



IUPAC Division VI
Chemistry and the Environment (DCE)
Division Meeting 6-7th July 2019
Palais des Congrès, Paris, France
Room 233M

Minutes



Division and Subcommittee Members Attending

Prof. Rai Kookana (RK) – Division President and Meeting Chair
Prof. Hemda Garelick (HG) – Division Vice President
Prof. Petr Fedotov (PF) – Division Past President
Dr. Roberto Terzano (RT) – Division Secretary
Prof. Nadia G. Kandile (NK) - Titular Member
Prof. Fani L. Sakellariadou (FS) - Titular Member
Prof. Irina Perminova (IP) – Titular Member
Prof. Doo Soo Chung (DC) - Titular Member
Dr. Laura McConnell (LM) - Titular Member
Dr. Bradley Miller (BM) - Associate Member
Prof. John Unsworth (JU) – Associate Member –via teleconference (Saturday morning)
Dr. Diane Purchase (DP) - Associate Member
Prof. Yong-Chien Ling (YL) – National Representative
Dr. Bipul Behari Saha (BS) - National Representative
Prof. Gloria Obuzor (GO) - National Representative
Prof. Weiguo Song (WS) - National Representative

Dr. Tiina Sikanen - National Representative

Guests:

Dr. Yehuda Sheva (YS)

Dr. Melanie Kah (MK)

Dr. Weiping Wu (WW)

Dr. Angela Serpe (AS)

Dr. Jillian Goldfarb (JG)

Dr. Amornpon Changsupan (AC)

Dr. Juan Joon Ching (JJC)

Dr. Nnanake-Abasi Offiong (NO)

Dr. Ngai Kohsing (NK)

Dr. Adam Kiefer (AK)

Dr. Kalagbai Ihesinachi (KI)

Dr. Cynthia Ibetto (CI)

Dr. Akwaono Inyangudah (AI)

Dr. Stephen Aderinto (SA)

Dr. Yong Chien Ling (YCL)

Dr. Anna Makarova (AM)

Dr. Iniobong Ogbonna (IO)

Dr. Guillermo Castro (GC)

Dr. Maria De Lourdes Rivera (MLR)

Dr. Growene Will Queiros Mugas (GWQM)

Dr. Gijs Kleter (GK) – via teleconference during the Subcommittee on Crop Protection Chemistry

Apologies received:

Prof. Annemieke Farenhorst (AF) - Titular Member

Dr. Wenlin Chen (WC) - Associate Member

Prof. Baoshan Xing (BX) - Associate Member

Prof. Bulent Mertoglu (BM) - National Representative

Prof. Philippe Garrigues (PG)

Prof. Nicola Senesi (NS)

Dr. Heinz Ruedel (HR)

Dr. Simone Ligi (SL)

Prof. Edgar Resto (ER)

Dr. Barbara Hedler (BH)

Prof. Ester Heath (EH) - National Representative

Prof. Willie Peijnenburg (WP)

Prof. Sabu Thomas (ST)

Prof. Maria Zanoni (MZ)

Saturday July 6, 2019

1. MORNING SESSION – CURRENT STATUS AND ACTIVITIES – 9:00 A.M.–1:00 P.M.

- 1.1 Opening, welcome, members attending, introductions of members, apologies – *RK and RT*

RK welcomed the participants and particularly the new members and guests who joined the division meeting. All the participants introduced themselves and their research interests and activities.

RT reported about the apologies received.

- 1.2 Approval of agenda, additions etc. – *RK and RT*

RK requested to anticipate point 4.1 before point 3.3. Request was approved and the agenda confirmed.

- 1.3 Minutes of previous meeting (May 2018, Rome, Italy) and teleconference (October 2018, March 2019). Goals for current 2-Days Meeting – *RK and RT*

Minutes of previous Meeting and teleconferences were approved. RK informed the participants that the two main goals of the Meeting were to discuss about the normal activities of the Division and develop new ideas, activities and project proposals.

