International Union of Pure and Applied Chemistry

104th MEETING OF BUREAU

VIRTUAL MEETING 25 APRIL 2020

FINAL DRAFT MINUTES

Attendees: Prof. Christopher Brett (Chair), Prof. Javier García-Martínez (Vice President), Prof. Richard Hartshorn (Secretary General), Mr. Colin Humphris (Treasurer), Prof. Qi-Feng Zhou (Past President), Prof. Russell J. Boyd, Prof. Mary Garson, Prof. Christopher K. Ober, Prof. Ken Sakai, Prof. Ghada Bassioni, Prof. Mei-Hung Chiu, Dr. Petr Fedotov, Prof. Ehud Keinan, Dr. Bipul Behari Saha, Dr. Tim Wallington, Prof. Lars R. Ohrström, Prof. Nikolay E. Nifantiev, Prof. Christine Luscombe, Dr. Zoltán Mester, Prof. Hemda Garelick, Dr. Rita Cornelis, Prof. Alan Hutton, Prof. Jan Apotheker, Prof. Francesca Kerton, Dr. Robert Audette, Ms. Leah McEwen, Prof. Pietro Tundo, Prof. Jürgen Stohner

Guest: Dr. Lynn Soby (Executive Director), Dr. Fabienne Meyers (Associate Director)

Dr. Laura McConnell, Prof. Jan Reedijk

Secretary: Lisa Musty

Apologies: Prof. Gloria Obuzor

SATURDAY 25 APRIL 2020

1. INTRODUCTORY REMARKS AND WELCOME

Professor Christopher Brett welcomed all participants and thanked them for joining the virtual meeting. He announced the virtual meeting format for off-year Bureau meetings and commented on the world situation due to the pandemic. Professor Brett further discussed the timing of the meeting and keeping to a timeline. He announced that some of the Divisions and Standing Committees have already met and asked all participants to introduce themselves, including titles and Bureau position.

2. FINALIZATION OF AGENDA

Professor Christopher Brett referred members to both the short agenda and the long agenda, which included items which needed to be previously reviewed and asked for additional topics. Dr. Zoltán Mester requested that everyone agree to meeting recording and Professor Brett asked if anyone objected to having the meeting recorded. All members agreed to the recording.

3. MINUTES OF 103rd MEETING OF THE BUREAU (PARIS, APRIL 2019)

Professor Christopher Brett brought the Bureau’s attention to the minutes of the 103rd meeting of the Bureau included in the Agenda book and asked if there were any questions or comments. Leah McEwen noted that under item 6.7 the SDS Subcommittee should be corrected to SCDS Subcommittee. As there were no other comments, Professor Brett asked Bureau members to vote via the chat function of the virtual meeting application.
**DECISION:**
The Bureau approved the Minutes of the 103rd (Paris) meeting.
28 – Yes; 0 - No; 2- Abstain

3.1 **MATTERS ARISING FROM MINUTES (NOT COVERED BY ITEMS ON AGENDA)**
No matters arising from the minutes were raised.

4. **MINUTES OF 158TH EC MEETING**

4.1 **RECEIPT OF DRAFT EXECUTIVE COMMITTEE MINUTES BY BUREAU**
The Secretary General noted that a draft of the 158th Executive Committee meeting minutes was not available for inclusion in the Agenda book. The Consolidated List of Actions were included in the Agenda Book and asked if there were any comments. There were no comments and the minutes were received by the Bureau.

**158th Executive Committee, Tokyo 2019 Consolidated List of Actions and Decisions**

[158EC2] Minutes of the 157th Executive Committee were noted as previously approved.

[158EC3] Draft minutes of the 103rd Bureau minutes were received and approved to seek Bureau approval.

[158EC4] The EC approved the membership of the Organization Review group proposed membership list. The EC also confirmed that Prof. Brett continue as the liaison to the group.

