### Reaction of Researchers to Plan S; Too far, too risky?

An Open Letter from Researchers to European Funding Agencies, Academies, Universities, Research Institutions, and Decision Makers

We support open access (OA) and Plan S is probably written with good intentions. However, Plan S<sup>1</sup>, as currently presented by the EU (and several national funding agencies) goes too far, is unfair for the scientists involved and is too risky for science in general. Plan S has farreaching consequences, takes insufficient care of the desires and wishes of the individual scientists and creates a range of unworkable and undesirable situations:

(1) The complete ban on hybrid (society) journals of high quality is a big problem, especially for chemistry. Apart from the fact that we won't be allowed to publish in these journals anymore, the direct effect of Plan S and the way in which some national funding agencies and academic/research institutions seem to want to manage costs may eventually even lead to a situation where we won't even be able to legally read the most important (society) journals of for example the ACS, RSC and ChemPubSoc anymore. Note that in their announcement of Plan S, the Dutch funding organisation NWO (for example) wrote that they expect to cover the high article processing charges (APCs) associated with the desired Gold OA publishing model from money freed by disappearing or stopped subscriptions to existing journals<sup>2</sup>. As such, Plan S may (eventually) forbid scientists access to (and publishing in) >85% of the existing and highly valued (society) journals! So effectively Plan S would block access to exactly those journals that work with a valuable and rigorous peer-review system of high quality. As a second note on this aspect: In the Netherlands, already for more than 6 months, researchers don't have legal access to most RSC journals<sup>3</sup>. Fully banning even more society journals is completely unacceptable and unworkable.

(2) We expect that a large part of the world will not (fully) tie in with Plan S. The USA, China and the rest of Asia highly value the existing (society) journals, in particular (for chemistry) the ACS journals and (for physics) the APS journals. Germany and Switzerland already indicated they will not conform to the plans as currently formulated. Belgium will also not join-in and independently introduced a different OA policy. Spain is also out, at least for the time being. A transition period for the rest of the world will surely take a long time, and a total global ban on hybrid (society) journals being taken up as a global initiative seems very improbable. Therefore, Plan S has the risk of splitting the global scientific community into two separate systems: cOAlition S grantees *vs.* the rest of the world, with all associated negative consequences. If that happens, this will have a strong negative effect on collaborations between the cOAlition S countries and the rest of the world, because joint publications in the highest quality selective journals, based on rigorous peer review and quality control procedures, with the highest standing in the community, won't be possible anymore (*e.g.* JACS, Science, Nature, Nature Chemistry, ACS Catalysis and Angewandte Chemie are all forbidden under Plan

<sup>&</sup>lt;sup>1</sup> <u>https://www.scienceeurope.org/coalition-s/</u>

<sup>&</sup>lt;sup>2</sup> https://www.folia.nl/actueel/123528/volledig-open-access-in-2020-6-vragen-en-antwoorden

<sup>&</sup>lt;sup>3</sup> <u>https://vsnu.nl/en\_GB/news-items/nieuwsbericht/394-no-agreement-with-the-royal-society-of-chemistry-publishing%C2%A0.html</u>

S!). This will also have a strong negative impact on the internationalization of PhD students and postdocs. Why would someone with academic ambitions come to *e.g.* the Netherlands or Sweden to obtain a PhD or obtain postdoc experience if they are not allowed to publish in journals that are important for their career progression, on the international landscape, and would make them therefore uncompetitive if they want to leave cOAlition S countries? Students in our universities are already starting to wonder if it is wise to do a PhD in a cOAlition S country, or rather move to another country to increase their chances of a successful (academic) career. Furthermore, if Plan S succeeds in splitting the global research system, it puts the willingness of scientists to do something for anyone in 'the other system', such as acting as a peer reviewer for manuscripts and research proposals, under pressure. These are all highly undesirable developments that will hurt science as a whole.

(3) We fully appreciate and agree with ongoing concerns about the exploding costs of journal subscriptions. However, with its strong focus on the Gold OA publication model, in which researchers pay high APCs for each publication, the total costs of scholarly dissemination will likely rise instead of reduce under Plan S. Furthermore, it will not eliminate the so-called publication 'paywall', but rather simply shifts it from reading to publishing. Tying in with this, the strong focus of Plan S to support in particular for-profit Gold OA-journals (at the expense of high quality non-profit Society journals<sup>4</sup>) has a serious risk that it leads to a surplus of papers of low quality/originality/newsworthiness and that research groups are confronted with high APCs. After all, this system is coupled to perverse financial incentives: Stimulate accepting as many papers as possible - regardless of their quality - and keep increasing the already high APCs in more selective journals.

(4) **Plan S ignores the existence of large differences between different research fields.** Plan S has (probably) a much larger negative effect on chemistry than on some other fields. A one-size-fits-all approach, as presented in Plan S, is therefore a bad idea. The 'mountain of feathers' effect that Plan S can trigger will likely quickly result in lower international ranking and standing of individual cOAlition S researchers, most certainly if little changes elsewhere.

Taken together, **Plan S is a serious violation of academic freedom**: Strongly reduced access to (and possibilities to publish in) suitable scientific journals of high quality, with a direct consequence that it also strongly restricts our choice of countries with which we can conveniently collaborate with or sustain lasting exchange programs. There are also issues with the copyright model (CC-BY) demanded by Plan S. A full ban on publishing in hybrid journals with imposed sanctions also feels as a serious degradation of existing rights. Most problematically, less radical and cheaper solutions are certainly possible. See for example the suggestions presented here: <sup>5</sup>. In addition, more and more journals (for example, JACS<sup>6</sup> and Elsevier<sup>7</sup> journals) are allowing researchers to not only deposit preprints of their work but also updating with each round of peer review until the decision letter is issued such that the research

<sup>&</sup>lt;sup>4</sup> <u>https://www.timeshighereducation.com/news/plan-s-could-prove-fatal-learned-societies</u>

<sup>&</sup>lt;sup>5</sup> https://forbetterscience.com/2018/09/11/response-to-plan-s-from-academic-researchers-unethical-too-risky/

<sup>&</sup>lt;sup>6</sup> <u>https://pubs.acs.org/page/jacsat/submission/prior.html</u>

https://www.elsevier.com/about/policies/sharing#preprint

<sup>2</sup> 

becomes immediately available *via* the pre-print server. However, as currently framed, Plan S sees such modes of dissemination as only being of archival value and this type of Green OA publishing is non-compliant under the current 10 rules of Plan S.

Researchers should have the freedom to choose publication venue, and while complying with Open Access mandates to also choose *how* papers are made Open Access, in a way that contributes to minimal increased costs for the publishing system while not impinging on academic freedom or jeopardizing internationalization in research and higher education. We call on both funding agencies who are already part of cOAlition S and those who have not (yet?) signed up, to take into account the full landscape of ways that papers can be made Open Access, and not just the very narrow definition provided by Plan S (including the hybrid ban, and the fact that peer reviewed pre-prints such as allowed by the ACS are currently not an obvious compliant solution). In addition, we demand that cOAlition S signatories take responsibility for the implications and risks Plan S may have for the European research landscape, and to therefore take every possible action in the implementation stage to prevent these potential and unintended consequences.

### Abbreviations:

ACS: American Chemical Society

APC: Article Processing Charge

APS: American Physical Society

ChemPubSoc: Partnership of 16 continental European chemical societies nurturing a family of high-quality chemistry journals

EU: European Union

JACS: Journal of the American Chemical Society

NWO: Netherlands Organisation for Scientific Research

OA: Open Access (no costs for reading)

Gold OA: OA model where the publications are immediately available from the publisher,

usually upon author payment of an APC fee to get their paper published.

Green OA: Subscription journals accepting depositing a pre- or post-print in a repository.

Platinum OA: Fully free to publish and read.