RK presented the activities of Division VI to new participants as well as projects and publications developed within the Division, and how to submit a project to the Division.

Actions

RT - To publish on the Division website the minutes of previous meetings

- 1.4 Review of previous Actions (Minutes of Rome Meeting and conference calls) – *RK, RT, HG*

RT reported about previous actions and informed the participants that all the main actions had been completed. HG reminded Division Members that they have to update their personal profile in IUPAC website to allow visualization of their personal data. LM informed that IUPAC has recently activated a shop to buy online IUPAC merchandise at <https://iupac.org/shop/>

- 1.5 Overview of Division Status, Roles and Budget – *RK*

RK presented the last Division budget and informed that, after the last commitments, about \$11,000 are still available for projects, to be allocated before the end of the year. RK anticipated that, because of operational budget reduction in the coming years, the Division face-to-face annual meeting, taking place between the IUPAC General Assemblies, is going to be not supported anymore by IUPAC through operational budget. IUPAC is asking the Divisions to meet by remote using GoToMeeting or other informatics tools. RK, HG and RT remarked the importance of face-to-face meetings every year and suggested to try to schedule them in connection with Conferences or workshops where the Division can organize Special Symposia or Satellite events through the development and proposal of IUPAC projects. RK informed that from the next IUPAC General Assembly, not only the Division Members in charge but also the incoming elected Members will be invited to participate to the biannual Division Meeting.

1.6 New Division rules – HG

HG presented the new Division Rules and the principles beyond its preparation. HG illustrated how the Division is structured and how Division Members are selected. HG highlighted that the most important activity of the Division is the preparation and development of Projects. HG explained what type of project can be submitted and the evaluation procedure.

1.7 Short reports from Division VI representatives on Standing Committees and other Divisions

- CHEMRAWN – NK

NK reported about the activities of CHEMRAWN. During the last CHEMRAWN meeting, the following points were discussed:

1. *Summary of the representation at the Hague conference.*

2. *Updating about the future of current projects:*

- a. *E-Waste Africa conference*

- b. *E-Waste Asia plans*

3. *Discussion about Social Media status.*

- Committee on Chemistry and Industry (COCI) – HG

HG reported about the activities of COCI and the report is attached (Appendix A). HG, who is going to become the new Division President in 2020, asked to be substituted as Division representative within COCI. Given BS's background in the Industry and his current involvement with COCI, BS was nominated as a representative of Div VI. BS accepted this offer.

- Committee on Chemical Education (CCE) – IP

IP asked to be substituted as Division representative within CCE. JJC offered to take this position. JJC attended the CCE meeting in Paris and his report is attached (Appendix B).

- Interdivisional Committee on Terminology, Nomenclature and Symbols (ICTNS) – PF

PF was not present at the moment of discussion but reported by an e-mail communication that, as Representative of Chemistry and the Environment Division to ICTNS, in 2018-2019 he has been asked to review a few technical reports submitted for publication in Pure and Applied Chemistry. In general, it looks reasonable if Division finds possibilities to collaborate more actively with ICNTS. Such a joint work may promote elaborating comprehensive interdisciplinary approaches to terminology that is used in different fields. This may help to avoid numerous mutual misunderstandings that often occurred until now.

- Pure and Applied Chemistry Editorial Advisory Board (PAC-EAB) – LM

LM informed the Division that, because of other commitments, she will be no more in the position to be in this Board and that another Division representative should be selected. YS offered to substitute LM in PAC-EAB. LM presented the new participants Pure & Applied Chemistry journal and Chemistry International journal. LM illustrated information about impact factor and the procedure to publish in PAC. YS and RT participated to the Board meeting and a short report about the last PAC-EAB meeting is attached (Appendix C).

- Interdivisional Subcommittee on Materials Chemistry – DSC

DSC reported that he was not contacted by the chairman of the Subcommittee. HG informed that ISMC is going to have a Meeting during the IUPAC Conference and DSC will attend it.

