

International Union of Pure and Applied Chemistry

156th MEETING OF EXECUTIVE COMMITTEE

Royal Society of Chemistry, London, UK, 18-19 November 2017

MINUTES

1. INTRODUCTORY REMARKS AND FINALIZATION OF AGENDA

Attendees: Prof. Natalia Tarasova (Chair), Prof. Qi-Feng Zhou, Dr. Mark Cesa, Prof. Richard Hartshorn, Mr. Colin Humphris, Dr. Lynn Soby (Executive Director), Prof. Christopher Brett, Prof. Mei-Hung Chiu, Prof. Christopher K. Ober, Prof. Javier Garcia Martinez
Guest: Ms. Minjie Huang, Dr. Fabienne Meyers (secretary)
Absentees: Prof. Kaoru Yamanouchi

Professor Natalia Tarasova welcomed all participants and members of the Executive Committee (EC) and thanked our host and Colin Humphris for all the arrangements.

One additional agenda items are the Rules of Operation-Division I to be considered under item 7 and following the Division roster.

2. MINUTES OF 155TH (BEIJING, 12-13 NOV 2016) 2016 MEETING OF EXECUTIVE COMMITTEE

The minutes of the 155th Executive Committee meeting are included in the Agenda Book for reference. The Executive was asked to review the minutes and if there was any question arising; the minutes were approved by email 21 May 2017.

The minutes were approved again and there was no matter arising not covered later in the current agenda.

3. MINUTES OF 100TH MEETING OF THE BUREAU (SAO PAULO, 11 AND 14 JULY 2017)

3.1 RECEIPT OF MINUTES BY EC

The draft minutes of the 100th Bureau meeting held in São Paulo, Brazil, in July 2017 are included for information in the Agenda book and will be distributed for input by Bureau by end of November 2017.

3.2 MATTERS ARISING (NOT COVERED BY ITEMS ON AGENDA)

There was no matter arising not covered later in the current agenda.

4. ACTION ITEMS FROM PREVIOUS MEETINGS

The EC reviewed the Action Items in the Agenda Book (p. 65 in the book shared 3 Nov2017). Of the list the following were called out:

99BU07[RH/ChemRAWN] Carlos Tollinche will provide the Secretary General a detailed report of future actions, strategies for the committee.

Follow-up is needed and the Secretary General will reach out to ChemRAWN chair.

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99BU15 [RH] Request to Divisions to provide all Divisional rules

Div I has a set of rules; include in this meeting agenda

99BU14 [RH/FM] Develop a one-page description of the Young Observers program and activities for communication to NAOs, Young Observers' and others.

Status: still incomplete, but ongoing communications is occurring with the YOs.

155EC03: Natalia Tarasova will ask the ICGCSD Chair to outline a plan and propose a budget

Status: in progress

155EC10: Lynn Soby to clarify the current privacy policy on the web.

Status: in progress; LS confirmed that we need to offer an opt-out option to display or not email address. This is implemented in the new database that will drive the web display.

155EC13: Natalia Tarasova will consult again with IUPAP and share the amended version of the ToR.

Status: completed

155EC15: Fabienne Meyers to develop a front page slide for the website to feature IUPAC-Solvay award and the call for applications.

Status: completed and to be recurring with later calls

{The minutes follows the order of the agenda items and not necessarily the order in which the items were discussed.}

5. FINANCE AND BUDGETS

Colin Humphris referred to the Agenda and Agenda Book for details.

The report included in the Agenda is reproduced below. All financial information presented at the EC meeting and contained in the Agenda and documents is pre-Audit and is subject to change.

5.1 AUDITED FINANCIAL STATEMENT FOR 2016

The 2016 Audit was completed in good time for presentation to Council. The Auditors gave IUPAC a clean bill of health. 2016 showed a small net surplus \$32k against a planned deficit of (\$87k) driven largely by underspend on travel associated with projects. It will be interesting to view the 2016/17 biennium, as a whole, given the insights we have through the new accounting system. The 2016 Audit is in the Agenda book.

5.2 REPORT ON CURRENT FINANCIAL SITUATION (CF 2016-2017 BUDGET)

The Profit and Loss Statement at end Q3 shows a surplus of \$349k but there are some important caveats. Income is up driven by the value of the investment portfolio (unrealized income) that is offsetting reduced income from publications. Most of our 2017 income is accounted for by end Q3.

Many of our expenses such as the Secretariat are on plan at or close to 75% of the budget. Some negative variances of note are for interest payments as we have taken loans to smooth the cash flow (see below) and increased depreciation associated with the investments in the new website. The main variation is a significant under spend on travel- something as seen in 2016. We need to understand if

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something fundamental has changed affecting that needs to be taken in account for our future budget processes.

Our current forecast for 2017 is to record a surplus relative to budget expectation of -\$77K, perhaps in the order of 50K-75K. This is an estimate given little visibility that we don't know what outstanding claims could come in. We will have ~\$32K Executive Committee costs, 30K estimated for additional claim forms, additional expenses associated with IUPAC100 webpage development. This surplus differs from the cash position which is also dependent upon all NAO NS subscriptions paid by 31 December 2017. (note section 5.5)

IUPAC Income Statement - Summary				
	Sep 2016 Actual	Sep 2017 Actual	2017 Annual Budget	2017 Actual vs Budget Variance
Income				
Program Income	\$ 1,031,158	\$ 1,106,548	\$ 1,226,002	(119,454)
Direct Public Support	29,000	15,541	0	15,541
Investments	248,481	340,089	140,000	200,089
Miscellaneous Income	0	0	0	0
Total Income	1,308,640	1,462,178	1,366,002	96,176
Cost of Good Sold	0	0	0	0
Gross Profit	\$ 1,308,640	\$ 1,462,178	\$ 1,366,002	96,176
Expense				
Awards, Grants & Contribution	29,000	27,745	0	(27,745)
Fixed Costs - Salaries & Benefits	412,278	413,307	582,463	169,156
Lease, Insurance & Bank Fees	57,933	67,059	68,276	1,217
General & Administrative Expenses	54,802	31,664	42,911	11,247
Contracted Services	46,340	44,809	59,300	14,491
Depreciation Expense	7,388	28,843	10,000	(18,843)
Other Expenses	28,215	27,240	25,850	(1,390)
Travel & Meetings	308,896	465,383	654,399	189,017
Miscellaneous Expense	0	0	0	0
Total Expenses	\$ 944,853	\$ 1,106,049	\$ 1,443,199	337,150
Net Ordinary Income / (Loss)	\$ 363,786	\$ 356,129	\$ (77,197)	433,326

Balance Sheet Analysis

The balance sheet as 30th September shows healthy cash position due to utilizing \$200k from a new \$350k loan. \$348k is shown in accounts receivable due to outstanding national subscriptions. Assets include the website that is now being depreciated. The investment portfolio value stands at \$4.12m. The assets are funded by our liabilities. Accounts payable are \$223k, a large part of which are GA expenses that were yet to be settled as of end September. The short-term loan amount borrowed now stands at \$300k, which happens to be slightly less than the unpaid national subscriptions.

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IUPAC Balance Sheet Summary As of 31 September 2017			
	Sep-16	Sep-17	Variance
ASSETS			
Current Assets			
Checking/Savings			
Total Checking/Savings	139,409	436,160	296,750
Accounts Receivable			
Total Accounts Receivable	314,599	348,391	33,792
Other Current Assets			
Undeposited Funds	0	0	0
Inventory	34,045	0	(34,045)
Sales Tax Receivable	814	290	(523)
Total Prepaid Expenses	1,245	3,468	2,224
Total Other Current Assets	36,103	3,758	(32,344)
Total Current Assets	490,112	788,309	298,198
Fixed Assets			
Total Fixed Assets	174,206	195,278	21,072
Security Deposits	3,565	3,565	(0)
Total Marketable Securities	3,971,899	4,118,934	147,036
Total Other Assets	3,975,464	4,122,499	147,035
TOTAL ASSETS	\$ 4,639,781	\$ 5,106,086	\$ 466,305
LIABILITIES & EQUITY			
Liabilities			
Current Liabilities			
Accounts Payable			
Total Accounts Payable	55,600	223,067	167,467
Total Credit Cards	6,704	13,606	6,902
Other Current Liabilities			
Total Payroll Liabilities	45,962	56,032	10,069
Total Unearned Membership Income	495	1,390	895
Deferred Rent	21,840	19,985	(1,855)
Total Short-term Notes Payable	100,000	350,000	250,000
Total Other Current Liabilities	168,297	427,407	259,109
Total Current Liabilities	230,601	664,079	433,478
Total Liabilities	230,601	664,079	433,478
Equity			
Net Asset w/ Donor Restriction	204,357	204,357	0
Net Asset w/o Donor Restriction	95,081	106,470	11,389
Unrestricted Net Assets	3,744,483	3,782,305	37,822
Nominal income / (loss) for the period	365,258	348,875	(16,383)
Total Equity	4,409,180	4,442,007	32,827
TOTAL LIABILITIES & EQUITY	\$ 4,639,781	\$ 5,106,086	\$ 466,305

