

MINUTES
IUPAC Division VI Chemistry and the Environment Virtual Conference Call
Wednesday, August 11 2021, 12:00 noon – 2:00 pm GMT

Present (50 in total)

1. Hemda Garelick - UK– Division President
2. Roberto Terzano - Italy - Division Vice President
3. Rai Kookana – Australia – Division Past President
4. Annemieke Farenhorst – Canada – Division Secretary
5. Laura McConnell – USA - Emeritus Member
6. Fani Sakellariadou – Greece - Titular Member and Division Project Coordinator
7. Petr Fedotov - Russia - Titular Member
8. Bradley Miller – USA – Titular Member
9. Diane Purchase – UK - Titular Member
10. Vladimir Beskoski (Владимир Бродский) – Serbia - National Representative
11. Joon Ching Juan – Malesia – National Representative
12. Bülent Mertoglu- Turkey - National Representative
13. Nadia Kandile – Egypt – Associate Member
14. Irina Perminova – Brasil – Associate Member
15. Bipul Behari Saha – India – Associate Member
16. Weiping Wu – China– Project Lead **incoming Associate Member in IUPAC Division VI*
17. Abeer Al Bawab
18. Анна Макарова
19. Akko Nakamura
20. Andrew DeAngelis
21. Christopher Brett
22. Clara Mangalhaes
23. Diana Rabadjieva **incoming National Representative in IUPAC Division VI*
24. Elisa Carignani
25. Fabienne Meyers
26. Fatimah Salim
27. Gabriele Manca
28. Gijs Kleter
29. Jyoti Giri
30. Kris Poduska
31. Leah McEwen
32. Leah Riter
33. Liana Vaccari
34. Louise Jingbo Liu
35. Magdeline Lai
36. Maryam Darestani-Farahani
37. Metteo Guidotti **incoming Associate Member in IUPAC Division VI*
38. Michelle Bailey
39. Nicola Sangiorgi
40. Riccarda Thelma MacDonald
41. Rita Cornelis

42. Ruchi Gupta
43. Shahrul Mizam Ahmad
44. Silvia Borsachi
45. Silvina Di Pietro
46. Sreena [full name unknown]
47. Stephan David Worrall
48. Stuart Chalk
49. Walter Waldman **incoming Associate Member in IUPAC Division VI*
50. Zi Wang

In Lieu of Regrets: Doo Soo Chung, Weiguo Song (Titular Members), Yong-Chien Ling, John B. Unsworth, Baoshan Xing (Associate Members), Christina Delerue-Matos, Michal Galambos, Ester Heath, Oluseun Elizabeth Popoola, Yehuda Shevah, Tiina Sikanen, Monthip Sriratana (National Representatives)

AGENDA

[See also meeting slides: Div meeting agenda August 2021.pptx]

1. Welcome and Introductions

President Hemda Garelick welcomed everyone. Division VI members plus some additional participants introduced themselves. In the interest of time, other participants were asked to provide their name and affiliations in the chat function. There were many young observers on the call and they were particularly welcomed. The agenda items were designed for the young observers and others to get a good understanding of Division VI, such as its history, projects and linkages.

2. The Division now: Reports from Division subcommittees and Interdivisional Committee Activities

Roberto Terzano invited representatives to provide a brief presentation on the history and current activities of the Division subcommittees, as well as on other IUPAC committees. This included information as it applies to: The Advisory Committee on Crop Protection Chemistry; The Subcommittee on Chemical and Biophysical Processes in the Environment (Diane Purchase); CHEMWRAN; COCI; CCE; ICGCSD; Interdivisional Committee on Terminology, Nomenclature and Symbols; and the Pure and Applied Chemistry Editorial Advisory Board.

3. Some history: A glimpse of Division VI projects across time

Hemda Garelick and Diane Purchase explained that Division VI was established 25-years ago and provided some examples of IUPAC projects in the past, along with their impacts. Information was also provided about past, current and future presidents, and other relevant Division matters. President Hemda Garelick pointed out that the Division might want to recruit an expert in atmospheric chemistry, and well as that the Division could also consider recruiting an expert in food chemistry.

4. A glimpse of Division VI members across time

Laura McConnell presented a video that she developed to celebrate Division VI members of the past and present. It was lovely to see all the photos, some dating back as far as 2006. The video can be viewed here: <https://vimeo.com/585078763/32921c290e>

5. Project development: What you need to know about IUPAC project development

Roberto Terzano and Fani Sakellariadou provided for an overview on how Division projects are typically prepared and developed. It was explained that budgets are not to support original research; rather budgets are to support collaborations among project participants and the dissemination of their knowledge through workshops, conferences, review articles and books.

6. Current projects

Fani Sakellariadou outlined the current Division VI projects and asked three Division VI members to present on their current projects: Rai Kookana (project: 2016-016-2-600 & 2019-010-1-600), Diane Purchase (2014-031-3-600) and Weiping Wu (2019-026-2-600). As Rai Kookana pointed out, the wonderfulness of being part of a Division VI project is to collaborate with peers across the world to make a direct impact on advancing knowledge and information that matters to society.

7. Potential new projects and new call for proposals

Participants on the call were invited to bring forward projects that they are interested in.

Diane Purchase brought forward a topic that biologists are currently interested in which is the advancement of nature-based solutions for carbon sequestration. She indicated that perhaps chemist can also help to provide solution. A number of participants on the call expressed interest in this topic. Gijs Kleter asked whether such project could include biotechnological approaches to increasing photosynthesis in plants. Diane Purchase indicated that this was indeed highly appropriate to be included. Gijs Kleter expressed further interest in the development of topic such as the use of synthetic biology for green chemistry. For example, genetical engineering of enzymes/bacteria to catalyze reactions that would otherwise impossible.

Leah Riter presented the idea to improve on the sustainability of environmental chemistry labs. For example, through the development of best practices and operations that lead to reduced use of solvents. It might also be possible to utilize different solvent, such as those that are considered "greener". The potential project would lead to practical training for laboratories across the world. Many participants on the call expressed an interest in this topic.

Rai Kookana pointed out that the next big discussions from a regulatory point of view will be about tires (vehicles). Gijs Kleter agreed and mentioned that in the Netherlands, the tire industry has recently developed a safe by design approach. Hemda Garelick indicated that such topic could also cover the development of new tires that will actually charge electric cars.

Three other projects were mentioned. Fani Sakellariadou was interested in a topic that focuses on the beneficial effects of trees in cities, including concepts such as sustainable cities. Annemieke Farenhorst brought forward an interest in sunscreen chemicals and what work is being done on this in regions around the world. Hemda Garelick expressed an interest in the impact of fires in regions with permafrost on methane emissions.

8. Collaborations and outreach plans

9. Any other business: Other items or new business.

10. Adjournment

The previous agenda items created fruitful discussions so there was limited time left to cover agenda items 8, 9 and 10. The Angkor Wat Conference was highlighted in part to also remind people that this will be an opportunity for Division VI members to have a meeting in-person. It was also concluded that the virtual meeting today was a great success – thanks to all presenters and participants.