[158EC5] During the discussion of the Establishment of an Endowment mechanism, the Treasurer and Vice President noted that a new narrative be created to communicate to an external audience the unique value proposition of IUPAC relative to many other organizations. *[No Person Assigned]*

[158EC6] The Treasurer and Executive Director will develop a formal Travel and Expense policy and present to Bureau at the 2020 meeting for approval. *[CH/LMS]*

[158EC9.1] The EC approved the recommendation to adopt a new category “Associate National Organizations” and continue promoting the benefits of coordinating the IUPAC Affiliate Member program and the IUPAC Company Associate Program.

[158EC9.2] The EC approved the recommendation to formally terminate the Sponsored Affiliate Member program for 2020 onwards. A discounted membership of $15.00 should be offered to lower income Associate National Organization countries.

[158EC9.3] The Treasurer and Executive Director will continue working the ANO details in order to propose to Council a replacement of the ANAO program after detailed review of the ability to pay in BRICS countries. *[CH/LMS]*
[158EC13] The EC approved the proposal to extend Division Emeritus Fellows to other IUPAC Divisions in order to harmonize the program.

[158EC14] The EC approved the Division Committee Rosters that were delegated to the EC for exceptional circumstances.

[158 EC16] The EC approved the proposed IUPAC Representatives “ON” other organizations for both the IUPAC and Division representatives.


[158EC20] The EC ratified the conference endorsements as of 30 November.

4.2 Highlights and Questions about Executive Committee Items Not on the Bureau Agenda

There were no questions about items from the minutes of the Executive Committee.

5. Minutes of 50th Meeting of Council

5.1 Receipt of Draft Executive Committee Minutes by Bureau

The Secretary General noted that the draft of the 50th Executive Committee meeting minutes were not available for inclusion in the Agenda book. The Consolidated List of Actions were included in the Agenda book for reference and he asked if there were any comments. There were no comments and the List of Decisions and Actions were received by the Bureau.

6. Action Items from Previous Meetings Not Covered on Agenda

Professor Richard Hartshorn noted that several items from the previous meeting of the Bureau would be covered in the Agenda. There were no questions or comments.

7. Report of the President

Professor Christopher Brett referred to his report included in the Agenda book. He noted highlights which included streamlined activities of IUPAC, increased visibility and the importance of projects put out by each committee. He emphasized the necessity of visibility of IUPAC as the worldwide resource for chemistry. Professor Brett called for continued efforts to link with external organizations, with specific emphasis on environmental sustainability and efforts toward reducing the global environmental crisis. He also discussed chemistry data to be presented in a universal format and encouraged members to thoroughly review the report, if they had not done so. He mentioned the United Nation Secretary General’s statements on the global health crisis and the need for IUPAC to
continue to provide hard data toward that end. He asked for any questions or comments on his report and there were none.

8. **Vice President’s Critical Assessment**

Professor Javier García-Martínez discussed the challenges of the Union and stated he will continue to be in contact with Bureau members for critical assessments, including discussions with the Evaluation Committee for review of efficiency. Professor Martínez additionally discussed promoting changes in recruiting young scientists and the necessity of finding balance with rigorous scientific work and accurate and quick responses to the needs for scientific data in chemistry. He noted his concerns about IUPAC becoming irrelevant and the current financial situation. He continued by mentioning scientific meeting challenges in person which were cancelled and postponed due to current pandemic and asked for feedback in writing or other communication.

Professor Christopher Ober commented to Professor Martínez regarding reopening research labs, and Robert Audette responded that they continue to function as essential in industry. He suggested that IUPAC publish information on protection and procedures to continue to safely operate laboratories in a rapid manner.

Professor Martínez thanked everyone for their input and reinforced the need for IUPAC to use the opportunity presented by the Covid-19 pandemic to further IUPAC visibility and chemistry initiatives.

Zoltán Mester commented that IUPAC has been largely silent in how to handle issues relating to the Covid-19 pandemic and quality chemical testing. He noted that this would be an additional opportunity to provide unbiased chemical testing information.

Professor Nikolay Nifantiev mentioned the possibility of IUPAC collaboration with the WHO and the opportunities such a situation provided for IUPAC.

Professor Martínez commented that some one-page instruction sheets exist, including one specifically circulated from Dow Chemicals, and encouraged individuals to communicate with him to offer simple and concrete guidelines for chemical handling.