RSC: Royal Society of Chemistry

VSNU: Vereniging van Samenwereknde Nederlandse Universiteiten

# Resources:

https://www.scienceeurope.org/coalition-s/

https://forbetterscience.com/2018/09/11/response-to-plan-s-from-academic-researchers-

<u>unethical-too-risky/</u>

https://www.timeshighereducation.com/opinion/podcast-plan-s-squelch

https://www.tidningencurie.se/debatt/europas-beslut-om-open-access-gar-for-langt/#.W88PDXzzng.twitter



### Signatories:

## A. cOAlition S countries (currently)

Finland - AKA has joined cOAlition S

1. Ari M. P. Koskinen, Professor of Organic Chemistry, Aalto University

#### France - ANR has joined cOAlition S

- 1. Etienne Derat, Assoc. Prof. of Computational Chemistry, Sorbonne Université
- 2. Rinaldo Poli, Prof., Université de Toulouse
- 3. Marc Robert, Prof., Université Paris Diderot
- 4. Elodie Anxolabehere, Research Director CNRS, Université Paris Diderot
- 5. Jean-Michel Savéant, Académie des Sciences, Prof., Université Paris Diderot
- 6. Milos R. Filipovic, CNRS, IBGC UMR5095, Université de Bordeaux
- 7. Frédéric Kanoufi, CNRS, ITODYS UMR7086, Université Paris Diderot
- 8. Claire Fave, CNRS LEM 7591, Université Paris Diderot
- 9. **Pascale Chenevier**, CEA, Université Grenoble Alpes

#### Ireland - SFI has joined cOAlition S

- 1. **Peter Crowley**, Prof. Protein Chemistry, NUI Galway
- 2. Elisa Fadda, Lecturer, Department of Chemistry, Maynooth University
- 3. Alan Ryder, Personal Professor, School of Chemistry, NUI Galway
- 4. **Damien Thompson**, Assoc. Prof. Physics, Bernal Institute, University of Limerick
- 5. Diego Montagner, Lecturer, Department of Chemistry, Maynooth University
- 6. Aidan McDonald, Associate Professor of Chemistry, Trinity College, University of Dublin
- 7. Joanna McGouran, Assistant Professor, Department of Chemistry, Trinity College
- 8. **Mathias O. Senge**, Professor of Organic Chemistry, School of Chemistry, Trinity College Dublin, The University of Dublin
- 9. **Isabel Rozas**, Professor in Chemistry, School of Chemistry, Trinity College Dublin, The University of Dublin
- 10. Trinidad Velasco-Torrijos Lecturer, Department of Chemistry, Maynooth University

Italy - INFN has joined cOAlition S

- 1. Alceo Macchioni, Prof. General and Inorganic Chemistry, University of Perugia
- 2. Peter H.M. Budzelaar, Prof. General and Inorganic Chemistry, University of Naples Federico II
- 3. Tony Molinaro, Prof. Organic Chemistry, University of Naples Federico II
- 4. Luca Muccioli, Assistant Prof. Physical Chemistry, University of Bologna
- 5. Carlo Camilloni, Associate Prof. for Applied Physics, University of Milano
- 6. Louise Gourlay, Assistant Prof in Biochemistry, University of Milano

- 7. Alessandro Laio, Prof. Statistical and Biological Physics, SISSA, Trieste
- 8. Armando Carlone, Prof. Organic Chemistry, Università degli Studi dell'Aquila
- 9. Fabio Ragaini, Prof. General and Inorganic Chemistry, University of Milano

Norway - RCN has joined cOAlition S

- 1. Mats Tilset, Prof. Organic Chemistry and Catalysis, University of Oslo (UiO)
- 2. Kathrin H. Hopmann, Assoc. Prof. Computational Chemistry, University of Tromsø (UiT)
- 3. **Ute Krengel**, Prof. Structural Biochemistry, University of Oslo (UiO)
- 4. Annette Bayer, Assoc. Prof. Organic Chemistry, University of Tromsø (UiT)
- 5. Hans-Petter Hersleth, Senior Lecturer, Biochemistry, University of Oslo (UiO)
- 6. **Bjørn Dalhus**, Researcher, Structural biology, University of Oslo (UiO)
- 7. **Magnar Bjørås,** Professor, Molecular biology, UiO, Norwegian University of Sci and Tech. (NTNU)
- 8. Michele Cascella, Professor, Theoretical Chemistry, University of Oslo (UiO)
- 9. Thomas Bondo Pedersen, Professor, Theoretical Chemistry, University of Oslo (UiO)
- 10. David Balcells, Senior Researcher, Theoretical Chemistry, University of Oslo (UiO).

Poland - NCN has joined cOAlition S

1. Mariusz Radoń, Assistant Prof. Chemistry, Jagiellonian University, Krakow

## Sweden - FORTE / FORMAS have joined cOAlition S

- 1. Lynn Kamerlin, Prof. Structural Biology, Uppsala University
- 2. Staffan Svärd, Prof. Eukaryotic Microbiology, Uppsala University
- 3. Christina Moberg, Prof. Organic Chemistry, KTH
- 4. Tore Brinck, Prof. Physical Chemistry, KTH
- 5. Helena Lundberg, Postdoc, Organic Chemistry, KTH
- 6. Markus Kärkäs, Assistant Prof. Organic Chemistry, KTH
- 7. Gaston A. Crespo, Assistant Prof., Department of Chemistry, KTH
- 8. Mats Johansson, Prof. and Department Head, Department of Fibre Technology, KTH
- 9. Oleksandr Kravchenko, PhD Student, Department of Chemistry, KTH
- 10. Rutger Schutten, Research Engineer, KTH
- 11. Mårten Ahlquist, Assoc. Prof. Theoretical Chemistry & Biology, KTH
- 12. Oscar Verho, Group Leader, Department of Organic Chemistry, Stockholm University
- 13. Lars Öhrström, Prof. Inorganic Chemistry, Chalmers Univ. of Technology, Gothenburg
- 14. István Furó, Prof. and Head of Department, Department of Chemistry, KTH
- 15. Per Berglund, Prof. Biochemistry, KTH
- 16. Katarina Edwards, Prof. Physical Chemistry, Uppsala University
- 17. Yashraj Kulkarni, PhD student, Biochemistry, Uppsala University
- 18. Ingela Lanekoff, Assoc. Prof. Analytical Chemistry, Uppsala University
- 19. Therese Grönlund, PhD student, Biochemistry, Stockholm University
- 20. Mate Erdelyi, Prof. Organic Chemistry, Uppsala University

- 21. Andreas Dahlin, Associate Professor, Chalmers University of Technology
- 22. Mikael Widersten, Prof. Biochemistry, Uppsala University
- 23. Martin Rahm, Asst. Prof. Theoretical Chemistry, Chalmers University of Technology
- 24. Jean Pettersson, Senior Lecturer, Analytical Chemistry, Uppsala University
- 25. Johan Viljanen, Researcher, Department of Chemistry BMC, Uppsala University
- 26. **Pernilla Wittung-Stafshede**, Prof. and Division Head, Biology and Biotechnology, Chalmers University of Technology
- 27. Yves Hsieh, Assistant Professor, Department of Chemistry, KTH
- 28. Bo Albinsson, Professor Physical Chemistry, Chalmers University of Technology
- 29. Rachel A Foster, Associate Professor, Stockholm University
- 30. Ramiro Rojas, Researcher, Wallenberg Wood Science Center, KTH
- 31. Karin Stensjö, Associate Professor, Microbial Chemistry, Uppsala University
- 32. Brian J.J. Timmer, Postdoc, Organic Chemistry, KTH
- 33. Emma Rose Scaletti, Postdoc, Biochemistry, Stockholm University
- 34. Johan Nilvebrant, Researcher, Protein Science, KTH
- 35. **Martin Andersson,** Professor, Department of Chemistry and Chemical Engineering, Chalmers University of Technology
- 36. Christiane Stiller, Postdoc, Protein Science, KTH
- 37. Bélen Martín-Matute, Prof. Organic Chemistry, Stockholm University
- 38. Kumari Ubhayasekera, Researcher, Analytical Chemistry, Uppsala University
- 39. Christina Divne, Prof. Industrial Biotechnology, KTH
- 40. James M. Gardner, Associate Professor and Division Head, Department of Chemistry, KTH
- 41. Mathieu Linares, Associate Professor, Department of Science and Technology, ITN, LIU
- 42. Ana Rita Calixto, Postdoc, Department of Chemistry, BMC, Uppsala University
- 43. Cátia Moreira, Postdoc, Department of Chemistry, BMC, Uppsala University
- 44. Eirini Ornithopoulou, PhD Student, Department of Chemistry, KTH
- 45. Björn Åkermark, Prof. Organic Chemistry, Stockholm University
- Anja-Verena Mudring, Professor, Head of Physical Materials Chemistry, Department of Materials and Environmental Chemistry, Stockholm University
- 47. Vadim Kessler, Professor, Department of Molecular Sciences, SLU
- 48. **Martijn Kemerink**, Professor, Dept. of Physics, Chemistry and Biology (IFM), Linköping University
- 49. Björn Blomkvist, PhD Student, Department of Chemistry, KTH
- 50. Matic Hribersek, PhD Student, Department of Chemistry, Uppsala University
- 51. Berit Olofsson, Prof. Organic Chemistry, Stockholm University
- 52. **Magnus Jonsson**, Senior Lecturer, Dept. of Science and Technology, Linköping University
- 53. Erkki Brandäs, Prof. Quantum Chemistry, Uppsala University
- 54. Jan Kihlberg, Prof. Organic Chemistry, Uppsala University
- 55. Eric Tyrode, Associate Professor, Department of Chemistry, KTH
- 56. Kenneth Wärnmark, Prof. Organic Chemistry, Lund University
- 57. Antanas Karalius, PhD Student, Department of Chemistry, KTH