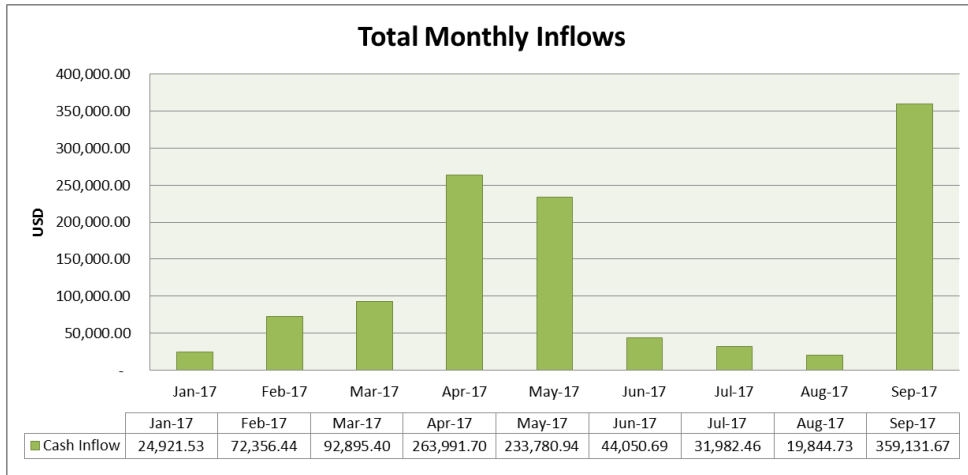
CASH FLOW

IUPAC is now reporting on a full accrual basis providing far greater insight into the financial performance of the Union and importantly its cash needs. Cash flow shows the familiar story with the third quarter cash management difficulties. To offset these difficulties, we have extended our borrowing in September. We will review this with the Finance Committee as part of our regular review of investment policy. We have a choice we could borrow from our investment portfolio and forgo interest from long term investments or borrow from the bank as we have done to minimize the opportunity cost.

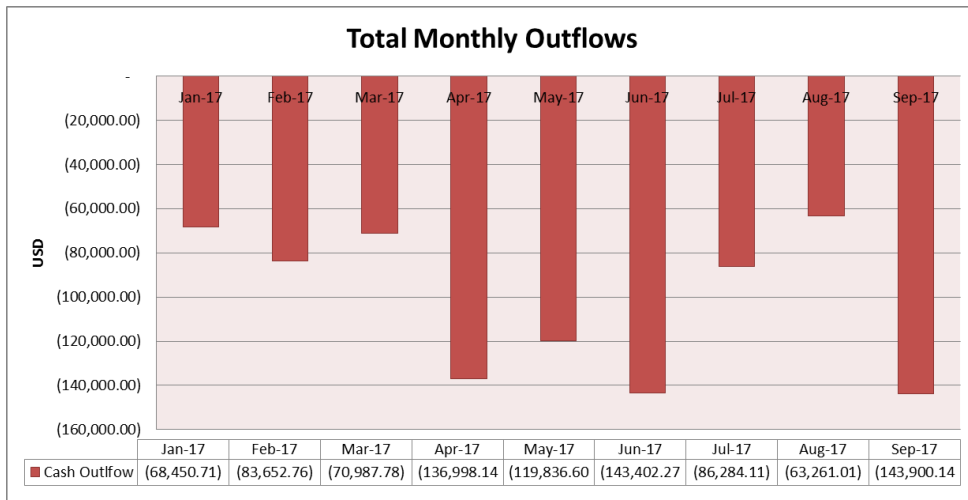
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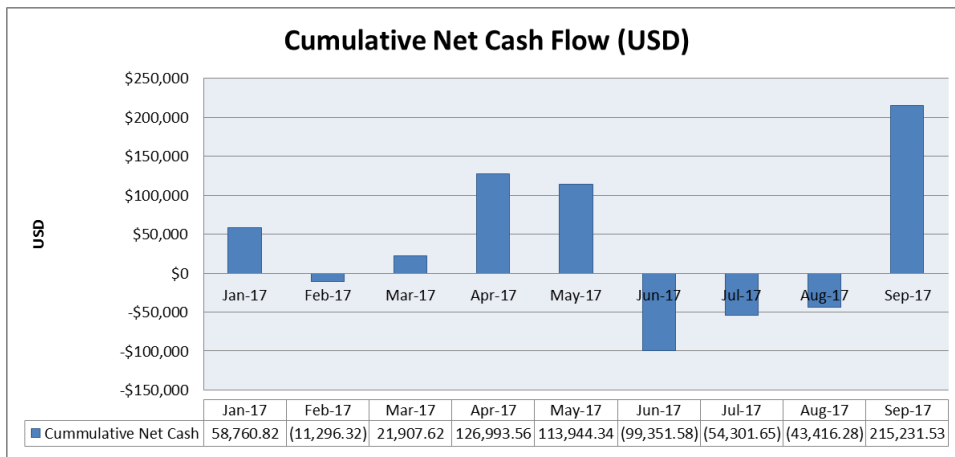
CASH INFLOW:



CASH OUTFLOW:



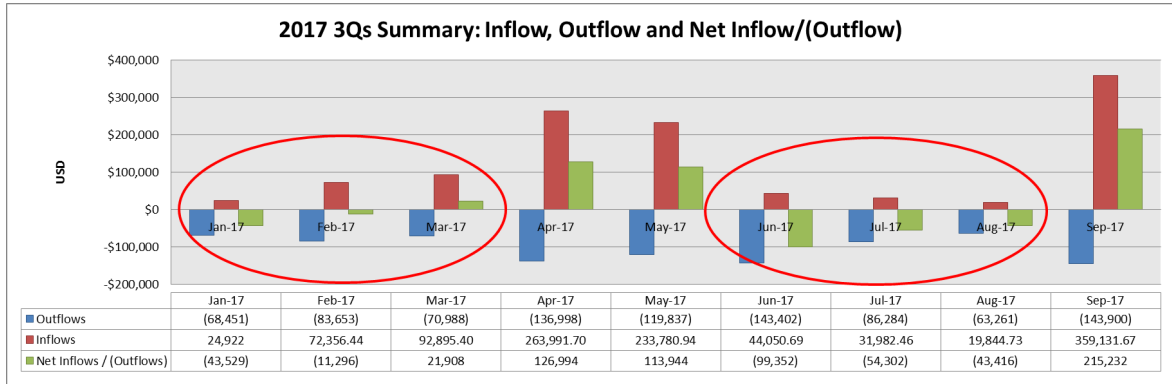
CUMULATIVE NET CASH FLOW:



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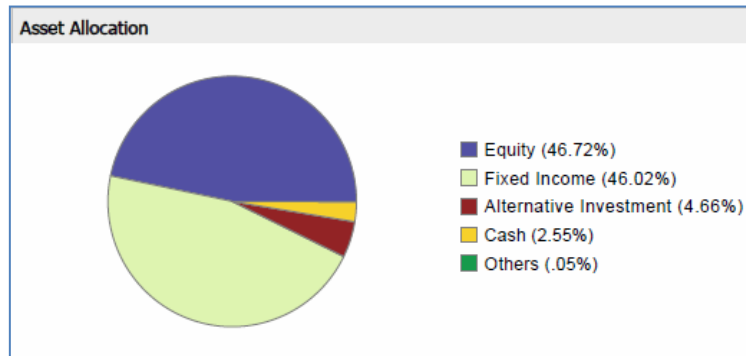
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CHALLENGES IN 2017 (A GA YEAR)



5.3 PERFORMANCE OF INVESTMENT PORTFOLIO

The 3Q Investment Portfolio report is included in the Agenda book. The overall investment market value (as of 29 September is \$4,226,622 with YTD return of 7.71% (net of fees). The Finance Committee approved a recommendation from BB&T/Scott&Stringfellow to rebalance the allocation to our original intention to 50/50 Equities/Bonds from 42/58 after the 2Quarter Investment meeting. The Alternative Investments are part of the Equity allocation. The YTD return of the Equities portion is 9.65% and Bonds yielded 3.10%.



The Overall Portfolio Snapshot is below for YTD and Quarter to Date.