**ACTION:**

During the Vice President’s critical assessment of the challenges of the Union, JGM agreed to contact Bureau members regarding initiation of the Evaluation Committee’s review of efficacy and needs of the Union. He will request feedback in writing or other communication from Bureau members [JGM]

9. **Report of the Secretary General**

Professor Richard Hartshorn introduced the specific issue of Gender Balance of invited speakers in conferences seeking IUPAC endorsement, which has not improved satisfactorily. He stated that a major challenge was that some organizing committees were not making this a sufficient priority. He suggested that a greater emphasis on giving up and coming scientists plenary opportunities at such
conferences might lead to a reduction in this problem. He noted that many IUPAC committees would be meeting by teleconference and other virtual means and offered to participate in those meetings if those groups thought it may be useful for him to do so.

Laura McConnell made comments on the Global Women’s Breakfast and suggested creating a document to provide guidance on how to create gender balance beyond current members.

Leah McEwen commented that she wants to assist with gender balance on plenary speakers at conferences and other focus areas of IUPAC representation.

Hemda Garelick suggested that the Bureau look at finding lists of women who are prominent in the Chemistry field. Her belief is that varied geography is important in this aspect for IUPAC.

**ACTION:**
*Secretary General and Executive Director will collaborate on furthering gender balance on plenary speakers at conferences, etc. [RH/LMS]*

10. REPORTS FROM DIVISIONS AND STANDING COMMITTEES

10.1 **DIV 1 – TIM WALLINGTON**

Dr. Tim Wallington reported on progress in the past two years on bringing projects in the division up to date. The Division was represented at the General Assembly in Paris with thirteen representatives and engaged in lively discussions during the meetings. He highlighted the completion of the 4th edition of the Green Book, which is now in review. Division 1 is already planning for a 5th edition of the Green Book that will be a digital narrative and is currently working on the project that is updating the Gold Book.

10.2 **DIV 2 – LARS OHRSTRÖM**

Professor Ohrström discussed the past year of Division 2 as extremely busy with both elections and the International Year of the Periodic Table activities. He also reported on the Division’s progress on revisions of atomic weights which are out for review in *Pure and Applied Chemistry*. Additionally, he reported a new interest in projects relating to the concept of valence and other materials in inorganic chemistry.

10.3 **DIV 3 – NIKOLAY NIFANTIEV**

Professor Nikolay Nifantiev referred Bureau members to his Division 3 report in the Agenda book for detailed information. He reported on various Division 3 activities including the participation in IUPAC collaboration with Organization for Prohibition of Chemical Weapons (OPCW), ongoing project management and scientific advances. He reported about work on management structure, participation in five subcommittees and eight Conferences in the past year.
10.4 Div 4 – Christine Luscombe

Professor Christine Luscombe opened with comments on the excitement about the postponed 48th World Polymers Conference, Macro 2020+ and the recent announcement of awards which will be presented at the conference in 2021.

10.5 Div 5 – Zoltán Mester

Professor Zoltán Mester referred Bureau members to the detailed report included in the Agenda book and emphasized the Division structure and goals. Additionally, he emphasized some of the goals of Division 5, to encourage the growth of Analytical Chemistry and to provide the highest level of scientific advice. The Division is also working on launching an international chemistry award.

10.6 Div 6 – Hemda Garelick

Professor Hemda Garelick discussed the Division 6 interest in a multi-disciplinary approach and the use of varied expertise in the area of processes in environmental systems, health and scientific aspects of food, agriculture and crops. The Division is using life cycle analysis of chemicals to help research end of life processes and their related effects on the environment. Additionally, Professor Garelick reported on several activities and collaborations which include studying nano-enabled pesticides, flame retardants and microplastics and in particular, studying their long-term impact on the environment. Division VI was involved in several symposia, conferences and proposals over the past two years. It proposed 3 symposia to the Montreal Congress planning committee.