- 58. **Baltzar Stevensson**, Researcher, Department of Materials and Environmental Chemistry, Stockholm University
- 59. Aelys M Humphreys, Asst. Professor, Stockholm University
- 60. Barbara Wohlfarth, Professor, Department of Geological Science, Stockholm University
- 61. **Måns Ehrenberg**, Senior Professor, Department of Cell and Molecular Biology, Uppsala University
- 62. Per Jemth, Prof. Protein Chemistry, Uppsala University
- 63. Per Siegbahn, Professor, Department of Organic Chemistry, Stockholm University
- 64. Dirk jan de Koning, Professor, Department of Animal Breeding and Genetics, SLU
- 65. Elis Erbing, PhD Student, Department of Organic Chemistry, Stockholm University
- 66. Alejandro Valiente Sánchez, PhD student, Department of Organic Chemistry, Stockholm University
- 67. Doreen Dobritzsch, Assoc. Prof., Department of Chemistry BMC, Uppsala University
- 68. Víctor Agmo Hernández, Assoc. Prof., Physical Chemistry, Uppsala University
- 69. Maria Greger, Assoc. Prof. Plant Physiology, Stockholm University
- 70. Ola F. Wendt, Prof. Inorganic Chemistry, Lund University
- 71. Klas Tybrandt, Research Fellow, Dept. of Science and Technology, Linköping University
- 72. Bengt Mannervik, Prof. Biochemistry, Stockholm University
- 73. Iulia Emilia Brumboiu, Postdoc, Department of Theoretical Chemistry and Biology, KTH
- 74. Igor Di Marco Researcher, Department of Physics and Astronomy, Uppsala University
- 75. Anthony C. Forster, Prof., Dept. Cell and Molecular Biology, Uppsala University
- 76. **Krister Holmberg**, Prof. Emeritus, Dept. of Chemistry and Chemical Engineering, Chalmers
- 77. Sandra Olsson, PhD student, Department of Chemistry BMC, Uppsala University
- 78. Johan S Eklöf, Assoc. Professor, Department of Ecology, Environment and Plant Science, Stockholm University
- 79. Jan Komorowski, Prof., Computational Biology and Bioinformatics, Uppsala University
- 80. Patrik Johansson, Prof., Department of Physics, Chalmers University of Technology
- 81. Ulf Ryde, Prof. Theoretical Chemistry, Lund University
- 82. Jan-Erling Bäckvall, Prof. Organic Chemistry, Stockholm University
- 83. Lukasz T. Pilarski, Associate Senior Lecturer, Department of Chemistry BMC, Uppsala University
- 84. Gábor Méhes, Postdoctoral Fellow, Dept. of Science and Technology, Linköping University
- 85. Mattias Jakobsson, Professor of Genetics, Uppsala University
- 86. Johan Åqvist, Professor, Department of Cell and Molecular Biology, Uppsala University
- 87. Nina Kann, Professor, Dept. of Chemistry and Chemical Engineering, Chalmers
- 88. Sylvia Lindberg, Professor Emeritus, Plant Physiology, Stockholm University
- 89. Julia Griese, Assistant Professor, Cell and Molecular Biology, Uppsala University
- 90. **Maria Abrahamsson**, Associate Professor, Physical Chemistry, Chalmers University of Technology

91. Joakim Andréasson, Prof. Physical Chemistry, Chalmers

The Netherlands - NWO has joined cOAlition S

- 1. Bas de Bruin, Prof. Bio-Inspired L90 Catalysis, Universiteit van Amsterdam (UvA)
- Ben Feringa, Prof. Organic Chemistry, Rijksuniversiteit Groningen (RuG), Nobel Prize 2016
- 3. Martijn B. Katan, Emeritus professor of nutrition, VU University Amsterdam (VU), TV celebrity
- 4. Joost Reek, Prof. Supramolecular catalysis, Universiteit van Amsterdam (UvA). Head Section Chemistry KNAW
- 5. Matthias Bickelhaupt, Prof. Theoretical Chemistry, Vrije Universiteit Amsterdam (VU)
- 6. Gerard Roelfes, Prof. Biomolecular Chemistry & Catalysis, University of Groningen (RuG)
- 7. Ryan C. Chiechi, Prof. Chemistry of Molecular Materials & Devices, Rijksuniversiteit Groningen (RuG)
- 8. Vivek Sinha, PhD researcher, Bio-Inspired Catalysis, Universiteit van Amsterdam (UvA)
- 9. Chris Slootweg, Assoc. Prof. Physical Organic Chemistry, Universiteit van Amsterdam (UvA)
- 10. **Marianne Lankelma**, PhD student, Bio-Inspired Catalysis, Universiteit van Amsterdam (UvA)
- 11. Gerrit C. Groenenboom, Prof. Theoretical Chemistry, Radboud University, Nijmegen (RU)
- 12. **Tijmen Bakker**, PhD student, Supramolecular catalysis, Universiteit van Amsterdam (UvA)
- 13. **Timothy Noel**, Assoc. Prof., Micro Flow Chemistry & Synthetic Methodology, TU Eindhoven (TUE)
- 14. Wowa Stroek, Master student, Bio-Inspired Catalysis, Universiteit van Amsterdam (UvA)
- 15. **Moniek Tromp**, Prof. Materials Chemistry, Rijksuniversiteit Groningen (RUG)
- 16. **Pieter Bruijnincx**, Prof. Sustainable Chemistry & Catalysis, Universiteit Utrecht (UU)
- 17. Klaas van Leest, PhD student, Bio-Inspired Catalysis, Universiteit van Amsterdam (UvA)
- 18. Eva Meeus, Master student, HRSMC Excellence Master, Universiteit van Amsterdam (UvA)
- 19. Evgeny Pidko, Assoc. Prof., Inorganic Systems Engineering, Technische Universiteit Delft (TUD)
- 20. E.W. "Bert" Meijer, Distinguished University Professor, Eindhoven University of Technology
- 21. Minghui Zhou, PhD student, Bio-Inspired Catalysis, Universiteit van Amsterdam (UvA)
- 22. **Antoine Lacour**, Research Associate, Synthetic Organic Chemistry, Radboud University, Nijmegen (RU)
- 23. Eline van den Heuvel, Master student, Bio-Inspired Catalysis, Universiteit van Amsterdam (UvA)
- 24. Max Derks, Research Associate, Synthetic Organic Chemistry, Radboud University, Nijmegen (RU)
- 25. Zirui Li, PhD student, Chemical Biology, Leiden University (LU)
- 26. Ali Hashemi, PhD student, Computational Catalysis, Inorganic Systems Engineering (ISE), TUDelft



- 27. Wilhelm Huck, Prof. Physical Organic Chemistry; Radboud University, Nijmegen (RU)
- 28. Roeland Nolte, Em. Prof. Organic Chemistry, Radboud University, Nijmegen (RU)
- 29. **Mike Smeenk**, Master student, Biomolecular Chemistry, Radboud University, Nijmegen (RU)
- Kimberly Bonger, Ass. Prof., Biomolecular Chemistry, Radboud University, Nijmegen (RU)
- 31. Bernd Ensing, Assoc. Prof. Computational Chemistry, Universiteit van Amsterdam (UvA)
- Robbert van Putten, PhD Student, Inorganic Systems Engineering, Technische Universiteit Delft (TUD)
- Daan A. Snoeken, Master student, Theoretical Chemistry, Radboud University, Nijmegen (RU)
- 34. Frank Hollmann, Assoc. Prof., Biocatalysis, Delft University of Technology
- 35. Andy-Mark Thunnissen, Ass. Prof. Molecular Enzymology, University of Groningen (RUG)
- 36. Reinoud Gosens, Ass Prof. Molecular Pharmacology, University of Groningen (RUG)
- 37. Andreas W Ehlers, Ass Prof. Comp. Chemistry, Universiteit van Amsterdam (UvA)
- 38. Erik Duin-Berteling, Research Technician, Universiteit van Amsterdam (UvA)
- 39. Victor R.L.J. Bloemendal, PhD student, Synthetic Organic Chemistry, Radboud University, Nijmegen (RU)
- 40. Maik Derks, Master student, Molecular Life Sciences, Radboud University, Nijmegen (RU)
- 41. **Sam Moons**, PhD Student, Synthetic Organic Chemistry, Radboud University Nijmegen (RU)
- Emiel Rossing, PhD Student, Synthetic Organic Chemistry, Radboud University Nijmegen (RU)
- 43. Freek Janssen, Postdoc, Synthetic Organic Chemistry, Radboud University, Nijmegen (RU)
- 44. Bert Poolman, Prof of Biochemistry and Scientific Director of GBB, University of Groningen (RUG)
- 45. Marco Fraaije, Prof Molecular Enzymology, University of Groningen (RUG)
- 46. Herma Cuppen, Prof. Computational Chemistry, Radboud University Nijmegen (RU)
- 47. Nathalie Katsonis, Professor of Chemistry, University of Twente (UT)
- 48. Dennis Hetterscheid, Assoc. Prof. Leiden Institute for Chemistry, Universiteit Leiden (UL)
- 49. Jana Roithová, Prof. Spectroscopy and Catalysis, Radboud University Nijmegen (RU)
- 50. Jan Reedijk, Em. Prof. Leiden Institute for Chemistry, Universiteit Leiden (UL)
- 51. Marthe Walvoort, Ass. Prof. Chemical Biology, University of Groningen (RUG)
- 52. Alexander Kros, Prof. Supramolecular chemistry, Universiteit Leiden (UL)
- 53. Shirin Faraji, Assoc. Prof. Theoretical Chemistry, Rijksuniversiteit Groningen (RuG)
- 54. Jurriaan Huskens, Prof. Supramolecular chemistry, Universiteit Twente (UT)
- 55. **Anouk Rijs**, Ass. Prof. Molecular Structure and Dynamics, Radboud University, Nijmegen (RU)
- 56. Mario van der Stelt. Prof. Molecular Physiology, Leiden University, (UL)
- 57. Daphne Boer, PhD student, Medical Biochemistry, Leiden University (UL)
- 58. Martijn van der Lienden, PhD student, Medical Biochemistry, Leiden University (UL)
- 59. David Klein, PhD student, Leiden Institute of Chemistry, Leiden University (UL)