Portfolio Snapshot		
	QTD	YTD
Beginning Market Value	\$4,178,829	\$3,971,525
Contributions/Withdrawals	-\$25,205	-\$50,198
Income	\$27,640	\$93,015
Capital Appreciation	\$45,359	\$212,281
Ending Market Value	\$4,226,622	\$4,226,622

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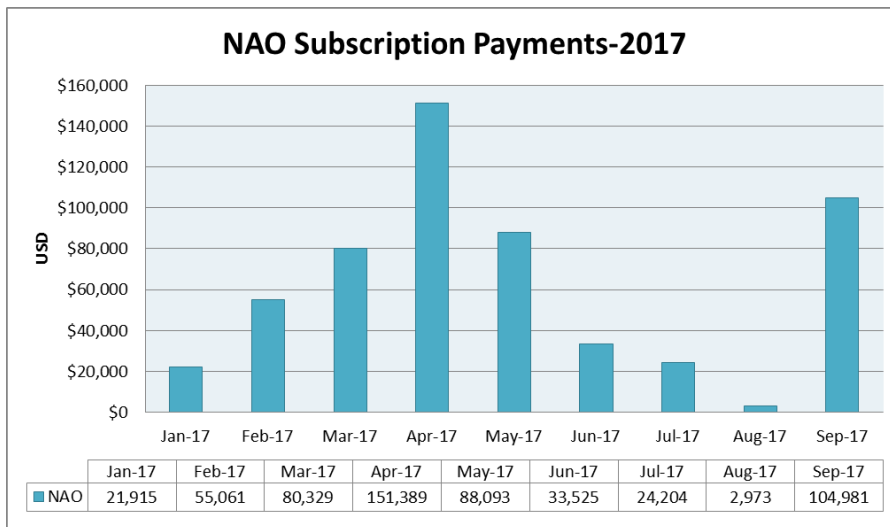
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5.4 ESTABLISHMENT OF ENDOWMENT MECHANISM

We are currently taking advice on the technicalities of setting up a suitable scheme. Options will be reviewed by the Finance Committee for recommendation to IUPAC early in 2018.

5.5 NAO NATIONAL SUBSCRIPTION: STATUS AND ISSUES

A summary of the status of the NAO National Subscriptions for 2016-2017 is included in the Agenda Book. IUPAC has received \$604,095 (~65%) of the 2016 budgeted amount of \$931,802 with an outstanding AR amount of \$328,707. We estimate the total receivables for 2017 to be \$915,576 with the difference due to current loss on exchange rates (\$6,102) and loss of status countries originally in the 2017 budget (\$17,226). The exchange rate loss in 2017 is comparable to 2016 at a similar time period. [Back payments from Pakistan, Costa Rica and Argentina-2016 were not adjusted in these numbers]. As a result of outstanding and delayed NS payments along with high volume of the GA Claims, a secondary line of credit was obtained. The initial BB&T line of credit (100K) was fully utilized and due to expire at the end of 2017. After thorough discussions with BB&T and BB&T/Scott& Stringfellow, a longer term line of credit solution was implemented. This allows IUPAC a line of credit up to \$350,000 that is secured against our investment portfolio. The initial line of credit (\$100K) was paid off with the new LoC, leaving \$250,000 for operations and reimbursements of claims.



NAO Issues:

1. Puerto Rico: Due to the devastating hurricanes this year, Puerto Rico may have little ability to pay their subscription. The Executive is asked to provide leniency regarding the 2017 payment beyond the deadline of 31 December 2017. At this time, few areas have electricity and internet connection. The Postal service is running now and Chair of CHEMRAWN and others have now been reimbursed. [From Dr. Carlos Tollinche: “About the PRNAO (CQPR), I do not know how did they fared since I tried to communicate with the office and it appears they are not operational yet. Therefore is going to be very difficult to get the PR NAO back to normal in particular with IUPAC related aspects.” 16 October 2017

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2. Cuba: Cuba has not paid a National Subscription since they were approved as an NAO in 2007/2008. The current balance (including 2017) is \$9,387 USD. Every effort in the recent past has been made to find a solution to the ability to transfer funds and/or identify that the Cuban NAO has the money in an account (to verify the issue is the transfer). They were unable to verify funds in an account.

The EC is asked to consider removing Cuba from NAO status, given that their members can participate through other programs (CA and AMP) if desired. It is doubtful they have any intention or method of paying IUPAC at this time.

3. Algeria: Algeria expressed an interest to join IUPAC (during the recent ACRICE conference via Jan Apotheker). They are in the process of requesting permission to join IUPAC (joining international organization is prohibited) from the General Assembly. The IUPAC President's CV was provided per their request.
4. Argentina: IUPAC received funds from Argentina for 2015 and 2016. Argentina was removed as NAO due to non-payment of 2015 and 2016 National Subscriptions. Argentina owes IUPAC for the 2017 National Subscription in order to apply for readmission to the Union. On October 12, 2017 I received the below communication regarding the 2017 NS:
"I would like to inform to you that, unfortunately, due to strong budgetary restrictions our Board of Directors has decided to suspend CONICET's international memberships since 2017, including those belonging to IUPAC. We have already informed the Argentine Association of Chemistry about this situation and CONICET has suggested them to afford the payment of Argentina's National Subscription"

NAO'S APPROACHING 24 MONTHS IN ARREARS

There are currently no NAOs approaching 24 months in arrears (other than Cuba).

Cuba is an outstanding problem and the EC considered how to resolve the issue which made them member while they are not paying their subscription. The EC recognized that the next FLAQ meeting will be in Cuba (La Habana, 9-12 Oct 2018). The consensus was that membership should be terminated in 2017 and that they shall be invited to reapply. Approved.

Action: To inform the Sociedad Cubana de Química that their IUPAC NAO will cease at the end of 2017 and invite them to reapply. (Lynn Soby)

5.5.1 NAO Applications and Readmission Requests

The Executive Committee was asked to review the Readmission Policy requirements in the Agenda book to inform decisions regarding Costa Rica and Pakistan requests.

1. Costa Rica: IUPAC received funds in the bank account from Costa Rica (non-NAO Status, provisional approved in 2015 at Council) to be applied to 2014, 2015 and 2016. They have been asked to provide a readmission application and pay the 2017 NS. Costa Rica, LANOTEC-CENAT, National Nanotechnology Laboratory, has filed all paperwork to apply for readmission as an NAO and is in the Agenda book.

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The Executive Committee reviewed the readmission documents and approved that the application from Costa Rica be moved for consideration by Council. Meanwhile they are 'provisional member'.

2. Pakistan: Pakistan was removed as NAO due to non-payment 2015 and 2016. Communication throughout 2016 and 2017 did not result in a proper readmission request and payment of monies owed in time for Council consideration. Recently, on 05 October 2017 IUPAC received funds in our bank account from Pakistan for invoice years 2015, 2016 and 2017. Pakistan is applying for readmission to the Union. A letter to the President, dated 24 March 2017 and their application is in the Agenda book.

The Executive Committee was asked to review the documents. EC recognized the intention of Pakistan for readmission and recommended to monitor their position till next Bureau (April 2018).

3. Kenya: The Kenya Chemical Society has filed the application, Organizational Profile and Letter to the IUPAC President requesting consideration for becoming an ANAO.

The Executive Committee reviewed the documents submitted by the KCS and approved that the KCS application as provisional Associate NAO.

The EC recognized that some key nations are missing and countries like Algeria, Morocco, Mexico, Nigeria, Lithuania, Vietnam, Mauritius. All have at some point made contact with IUPAC or IUPAC had contact with them.

5.6 BUDGET UPDATE FOR 2018-2019

This is unchanged from the Council meeting but we should review budgeting assumptions if we see material variances for the 2016/17 biennium relevant to 2018/19.

We are currently relaunching the AMP and CA schemes in line with the Council decisions and will monitor how these affect subscriber behavior.

6. NATIONAL SUBSCRIPTION TASK FORCE

Colin Humphris reviewed the work undertaken since Council on the assessment of the statistical analysis, seeking more data for Puerto Rico and reviewing the range of options for different combinations of the measures. For instance, the NSTF find a *prima facie* good fit for an index of Publications, GDP and Industry Turnover that may be workable.

Colin Humphris acknowledged the help of Tom Fearn (Professor of Applied Statistics in the Department of Statistical Science at UCL and member on a Division V project) for his help in sorting out the data.

EC recognized that more work needs to be done and approved for this work to be done. Following the Treasurer's recommendation, the membership of NSTF will be reviewed.

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Ultimately, a revised plan will need to be written-up to be shared with NAOs and followed by a series of gotomeeting consultations similar to those arranged before last Council. An update will be provided to Bureau (by April 2018) before it goes to all NAOs.

The goal is to have a model that is transparent and stable and that limits variations to more than 3 % per year. The model itself will need to be reassessed every 2 or 3 biennia.

NAO National Subscription summary

Invoices for 2018 have been issued in US \$ as approved by Council. The NAO National Subscription summary for 2017 and 2018 is in the Agenda book.

7. ROSTERS FOR DIVISIONS AND STANDING COMMITTEES

The rosters of the Division Committees, whose approval were delegated to the Executive Committee are included in the Agenda book. The TMs were already presented and approved at Council.

The EC reviewed and approved the compositions for all the 8 Divisions, with exception for Division V, and for which the membership of Medhat A. Al-Ghobashy (Egypt) is questioned by the NAO; see correspondence to/from Nadia Kandile in the agenda book.

All other exceptions presented for various committees were reviewed and considered acceptable.