- Division VII Chemistry and Human Health Division – BM

BM reported about the activities of Division VII.

- Committee Interdivisional Committee on Green Chemistry for Sustainable Development (ICGCSD)

ER informed the Division by e-mail that he will be no more in the position to contribute to the Division activities as Member. RK acknowledged ER for his precious contribution to the Division and will present formally an acknowledgement letter to ER and ask Lynn Soby to present him an official certificate attesting his service in IUPAC. NK offered to take the role of Division VI representative within ICGCSD.

Actions

RK - To inform Commissions about the names of new Division Representatives

RK - To prepare an official letter to thank Edgar Resto for his contribution to Division VI

RK - To ask Lynn Soby to send Edgar Resto a certificate acknowledging ER service in Division VI

1.8 Cooperation with other international organizations – HG and RK

HG reported about the cooperation with OPCW and the outcomes of the last OPCW meeting in The Hague that she attended. HG invited a representative of OPCW to join the Division Meeting. Jonathan Forman, the Science Policy Adviser and Secretary to the Scientific Advisory Board of OPCW, suggested the name of Barbara Hedler, Senior Industry Officer - Verification Division at OPCW. Unfortunately, she was not able to attend the meeting on time. HG is going to meet her during the Conference and discuss about possible common projects.

HG reported about the cooperation with OECD and the outcomes of the last OECD meeting. A representative of OECD was invited to attend the Division meeting but could not participate. RK suggested developing projects in collaboration with OECD.

*AM presented the activities of SAICM and highlighted the importance of having sound scientific opinions and independent views on chemical safety. AM informed that next SAICM Conference will be in 2020 in Bonn (Germany). A presentation of SAICM activities is attached ([Appendix D](#)). IUPAC and SAICM developed a document on activities related to chemical management ([Appendix E](#)). A report on SAICM activities in relation with IUPAC was published in 2016 in *Chemistry international* ([Appendix F](#)).*

LM reported about the activities developed with the EuChemS Division of Environmental Chemistry and about the recent symposium on glyphosate that took place during the last ICCE Conference in Thessaloniki (Greece) in June.

RK reported about his experience with involving industries, legislators and regulators in one of his projects on nanopesticides. HG reported about similar experience with the e-wastes project.

GO informed the Division that there will be a workshop on e-wastes in Nigeria in March 2020. CHEMRAWN was involved in this workshop but not Division VI. RK asked GO to verify if a contribution by Division VI to the workshop is still possible.

JG offered collaboration of the American Chemical Society (ACS) to organize joint workshops or symposia.

Actions

GO - To ask for Division VI involvement in the activities of the workshop on e-waste in Nigeria in 2020

1.9 Short Subcommittee Report - Chemical and Biophysical Processes in the Environment – DP & BM

DP presented the Subcommittee activities (Appendix G). DP announced that the webpage of the Subcommittee will be implemented and updated as well as an e-newsletter will be prepared by BM.

1.10 Short Subcommittee Report - Subcommittee on Crop Protection Chemistry – JU & LM

LM reported about the Subcommittee activities and in particular about the last 14th IUPAC International Congress of Crop Protection Chemistry that was hosted in Ghent in May. LM informed the Division that, because of other commitments, JU will not be able to continue as Subcommittee Chair. During the last meeting in Ghent it was decided that a new Chair should be elected. In the meantime, LM is going to Chair the Subcommittee until a new Chair will be defined. LM informed that the next IUPAC International Congress of Crop Protection Chemistry will be in 2023 in New Delhi, India.

1.11 Division VI web pages and social media communication – RT, BM

RT reported about the situation of the Division website and solicited Division Members to update relevant information by sending him material to publish on the website. RT suggested revising the Division Members biosketches every two years to include new elected members. RT suggested adding to the Division website the link to papers developed within Division projects and published in the last years. RT asked Subcommittee Chairs to verify and update the list of Subcommittee members. RK asked all new participants to inform by e-mail RT about interest in participating to the activities of the Division. DP suggested creating a link on the website for those who want to contact RT to express their interest to join the Division. BM suggested creating a LinkedIn profile of the Division to facilitate the dissemination of information regarding Division activities.