10.7 Div 7 – Rita Cornelis

Dr. Rita Cornelis provided a summary of Division 7 projects and activities during the past biennium, including a Symposium on Drug Discovery and Development, the production of a manuscript submitted to ICTNS for publication and a project focused on the glossary of terms used in combinatorial chemistry, which is in final draft form. Professor Cornelis also summarized several additional projects and publications. Chairs of two Subcommittees were elected and membership of 3 Subcommittees were renewed.

10.8 Div 8 – Alan Hutton

Professor Alan Hutton drew Bureau’s attention to a new collaborative project, building on the Division’s long-standing liaison with ISO, entitled ‘Nomenclature and associated terminology for inorganic nanoscale particles’. He gave additional details on Brief Guides to chemical nomenclature that were newly published in several languages in four-page brochure format as well as the originals in Pure and Applied Chemistry. Key priorities for the future include new editions of the Red Book and the Principles of Chemical Nomenclature. Professor Hutton also gave an update on the health of Karl-Heinz Hellwich, current Titular Member and former Past President of the Division, who has been gravely ill but is now embarking on a slow recovery.
10.9 CHEMRAWN – FRANCESCA KERTON

For ChemRAWN, the Committee on Chemical Research Applied to World Needs, Professor Francesca Kerton discussed future initiatives and collaborations on awards, additional IUPAC Committees currently working on building capacity through chemistry research and training, and social media awareness. She additionally highlighted the need to improve interdivisional interactions and collaborations globally. Other activities which are ongoing include the use of virtual technologies to promote awareness of chemical research.

Mr. Colin Humphris requested to be added to the ChemRAWN invite list and Professor Kerton agreed to do so.

ACTION:

Colin Humphris, as Treasurer and an ex-officio member of ChemRAWN is to be added to all ChemRAWN invites [FK]

10.10 COCI – ROBERT AUDETTE

Colin Humphris indicated he was working on increasing the global chemical industry's participation in IUPAC. Colin was interested in having COCI's involvement in this important IUPAC effort. Dr. Robert Audette indicated that he was actively working on proposed new COCI goals and objectives for 2020-2021. The 1st new goal and objective was to re-initiate and increase the global chemical industry and pharmaceutical industry, including chemical industry associations, back into active participation within COCI. Dr. Audette agreed to collaborate closely with Mr. Humphris on this important IUPAC and COCI initiative. *Dr. Audette resigned as Chair of COCI shortly after the Bureau meeting. Dr. Anna Makarova was appointed Chair and Dr. Bipul Saha appointed Secretary by the President after consultation with the Executive Committee. The Action item below reflects the current membership.

ACTION:

Colin Humphris, as Treasurer, and Dr. Saha, as COCI Secretary, will collaborate to increase the global chemical industry and pharmaceutical industry, including chemical industry associations, active participation in IUPAC and COCI. [CH, BS]

10.11 CCE – JAN APOTHEKER

Professor Jan Apotheker reported on a number of projects completed, including a project about gender gap and chemistry education. He also commented on the role of chemistry in development. The Periodic Table Challenge was extremely successful, and he noted that over 130 countries participated in the Challenge. Ongoing items related to this are relaunching the PT Challenge “2.0” on the IUPAC website. He noted upcoming conferences planned for ICCE and discussed publishing a special issue of Chemistry Teacher International, in cooperation with the other Divisions. He referred Bureau members to the report in the Agenda book for additional details.
10.12 ICTNS – JÜRGEN STOHNER

Professor Jürgen Stohner discussed that ICTNS updates guidelines on technical reports, recommendations and revising entries in The Gold Book. He also referred to his own report in the most recent publication. Additionally, he mentioned IUPAC sponsored books reviewed by ICTNS. Finally, he commented that the review of publications (time spent under review, number of revisions etc.) is more thorough than he originally expected and within the limits of past years.

10.13 CPCDS – LEAH MCEWEN

Ms. Leah McEwen reported on a new program on emerging technologies and highlighted the opportunity of research in the digital era. She also discussed raising the public awareness of “Digital IUPAC” and specifications necessary for projects and a substantial online presence. She emphasized the exchange of research data in the digital era and collaborating with digital media on publications. Ms. McEwen spoke briefly on the challenges of researching drug sequencing in regard to the Covid-19 work. Additionally, she stated priorities for CPCDS continue to be establishing standard metadata profiles for machine-readable expression of data and creating digital workflows and tools.