- 60. Thomas Hansen, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 61. Thomas Bakkum, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 62. Marta Artola, Postdoc, Leiden Institute of Chemistry, Leiden University (UL)
- 63. Thom Hersbach, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 64. Stefan Raaijman, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 65. Hessel van Dijk, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 66. Alexander Bakker, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 67. Rienk Eelkema, Assoc. Prof., Delft University of Technology (TUD)
- 68. Leon Jacobse, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 69. Jeroen Methorst, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 70. Diyu Zhang, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 71. **Stefan van der Vorm**, dr. lecturer Organic Chemistry, Leiden Institute of Chemistry, Leiden University (UL)
- 72. Tiddo J. Mooibroek, Research Ass. Prof. Supramolecular Chemistry, University of Amsterdam (UvA)
- M. Ángeles Fernández-Ibáñez, Assoc. Prof. Synthetic Organic Chemistry, University of Amsterdam (UvA)
- 74. Floor M. Aalders Master student, Radboud University Nijmegen (RU)
- 75. **Sybren K. Schoustra** MSc Student, Radboud University (RU) / Soon PhD student at Wageningen University & Research (WUR)
- 76. **Marc-Etienne Moret**, Assistant Professor, Organic Chemistry & Catalysis, Utrecht University (UU)
- 77. Floris J. van Dalen, PhD student, Bio-organic Chemistry/Tumor Immunology, Radboud University/Radboud UMC, Nijmegen (RU)
- 78. Maria João Ferraz, Postdoc, Medical Biochemistry, Leiden University (UL)
- 79. **Jarl Ivar van der Vlugt** Assoc.Prof., Bioinspired Homogeneous Catalysis, University of Amsterdam (UvA)
- 80. Jan B. F. N. Engberts, Em. Prof. Chemistry, Rijksuniversiteit Groningen (RuG)
- 81. Kees Hummelen, Prof. 'Material Science & Chemistry, Rijksuniversiteit Groningen (RuG)
- 82. Hans Elemans, Assoc. Prof. Molecular Nanotechnology, Radboud University (RU), Nijmegen
- 83. G. Julius Vanco, Prof. Materials Science & Nanotechnology, MESA+, Universiteit Twente
- 84. Laura Opdam, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 85. B.J. Molenaar, Master student, Leiden Institute of Chemistry, Leiden University (UL)
- 86. Hans van den Elst, Research analist, Leiden Institute of Chemistry, Leiden University (UL)
- 87. **Marcellus Ubbink**, Prof. Protein Chemistry, Leiden Institute of Chemistry, Leiden University (UL)
- 88. **Maria Antonietta Loi,** Prof. Photophysics & OptoElectronics, Zernike Institute for Advanced Materials, University of Groningen (RuG)
- Helmi Schlaman, Programme coordinator Life Science and Technology, Leiden Institute of Chemistry, Leiden University (UL)
- 90. Fatema Zahra Rashid, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 91. Ria Broer, Prof. Theoretical Chemistry, University of Groningen (RuG)

- 92. Jeroen Codée, Assoc. Prof. Bio-organic Chemistry, Leiden Institute of Chemistry, Leiden University (UL)
- 93. Tom van der Wel, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 94. **Raoul Plessius**, PhD student, Supramolecular catalysis, Universiteit van Amsterdam (UvA)
- 95. Annelot van Esbroeck, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 96. Michiel Langerman, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 97. Martijn van der Plas, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 98. Christian Marvelous, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- S. Hakim Hamdani, master's student, Synthetic Organic Chemistry, Radboud University, Nijmegen (RU)
- 100. Joachim Bijl, Master student, Synthetic Organic Chemistry, University of Amsterdam (UvA)
- 101. Daan den Boer, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 102. Dmitri Filippov, Assistant Professor, Leiden Institute of Chemistry, Leiden University (UL)
- 103. Arnold J.M. Driessen, Prof. Molecular Microbiology, University of Groningen (RUG)
- 104. Zhenghui Wen, PhD student, Micro Flow Chemistry & Synthetic Methodology
- 105. Eva Blokker, Master student, Theoretical Chemistry, Vrije Universiteit Amsterdam (VU)
- 106. Mandy Erkelens PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 107. Joris Timmermans. Postdoc Researcher, Institute of Environmental Studies, Leiden University (UL)
- 108. Tibor Kudernac, Assistant Professor, Organic Chemistry, University of Twente (UT)
- 109. Geert-Jan Kroes, Prof. Theoretische Chemie, Universiteit Leiden
- 110. Wybren Jan Buma, Prof. Molecular Spectroscopy, Universiteit van Amsterdam (UvA)
- 111. Jeroen P.J. Bruekers, PhD student, Molecular Nanotechnology, Radboud University (RU)
- 112. Gerard van Koten, Honorair University Professor, Universiteit Utrecht (UU)
- 113. Akansha Goyal, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 114. Alex van der Ham, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 115. **Syuzanna R. Harutyunyan**, Prof. Synth. Organic Chemistry, Rijksuniversiteit Groningen (RuG)
- 116. Jiangkun Ouyang, Postdoc, Organic Chemistry, Radboud University, Nijmegen (RU)
- 117. **Saurabh Soni**, PhD student, Zernike Institute for Advanced Materials and Stratingh Institute of Chemistry, University of Groningen (RuG)
- 118. Jean-Paul Lange, Professor, Chemical Engineering, University of Twente (UT) and Principal Researcher at Shell Technology Center, Amsterdam
- 119. Jörg Meyer, Assistant Professor, Theoretical Chemistry, Leiden University (UL)
- 120. Han Mulder, Associate Professor, Animal Breeding and Genomics, Wageningen University (WU)
- 121. Jan Vos, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 122. Albert J. R. Heck, Distinguished Faculty Professor, Utrecht University (UU)
- 123. Albert P.H.J. Schenning, Prof. Stimuli-responsive Functional materials and Devices, Eindhoven University of Technology (TU/e)