Actions

All - To send Roberto material for the website

RT - To ask for biosketches to update the website for the next biennium

Subcommittee Chairs - To update the list of members with new participants

All new participants - To write RT about interest in participating to the Division Activities

BM - To create a LinkedIn profile of the Division

1.12 Project budget allocations – RK

RK informed that \$11,350 must be allocated for projects before the end of the year, possibly to support two new projects. Three projects are far over their deadline and should be closed. AF has already contacted the project leaders but she did not receive a reply.

1.13 Project Coordinator, new review process, tools – RK, FS, AF

FS reported that only one project was submitted in the last months, so no new project is in discussion. RK suggested having only one Project Coordinator to manage both new and old projects. Division Members agreed on FS as the only PC, since AF is going to take the role of Division Secretary in the next biennium.

Action

AF – to pass the role of Project Coordinator for existing projects as well as all relevant information to FS

1:00 P.M. – 2:00 P.M. – Lunch

2. AFTERNOON SESSION – PROGRESS REPORTS REVIEW, PROJECT PROPOSALS REVIEW; PLANNING, BRAINSTORMING, FUTURE PLANS 2:00 P.M. – 5:30 P.M.

Richard Hartshorn (RH, IUPAC General Secretary) and Chris Brett (CB, IUPAC Vice President) visited the Division and illustrated some relevant IUPAC activities and changes IUPAC is going to introduce in the coming years. In particular, he informed Division Members about the strong engagement of IUPAC with OPCW and that important joint initiatives are being developed. The annual Division meeting in between IUPAC General Assemblies will be no more economically supported by IUPAC through operational budget. They suggested to have remote meetings by using telematics tools. Adequacy of tools for remote connections was discussed as well as issues related to internet connection in developing countries. RH and CB suggested finding other ways to support annual Division Meetings like developing Division projects for workshops or symposia involving Division Members. RH informed that in the future, also new elected members will be asked to participate to the IUPAC General Assemblies. They asked Division VI to collaborate with the Interdivisional Committee on Green Chemistry for Sustainable Development (ICGCSD). RH informed Division Members that CHEMRAWN will be soon decommissioned but that projects and activities already planned will be completed. IUPAC Goldbook will be revised and support by the Divisions in this process will be sought. Finally, they remarked on the importance of expanding the awareness of IUPAC to a broader audience and the fundamental role of diversity within IUPAC organization.

2.1 Current projects. Review of progress reports. Status/Needs/Accomplishments – FS, AF

RT illustrated a report sent by AF summarizing the status of Division Projects ([Appendix H](#)). RK informed Division Members that \$1000 have been recently allocated to project 2019-003-1-600 by John Unsworth, as indicated by the Subcommittee on Crop

Protection Chemistry at the meeting that took place in Ghent (May 2019) during the IUPAC Conference on Crop Protection. LM reported that project 2013-024-2-600 by Molineaux is going to be completed and the connected IUPAC technical report is going to be published in Pure and Applied Chemistry.

2.2 Short reports and discussion on interdivisional projects with the participation of Division VI – RK, HG

RK illustrated his project on nanopesticides that was developed in collaboration with Division VII. HG reported about her involvement in the project on chemical education for schoolchildren that was developed in collaboration with Division VII and CCE. RK informed that two interdivisional meetings will take place on Sunday morning with Division VII and V to develop possible new collaborative projects.

2.3 Review of new project proposals – RK, FS

RK reminded Division Members and observers that it is not necessary to be a Division Member to submit a project proposal. RK encouraged young observers to submit new project ideas to the Division. RK illustrated how to submit a proposal and how project proposals are evaluated according to the new evaluation process. FS reported that no new project proposal is under review. FS reminded all Division Members that their contribution in revising the project proposals is fundamental and that they should accept invitation to review and respect the deadlines.