Action: Invite Professor Medhat A. Al-Ghobashy to clarify his intention viz his TM election. The full roster of Division V will need to be approved later.

The EC reviewed and approved the composition of Commission II.1 (CIAAW and subcommittees)

The rosters of the Standing Committees (CCE, COCI, CHEMRAWN, CPCDS, ICTNS and ICGCSD, and PAC-EBA) were reviewed.

Ref CPCDS, the lack of diversity in term of NAO was raised. EC recognized that the expertise might be restrictive but the committee shall be encouraged to broaden its membership.

The Standing Committees membership will later be approved by the President.

The Finance Committee has two open positions and still in the process of consulting with our NAOs for suitable candidates. The Executive Committee was invited to propose candidates with business, finance, investment experience and fund raising/endowment experience. The final decision rests with the President.

Action: Follow-up with nomination and finalize a roster for the Finance Committee for input by the EC prior President approval.

(i) Division I Rules of Operation

Prof. Ron Weir has submitted new Division I rules of operation and a request that the Executive Committee approve these rules. A memo to the EC and the proposed rules are in the Agenda book.

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While there were no comments, the Secretary General recognized that it was good that the proposed rules have an explicit mechanism to remove ‘non-performing members.’
EC is asked to return feedback to the SG.

8. ROSTERS FOR BUREAU COMMITTEES FOR 2018-2019

Status on membership of Bureau committees was reviewed.

A draft of the membership list (23 Oct 2017) is in the Agenda book and did require revisions. A final version including the corrected membership for the Project Committee and the Membership Relations Committee will need to be recirculated.

The function of the Committee on Chemistry Research Funding was discussed.

Ultimately it was agreed that its purpose shall be focused on the more general issue of the Union funding. The Treasurer will be ex Officio.

Because of the relevance of funding with Membership issue, the Treasurer will also be ex Officio on the MRC.

Javier Garcia Martinez expressed his interest to be on the MRC.

While Chris Brett is proposed as returning chair for the Evaluation Committee, the suggestion was made that this position becomes one of the Vice President (VP ex officio).

The Treasurer raised a concern in reference to his own position running now in sync with that of the Secretary General., i.e. both the Treasurer and the SG were first elected in 2015 and both could be up for reelection in 2019 or a second 4-year term. If re-elected, both will end their term in December 2023. In previous biennia, the SG and Treasurer terms were preferably stacked alternatively so that both end at different time.

9. REPRESENTATIVES “ON” ORGANIZATIONS

A listing of volunteers and staff members to serve as IUPAC representatives on organizations whose work complements IUPAC’s activities was not available at the time of the EC meeting.

Action: To provide a listing of the ON members for review and approval by the Executive Committee.

Included in the book is the President’s letter to BIPM with IUPAC nominations for position on JCGM, GUM, and VIM.

{Day 2 follow-up: Javier Garcia Martinez is to replace Mark Cesa on FLAQ; Jan Reedijk on EuCheMS; Mark Cesa to continue as Fellow on OPCW (education/outreach)}

10. 2017 GA/CONGRESS, SAO PAULO, BRAZIL

10.1 LESSONS LEARNED

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Lynn Soby explained that one activity from Sao Paulo that received positive feedback from many organizations, was the WCLM-YO-RYO-IYCN-IUPAC Poster session and reception. She recalled that it engaged 50/50 sponsor with ACS, which helped IUPAC expenses. Repeating this exactly in Paris may be difficult because the organizers plan to have YO activities at Maison de la Chimie (away from the Congress venue); still this shall be explored.

One major issue was the registration process for the Congress and the GA-it did not work smoothly; required a significant amount of time to direct people to a single person to register for them and for us, as many had to be done individually and members were very unsatisfied. The IUPAC2019 registration system will be checked thoroughly to prevent this from happening. The on-site registration was however seamless and fully supported by the congress/PCO and needed no IUPAC staff time.

Another issue was the Brazilian Visa process, as there were many problems getting proper letters to our members (typically the Secretariat ED was involved) and the PCO process was not user friendly.

For the planning with the Congress and to allow the various prizes to be fully considered in the program, the abstract submission date is key; something to review/consider closely with the congress and with our own deadline (e.g. Solvay awards, women awards).

Clarification of the IUPAC Claim form process for the GA attendees is also needed. Reasonable early booking of flights should be encouraged, as some were made 1-2 weeks prior to the GA. As Paris will be much more expensive, this awareness and communication should be done early. An attendance sheet for the Division and Standing Committee meetings and Project TG meeting will be implemented to assist the Secretariat track claims and solicit outstanding claims prior to end of the year. The Secretariat currently has no visibility to this information.

10.2 FEEDBACK ON ELECTION PROCESS AND GA SCHEDULE

The 2018-2019 election process will be discussed in item 15. Positive feedback from the NAOs was provided during the GA. The major commentary was regarding the transparency and inclusiveness of this biennium's election process.

The General Assembly schedule feedback is the challenge of time to include any additional activities and that Division and Committee meetings be started after the first Plenary talk (~10:00 am). ICTNS meeting may need to be shifted to an evening time. The Secretariat continues to have issues with late requests for early meeting rooms, changes and additions to the schedule and the interdivisional meeting schedule. The organizers were able to accommodate the requests for meeting rooms for Friday morning meetings and most were set up mid-day Friday.

Action: Prepare an outline of the GA2019 schedule based on and similar to 2017, with freeing or flex time allowing members to attend the plenary of the Congress (from Monday on) and to schedule ICTNS a day ahead (Friday) prior the first Division meetings. The PC and EvC should also not be in parallel.

10.3 WCLM

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10.4 YOS AND RYOS ENGAGEMENT

Discussed above - the WCLM-YO-RYO-IYCN-IUPAC Poster session and reception was a well received activity.

11. 2019 GA/CONGRESS, PARIS, FRANCE

11.1 REPORT FROM ORGANIZING COMMITTEE

A report from the Organizing Committee Chair, Jean-Pierre Vairon, is in the Agenda book. Recent changes in the CNC leadership are also described. Currently, IUPAC100 team and the OC are working on “harmonization” of the Centenary celebration during the GA (Monday evening)

11.2 GA SCHEDULE

The General Assembly schedule will largely follow the São Paulo, Brazil schedule. The Opening Ceremony (jointly GA/Congress) will include time slot for the IUPAC President’s Address, the presentation of the IUPAC-Solvay Award (with a Solvay representative) and the Distinguished Women’s Award. The overall duration of the Opening (Sunday pm) is estimated to run from 17:00 to 19:00, followed by a plenary lecture from 19:00-20:00, and followed by a welcome reception.

The closing ceremony is also expected to be similar to Brazil 2017.

11.3 WCLM 2019

Chris Ober explained that the group involved in the WCLM2017 met the day prior this Bureau and have some ideas for 2019. While the networking session followed by the poster session and reception in 2017 was a joined activity with IYCN, such activity can be repeated for the benefit of the YOs, IYCN, and IUPAC members. (This appears possible since the IUPAC100 celebration is now scheduled for Monday am)

The plenary session of WCLM could be refocused to offer the NAOs a stage to take active parts. More detailed suggestions will be prepared in advance of the next Bureau.

11.4 YOUNG OBSERVER PROGRAM

See above. Coordination will be required to ensure that YOs are made aware of the IYCN program and to avoid duplication of proposed activities. Ensure that Monday evening is also reserved by IYCN for the joint networking session.

12. IUPAC 100 - CENTENARY PLANNING STEERING GROUP

Prof. Garson and Dr. McConnell joined via GoToMeeting
A report is included in the Agenda book.

Quickly the discussion turned to IYPT (item 13)

Mary Garson asked Natalia Tarasova for guidance and how should IUPAC100 integrate IYPT?

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Natalia Tarasova explained that UNESCO approved (last week) by consensus to ask UN to declare 2019 IYPT. Several paths are being explored and ultimately a decision shall be made before the end of the year. Natalia Tarasova explained that UNESCO expects that practically IUPAC will take the lead if the year was approved, and with close cooperation with other organizations (as highlighted in the IYPT Prospectus).

The EC recognized the opportunities that IYPT represents to leverage IUPAC100 but the practicality of managing both remains unclear.

Laura McConnell expressed the view that IYPT will likely be met with a lot of enthusiasm, but for IUPAC, just like with IUPAC100 initiatives, the activities need to benefit the Union in the long term.

Ultimately, the EC concurred with the view that IUPAC shall be prepared to take the lead and develop a plan as soon as possible. The VP, with Javier Garcia Martinez and Mei-Hung will consult each other and outline a plan which in term can be developed as a proposal as soon as the UN decision will be known.

Mary Garson provided updates on IUPAC100, covering the website, the activities planned for Paris, various other projects, and funding issues. She confirmed that in Paris, a key time slot of Monday morning was reserved for the joint celebration at the Palais des Congrès (need a gap in the GA schedule). A detailed script is being prepared. The website shall be released early next year.