- 124. Bert Klein Gebbink, Prof. Homogeneous and Bio-inspired Catalysis, Utrecht University (UU)
- 125. Wesley Ketelaars, Master student, Molecular Chemistry, Radboud University, Nijmegen (RU)
- 126. Anne Swartjes, PhD student, Molecular Nanotechnology, Radboud University, Nijmegen (RU)
- 127. Wesley Browne, Associate Professor Molecular Inorganic Chemistry, University of Groningen (RUG)
- 128. David N. Reinhoudt, Em. prof. Supramolecular Chemistry, University of Twente (UT), part-time prof. Supramolecular Chemistry, Radboud University Nijmegen (RU)
- 129. Lara Polak, Master student, Bio-Inspired Catalysis, Universiteit van Amsterdam (UvA)
- 130. Martijn Tepaske, Master student, Bio-Inspired Catalysis, Universiteit van Amsterdam (UvA)
- 131. Sijbren Otto Prof. Systems Chemistry, University of Groningen (RuG)
- 132. Cornelis J. Elsevier, Prof. Molecular Inorganic Chemistry, Universiteit van Amsterdam (UvA)
- 133. Inge Loes ten Kate, Asst Prof. Planetary Science / Astrobiology, Utrecht University (UU)
- 134. Edwin Otten, Associate Professor Molecular Inorganic Chemistry, University of Groningen
- Johannes E. M. N. Klein, Assistant Professor Molecular Inorganic Chemistry, University of Groningen (RUG).
- 136. Henk van den Berg, Professor, Universiteit Twente (UT).
- 137. Trevor A. Hamlin, Ass. Prof., Theoretical Chemistry, Vrije Universiteit Amsterdam (VU)
- 138. Pascal Vermeeren, PhD student, Theoretical Chemistry, Vrije Universiteit Amsterdam (VU)
- 139. **Stephanie van der Lubbe**, PhD student, Theoretical Chemistry, Vrije Universiteit Amsterdam (VU)
- 140. Célia Fonseca Guerra, Professor, Theoretical Chemistry, Vrije Universiteit Amsterdam (VU)
- 141. Timme H. Donders, Ass. Professor Palaeoecology, Utrecht University (UU)
- 142. Evert Jan Baerends, Prof. Em. Theoretical Chemistry, Vrije Universiteit Amsterdam (VU)
- 143. Han J.G.E. Gardeniers, Prof. Chemical Engineering, University of Twente (UT)
- 144. Ellen Kampinga, Master student, Chemistry of Molecular Materials and Devices, University of Groningen (RUG)
- 145. Detlef Lohse, Professor, Physics of Fluids, University of Twente (UT)
- 146. Richard van Lent, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 147. Arash Helmi, Postdoc, Inorganic Membranes and Membrane Reactors, TU Eindhoven (TUe)
- 148. Qi Yu, PhD student, Institute of Environmental Science, Leiden University (UL)
- 149. Ward Doelman, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 150. Lies Bouwman, Professor Inorganic Chemistry, Leiden University (UL)
- 151. **Hidde Elferink**, PhD student, Synthetic Organic Chemistry, Radboud University, Nijmegen (RU)
- 152. Binne Zwanenburg, Em. Prof. Organic Chemistry, Radboud Universiteit, Nijmegen (RU)
- 153. Jiabin Luan, PhD student, Systems Chemistry, Radboud University, Nijmegen (RU)

- 154. Ayush Narsaria, PhD student, Theoretical Chemistry, Vrije Universiteit, Amsterdam (VU)
- 155. **Thomas Boltje**, Assistant Professor, Institute for molecules and Materials, Radboud University (RU).
- 156. Viktor Ivasyshyn, PhD Student, Chemistry of Molecular Materials and Devices, University of Groningen (RUG)
- 157. Irene Groot, Associate Professor Heterogeneous Catalysis/Surface Science, Leiden University
- 158. Silvia D'Agostini, PhD student, Leiden Institute of Chemistry, Leiden University (UL)
- 159. Rint Sijbesma, professor of Supramolecular Polymer Chemistry, TU Eindhoven (TUe)
- 160. Nicole Smits, PhD Student, Leiden Institute of Chemistry, Leiden University (UL)
- George Palasantzas, Prof. Physics, Zernike Institute for Advanced Materials, University of Groningen (RUG)
- 162. Jan Anton Koster, Associate Professor of Applied Physics, University of Groningen (RUG)
- 163. **Thomas Ia Cour Jansen**, Assistant Professor Physics, Zernike Institute for Advanced Materials, University of Groningen (RUG)
- 164. Jane Kardula, PhD Student, Chemistry of Molecular Materials and Devices, University of Groningen (RUG)
- 165. **Sylvia Rousseva**, PhD Student, Zernike Institute for Advanced Materials and Stratingh Institute of Chemistry, University of Groningen (RUG).
- 166. **Bart J. Kooi**, Professor, Zernike Institute for Advanced Materials, University of Groningen (RUG)
- 167. Jacob van Hengst, PhD Student, Leiden Institute of Chemistry, Leiden University (UL)
- 168. Maarten Stam, Master student, Leiden Institute of Chemistry, Leiden University (UL)
- 169. Dana Rademaker, Master student, Leiden Institute of Chemistry, Leiden University (UL)
- 170. **Eelco Ruijter**, Associate Professor of Organic Chemistry, Department of Chemistry & Pharmaceutical Sciences, Vrije Universiteit Amsterdam (VUA)
- 171. Marcel de Jeu, Associate Professor of Mathematics, Leiden University (UL)
- 172. Jordy Saya, PhD Student, Department of Chemistry & Pharmaceutical Sciences, Vrije Universiteit Amsterdam (VUA)
- 173. Adri Minnaard, Director of the Stratingh Institute for Chemistry, University of Groningen
- 174. Meike Stöhr, Professor, Zernike Institute for Advanced Materials, University of Groningen
- 175. **Anja Palmans.** Associate Professor, Department of Chemistry and Chemical Engineering, TU Eindhoven (TUe)
- 176. **Ivo Filot**, Assistant Professor, Department of Chemistry and Chemical Engineering, TU Eindhoven (TUe)
- 177. John Braun, PhD Student, Department of Chemistry & Pharmaceutical Sciences, Vrije Universiteit Amsterdam (VUA)
- 178. Floris Rutjes, Professor, Institute for Molecules and Materials, Radboud University
- 179. Wim Nieuwpoort, Emeritus Prof. Theoretical Chemistry, University of Groningen (RuG)
- 180. Daniel L. J. Broere, Assistant Professor, Organic Chemistry & Catalysis, Utrecht University
- 181. **Taha Selim**, PhD Student, Theoretical Chemistry Department, IMM, Radboud University (RU), Nijmegen.



- 182. **Shaotao Bai**, PhD Student, Supramolecular and Homogeneous Catalysis, University of Amsterdam (UvA)
- 183. **Thomas R. Roose**, PhD Student, Department of Chemistry & Pharmaceutical Sciences, Vrije Universiteit Amsterdam (VUA)
- 184. Piter Bijma, Assistant Professor Animal Breeding and Genomics, Wageningen University
- 185. Elena Daines, PhD Student, Physical Organic Chemistry; Radboud University, Nijmegen (RU)

The United Kingdom - UKRI has joined cOAlition S

- 1. Philippe Wilson, Lecturer Biological Chemistry & Bioinformatics, De Montfort University
- 2. Lee Cronin, Prof. and Regius Chair of Chemistry, University of Glasgow
- 3. Perdita Barran, Prof and Director of the Michael Barber Centre, University of Manchester
- 4. Varinder Aggarwal FRS, Professor of Synthetic Chemistry, University of Bristol
- 5. Wuge Briscoe, Reader in Physical Chemistry, University of Bristol
- 6. Robin Bedford, Professor of Catalysis, University of Bristol
- 7. Dek Woolfson, Professor of Chemistry and Biochemistry, University of Bristol
- 8. Tom Oliver, Royal Society University Fellow and Lecturer, University of Bristol
- 9. David Naafs, Royal Society University Fellow and Lecturer, University of Bristol
- 10. Stephen Wells, Researcher, University of Bath
- 11. Jonathan Essex, Professor of Chemistry, University of Southampton
- 12. Gareth Tribello, Lecturer in Atomistic Simulation, Queen's University Belfast
- 13. Jonathan Clayden, Professor of Chemistry, University of Bristol
- 14. Michael Shaver, Professor of Polymer Science, University of Manchester (UoM)
- 15. Matthew Nelson, Research Leader, Royal Botanic Gardens, Kew
- 16. Jennifer Garden, Ramsay Memorial Trust Fellow, University of Edinburgh
- 17. Euan Brechin, Professor of Coordination Chemistry, University of Edinburgh
- 18. Christopher Arthur, Research Fellow, University of Bristol
- 19. Paul Gates, Research Fellow, University of Bristol
- 20. Anthony Davis, Professor of Supramolecular Chemistry, University of Bristol
- 21. Scott Cockroft, Senior Lecturer in Organic Chemistry, University of Edinburgh
- 22. Paul A. Clarke, Reader in Organic Chemistry, University of York
- 23. Michael Coogan, Deputy Head of Chemistry Department, Lancaster University.
- 24. Drew Thomson, Lecturer, University of Glasgow
- 25. David Nelson, Lecturer and Chancellor's Fellow, University of Strathclyde
- 26. Dr. John M. Brown FRS, CRL, Oxford University
- 27. Edward Tate, Professor of Chemical Biology, Imperial College London & Francis Crick Institute
- 28. Frank Lewis, Senior Lecturer in Organic Chemistry, Northumbria University
- 29. Christopher Serpell, Senior Lecturer in Chemistry, University of Kent
- 30. Aniello Palma, Lecturer in Organic Chemistry, University of Kent
- 31. Valery N.Kozhevnikov, Associate Professor in Chemistry, Northumbria University
- 32. William Gee, Lecturer in Chemistry and Forensic Science, University of Kent
- 33. Marc van der Kamp, BBSRC David Phillips Research Fellow, University of Bristol