10.14 ICGCSD – PIETRO TUNDO

Professor Pietro Tundo gave updates on the Interdivisional Committee on Green Chemistry for Sustainable Development, including new members and nominations. He further noted his concern that there are only 8 core members (Chair, Secretary, 3 TM and 3 AM) and emphasized the need for partnerships and coordination of efforts around green chemistry. Additionally, the 1st virtual meeting of this Committee was held in January 2020. Professor Tundo gave a summary of several awards and prizes awarded, including PhosAgro/UNESCO/IUPAC, IUPAC-NHU Award and ChemRAWN VII Prize in Green Chemistry. He also discussed the Metrics for Green Synthesis and correlating IUPAC projects with the UN-SDG’s.

11. ADDITIONAL ICGCSD MATTERS

11.1 STATEMENT TO BUREAU

Christopher Brett requested that Professor Pietro Tundo, Standing Committee Chair, summarize the proposed statement of ICGCSD. The full statement was in the Bureau Agenda book. Professor Tundo introduced the statement to the Bureau:

“While we pay attention to the increasing emission of CO2 and the increasing number of new chemical compounds that are spreading in the environment, it is difficult to foresee an end to this damaging trend. Because Nature is not in a hurry, but humankind is.”

Professor Brett requested questions from Bureau members and Professor Hemda Garelick commented that the statement needs additional discussion and collaboration. Additionally, she
noted the need to define Green Chemistry more carefully by the Bureau. Javier Martinez and Colin Humphris also had comments regarding the difference between Sustainable Development and Green Chemistry. Discussion commenced around the terminology of “Green Chemistry” and Christopher Brett requested that there be an electronic vote on the statement at a later date, as a consensus is needed. All agreed that more discussions were required before a vote can be made.

**ACTION:**

The ICGCSD statement regarding “Green Chemistry” needs additional discussion and a vote via electronic methods will be held in the future. [PT/RH/CB/HG]

11.2 NHU AWARD RENEWAL

Professor Tundo then gave an overview on the NHU-IUPAC Award renewal in March of 2020, which will be presented at the 47th IUPAC World Chemistry Congress and General Assembly in Montreal, Canada, in 2021. This will be the second such award for Advancements in Green Chemistry.

11.3 UNSDGs PROJECT

Professor Pietro Tundo gave a review of the task group on proposal #2020-011-1 which is also found summarized in the Agenda book.

Christopher Brett asked for questions on Committee Reports. Colin Humphris referred to a question about COCI from Robert Audette and they agreed to discuss the item in an offline conversation. No additional questions were raised.

12. ITEMS FROM MEETING OF DIVISION PRESIDENTS

12.1 DIVISION EMERITUS FELLOWS

Professor Richard Hartshorn discussed the status of the Division Emeritus Fellows Program. He referred to the proposal to expand the program, included in the Agenda book. It details that each of IUPAC Division would have its own group of Emeritus Fellows and will be responsible for managing that group and involving them appropriately in the work of the Division.

13. COVID-19 AND IUPAC CONFERENCES

Professor Richard Hartshorn informed the Bureau about numerous IUPAC conferences which were either postponed or cancelled due to the Covid-19 pandemic. He expressed concern about future issues of Pure and Applied Chemistry (PAC) due to a lack of these events and collaborations that may cause a shortage of materials for publication. Professor Hartshorn suggested the Bureau consider alternative sources of materials and themed issues of PAC.
Professor Martínez discussed that the Covid-19 pandemic may provide new subject content for publications. He stated that additional discussion online is needed.

Professor Christopher Ober mentioned the possibility of publishing student review papers written during the Covid-19 pandemic.

Professor Nikolay Nifantiev commented that student articles may not be of interest to the community if it is student driven. Profs. Ghada Bassioni and Jurgen Stohner also commented on this topic regarding young and inexperienced scientific writing.