2.4 Brainstorming of ideas for new Project Proposals – All

Several ideas were presented by meeting participants. Here is a list:

SA: metal nanoparticles for environmental remediation

RT: inorganic solid wastes to use in soil remediation

AF: Hg and Pb pollution from mining areas

WW: air pollution, air particulate; fate of batteries of electrical vehicles

DSC: microplastics

IP: non-fuel use of coal, e.g. to recover useful chemicals for industrial productions.

NK: environmental impact of heavy crude oil

DP: organic materials in e-wastes, to develop with Polymer Division

FS: suggested to develop projects in collaboration with IMO (International Maritime Organization).

RK suggested all to prepare a more developed project idea of the above listed topics to discuss during the Subcommittee meetings on Sunday morning.

2.5 Discussion of high priority topics for new call for Proposals Flyer – All

RT suggested considering some of the ideas listed in 2.4 as a basis to develop the new flyer for call for proposals. RK suggested including also topics that will emerge during the Subcommittee meetings.

Action

RT - To update the flyer of the call for project proposals with new topics coming from Meeting discussion

2.6 Brainstorming on ideas for enhancing interdivisional cooperation – All

RK suggested moving this point to Sunday morning during Interdivisional meetings (3.1 and 3.2).

2.7 IUPAC Conference 2019 and IUPAC Centenary celebrations – RK, LM

LM had to leave the meeting because of another simultaneous commitment, therefore she could not detail all the activities going on for IUPAC Centenary Celebrations. Anyway, RK informed that on Monday morning there would be a full Session in the IUPAC conference dedicated to centenary celebrations.

- Reports from Division Members on IUPAC Centenary celebrations – BS
BS made a presentation about all the events organized in India to celebrate the 100 years of IUPAC and 150 years of periodic table, including educational and dissemination activities.
- Special Symposia at IUPAC Conference 2019 – DP
DP reported about the three Symposia organized by Division VI and reminded that they will take place on Wednesday afternoon and Thursday all day long.
- Chemistry and the Environment Award – BM
BM reported about the Division award and the involvement of Division Members in the evaluation of abstracts and posters. BM presented the evaluation criteria and discussed them with all Division Members.

8:30 P.M. Saturday Night – Division Dinner

Sunday July 7, 2019

3. MORNING SESSION – INTERDIVISIONAL AND SUBCOMMITTEE MEETINGS 8:00 A.M. – 12:30 A.M.

3.1 Division VI and VII Interdivisional Meeting: 8:00 A.M. – 9:00 A.M. (Room Division VI)

Linda Johnston (LJ) and Tom Perun (TP) participated to the joint meeting in representation of Division VII. RK illustrated old and present projects developed in collaboration with Division VII such as the project on nanopesticides that brought together industry, academia and legislators for the risk assessment of these emerging pollutants. Two workshops about nanopesticides and human health are going to be organized and a couple of papers to be produced on the outcomes of the project. LJ remarked the importance to involve regulatory agencies when dealing with these topics. LJ reminded about a joint workshop organized in 2017 in Mexico on nanomaterials and described the subjects discussed during the workshop. A perspective paper is being prepared on the outcomes of the workshop. RK informed LJ and TP that within Division VI an important regulator as USEPA is represented by BM. BM highlighted the importance of developing standardized procedures to assess the risks and toxicity of chemicals. HG reminded that Division VI is involved in an educational project led by Vladimir Gubala (VG) from Division VII on “Chemistry in the classroom”. After some discussion, the following ideas to develop possible joint projects were proposed:

- Remediation of contaminated sites and impact on human health*
- Bioavailability of pollutants*
- Bioavailability and bioaccessibility of e-wastes, proposed by DP. LJ suggested contacting Vincenzo Abate (VA) of the Subcommittee on Toxicology and Risk Assessment to develop a project proposal on the subject. DP is going to share with LJ some recent publications on e-wastes developed within IUPAC project.*
- Impact of graphene on the environment and human health, suggested by DP. LJ proposed developing a critical review on the impact of graphene.*
- Emerging environmental issues of the coming 10 years, implications for human health, proposed by RK.*
- New pharmaceutical and new cosmetic products in the environment, proposed by HG.*
- Fate of traditional medicine products in the environment, suggested by RK. These products are usually not regulated. HG commented that these products are usually regulated as food. MLR expressed particular interest on the topic.*
- Nanomedicals, proposed by DP. VG already developed a project on similar topics and published some papers.*
- Impact of chelating agents on the environment and human health, suggested by DSC.*

- *New animal models to assess bioavailability and toxicity, proposed by BM.*
- *Determination of drugs in wastewater to monitor their use in some main cities, suggested by HG.*
- *Per- and Polyfluoroalkyl substances (PFASs) in the environment, suggested by BM and RK. Traditional animal models cannot be applied to study the bioavailability and toxicity of these compounds. There is also a problem with detection of these chemicals. Possibility to develop a project also in collaboration with Division V and Div VII.*

RK suggested to develop some of these project ideas within the Subcommittee meetings and individuate a responsible to follow up with the preparation of a project proposal.

Actions

DP – to send LJ a copy of the papers published on e-wastes.

3.2 Division VI and V Interdivisional Meeting: 9:15 A.M. – 10:15 A.M. (Room Division VI)

Division V President Zoltan Mester (ZM) and other Division V Members participated to the Interdivisional Meeting. All Members introduced themselves. RK reminded about past and present joint projects with Division V. PF suggested developing a project about methods and nomenclature for bioavailability and bioaccessibility studies to finalize with IUPAC recommendations. RK proposed to develop a joint project on PFASs including ecological, environmental, human health, and analytical chemistry issues. A crucial issue is the development of new animal models to assess the toxicity of these chemical compounds. ZM added that there are also analytical challenges associated with these substances since the concentration of these molecules in the environment is very low. Lack of suitable standards and the existence of thousands of congeners is another issue. RK proposed to concentrate only on the major PFAS causing major concern and develop a project proposal idea during the Subcommittee meetings.

Other proposed projects were:

- *Solubility of chemical compounds. ZM reminded that there is already a project on this topic leaded by David Shaw (DS) reviewing solubility data available in the literature.*
- *Bioavailability and bioaccessibility of e-wastes, proposed by DP. DS suggested defining first the chemical-physical properties of these emerging pollutants. ZM commented that e-waste speciation could be a topic of common interest with Division V.*
- *Chemical speciation in marine environment, proposed by FS.*
- *Microplastics, proposed by ZM. ZM commented that it is important that IUPAC give an authoritative opinion on this topic. A relevant aspect on this topic could be defining what properties of these materials should be analyzed that can create problems to the environment and human health.*

- Analytical chemistry of nanomaterials. Jan Labuda (JL) reminded that a project on this subject is in progress and he is the task group chair.

- Specimen banking and how to preserve samples over the years, suggested by ZM.

RK suggested to develop project ideas on these topics within the Subcommittee Meetings.

- 3.3 Presentation of Division VI and its activities to Guests and New Members, including existing collaboration with other IUPAC Divisions and Committees – RK

RK illustrated the activities of IUPAC and Division VI to meeting participants (Appendix I).

- 3.4 Subcommittee Meetings: 10:30 A.M. – 12:30 A.M.

- Subcommittee on Crop Protection Chemistry (Room 301)
A report of the outcomes of the Subcommittee Meeting is attached (Appendix J)
- Subcommittee on Chemical and Biophysical Processes in the Environment (Room 233M)
A report of the outcomes of the Subcommittee Meeting is attached (Appendix K)

1:00 P.M. – 2:00 P.M. – Lunch

4. AFTERNOON SESSION – COLLABORATIONS, OUTREACH PLANS (WITH THE PARTICIPATION OF GUESTS) 2:00 P.M. - 4:30 P.M.

PF described the procedures and rules for the election of Division Members and National Representatives, and presented the results of the elections for the biennium 2020-2021 (Appendix L).