- 34. Carmen Domene, Prof of Computational Chemistry, University of Bath
- 35. **Andy Wilson**, Professor, School of Chemistry and Ashby Center for Structural Molecular Biology, University of Leeds
- 36. Marcin J. Skwark, Research Associate, University of Cambridge
- 37. **Niklaas J. Buurma**, Senior Lecturer in Physical Organic Chemistry, School of Chemistry, Cardiff University
- 38. **Sam Hay**, Senior Lecturer in Biophysical Chemistry, Manchester Institute of Biotechnology and School of Chemistry, University of Manchester
- Anthony Nash, Postdoc, Department of Physiology, Anatomy, and Genetics, University of Oxford
- 40. Sara Kyne, Senior Lecturer in Chemistry, University of Lincoln
- 41. David Tetard, Senior Lecturer in Chemistry, Northumbria University
- 42. Linus O. Johannissen, Experimental Officer, Manchester Institute of Biotechnology, University of Manchester

# B. Non-cOAlition S countries (currently)

### Australia

- 1. Pall Thordarson, Professor, University of New South Wales (UNSW Sydney)
- 2. Michelle Coote, Professor, Australian National University (ANU Canberra)
- 3. Jonathon Beves, ARC Future Fellow, University of New South Wales (UNSW Sydney)
- 4. Philip Gale, Professor and Head of School, School of Chemistry, University of Sydney
- 5. **Wallace Cowling**, Professor, The University of Western Australia (UWA)
- 6. Sheng Chen, Research Fellow, The University of Western Australia (UWA)
- 7. **Hans Daetwyler**, Research Leader Computational Biology, Agriculture Victoria Research, Department of Economic Development, Jobs, Transport and Resources, Victoria, Australia
- 8. **Jason Harper**, Associate Professor, University of New South Wales (UNSW Sydney)
- 9. **Gregory Warr**, Professor, School of Chemistry (The University of Sydney)
- 10. Scott Kable, Professor and Head of School of Chemistry (UNSW Sydney)
- 11. Kristopher Kilian, Senior Lecturer, University of New South Wales (UNSW Sydney)
- 12. **Stephen Glover**, Adjunct Professor, Department of Chemistry, University of New England (UNE)
- 13. Torsten Thomas, Professor and Director, University of New South Wales (UNSW Sydney)

### Austria

- 1. **Karl Kirchner**, PhD, Professor, Institute of Applied Synthetic Chemistry, Vienna University of Technology
- 2. Helmuth Hoffmann, PhD, Professor, Institute of Applied Synthetic Chemistry, Vienna University of Technology
- 3. **Peter Weinberger**, PhD, Assist.-Prof., Institute of Applied Synthetic Chemistry, Vienna University of Technology



## Belgium

## 1. Tatjana Parac-Vogt, Professor, Department of Chemistry, KU Leuven

# Brazil

1. Antônio Eduardo Miller Crotti, Ph.D. Professor, Department of Chemistry, Faculty of Philosophy, Sciences and Letters, University of São Paulo

## Canada

- 1. Sarah Rauscher, Assistant Professor, Department of Chemistry, University of Toronto
- 2. **Dennis Salahub**, Professor Emeritus of Chemistry, University of Calgary
- 3. Datong Song, Associate Professor, Department of Chemistry, University of Toronto
- 4. Paul Hayes, Professor, Department of Chemistry, University of Lethbridge
- 5. **Ulrich Fekl**, Professor, Department of Chemistry, University of Toronto
- 6. Mark Stradioto, Professor, Department of Chemistry, Dalhousie University
- 7. **Stacey Wetmore**, Professor, Department of Chemistry and Biochemistry, University of Lethbridge
- 8. Tim Storr, Associate Professor, Department of Chemistry, Simon Fraser University
- 9. **Marc Roussel**, Professor, Department of Chemistry and Biochemistry, University of Lethbridge
- 10. **Borries Demeler**, Professor, Department of Chemistry and Biochemistry, University of Lethbridge

# China

1. Yaya Duan, Postdoc, Organic Chemistry, ICIQ

### Croatia

1. Aleksandra Maršavelski, Assistant Professor, Department of Chemistry, Faculty of Science, University of Zagreb

# Czech Republic

- 1. Petr Bouř, Professor of Analytical Chemistry, UCT and CAS
- 2. **Zlatko Janeba**, Senior Researcher, Institute of Organic Chemistry and Biochemistry CAS, Prague
- 3. Michal Hocek, Professor Organic Chemistry, Charles University and IOCB Prague
- 4. Lubomír Rulíšek, Senior Researcher, Institute of Organic Chemistry and Biochemistry CAS, Prague

- 5. Pavel Kočovský, DSc, FRSE, Prof. Organic Chemistry, Charles University
- 6. **Michal Straka**, Senior Researcher, Institute of Organic Chemistry and Biochemistry CAS, Prague
- 7. **Milan Vrabel**, Junior Group Leader, Institute of Organic Chemistry and Biochemistry, CAS, Prague
- 8. Eliška Matoušová, Assist. Prof. Organic Chemistry, Charles University
- 9. Natalia Janowicz, PhD student, Parasitology, Charles University, Prague
- 10. Petr Hermann, Professor Inorganic Chemistry, Charles University, Prague
- 11. Eliška Nováková, Assist. Prof. Analytical Chemistry, Charles University, Prague
- 12. Cina Foroutan-Nejad, Junior Researcher, Physical Chemistry, Central European Institute of Technology, Masaryk University, Brno
- 13. Radovan Herchel, Assoc. Professor, Department of Inorganic Chemistry, Palacký University Olomouc

### Egypt

- 1. **Hamdy Abdel-Shafy**, Assistant Professor, Department of Animal Production, Faculty of Agriculture, Cairo University
- Hossam E. Rushdi, Associate Professor of Animal Breeding and Genetics, Faculty of Agriculture, Cairo University

#### Germany

- 1. Sven Schneider, Prof. and Head of Institute for Inorganic Chemistry, University of Göttingen
- 2. Sarah Köster, Prof. of Experimental Physics, University of Göttingen
- 3. Martin Elsner, Prof., Chair of Analytical and Water Chemistry, Technical University of Munich
- 4. **Matthias Beller**, Prof. Applied Homogeneous Catalysis, Leibniz Institute for Catalysis, Rostock
- 5. **Riza Dervisoglu**, Postdoctoral researcher, Max Planck Institute for Biophysical Chemistry, Göttingen
- 6. **Torsten Beweries**, PD Dr., Coordination Chemistry and Catalysis, Leibniz Institute for Catalysis, Rostock
- 7. Serena DeBeer, Professor & MPI Director, inorganic spectroscopy, Max-Planck Institute for Chemical Energy Conversion (MPI CEC), Mülheim a/d Ruhr
- 8. **Birgit Strodel**, Professor, Computational Biochemistry, Forschungszentrum Jülich & Heinrich Heine University Düsseldorf
- 9. **Frank Neese**, Professor & MPI Director, molecular theory & spectroscopy, Max-Planck Institut für Kohlenforschung (MPI-Kofo), Mülheim a/d Ruhr
- 10. Thomas Braun, Professor for Inorganic Chemistry, Humboldt-Universität zu Berlin
- 11. Christian Limberg, Professor for Inorganic Chemistry, Humboldt-Universität zu Berlin
- 12. Hannah Noa Barad, Postdoctoral researcher, Max Planck Institute for Intelligent Systems, Stuttgart



- 13. Peter R. Schreiner, Professor of Organic Chemistry, Justus Liebig University, Giessen
- 14. Siegfried Schindler, Professor Inorganic Chemistry, Justus-Liebig-Universität, Gießen
- 15. **Patrick Hasche**, PhD Student, Coordination Chemistry and Catalysis, Leibniz Institute for Catalysis, Rostock
- 16. Alois Fürstner, Professor and Director at the MPI für Kohlenforschung, Department of Organometallic Chemistry, Mülheim/Ruhr

#### Greece

1. **Nikolaos Labrou.** Professor, Department of Biotechnology, Agricultural University of Athens