14. 2021 51ST GENERAL ASSEMBLY & 48TH CONGRESS, MONTREAL

Dr. Lynn Soby announced her support of the conference application submitted for approval and also noted that the application was included in the Agenda book. She commented on the importance of having greater diversity at the 51st IUPAC General Assembly and 48th Congress and expanding upon earlier plans to ensure it. Lynn additionally gave details from her review of the location and facilities.

Mr. Colin Humphris commented that Division Presidents and Committee Chairs should make great efforts to encourage the newer members of IUPAC to attend the General Assembly in 2021.

**DECISION:** Bureau unanimously approved the Application for IUPAC Endorsement (AIE) submitted by the Chemical Institute of Canada and National Research Council of Canada for the 2021 World Chemistry Congress.

Yes – 32; No – 0; Abstain – 0

The Bureau took a short break from 11:45AM to 11:55 AM (Mary Garson departed the meeting and announced that Laura McConnell would take her additional items on the agenda).

15. IUPAC ORGANIZATIONAL STRUCTURE REVIEW GROUP REPORT

Professor Javier Martínez reported that the IUPAC Organizational Structure Review Group is reviewing organizational structure and financial spending, including pressures on the Secretariat’s costs. The report could include short, medium, and long-term recommendations and changes.

Leah McEwen commented that, in addition to increasing efficiency, how we work also has implications for dissemination, access, adoption and managing IUPAC's outputs.

Christopher Brett commented that there was a lot of ground to cover before October of this year, with the review group making its recommendations to the Executive Committee by November 2020. He also recommended collaboration of Bureau members with the Review Group when requested and asked the Bureau to consider what they would like to see happen as IUPAC begins its second century.

16. FINANCE AND BUDGETS

Summary
Mr. Colin Humphris, Treasurer, referred to the IUPAC 2018-2019 Biennium P&L, included in the Agenda book. He reviewed the biennial balance sheet, line of credit and cash flow report, with emphasis on capital gains and losses, publication income, and Budget allocations. Colin Humphris noted that both he and Lynn Soby would be available to answer questions regarding the Finance Committee’s report. Also mentioned was the unpredictability of the current financial environment, and a major economic downturn would definitely affect IUPAC income and investments. The summary profit and loss statement for 2019 is included in the Agenda book. The data make comparison between 2019 Actual and the original 2019 budget together with commentary to aid understanding. Looking at 2019, a higher expected cost in a General Assembly year and 2018 (off year) actuals gives a complete biennium picture.

The overall biennium result is a loss of 58k USD but this is net of an unrealized gain on the value of IUPAC’s investments of 297k USD. Therefore, at an operating level the loss was 355k USD largely accounted for by the fact that at the end of the biennium IUPAC had borrowings of 337k USD.

The 2019 year-end balance of the total portfolio was 4,476,402.00 USD and, as seen in the P&L, had significant “unrealized” gains throughout 2019. The total balance as of March 31, 2020 was 3,754,273 USD which represents a loss of 721,992 USD between January 31st and March 31st.

Also reviewed were publication income and budget allocations for 2020/2021.

Lynn Soby reported that Secretariat staff have been working remotely and will continue to do so for the near future due to the Covid-19 pandemic.

Christopher Brett asked Colin Humphris about travel expenses and to expand on the explanation on the travel information per diem rates. Colin Humphris gave the explanation that per diem rates are universal and exclude local travel charges.

17. TRAVEL AND EXPENSE POLICY REVIEW

Lynn Soby summarized the Travel and Expense Policy and referred Bureau members to the report included in the Agenda book. She emphasized the necessity of approving the new policy so that Claim form structure and instructions can be updated.

**DECISION:**

*Bureau unanimously approved the new 2020 Travel and Expense Policy [All]*

*Yes – 27; No – 0; Abstain - 0*

18. AUDITED FINANCIAL STATEMENT AND STATUS

Colin Humphris referred Bureau members to the 2019 Financial Audited Statements included in the Agenda book for reference. He announced that the Audit was clean and correct. Additionally, development of more policies is important for both the volunteers and the IUPAC Centenary Endowment Fund. There were no questions or comments on the report.
19. **Centenary Endowment Status**

Colin Humphris reported that the Endowment Policy review is available and thanked the Endowment Committee for soliciting advice on the legal, scientific and investment aspects. Colin also mentioned that IUPAC could potentially attain sponsorship for the Periodic Table Challenge. He reported that the Centenary Endowment Board would be an external board with the roles of soliciting funds from members of the International chemistry community and seeking other philanthropic major donors. He referred Bureau members to the documents contained in the Agenda book and commented that the first meeting should take place prior to the Montreal General Assembly meeting in 2021.