12.1 PROJECT/ACTIVITY LISTING

A status report from the IUPAC100 Management Committee is in the Agenda book. Current efforts are focused in obtaining detailed input from the project teams with regard to a needs assessment for webpage design. Sponsorship opportunities are being identified during the development phase of the IUPAC100 webpage(s) as well as for activities in the report.

12.2 FUNDING AND RESOURCING

Colin Humphris spoke at the industry global summit in Vienna at the end of October and provided an update. His presentation included a sponsorship/partnership model.

Preliminary efforts of IUPAC100 prior to and including São Paulo, Brazil have cost ~\$6,100 for the design and development of IUPAC100 Logos, Twitter headers, pin design and manufacture and webpage design meetings. This expense has been carried under the Secretariat budget and not as a project.

13. INTERNATIONAL YEAR OF THE PERIODIC TABLE

The Prospectus for UNESCO's consideration of IYPT is in the Agenda book. Also included is the EC resolution sent to UNESCO and Prof. Tarasova's letter to Irina Bokava from December 2016.

13.1 FUNDING AND RESOURCING

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Discussions about the IYPT were intertwined with that of IUPAC100 – see above

Day 2: Chris Brett presented an outline of an hypothetical plan if IYPT was approved.

The group recognized that some of the ideas/projects already being worked out for IUPAC could be repurposed, e.g. PT Challenge. Some events are also already being planned as *de facto* it will be the 150 years anniversary of the first publication in 1869 of the Mendeleev periodic table; as such these events can become part of IYPT. While it appears that there is a momentum to celebrate the PT, there is a need to unify these projects/events. Needs for logo, flyers, web, etc. Need for a management committee (no more than 5) supported by an assistant (estimate US\$80k/year/person). Part time and affordable location shall be explored. A senior person/part time volunteer shall be the key contact with various Unions. Funding of an estimated 500k shall be raised (mostly from industry).

The Secretary General proposed that the EC approved the preparation of a proposal.

Action: Chris Brett to draft a project proposal to be send around to the EC before the end of the month.

Action: Natalia Tarasova to approach Jan Reedijk to seek his input about IYPT.

Action: EC to hold a conference call mid December to review advancement and readiness in advance of the UN decision.

14. STRATEGIC ISSUES FOR THE NEXT BIENNIUM

Professor Qifeng Zhou reviewed some ideas that he hopes will continue to guide strategic initiatives in the near future.

- Membership relation, including issues of retention are important not only for NOAs, ANAOs, CAs and affiliates. The recent revamp of the programs will need to be monitored. Contact with the chemical industry is not limited to COCI; ICGCSD can provide good contacts.

- Establishing meaningful ‘cooperation’ is relevant, not only with CAs but also with Organizations (AOs) and Federations. Is having MOU the best way?

- Involvement of young scientists is promising now that the IYCN is better established and that a cooperation with IYCN is on-going. IUPAC shall consider to make better use of its poster prize to recognize young scientist.

- A suitable development and management of an endowment shall be a priority.

- The on-going evaluation of the Union’s work through the Divisions and the implementation of the Strategic Plan will require follow-up and broadened role of Evaluation Committee.

- Big data and Sustainable development are emerging and recurring topics that deserve attention and support, and should be strategic priorities.

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Qifeng Zhou invited comments and thanked very one for their support.

Natalia Tarasova commented on the recent International Conference on Green Chemistry held in Moscow in October and recognized Sinopec and PhosAgro for their support.

15. ELECTIONS – UPDATE AND TIMELINES

15.1 STATUS UPDATE – 2018-2019 ROSTERS, NAO COMMUNICATIONS, APPOINTMENT LETTERS

Lynn Soby reviewed the 2018-2019 Election process which began 30 November 2016 and that is to be completed by 15 December. The schedule is in the Agenda book. Improvements in communications, nominating chair responsibilities, eligibility determination, timelines and Secretariat responsibilities will be implemented for the 2020-2021 cycle. The use of an online nomination system for both NAOs and NCs eliminated a lot of workload on the Secretariat, however, it remains a significant demand upon resources. Four of our five staff are involved in various aspects of this process. Following the Executive Committee decisions of the Standing Committee membership as well as the Division rosters, the NAOs will be sent the full set of rosters. Appointment letters are prepared for Division Officers, Bureau and Titular Members. The membership is currently being recorded into the new database which will allow us to update the membership on the website 31 December 2017 automatically. Opportunities to shorten the timescale will be considered, especially to avoid duplication of work such as double entries of the results.

15.2 APPROVAL OF DR GARETH OWEN AS TM OF JCBN

EC approve the nomination of Gareth Owen as titular member on the Joint Commission on Biochemical Nomenclature

15.3 TIMELINES FOR NEXT ELECTION CYCLE

Lynn Soby confirmed that the 2020-21 Election process will begin 1 December 2018 with the announcement posted on the website for NAO nominations. Concurrently, Nominating Committee Chair and members should be finalized prior to 1 December. The eligibility determination should be improved by the redesign database structure, which is a significantly complex step in the process.

(similar announcement was posted in Sep 2016 online as <<https://iupac.org/iupac-elections-for-the-2018-2019-term/>>, and in print in CI Sep 2016, p. 19)

15.4 INSTRUCTIONS FOR NOMINATING COMMITTEE CHAIRS

During the 2018-2019 election process, there appeared to be lack of understanding of the composition of the Nominating Committee and responsibilities. It is intended to prepare a detailed document, to be given to nominating committee chairs, division presidents and standing committee chairs, which will clarify the process and responsibilities. The Nominating Committee should consist of at least 4, but not more than 5 members; with no more than 2 members from the existing Division Committee, and the other 3 chosen from outside IUPAC on the basis and breadth of their expertise.

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Lynn Soby indicated that one sensible consideration is to recommend that the Division Vice President be systematically on the nominating committee (NC). The guidelines provided for the establishment of the NC should be reviewed. Ultimately, the SG approved each NC.

Action: Review the Elections guidelines to clarify task and responsibility of the Nominating committee (Secretariat/SG)

16. IYCN DEVELOPMENTS

Richard Hartshorn reported that the MOU with IYCN was signed in São Paulo. Despite the momentum and the flurry of activities during the GA, IYCN has been quiet since. The SG suggested that any opportunity to engage with them shall be nurtured. One of the IUPAC100 projects provides such an opportunity.

17. 2021 GENERAL ASSEMBLY & CONGRESS, MONTREAL, CANADA

Lynn Soby referred to the copy of the news release prepared by Canadian Society for Chemistry (CSC), the National Research Council of Canada (NRC) and the Canadian National Committee for IUPAC (CNC-IUPAC) announcing that Canada has been selected to host the 48th IUPAC World Chemistry Congress and the 51st IUPAC General Assembly August 13-20, 2021 in Montréal, Canada.

The Agenda book also included some meeting notes including an update of the Organizing Committee members and responsibilities.

18. STATUS REPORT ON IUPAC SECRETARIAT

18.1 WEBSITE, INFORMATION SYSTEMS, SOCIAL MEDIA

Lynn Soby reported briefly on the current and future plans of the IUPAC website. The completion of the implementation of ZoHo database with IUPAC.org in the priority, while the actual phase II of the web is on hold.

The new system will drive the display of member records online and the authentication required for the access of CI online. A two-way control will allow member to access their information.

For a proper setting of CI Digital First, additional requirement might be needed. IUPAC100 is however covered as it shall be one landing page and one page per project; this shall be release early January.

Twitter and other social media channels are set but under utilized.

The implementation of the new programs, i.e. AMP and CAs will provide opportunity to renewed communication with the NAOs. Lynn Soby asked if 'Affiliate' should it be renamed as "individuals membership". The EC agreed that this question shall be examined closely and if desirable be brought forward in time with the next Council.

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Action: Review options for the name of the AMP and consider implication of changing the name. Report in advance in the next council (Secretariat).

18.2 TRAINING FOR WEBSITE CONTENT MANAGERS

Lynn Soby explained that Divisions and Standing Committees were solicited for website content managers following the GA. She received a response from Division V and Division VII. During 2016 and 2017, we tested and modified our capabilities with “early adopters” from the Polymer Division, Polymer Education subcommittee, Division V and VI. Editor access to upload content on pages is easily managed from the WordPress administration. A second request for content managers will be done and brief training provided, but is dependent upon input from the Divisions and Standing Committees. Twitter capabilities are in place if needed on the pages.

The Secretariat plans to extend and share the use of facility of Gotomeeting and acquire a non for profit account with 10 seats.

18.3 STAFF RESPONSIBILITIES

and

18.4 WORKLOAD ISSUES

Lynn Soby explained that many processes have been reviewed to take advantage of current IT and online services, including cognito form for several prizes application, member update and payment. She hopes to make further improvement, but currently to focus is on the deployment of the new members database

The workload of the Secretariat remains high and increases with every new program or initiative, the Secretariat involvement increases. Many processes have been improved, but there continues to be an expectation of “personalized service” for much of our work.