- 4.1 Present and new opportunities for collaborations with other Institutions – RK

These issues were already discussed in some of the previous points and therefore RK suggested skipping to the next point.

- 4.2 Working with IUPAC – a collaborator's perspective – Dr Melanie Kah

MK presented her experience with participating to a Division VI IUPAC project as external member and described the results of the project. She particularly highlighted the considerable benefits she realised as a young researcher through

the involvement in an IUPAC project on Nanopesticides, which facilitated her global networking (Appendix M).

4.3 Brainstorming of new collaborative project ideas – All

RK reported that 4 potential project ideas were developed during the meeting of the Subcommittee on Crop Protection Chemistry:

- *Top 10 environmental challenges of the coming years, AK to develop the project proposal.*
- *PFASs in the environment, RK and BM to develop the project in collaboration with other Divisions.*
- *Analytical challenges of off-patent pharmaceuticals in the environment, MDR to develop the project proposal.*
- *Coal as a source of raw materials for environmental and industrial applications, IP to develop the project proposal.*

DP reported that 4 potential project ideas were developed during the meeting of the Subcommittee on Chemical and Biophysical Processes in the Environment:

- *Microplastics in the environment, WW and YL to develop the project proposal.*
- *Bioaccessibility and bioavailability – harmonization of protocols, BM to develop the project proposal.*
- *Fate of wastes (batteries) deriving from disposal of electrical vehicles, WW to develop the project proposal.*
- *Pharmaceutical products in the environment, HG to develop the project proposal in collaboration with Division VII.*

4.4 Upcoming Conference Opportunities for Outreach and Interaction – RK

RK and HG suggested developing ideas for two Special Symposia to propose for the APCE & CECE Conference in November 2020 in Angkor Wat (Cambodia) Chaired by DSC. This Conference will offer the opportunity for all the Division Members to meet face-to-face in 2020. DSC and other Division Members are invited to look for private sponsorship to support invited speakers.

4.5 Outcome of divisional, subcommittee and interdivisional meetings – RK

These issues were already discussed in some of the previous points and therefore RK suggested skipping to the next point.

4.6 Additional Agenda Items or other New Business

No other new business.

4.7 Next conference call and meeting - *RK and RT*

RK and RT proposed to have the next conference call at the end of November in order to have the time to evaluate and vote for the new projects that will be likely submitted in September.

If projects will be approved, the next face-to-face meeting will be in Angkor Wat (Cambodia) in 2020.

4.8 Final Review of Action Items – *RT*

RT presented a list of actions deriving from the activities of the meeting. Division Members were informed of them and offered collaboration.

4.9 Closing remarks – *RK*

RK thanked all the Division Members, National Representatives, Guests and Observers for their active participation to the meeting and expressed his wish that the all the ideas developed during the meeting will find actuation in new project proposals.

5:30 P.M. – 47th IUPAC Congress Welcome and Opening Ceremony

Attachments (available on Division Google Drive: IUPAC Division VI → Division Meetings → Paris 2019 → Appendixes Meeting Minutes)

Division Goole Drive access:

Appendix A - Summary of COCI activities for DivVI 2018-19

Appendix B - CCE activities report

Appendix C - Report from Pure and Applied Chemistry Editorial Advisory Board

Appendix D - SAICM presentation - Makarova

Appendix E - IUPAC SAICM Chemical Management

Appendix F - [Chemistry International] SAICM Science Sector and IUPAC Activities

Appendix G - Report Subcommittee on chemical and biophysical processes in the environment 7 July 2019

Appendix H - IUPAC Project Update July 4 2019

Appendix I - Highlights_Div_VI_May 2019

Appendix J - Brainstorming report Subcommittee Chemical and biophysical processes in the environment

Appendix K - Notes from the PPChem subcommittee_DRAFT
Appendix L - Peter Fedotov-Division VI membership 2020-2021
Appendix M - Kah_Collaborator_Paris