 as the various changes were implemented in a number of countries. While the income is slightly lower, the estimated cost saving for the 2018 transition to digital access of CI of our members/volunteers and basic AMP (Sponsored and Paid) is \$25.4k (elimination of print copies).

The budget expectations for 2020/2021 have been revised to take account of this experience. Gaining AMP members should remain a major focus.

18.5.5 Establishment of the Centenary Endowment Fund and Mechanism

In São Paulo, Council approved the proposal of the Executive Committee to proceed with the creation of an Endowment fund (22.1, Motion 4). Further work on establishing a new endowment fund has been done throughout 2018. The EC at the November 2018 meeting provided the Treasurer and Executive Director the permission to pursue development of detailed Endowment process, costs and other items currently unknown (i.e. establishment of a Board of Directors and issues related to the current Governance of IUPAC

Core principles of an Endowment fund: A fund which contains a meaningful principal that remains intact and interest/dividend that provide income for use by the organization. Endowment funds are restricted funds, meaning the corpus remains intact, and a non-profit organization can draw upon the annual investment fund specified by the endowment governing documents. We are recommending a Management Board (Board of Directors, BOD) that includes external directors with expertise in the management of such funds, high positioned individuals who have access to capital and possibly to high net worth individuals, and with effective links to the sources of funds in industry or the various foundations. External Directors would ensure that the fund is managed objectively and ethically in the context of its founding articles, giving confidence to donors. This is the normal approach for such funds in US non-profit organizations.

We have engaged the law firm of Manning, Fulton & Skinner and have sought their advice on:

- the establishment of the endowment
- its guiding documents that clearly set forth how the fund will be funded and under what circumstances it may be accessed.
- the administration of the BOD
- tax status (we want to offer tax relief to investors)

The IUPAC Auditors, BB&T Investment managers and FC will be engaged in this activity providing advice to the Executive Committee to enable founding of the fund

We feel that the appointment of a Board with external Directors requires explicit approval by Council before we can seek to recruit for the Board. We will seek nominations from our members. The Executive Committee would make the appointments on behalf of Council with advice from the Finance Committee.

Motion: Council approves the future appointment of the <u>Centenary Endowment Fund</u>
Board of Directors including external Directors by the Executive Committee.
Council also gives approval to the Executive Committee to progress the formation of the fund and its guiding documents.

18.6 Appointment of Auditors for 2019

[Mr. Humphris]

[For Decision; voting by show of hands]

Following approval of a change of auditors in São Paulo, proposals were obtained for a number of companies for consideration by the Finance Committee and a recommendation to appoint McMillan, Pate and Company, LLP for financial year 2019 onwards was made and accepted by the Executive Committee and Bureau for proposal to Council.

Motion: *McMillan, Pate and Company, LLP are appointed as auditors for IUPAC for the financial year 2019 onwards.*

19 [13:40] Organizational Changes in Existing IUPAC Bodies, Proposals for New and Reconstituted Bodies/Terms of Reference

[Prof. Hartshorn]

[For Decision; voting by show of hands]

19.1 Executive Committee Recommendation to Dissolve CHEMRAWN

Following extensive review of CHEMRAWN (papers from the Evaluation Committee and CHEMRAWN are presented in the Agenda book, item 16.8), the Executive Committee resolved unanimously to recommend to Council that CHEMRAWN be dissolved, with its responsibilities being distributed to other appropriate IUPAC bodies. This recommendation was endorsed by Bureau.

Motion: Council approves the Executive Committee Recommendation to Dissolve/Disestablish CHEMRAWN.

19.2 Bureau Membership

As outlined in the Report of the Secretary General, there has been some discussion/confusion around the membership of Bureau. The current Statutes and Bylaws make no mention of whether Chairs of Standing Committees are full, voting members of Bureau, or not. There is, however, reference to the ability of Council to add members to Bureau, and there have been explicit Council decisions to include the Chairs of ICTNS and CPCDS on Bureau.

As Secretary General, it is my recommendation that chairs of science-based standing committees (CPCDS, ICTNS, CCE, COCI, and ICGCSD) should be full voting members of Bureau. *If the motion in 19.1 fails, the following motion should be amended to include CHEMRAWN*,

Motion: The Chairs of CPCDS, ICTNS, CCE, COCI, and ICGCSD should be full voting members of Bureau.

19.3 Proposal for Organizational Review

The Executive Committee recommends to Council that a working group be established to undertake a complete review of the organizational structure of IUPAC. The working group should further be asked to develop proposals for the future organization of IUPAC, which can be discussed during the 2020-21 biennium, and voted upon at the 2021 Council meeting in Montreal. This recommendation was endorsed by Bureau.

Motion: The Executive Committee recommends to Council that a working group be established to undertake a complete review of the organizational structure of IUPAC.