19. PUBLICATIONS

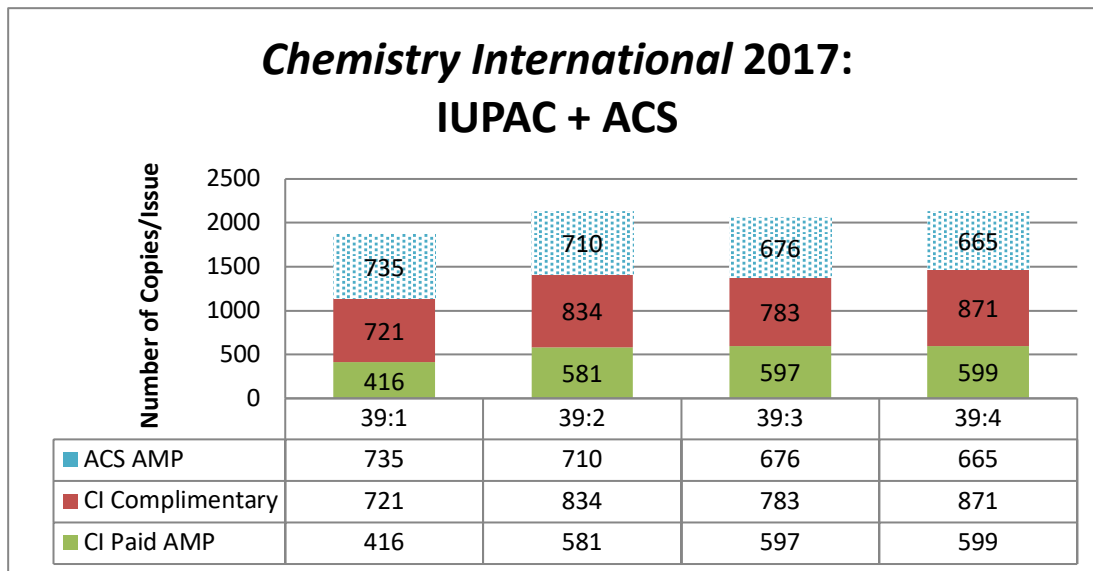
19.1 STATUS REPORT *CHEMISTRY INTERNATIONAL CI DIGITAL UPDATE*

Colin Humphris explained that in 2018 CI will be moved to quarterly and that to complement the now seasonal print, that a CI Digital First is being developed. He invited EC members to review the investment proposal for this. Linked to this are changes to enable the authentication of members who will have the right to view CI online as part of their membership. This will enable sales of CI to other interested chemists by De Gruyter.

Colin Humphris pointed to the 2016 CI Print numbers and breakdown of Paid versus Complimentary for IUPAC AMPs and ACS AMPs (reported below). In 2017, paid AMP is higher than 2016 while the complimentary issues dropped by 1,210. This is due to modifications made to our AMP process as well as reducing print copies to Task Group Members (TGMs). In 2018, all

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members will receive digital CI through a user authentication system. Members may join as an AMP “plus print” member if they choose to receive a print version.



19.2 STATUS REPORT *PURE AND APPLIED CHEMISTRY*

DeGruyter will be implementing new marketing strategy to enhance PAC and CI visibility. Also, PAC subscribers in 2018 will receive complimentary CI digital access as a bundled offering. An overview of PAC publications was provided in the Agenda Book.

19.3 VIRTUAL PUBLISHING AND DATABASES

19.3.1 IUPAC Standards On Line with DeGruyter

Sales of the Standards On-Line have been significantly lower than planned since initial launch.

Fabienne Meyers explained that De Gruyter is developing marketing initiatives that will leverage both CI and PAC. Online, it will translate into a landing page that presents all IUPAC/DG joint publications, i.e. PAC, CI, the Standards. In addition, we are compiling thematic Virtual issue which content will be pulled from both CI and PAC. The first such issue will be release early 2018.

19.3.2 Solubility Data Series with NIST/SpringerNature Status

Lynn Soby reported that the current status of this possible collaboration was at a standstill, due to NIST’s publisher, AIP and their stance regarding derivative works and licensing expectations. A meeting was held in Sao Paulo with SSED to discuss the situation after 2 years of work. Formulation of an approach to NIST along with AIP is in process, but may require legal advice for our intellectual property. Indications are that IUPAC has no rights to

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the “IUPAC-NIST Solubility Data Series”. SSED indicated that they are about one year away from the next publication and have been asked to continue work but not to engage AIP.

Lynn Soby indicated that of the author agreements and signatories may provide IUPAC with rationale to negotiate with AIP. However, IUPAC ownership might be “lost”.

Lynn Soby indicated IUPAC should consider a serious IP policy to protect the work of the Union.

19.3.3 Opportunities with SpringerNature

SpringerNature is still committed to work with IUPAC to identify potential collaborations. The Stability Constant Database (now aged) was suggested (IUPAC does own the data) but may be too outdated to commercialize.

Lynn Soby suggested that an inventory type project could be suitable and where a database would provide a searchable and enhanced product.

19.4 CI EDITORIAL BOARD

The CI EB continues to be focused on relevant content anticipated in the world of chemistry with links to future conferences and PAC special issues. Board members are very active in preparation for the launch of CI digital first.

19.5 PAC EDITORIAL ADVISORY BOARD

Richard Hartshorn pointed to the summary prepared by Hugh Burrows listing the conferences coverage in PAC 2017.

{this article was published in the Jan 2108 CI < <https://doi.org/10.1515/ci-2018-0113>>}

~~19.5.1 What is the IUPAC position on Open Access, and what discussions are underway with DeGruyter on this issue?~~

Item listed in the detailed agenda but not discussed in the meeting

19.6 BOOK PUBLICATIONS

Lynn Soby commented on this item. Recent book publications include “Successful Drug Discovery”- Ed. Fischer and Childers (Wiley-VCH); “Comprehensive Glossary of Terms Used in Toxicology” (RSC)-Duffus, Templeton and Schwenk; “Compendium of Terminology and Nomenclature of Properties in Clinical Laboratory Science” (with IFSCC) (RSC)-Ferard, Dybkaer and Fuentes-Arderiu.

IUPAC book publishers include Royal Society of Chemistry (Color Books), Wiley & Sons, Wiley VCH and others. Recently, the publications contract for Janos Fisher et al. Successful Drug Discovery #3 was renegotiated with the publisher. The royalty rate on print was increased from 4% to 6% where all other categories remain the same. This

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increase reflected the publishers' commitment to IUPAC, as it is above their global rate for print publications (4%). All royalties of this book are given to IUPAC by the editors.

In 2016, there was an issue with one of our series published by John Wiley & Sons, as they did not receive prior notice of a publication until it was completed. Recent discussions with them have led both parties to review contractual obligations and royalty payments. A master contract is in place and an inventory of royalties, upfront payments due to IUPAC is planned. Royalties are split between editors and IUPAC (50/50) in some of these contracts. An upfront payment of \$500.00 is due to IUPAC however, we will review if money is owed over the past few years.

Lynn Soby asked that when a project proposal makes mention of a book that it be passed to her for review so that as a project it can be flagged and followed-up.

20. NEW ELEMENTS WORKING PARTIES

Natalia Tarasova referred to her correspondence with Sigurd Hofman sharing update of the advancement of the project {2017-014-2-200}

The Joint Working Group (with IUPAP) is progressing and Hofman reported that the group started to analyze the criteria developed in 1985 to 1991 with respect to their usefulness in present and future evaluations. A first draft of an upgrade of those criteria considering new technical developments and expectations on results of future experiments has been prepared and is now under discussion. Next, the JWG will prepare a chapter on rules for the work of a future JWP and on requests to experimentalists how to optimize a publication so that all necessary data for an objective evaluation are included and ambiguities are avoided.

A draft to the 'Term of References' for Joint Working Party to be established for assessing the validation of claims of new element is also include in the agenda book.

21. IUPAC COMMITTEE FOR ICSU

Natalia Tarasova referred to the Agenda book which included the ICSU GA Agenda and documents. Mark Cesa reported that it is was a 'usual' GA which also included a forum of Unions and National Members.

21.1 UPDATE ON ICSU-ISSC MERGER

Mark Cesa provided an update on the ICSU General Assembly and the ICSU-ISSC joint meeting in Taipei 23-26 October 2017, along with IUPAC's vote on the proposed merger and the results of the voting overall. Papers provided by ICSU in advance of the GA can be found at: <https://www.icsu.org/events/32nd-icsu-general-assembly> and are included in the agenda book.

The merger of the International Council for Science (ICSU) and the International Social Science Council (ISSC) was approved. ((National members 50 for, 3 against, 1 abstention; Union member 25 for, 0 against.)) This will create "a unified, global voice of science, with a powerful presence in all regions of the world and representation across the natural

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(including physical, mathematical and life) and social (including behavioural and economic) sciences.”

A new Dues committee will to be in place for invoicing 2021.

The next and first GA of the new International Science Council will be in Paris in July 2018.