### India

- 1. Nanda Dulal Paul, Ass. Prof., Dept of Chemistry, Indian Inst. of Eng. Sci. & Techn., Shibpur
- 2. **Suman Sinha**, PhD researcher, Dept of Chemistry, Indian Inst. of Eng. Sci. & Techn., Shibpur
- 3. Rina Sikari, PhD researcher, Dept of Chemistry, Indian Inst. of Eng. Sci. & Techn., Shibpur
- 4. Siuli Das, PhD researcher, Dept of Chemistry, Indian Inst. of Eng. Sci. & Techn., Shibpur
- 5. **Gargi Chakraborty**, PhD researcher, Dept of Chem., Indian Inst. of Eng. Sci. & Tech., Shibpur
- 6. Rakesh Mondal, PhD researcher, Dept of Chem., Indian Inst. of Eng. Sci. & Tech., Shibpur
- 7. Seemika Banerjee, PhD researcher, Dept of Chem., Indian Inst. of Eng. Sci. & Tech., Shibpur
- 8. N. Sukumar, Professor, Department of Chemistry, Shiv Nadar University

### Israel

- 1. Ehud Keinan, Professor Emeritus, Schulich Faculty of Chemistry, Technion-Israel Institute of Technology and President of the Israel Chemical Society
- 2. Dan Tawfik, Professor, Department of Biomolecular Sciences, Weizmann Institute
- 3. Sason Shaik, Professor of Theoretical Chemistry, The Hebrew University of Jerusalem
- 4. Yuval Garini, Professor, Department of Physics, Bar Ilan University
- 5. Dan Major, Professor, Chemistry Department, Bar Ilan University
- 6. Norman Metanis, Professor, Institute of Chemistry, The Hebrew University of Jerusalem
- 7. **Katya Kapilov-Buchman**, PhD, Department of Material Science and Engineering, Technion-Israel Institute of Technology
- 8. Ilan Marek, Professor, Schulich Faculty of Chemistry. Technion-Israel Institute of Technology
- 9. **Shimon Maksymenko**, PhD student, Schulich Faculty of Chemistry. Technion-Israel Institute of Technology

- 10. Raphael Mechoulam, Professor, The Hebrew University of Jerusalem
- 11. Ilya Grinberg, Professor, Chemistry Department, Bar Ilan University
- 12. **Mark Iron**, Associate Staff Scientist, Department of Chemical Research Support, Weizmann Institute of Science
- 13. **Timor Baasov**, Professor, Schulich Faculty of Chemistry. Technion-Israel Institute of Technology
- 14. Izaak Cohen, Ph.D., Department of Physics, Bar Ilan University
- 15. Moshe Portnoy, Associate Professor, School of Chemistry, Tel Aviv University
- 16. Aryeh Frimer, Professor Emeritus, Dept. of Chemistry, Bar Ilan University
- 17. Lucio Frydman, Professor, Department of Chemical and Biological Physics, Weizmann Institute
- 18. **Graham de Ruiter**, Assistant Professor, Schulich Faculty of Chemistry. Technion Israel Institute of Technology
- 19. Arlene Wilson-Gordon, Professor Emerita, Department of Chemistry, Bar-Ilan University
- 20. Zeev Gross, Professor, Schulich Faculty of Chemistry. Technion Israel Institute of Technology
- 21. Jan M. L. (Gershom) Martin, Baroness Thatcher Professor of Chemistry, Weizmann Institute
- 22. **Slava Freger**, Professor, Wolfson Department of Chemical Engineering. Technion Israel Institute of Technology
- 23. Itamar Willner, Professor, Institute of Chemistry, The Hebrew University of Jerusalem
- 24. Irena Efremenko, Weizmann Institute of Science
- 25. Ashraf Brik, Professor, Schulich Faculty of Chemistry. Technion-Israel Institute of Technology
- 26. **Miriam Karni**, Ph.D, Research Fellow, Schulich Faculty of Chemistry. Technion Israel Institute of Technology
- 27. Arkadi Vigalok, Professor, School of Chemistry, Tel Aviv University
- 28. Ronny Neumann, Professor, Department of Organic Chemistry, Weizmann Institute of Science
- 29. **Yoav D. Livney,** Associate Professor, Department of Biotechnology & Food Engineering, Technion- Israel Institute of Technology
- 30. Mattan Hurevich, Senior Lecturer, The Hebrew University of Jerusalem
- 31. **Gilad Haran**, Professor, Department of Chemical and Biological Physics, Weizmann Institute of Science
- 32. **Ester Segal**, Associate Professor, Department of Biotechnology & Food Engineering, Technion-Israel Institute of Technology
- 33. Uri Banin, Professor, Institute of Chemistry & the center for nanoscience and nanotechnology, The Hebrew University of Jerusalem
- 34. **Maya Davidovich-Pinhas**, Asst. Prof., Department of Biotechnology & Food Engineering, Technion- Israel Institute of Technology
- 35. Indrajit Maity, postdoc, Department of Chemistry, Ben-Gurion University of the Negev
- 36. Gilbert Daniel Nessim, Assistant Professor, Department of Chemistry, Bar Ilan University
- 37. Amnon Albeck, Professor, Department of Chemistry, Bar Ilan University
- 38. Anatoly Belostotskii, Associate Professor, Department of Chemistry, Bar Ilan University

- 39. **Yuval Shoham**, Erwin and Rosl Pollack Chair in Biotechnology, Technion-Israel Institute of Technology
- 40. Wilfried J. W. Mayer, D.Sc., Retired Head Analytical R&D at ADAMA Makhteshim Ltd.
- 41. Joel Bernstein, Prof. Emeritus, Department of Chemistry, Ben-Gurion University
- 42. **Dr. Tuvia Zisner**, Chemical Engineer
- 43. **Ranjeesh Thenarukandiyil**, postdoc, Schulich Faculty of Chemistry. Technion Israel Institute of Technology
- 44. **Pravat Mondal**, postdoc, Schulich Faculty of Chemistry. Technion Israel Institute of Technology
- Chinna Ayya Swamy P, postdoc, Schulich Faculty of Chemistry. Technion Israel Institute of TechnologyMicha Fridman, Professor, School of Chemistry, Tel Aviv University.
- 46. **Ilana Kolodkin-Gal**, Assistant Professor, Department of Molecular Genetics, Weizmann Institute
- 47. Nir Ben-Tal, Professor, The George S. Wise Faculty of Life Sciences, Tel Aviv University
- 48. Michael Fainzilber, The Chaya Professor in Molecular Neuroscience, Weizmann Institute
- 49. Charles E. Diesendruck, Assist. Prof., Schulich Faculty of Chemistry, Technion Israel Institute of Technology
- 50. **Daniella Godfarb**, Professor Department of Chemical and Biological Physics, Weizmann Institute of Science
- 51. **Alex Leshansky**, Assoc. Professor, Department of Chemical Engineering, Technion-Israel Institute of Technology
- 52. Shlomo Yitzchaik, Professor of Chemistry, The Hebrew University of Jerusalem

### Japan

- 1. **Paola Laurino**, Assistant Professor (Protein Engineering and Evolution), Okinawa Institute of Science and Technology, Okinawa
- 2. **Eugene Khaskin**, Researcher (Organometallic Chemistry), Okinawa Institute of Science and Technology, Okinawa

#### Lithuania

1. visvaldas Kairys, Senior researcher, Vilnius University

### New Zealand

1. Margaret Brimble, Distinguished Professor (Organic Chemistry), University of Auckland

### Portugal

- 1. Maria José Calhorda, Professor of Inorganic Chemistry, University of Lisboa, Portugal
- 2. Ana Margarida Martins, Assistant Professor with Habilitation at University of Lisboa, Portugal



- 3. Paulo Nuno Martinho, Researcher, University of Lisboa
- 4. Jorge Oliveira, Assistant Professor, Polytechnic Institute of Viseu, Portugal
- 5. María Teresa Blázquez-Sánchez. Postdoc, University of Lisboa, Portugal
- 6. Ara Núñez Montenegro, Postdoc, University Of Porto, Portugal

## Serbia

- 1. Maja Gruden, Assoc. Prof. Chemistry, University of Belgrade
- 2. **Melita Vidakovic**, Full Research Professor, Institute for Biological Research, University of Belgrade
- 3. Alisa Gruden-Movsesijan, Research Professor, Institute for the Application of Nuclear Energy – INEP, University of Belgrade