20 [15:00] National Subscriptions for 2020-2021 (already approved via NSTF) and Proposed Budget 2020-2021

[Mr. Humphris]

[For Discussion and Decision; voting by cards, >50 % of votes cast (Bylaw B2.2)]

20.1 National Subscriptions for 2020-2021

The recommendations of the National Subscription taskforce were adopted by Council through a webinar process conducted in September 2018. The formal notification letter stating the results to the NAOs is in the Agenda book.

Results of Council Votes-National Subscription Model, Results and Implementation

Total Votes Possible: 169 Majority: 86

1. Council is asked to approve the new National Subscription Model

For = 102

Motion approved

Against = 21

Abstain = 0 (no vote)

Dismissed = 1

Total Votes Cast: 123

2. Council is asked to approve the implementation plan of \pm 3% p.a. of the National Subscriptions from 2019 to 2023

For = 106

Motion approved

Against = 21

Abstain = 0 (no vote)

Dismissed = 1

Total Votes Cast: 127

3. Council is asked to approve the Bureau/NSTF recommendation for treating "Minimum Paying" Countries

For = 108

Motion approved

Against = 9

Abstain = 1 (no vote)

Dismissed = 1

Total Votes Cast: 117

4. Council is asked to approve the recommendation for Puerto Rico's *immediate* reduction to the National Subscription Target for 2019 due to unique circumstances.

For = 115

Motion approved

Against = 2

Abstain = 1 (no vote)

Dismissed = 1

Total Votes Cast: 117

5. Council is asked to approve the National Subscriptions for 2019-2023.

Yes = 105

Motion approved

 $N_0 = 18$

Abstain = 0

Dismissed = 1

Total Votes Cast: 123

The model adopted was based on statistical advice from SAMSI (Statistical and Applied Mathematical Sciences Institute, RTP) in what was essentially a regression analysis of data over the past four years based on three national factors; the number of chemistry publications, the relative size of the chemical industry and GDP. Internationally comparable data is available for all three factors. It will be implemented for the next two biennia to 2023 when the data will be updated. The status update letter to the NAOs is in the agenda book for reference.

The National Subscriptions for 2020 and 2021 were used in the budget development for the coming biennium.

20.2 Proposed Budget for 2020-2021

The proposed 2020/2021 was developed from a baseline comparison to 2018/2019. Multiple models were developed and reviewed at the Finance Committee (FC) meeting February 2019.

FC recommended reductions to the overall deficit and adjustments in operating expenses. The model was adjusted and presented to the Executive Committee (EC) in March 2019. Following the EC discussions, further adjustments were recommended to reduce the deficit and adjust operations and project allocations.

Key points in the Proposed Budget approved by Bureau and recommended to Council are (The P&L and Division/Committee Allocations are in the Agenda book):

- National Subscription income is derived from the agreed subscriptions adjusted for the loss of Brazil and Pakistan.
- Revised AMP and CA Income to realistic base
- Operations Budgets reduced to \$2,000 for all Divisions
- Project Budgets reduced by 10% from 2018/2019
- Project Committee: Increase of \$20k for interdivisional projects
- Executive Committee: Virtual Meetings Quarterly and face to face at GA
- Bureau: Virtual Meetings Quarterly and face to face at GA
- Finance Committee: Virtual Meetings Quarterly
- No residual expense for IUPAC100 or International Year
- GA budgeted at similar level to 2015/2017
- CHEMRAWN: Eliminated (Council must Approve. 18/19 Budget = \$20,000)
- CCE Flat to 18/19
- COCI Reduced to \$28,000 (decrease of \$7,000)
- ICTNS back to 0
- ICGCSD: Increase of \$5k
- CPCDS: Increase of \$7.8k (10k Projects/20k Ops)
- FSC: Decrease of \$10k
- Participation on external bodies set at actual levels 2017/18
- Delegates to Council: Countries less than 2 votes eligible est =\$25k GA Budget reduced \$20,000 (average of 2015-2017 = ~\$45,000).
- Assumptions: No new NAO income; Brazil removed

A summary for 2020-2021, shown below, underlines the fact that this remains a deficit budget (\$254,073).

	2018-2019 2018 2019			2020-2021				
					2020	2021		
P&L								
Total Income	\$	1,468,319	\$	15,219,769	\$	1,264,691	\$	1,381,613
Total Expense	\$	1,316,192	\$	1,809,000	\$	1,263,694	\$	1,616,683
Annunal Loss/Gain	\$	142,127	\$	(299,526)	\$	(9,003)	\$	(245,070)
Biennium Loss			\$	(157,399.00)			\$	(254,073)

Motion: Council approves the recommended 2020-2021 Budget

REFRESHMENT BREAK: 15:30-16:00

21 [16:00] Associated Organizations of IUPAC

- 21.1 No new Associated Organizations have joined IUPAC during 2017-2019.
- 21.2 Termination of Associated Organizations

Associated Organizations of IUPAC pay an annual fee of \$50.00. They are invoiced similarly as National Adhering Organizations-in September of the year before the subscription is due. Two Associated Organizations of IUPAC, SEANAC and EFCE, are recommended to Council for removal from the Union due to 24 months or more in arrears.