Colin Humphris asked how consistent is the merger with IUPAC strategic priorities.

Action: The NAOs shall be informed about the merger and received copy of the ICSU letter.

21.2 UPDATE ON ICSU GRANT: “A GLOBAL APPROACH TO THE GENDER GAP IN MATHEMATICAL AND NATURAL SCIENCES: HOW TO MEASURE IT, HOW TO REDUCE IT?”

A report on the recent regional workshop and a report for the ICSU General Assembly is in the Agenda book.

See <https://icsugendergapinscience.org/> and @GenderGapSTEM

Mei-Hung Chiu indicated that the project was progressing well and that it brings many partners to work together towards addressing an important SDGs, Goal 5 Gender Equality: “Achieve gender equality and empower all women and girls”. The partners are all contributing and are involved actively. Year 1 (now completing) focused on the survey development, Year 2 will be devoted to the global survey itself and collecting data, and Year 3 on to the assessment and interpretation, pulling best practices.

22. MEMBERSHIP RELATIONS COMMITTEE

Mark Cesa reviewed the Value proposition statements that have been prepared for IUPAC’s major stakeholder classes: NAOs, affiliates, volunteers, and Company Associates. Data and value proposition statements for NAOs, affiliates and volunteers were shared with the EC and the Bureau earlier this year, and the statement for Company Associates was prepared after the CA survey was extended to members of the Committee on Chemistry and Industry. These statements and the data behind them are intended to inform the MRC in the coming biennium in its efforts to retain current members and recruit new members from all of our stakeholder classes.

Ultimately, the goal is to improve membership of all type.

The Value proposition statements are internal to guide program implementation.

Next step, in the next biennium, is to present/share these value proposition.

Statement for NAOs

IUPAC membership extends the reach and global recognition of NAOs; provides support for member recruitment and retention, and increases the NAO’s value to its members through networking, information and career enhancement.

Statement for Volunteers

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IUPAC volunteers contribute to the betterment of humankind, the chemistry profession and the Union. Volunteering for IUPAC is an excellent mechanism for global networking, developing and applying skills, gaining international experience, and earning recognition for professional accomplishments.

Statement for Affiliates

IUPAC provides a platform for individual chemists and related professionals to network globally, gain recognition for their professional contributions, and stay informed in the fields of chemistry through IUPAC news, education and career development offerings.

Statement for Company Associates

IUPAC provides an essential platform for the chemical industry and for chemists and related professionals from industry through access to networking, global recognition, and guidance of and participation in IUPAC projects that span the fields of chemistry. Company Associates contribute actively to IUPAC's role as the provider of the common language for chemistry, standards that facilitate commerce, and conferences and projects that advance the chemistry enterprise.

Chris Brett suggested a similar assessment shall be derived to specifically address Associated Organizations

23. STATUS OF COMPANY ASSOCIATES PROGRAM

Colin Humphris reported that as a fellow-up to the Council decision to proceed with the revised CA program, a communication to NAOs and existing Company Associates was prepared involving input from MRC and COCI. Feedback was sought from CAs on their perception of the value proposition.

Colin Humphris indicated that the Secretariat was now implementing the new program.

The key aspects of the revised CA program are as follows:

1. Employees of Company Associates will be eligible to be nominated as candidates for Associate Member positions in Division elections and for appointment to Standing Committees, irrespective of country of residence.
2. Employees of Company Associates will be eligible to be nominated as candidates for both Titular and Associate member positions in COCI irrespective of the country of residence.
3. CAs and their employees can continue to participate in IUPAC projects, including development of project proposals, service as members of project task groups, and leadership of IUPAC projects.
4. CAs will receive discounts on IUPAC publications and fee-paying databases. The 25% discount for subscriptions to Pure and Applied Chemistry will be re-instated for CAs. CAs will have the option to receive PAC in either digital or print versions or both.
5. Companies will receive a 10% discount on registration fees for IUPAC endorsed conferences and symposia. Two persons per CA per conference or workshop are eligible.

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6. Company Associates will receive complimentary access to the digital version of *Chemistry International (CI)*.

The subscriptions for existing CA's will be phased in over four years to the \$2,500 target. New CA's in 2018 will be charged \$2,500.

24. STATUS OF AFFILIATE MEMBERSHIP PROGRAM

Colin Humphris indicated that the revised scheme was being implemented for 2018 as per the Council decision to increase the subscription, to extend nomination rights to all chemists to non-supported positions (AM) on Divisions and Standing Committees.

The key aspects of the revised Affiliate Membership Program are as follows:

1. Affiliate Members from both NAO and non-NAO countries will be eligible to be nominated as candidates for Associate Member positions in Division elections and for appointment to Standing Committees.
2. Affiliate Members can continue to participate in IUPAC projects, including development of project proposals, service as members of project task groups, and leadership of IUPAC projects.
3. Affiliate Members will continue to receive a 10 % discount on registration fees for IUPAC endorsed conferences and symposia. Affiliate members will continue to receive a 25 % discount on IUPAC books.
4. Affiliate Members will receive complimentary access to the digital version of *Chemistry International (CI)*. A print version will be available at a \$25 subscription premium as a contribution to printing and distribution costs.
5. Affiliate Members will receive a certificate of membership, an Affiliate Membership card and a letter from the IUPAC Executive Director.
6. Affiliate Members will all be visible on the IUPAC website in 2018 in the Membership Directory of the website. This will provide global visibility for our Affiliate Members and incorporate the AMPs fully into IUPAC's membership.

A 6-year limit is set for sponsored members.

25. PROJECTS IN REVIEW

PROPOSALS IN REVIEW

The most recent report of proposals in review is in the Agenda book. At the end of this biennium, a deadline for submission of new proposals to the Project Committee (PC) was set to 31 October 2017. Total amount requested in recent report is \$103,000. The PC will apply a new practice that is to postpone to the following biennium, the assessment of proposals coming from Divisions seeking full support for a large proposal when at that time, the Division has itself already committed its entire biennium budget to other projects.

Fabienne Meyers also indicated that in this end of biennium period, the DPs appreciated a regular and most up-to-date financial report so that they can finalize commitments without over/under spending their budget.

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PROJECT AND FINANCIAL REPORT

The 30 September Project and Financial Report are in the Agenda book. These reports are provided on a monthly basis to the DPs, STCCs and Task Group Chairs.

Lynn Soby confirmed that as was discussed at the GA during the DP/STCC meeting, Divisions and Standing Committees were asked to provide, via a GoogleSheet, their designated Project Managers who will be responsible for project management. This should assist in providing updates, monitoring aged projects and insuring a single point of contact for the Secretariat. PMs from Division II, III, IV and VII along with CCE and SSED have provided contact information thus far.

26. EVALUATION COMMITTEE UPDATE

Chris Brett referred to the Evaluation Committee (EvC) report included in the Agenda book and that has been updated since the Council meeting. He indicated that clearly the GA generated a momentum to complete projects and also to review proposed end date of current projects.

It was mentioned that three Divisions have since 2000 changed their name, Div I, III, and IV. While the scientific landscape is continuously evolving, these names shall remain current and contemporary. We should all keep thinking about.

Richard Hartshorn asked if the EvC should undertake a performance review of the Divisions? and develop a set of criteria against which their activities can be rated.

Colin Humphris suggested that a set of criteria shall be available which will guide a process allowing for a clear termination. The Secretary General concurred that the Division shall exercise their judgement and terminate projects that have no prospect of completion.

Action: EvC to consider a set of criteria that will allow for an evaluation of the Divisions; a draft shall be shared and reviewed with the DPs.

Chris Ober suggested that the Vice President Critical Assessment could cover such on-going assessment based on the EvC review.

26.1 FUTURE OF CHEMRAWN

Chris Brett commented that the EvC was asked by Council to review CHEMRAWN. He pointed out that while being also a member of ICGCSD, a conflict might be perceived. Alternatively, another member of the EvC could lead this review or the Secretary General could. Also, the EC considered the timeline and it was decided that ultimately while the review shall be presented at the next Council, the review must be available for consideration by the EC next year and to be shared with Bureau for its e-meeting in April 2019.

Action: EvC with the support of the SG to complete a review of CHEMRAWN by November 2018.

27. THE PHOSAGRO PROJECT

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Natalia Tarasova referred to John Corish report included in the Agenda book.

The PhosAgro/UNESCO/IUPAC Program on Green Chemistry for Life which is a very tangible outcome of the 2011 International Year of Chemistry has now completed five years of its planned five-year duration. Six awards of approximately €30,000 have been made in each of the years 2014, 2015, 2016, and 2017 with the 24 prizewinners coming from different countries spread right around the world. The International Jury meets in May of each year in UNESCO Headquarters in Paris and has had the difficult task of choosing the award winners from among the in excess of four hundred applications received to date. The successful young researchers have made presentations at a special meeting at the headquarters of PhosAgro in Moscow, at the IUPAC General Assembly at Busan, at a meeting of the Scientific Advisory Board of the UN Secretary General in St. Petersburg, at the Sixth IUPAC Conference on Green Chemistry in Venice, and, most recently at the St. Petersburg International Economic Forum (SPIEF'17). An additional special Prize for a project associated with phosphogypsum has been awarded.