**DECISION:**

*The Bureau approves the Centenary Endowment Fund draft resolution documents to enable the Treasurer and Executive Director to progress the next steps in formation of the Fund and its Board.*

*Yes – 27; No – 0; Abstain - 0*

20. **Applications for National Adhering Organization Status**

Lynn Soby reported that there were no additional applications for IUPAC NAOs. Additionally, she encouraged Bureau members to reach out to their respective countries and NAOs to encourage increased collaboration with IUPAC and transferring their 2020 National Subscription.

21. **Publications**

Colin Humphris reminded the Bureau of the necessity for a future agreement to continue with DeGruyter and that the termination date of the current contract is December 31, 2021.

Additionally, he reported that the *Chemistry International* editorial board continues to meet regularly to ensure the flow of relevant and interesting content. A workgroup is looking at ways to bring CI digitally to a larger audience. DeGruyter will continue to work on proposals to this end.

Professor Jan Apotheker mentioned including *Chemistry Teacher International* in the consideration of digital publications and future materials.

22. **Status Report on IUPAC Secretariat**

Dr. Soby introduced the Bureau members to Lisa Musty, the Secretariat’s new staff member responsible for assisting the Executive Director and program management of the multiple membership programs. Bureau members welcomed Lisa to IUPAC.

23. **Report of IUPAC100 Centenary**

In the absence of Professor Mary Garson, Dr. Laura McConnell, guest of the Bureau meeting, presented a summary of the celebration of the IUPAC Centenary. Many IUPAC conferences and
symposia were part of the IUPAC 100, as well as the Periodic Table Challenge, which will continue to provide exposure and engagement activities on the IUPAC website. The Periodic Table of Younger Chemists, PTYC is a specific joint initiative with IYCN and honored 118 younger chemists, each representing an element in the Periodic Table. The website for this celebration of IUPAC is on https://iupac.org/100/.

Javier Martínez expressed his appreciation on the success of IUPAC 100, 2020 Global Women’s Breakfast and the multiple legacies of the 2019 efforts.

23.1 Global Women’s Breakfast 2020

Laura McConnell discussed the reach and scope of the Global Women’s Breakfast and the Centenary. She congratulated Mary Garson on the success of the 2020 Women’s Global Breakfast. Additional comments on the reach and scope were made by several Bureau members. Lynn Soby commented that it was a great success and videos were recorded and displayed on the IUPAC website and IUPAC’s social media.

Lynn Soby commented that Bureau members were encouraged to look for additional sponsorship opportunities for next year’s GWB.

24. Report on IYPT 2019

Professor Jan Reedijk reported on UNESCO activities and referred Bureau members to the summary, including a financial report and youth activities.

Dr. Bipul Saha gave a summary of the IYPT activities in India and informed that discussion on implementation of International Year of Basic Sciences for Sustainable Development (IYBSSD) has already been initiated.

25. International Year of Basic Sciences for Sustainable Development

Professor Christopher Brett announced that The International Union of Pure and Applied Physics has proposed an International Year of Basic Sciences for Sustainable Development. Professor Brett noted that this must be approved by the UN General Assembly. The IUPAP must sign a memorandum of understanding (MoU) with its partners which would include the amount of funding to be contributed by IUPAC. He emphasized attracting young people to basic sciences in the future. He additionally offered to answer questions now or in the future.