The European Federation of Corrosion (EFC) will be notified that they are will be in arrears for 24 months in September 2019.

IUPAC Associated Organizations >Two Years in arrears	Year of Last Payment	Country
African Network of Analytical Chemists (SEANAC)	2016	South Africa
European Federation of Chemical Engineering (EFCE)	2015	France
European Federation of Corrosion (EFC)	2017	Germany

Motion: Council approves removal of SEANAC and EFCE as IUPAC Associated Organizations.

22 [16:10] <u>Associate National Adhering Organizations (ANAO)</u>

22.1 Ghana Institute for Pure and Applied Chemistry (GIPAC)

The Ghana Institute for Pure and Applied Chemistry (GIPAC) applied for ANAO status in 2014 and were approved at 2015 Council in Busan, Korea for four years at which time they would need to decide to become a full NAO (2014-2017). The ANAO fees were paid for 2014 and 2015 ANAO. However, no invoices for 2016 or 2017 were paid and no communication has been received since their acceptance letter was sent July 2015. Multiple efforts to engage communications has been made with no success.

Motion: Council approves removal of Ghana Institute for Pure and Applied Chemistry as ANAO of IUPAC.

23 [16:15] Proposals Formally Received from National Adhering Organizations

[Prof. Hartshorn]

There were no proposals received from National Adhering Organizations for Council consideration.

24 [16:15] Proposals for Changes to the Statutes and By-Laws of the Union

[Prof. Hartshorn]

There were no proposals received from National Adhering Organizations for changes to the Statutes and By-Laws of the Union.

25 [16:20] Reauthorization of Commissions

[Prof. Hartshorn]

[For Decision; voting by show of hands]

Bylaw 3.302 requires that Council reapprove all existing Commissions at each General Assembly.

Motion: Council reauthorizes the Commission on Physicochemical Symbols, Terminology and Units, the Commission on Isotopic Abundances and Atomic Weights, and the IUBMB-IUPAC Joint Commission on Biochemical Nomenclature (JCBN).

26 [16:25] <u>IUPAC100 Centenary Report</u>

[Prof. Mary Garson/Dr. Laura McConnell] [For Information]

Professor Mary Garson will report on the progress, activities and current status of the IUPAC 100 Centenary. The celebration will have already occurred on Monday, July 8th.

27 [16:35] IYPT2019 Report from the Management Committee

[Prof. Jan Reedijk/Prof. Natalia Tarasova] [For Information]

IUPAC being the lead organization for UNESCO and IYPT2019 has a brief for IUPAC Council. The celebration year is half-way, and after the grand opening at UNESCO, January 29, 2019, the MC is preparing for the closing ceremony, scheduled for Tokyo, Japan, on December 5, 2019. The detailed report for council with deal with the start, the UNESCO submission and the UN application, and how IUPAC took the lead in formation of an MC and fund raising, as was as handling a website and initiation several initiatives and events, in close relation with IUPAC100. The report summarizes outcomes of some major events, and also how the outcome and results of IYPT will be kept in IUPAC archives and museums for future generations.

28 [16:45] WCLM 2019 Report

[Prof. Christopher Ober/Prof. Francis Separovic] [For Information]

Professor Christopher Ober will report on the 2019 World Chemistry Leadership Meeting which occurred Wednesday morning July 10.

29 [16:55] Plans for 51st General Assembly and 48th Congress in 2021 (Montreal, Canada)

[Prof. Neil Burford]

[For Information]

Professor Neil Burford will provide an update to the Council on the plans for IUPAC 2021.

30 [17:10] <u>Plans for the 52nd General Assembly and 49th Congress in 2023 (The Hague, Netherlands)</u>

[Mr. Jan-Willem Toering]

[For Information]

Mr. Jan-Willem Toering will provide an update to the Council on the plans for IUPAC 2023.

31 [17:20] <u>Important Matters Referred to Council by Bureau at 50th General Assembly, Not Covered by Items on Council Agenda</u>

[Prof. Hartshorn]

[For Information and Discussion]

The 103^{rd} Bureau meeting will have taken place on Tuesday 9^{th} July 2019 in Paris. This item is to ensure all items for Council can be raised by Bureau.

32 [17:25] Any Other Business

[Prof. Hartshorn]

33 [17:30] Closing Remarks, Acknowledgements and Adjournment

[Prof. Zhou]

Gala Dinner Evening