This has been an outstandingly successful program attracting as it has young researchers from the best known institutions in the world of green chemistry as also very importantly from many of the countries in the developing world. Its success has been highly appreciated by PhosAgro, and the decision was made to maintain the program for the next three years. The 5th call for prizes for 2018 is now open with a closing date of February 28th, 2018.

Professor Tarasova indicated that PhosAgro intention is to renew and extend this program for another 3 years, with the equivalent of USD 3.5M. Where will the presentations made in 2019 is not yet decided, but the IUPAC Congress in Paris might be an option.

The EC thanked Professor John Corish for his continued involvement, UNESCO for their collaboration and support, and extend gratitude to PhosAgro.

28. INCHI TRUST

Richard Hartshorn reported that the InChI Trust held a conference at the NIH in Bethesda over three days in August. This allowed the various working groups to share ideas and approaches to their problems, as well as looking forward in the InChI world. Key outcomes from the conference and the subsequent discussion at the InChI Trust Board meeting include:

- A proposal to move software development to the open-source platform GitHub.
- The need for an enhanced role for the Division VIII-InChI SubCommittee as the InChI Scientific Advisory Board, in light of the GitHub proposal and other developments, with revised Terms of Reference and appropriate funding (probably mostly or entirely from the Trust). Specific arrangements for appointing members, both by IUPAC and by the Trust, should be established.
- An InChI Prize be established for devising new uses of InChI. The Trust will budget \$10,000 and hopes to make the first presentation at the 2019 World Chemistry Congress.
- The need to prepare a 3-5 year strategic plan for presentation at the 2018 InChI AGM. Among other matters, the plan should address the promotion of uses of InChI arising from existing developments, such as the Health and Safety application at the University of California, with a view to encouraging recruitment of new Trust members.
- Agreement that further meetings like the NIH meeting should be run – next one in early spring 2018.

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Ray Boucher has taken over as Chair of the Trust Board (he is also a member of the Division IV Subcommittee on Polymer Terminology).

Alan McNaught will retire now retire as Secretary of the InChI Subcommittee. Richard Hartshorn thanked Alan McNaught for his long-time involvement with InChI.

Qifeng Zhou indicated that the Chinese Chemical Society was interested in joining the Trust.

29. SPECTROSCOPIC DATA STANDARDS INITIATIVE

Richard Hartshorn referred to the Report of the **NMR Repository Task Force** included in the agenda book. He explained that meetings held by the Research Data Alliance and attended by several IUPAC members, included much discussion of the need for an NMR data repository (similar to the Cambridge Crystallographic Data Centre), and possibly for other spectra as well. Bonnie Lawlor (Chair of CPCDS) was asked to examine this issue and report on the feasibility of IUPAC taking the lead in such an effort, and particularly considering possible business models. The report suggested that IUPAC should take the lead in establishing the standards that would underpin data storage and validation in NMR data repositories while it shall not run the depository. It is suggested also that IUPAC establish the standards by which repositories should be measured to ensure that scientific integrity is maintained and data usability is optimized. This latter recommendation could potentially be a source of revenue as repositories would most likely pay to undergo review by IUPAC with the goal of being awarded an IUPAC seal of approval.

Richard Hartshorn indicated that CPCDS will approach the Allotrope Foundation www.allotrope.org and explore what cooperation can support the development of standards. Possibly a MOU shall be established.

EC thanked the Task Force for their details investigation and approved that CPCDS continue its evaluation of such potential project.

30. 2018-2019 IUPAC/SOLVAY AWARD

Mark Cesa indicated that suggestions have been offered by members of the IUPAC-Solvay Award Committee for improvements in the process of reviewing applications and selecting awardees after the 2016 and 2017 award process was completed. These suggestions have been incorporated into a revised plan and schedule for the awards for 2018 and 2019.

Solvay has generously agreed to provide € 20,000 for the biennium 2018-2019 (and covering the awards in 2018 and 2019 and instead of the regular € 10,000 per biennium) in recognition of the IUPAC centenary in 2019 and to remind the role of Ernst Solvay as a precursor of the IUPAC (see codicil included I the Agenda book).

The proposed plan and schedule, and the agreement with Solvay for 2018 and 2019, are found in the agenda book.

Mark Cesa indicated that the expertise of the jury member is critical and that all DPs shall take part. In the submission, the word limit is now strictly followed and fixed by submission form.

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While Solvay increased their support for 2019, it has not been decided if this will translate in a greater financial award for the same regular number of recipients (4 or 5 per year) or the same award presented to a greater number of recipients. The timing should be such that all the awardees have the opportunity to present at the Congress in Paris. Also, and while being in Paris, a representative of Solvay shall be involved in the presentation of the Awards.

31. OPCW

31.1 REPORT ON 2017 WORKSHOP ON REMOTE SENSING

Mark Cesa reported that IUPAC partnered with the OPCW Scientific Advisory Board (SAB), the U. S. National Academies, the Brazilian Academy of Sciences and the Brazilian Chemical Society to hold a workshop entitled, "Innovative Technologies for Chemical Security," in Rio de Janeiro, Brazil on 3-5 July 2017. This workshop was one of several intended to inform the report of the SAB on developments in science and technology for the December, 2018 Fourth Review Conference of the CWC.

The workshop was chaired by Dr. Christopher Timperley of the SAB, Prof. Aldo Zarbin of the Brazilian Chemical Society, Dr. Jonathan Forman of the OPCW Technical Secretariat, and Dr. Mark Cesa of IUPAC, assisted by Dr. Camly Tran of the U. S. National Academies and Dr. Bernard West of IUPAC. The SAB's report on the workshop is included in the agenda book, and a special topics issue of *Pure and Applied Chemistry*, including papers from presenters at the Workshop, is being planned for mid-2018.

{A report prepared by Bernard West appeared in *CI* Jan 2018 < <https://doi.org/10.1515/ci-2018-0118>>}

31.2 DEEPER/BROADER ENGAGEMENT PROJECT

Richard Hartshorn and Jonathan Forman (OPCW Science Advisor) are preparing a project that will take an IUPAC delegation (representatives from interested Divisions and Committees) to the 2018 OPCW Conference of States parties, or possibly their five-year review conference. In return, and OPCW delegation would attend the 2019 General Assembly in Paris. The goal is to enhance engagement with OPCW and identify new areas for possible collaboration by raising mutual awareness of the respective organizations and the ways they operate.

Mutual meeting to understand how both work. Purpose is to understand the other organization.

Action: Draft a project proposal to support IUPAC delegation (Richard Hartshorn); confirm IUPAC and Divisions representative.

It was pointed out that OPCW The Hague Award can be awarded to organization. Should IUPAC consider applying?

Action: Review eligibility < <https://awards.opcw.org/>> for 2019.

32. NEXT BUREAU MEETING (BRATISLAVA, SLOVAKIA, ON 6-8 APRIL 2018)

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Lynn Soby confirmed that the next Bureau meeting is scheduled for 6-8 April in Bratislava, Slovakia. Recommendations for hotels were evaluated and negotiation with [The Loft Hotel](#) are in process. The meeting venue has not been decided but we have been assured it will meet our requirements as discussed in Sao Paulo with Milan Drabik. Information regarding VISA practices and requirements are in the Agenda book. For further information, see <HTTPS://WWW.MZV.SK/WEB/EN/CONTACT-US>. Letters of invitation from Slovak Chemical Society and Slovak National Committee are being prepared and will be sent when received at the Secretariat. The decision of hotel, contract negotiation and payment is IUPACs responsibility.

On Friday 6 April, and prior the formal Bureau meeting, the committees of the Bureau will be scheduled to meet.

33. DATES AND PLACE OF NEXT EXECUTIVE COMMITTEE MEETING

Natalia Tarasova indicated that preliminary discussion on the dates and place of the next Executive Committee meeting was underway and it might be in Madrid, Spain, in November 2018.

Action: To follow-up with the NAO to ensure that all is manageable (Lynn Soby)

Action: To confirm exact place and date as soon as possible.

34. ANY OTHER BUSINESS

There was no other business.

Natalia Tarasova thanked the Past President, Mark Cesa, and also the Vice President, QiFeng Zhou. She, being from Russia and with her peers namely from USA and China, recognized that the international collaborations that IUPAC support are great examples for the scientific community. She thanked all the members of the EC for their support and Lynn Soby for the work of the Secretariat.

Mark Cesa thanked Professor Natalia Tarasova for her service to the IUPAC in her position of the IUPAC President.

QiFeng Zhou recognized that a lot of work has been accomplished over the last few years and he appreciated that the Union was in a good place to celebrate its centenary. He appreciated and welcomed the help of the officers and members.

The meeting was adjourned at 11:45 am.