26. Bureau Committee Reports

26.1 Report of the Membership Relations Committee

Professor Qi-Feng Zou reported on the analysis being made of how IUPAC might serve its members better and comparing with what is done by other unions. He mentioned the International Mathematical Union and the International Union of Physics in his report in the Agenda book.
26.2 REPORT OF THE IUPAC COMMITTEE FOR ISC

Professor Qi-Feng Zou reported on the activities of the ISC. The ISC launched an online hub for the Covid-19 pandemic. He highlighted ISC action plan items and research as well as sharing best practices.

26.3 REPORT OF THE IUPAC-SOLVAY AWARD COMMITTEE

Professor Qi-Feng Zhou reported on the 2020 IUPAC Solvay Awards, which include winners from Vietnam, China, Israel, India and Canada and 3 honorable mentions from a total of 7 countries, including a good gender balance of 5 males and 3 females. He additionally noted that this year had better diversity than previous years and that Solvay was happy with the results. Professor Zhou also thanked the team members and Committee.

26.4 REPORT FROM PROJECT COMMITTEE

Professor Jan Reedijk provided a summary of project funding for scientific conferences. He noted that projects are evaluated based on their capability to span multiple divisions, and the willingness of the divisions to give these projects funding support. Professor Reedijk also reported that the project committee budget increased from 70k USD to 90k USD.

26.5 REPORT FROM EVALUATION COMMITTEE

Javier Martínez reported on communication and feedback from members of the Evaluation Committee.

27. PROJECTS IN REVIEW

Dr. Fabienne Meyers referred Bureau members to the Proposals in Review available to them in the Agenda book. She further explained how the proposals are tracked and centrally located in IUPAC systems. She gave additional information on the format and numbering of the proposals listed, how they are assigned and approved. Fabienne additionally commented that reports are shared monthly and contain a summary of all current project balances.

Professor Hartshorn mentioned that DP’s and STCC should be sure the project reports are submitted accurately and in a timely manner.

27.1 INTELLECTUAL PROPERTY

Lynn Soby presented the Bureau with information regarding the endorsement of an intellectual property guideline for IUPAC, to include rights for a book, compilation, video and other items to be considered. Additionally, Lynn also noted that members on the Bureau are included in the financial reports to the US Internal Revenue Service.

Christopher Brett suggested having an additional discussion on this topic and a vote at a later date and Bureau members agreed.
ACTION:
Lynn Soby will discuss this item with Bonnie Lawlor and report back to the Bureau for further input and voting. [LS]

28. CONFERENCE ENDORSEMENT PROGRAM

29. InChI Trust

Richard Hartshorn referred Bureau members to review the report included in the Agenda book.

30. OPCW Interactions

Professor Brett reported on IUPAC work with the Organization for the Prohibition of Chemical Weapons (OPCW) on the peaceful uses of chemistry. A 2019 Hague Award was given to IUPAC in recognition of the collaboration with OPCW since 1997. He noted that Professor Hartshorn has helped coordinate and increase the interactions with OPCW through various IUPAC Divisions.

Professor Hemda Garelick gave an overview of the recent discussions on education, analytical chemistry and the environment with OPCW in Paris and a proposal made to OPCW regarding collaboration on those three topics. She will provide a summary of the meeting in the next month.

Colin Humphris asked if there were current plans on how to spend OPCW funds awarded to IUPAC.

Lynn Soby stated that the award has been designated as unrestricted funds but is being held as restricted, pending determination of how IUPAC will use the funds. The officers were encouraged to discuss this at later time.

31. Date of 105th Bureau Meeting

Professor Brett announced that the next Bureau meeting will be held in early 2021, specifically April 17th, 2021, with April 10th, 2021 serving as an alternative date and asked if there were any conflicts. The Bureau agreed on those dates.

32. Any Other Business

Professor Nikolay Nifantiev proposed two questions for additional Bureau discussion. The first topic concerns endorsed conferences, which was already addressed in the discussion of item 13.

The second is IUPAC collaboration with WHO. Bureau members briefly discussed agreements and Colin Humphris noted the importance of finding useful projects for proposals, as this is the model preferred by WHO and other similar international organizations.

The meeting was adjourned at 13:58
33. APPENDIX FOR COMPLETED ACTION ITEM DOCUMENTATION

The files included in this section refer to specific action items that have been completed and need to be minuted as complete.