# Spain

- 1. Antonio M. Echavarren, Prof. Organic Chemistry, Institute of Chemical Research of Catalonia (ICIQ), President of the Spanish Royal Society of Chemistry
- Gonzalo Jiménez-Osés, Group Leader in Computational Chemical Biology, Ramon & Cajal Fellow, University of La Rioja (UR), President of the Young Chemists Division of the Spanish Royal Society of Chemistry
- 3. **Julio Lloret-Fillol**, ICREA Prof. and group leader at Institute of Chemical Research of Catalonia (ICIQ)
- 4. Arjan W. Kleij, ICREA Professor and Group Leader at Institute of Chemical Research of Catalonia (ICIQ)
- 5. Noufal Kandoth, Postdoc, Institute of Chemical Research of Catalonia (ICIQ)
- 6. **Jan Oldengott**, Postdoc, Institute of Chemical Research of Catalonia (ICIQ)
- 7. **Jesús Jover**, Assistant Prof., Universitat de Barcelona (UB)
- 8. Jordi Villà-Freixa, Prof., Biosciences, Universitat de Vic Universitat Central de Catalunya (UVic-UCC)
- 9. Juan Carlos Sancho-Garcia, Prof. Physical Chemistry, University of Alicante (UA)
- 10. Miquel Costas Salgueiro, Prof. Inorganic Chemistry, Universitat de Girona
- 11. Cristina Tejel, Scientific Researcher, CSIC-Universidad de Zaragoza
- 12. **Miguel A. Ciriano**, Research Prof., CSIC-Universidad de Zaragoza
- 13. Javier A. Cabeza, Prof. Inorganic Chemistry, Universidad de Oviedo
- 14. Enrique Pedroso, Prof. Emeritus of Organic Chemistry, Universitat de Barcelona
- 15. **Arkaitz Correa**, Ramon y Cajal Researcher, Organic Chemistry, University of the Bask Country.
- 16. Narciso M. Garrido, Prof. Organic Chemistry, Universidad de Salamanca
- 17. Eduardo Peris Fajarnés, Prof. Organometallic Chem. & Cat., Universidad Jaume I, Castellon
- 18. Elisabet Romero, Group Leader, Institute of Chemical Research of Catalonia (ICIQ)
- 19. Antonio de la Hoz, Group Leader, Universidad de Castilla-La Mancha
- 20. José A. Pomposo, IKERBASQUE Research Professor at the University of the Basque Country (UPV/EHU)



- 21. José Carlos Menéndez, Professor Organic Chemistry, Universidad Complutense, Madrid
- 22. Ernesto de Jesús, Prof. Inorganic Chemistry, Universidad de Alcalá.
- 23. Pedro Merino,
- 24. Marta Elena Gonzalez Mosquera, Associate Professor Inorganic Chemistry, Univ. Alcala
- 25. Israel Fernández López, Associate Professor (Organic Chemistry), Universidad Complutense de Madrid
- 26. Justo Cobo Domingo, Professor of Organic Chemistry, Universidad de Jaén
- 27. Jose A. Mata, Associate Professor Inorganic Chemistry, Universitat Jaume I
- 28. **Miguel Ángel Alario Franco**: Emeritus professor Inorg. Chemistry(UCM) Former President Real Academia de Ciencias de España
- 29. Vicent Moliner. Professor of Physical Chemistry. Universitat Jaume I, Castellón
- 30. Jesús Campos. Scientific Researcher, Spanish National Research Council (CSIC), Sevilla.
- 31. Eduardo Sola, Scientific Researcher, CSIC-Universidad de Zaragoza
- 32. X. Ramón Nóvoa, Professor of Chemical Engineering. University of Vigo.
- 33. Beatriu Escuder, Associate Professor Organic Chemistry, Universitat Jaume I.
- 34. Amor Rodríguez Iglesias. Scientific Researcher, IIQ-CSIC, Sevilla.
- 35. Rosario González-Muñiz, Scientific Researcher, IQM-CSIC, Madrid
- 36. Amadeu Llebaria. Scientific Researcher, IQAC-CSIC, Barcelona
- 37. Ángel J. Moreno. Scientific Researcher, CFM-CSIC, San Sebastián
- 38. Lourdes Ramos. Senior Scientific Researcher, IQOG-CSIC, Madrid
- 39. Daniele Cangialosi. Scientific Researcher, CFM-CSIC, San Sebastian
- 40. Javier Hernández-Borges. Professor of Analytical Chemistry, University of La Laguna (ULL), Tenerife.
- 41. Verónica Pino Estévez. Professor of Analytical Chemistry, University of La Iaguna (ULL), Tenerife
- 42. **Pedro Alberto Enríquez Pama**, Lecturer of Physical Chemistry, Universidad de La Rioja (UR).
- 43. Jose M. Lassaletta, Research Professor, Instituto de Investigaciones Químicas (CSIC-US)
- 44. Ignacio Tuñón, Professor of Physical Chemistry, University of Valencia
- 45. **Joaquín López Serrano**, Associate Professor of Inorganic Chemistry. Universidad de Sevilla.
- 46. Beatriz Julián López, Associate Professor Inorganic Chemistry, Universitat Jaume I.
- 47. Alma Viso. Senior Scientific Researcher, IQOG-CSIC, Madrid.
- Juan Pedro Espinós Manzorro, Research Professor, Instituto de Ciencia de Materiales de Sevilla (CSIC-US)
- 49. Fernando López Ortiz, Professor of Organic Chemistry, Universidad de Almería (UAL).
- 50. **Noemí de los Santos Álvarez**, Associate Professor of Analytical Chemistry. Universidad de Oviedo.
- 51. Roberto Fernández de la Pradilla, Senior Scientific Researcher, IQOG-CSIC, Madrid.
- 52. José M. Fernández-Colinas, Professor, University of Oveida
- 53. Feliu Maseras, Group leader, Institute of Chemical Research of Catalonia (ICIQ)
- 54. Fernando López, Senior Scientific Researcher, CSIC, Spain

- 55. **Maria Ventura Sánchez-Horneros,** Postdoctoral fellow, Instituto de Tecnologia Quimica (ITQ-CSIC), Valencia.
- 56. **José Carlos González Gómez**, Associate Professor of Organic Chemistry, Universidad de Alicante (UA)
- 57. Miquel Solà, Professor of Physical Chemistry, University of Girona
- 58. Laura Rodríguez Raurell, Associate Professor, University of Barcelona
- 59. Albert Moyano, Professor of Organic Chemistry, University of Barcelona
- 60. José Luis Mascareñas, Professor Organic Chemistry, University of Santiago
- 61. Gonzalo Blay Ilinares, Professor of Organic Chemistry, Universitat de València
- 62. **Pedro Cintas**, Prof. Organic Chemistry, Universidad de Extremadura (UEX)
- 63. Carmen Pérez, Associate Professor of Materials Science, University of Vigo
- 64. Joaquín Campos, Full Professor of Medicinal and Organic Chemistry, University of Granada
- 65. Angel Orte, Professor of Physical Chemistry, University of Granada
- 66. Moisés García-Morales, Associate Professor of Chemical Engineering, University of Huelva
- 67. Francisco Alonso, Professor of Organic Chemistry, University of Alicante
- 68. Diego J. Ramón, Professor of Organic Chemistry, University of Alicante
- 69. Miguel A. Esteruelas, Professor of Inorganic Chemistry, University of Zaragoza-CSIC
- 70. José A. Fernández, President of GEFAM, Universidad del País Vasco, Leioa
- 71. José M. Fraile, Scientific Researcher, ISQCH, CSIC-Universidad de Zaragoza
- 72. José M. G. Molinillo, Professor of Organic Chemistry, Universidad de Cádiz
- 73. Pablo Barrio, Ramón & Cajal Fellow, Universidad de Oviedo
- 74. Carlos Vila, Ramón & Cajal Fellow, Universitat de València
- 75. Carlos del Pozo Losada, Professor of Organic Chemistry, University of Valencia
- 76. Atsushi Urakawa, Group Leader, Institute of Chemical Research of Catalonia (ICIQ)
- 77. Jesús J. Pérez-Torrente, Prof. Inorganic Chemistry, University of Zaragoza
- 78. Jenifer Rubio Magnieto, Post-doctoral fellow, Universitat Jaume I o Castelló.
- 79. Montserrat Oliván, Scientific Researcher, Universidad de Zaragoza-CSIC
- 80. **Diego Peña**, Associate Professor of Organic Chemistry, CIQUS, Univ. Santiago de Compostela
- 81. **Iñigo López Arbeloa**, Professor, Departamento Química Física, Universidad del País Vasco/EHU, Bilbao
- 82. **Miguel Ángel Casado Combreras**, PhD Student, Instituto de Investigaciones Químicas (CSIC-University of Seville)

#### Switzerland

- 1. **Raffaella Buonsanti**, Assistant Professor, Department of Chemical Sciences and Engineering, EPFL
- Xile Hu, Professor, Laboratory of Inorganic Synthesis and Catalysis, EPFL
- 3. Karl Gademann, Professor and Head of the Department of Chemistry, University of Zurich

- 4. Jérôme Waser, Associate Professor, Laboratory of Catalysis and Organic Synthesis, EPFL
- 5. **Clemence Corminboeuf**, Associate Professor, Laboratory for Computational Molecular Design, EPFL
- 6. Stefan Bienz, Professor, Department of Chemistry, University of Zurich
- 7. Michal Juríček, Assistant Professor, Department of Chemistry, University of Zurich
- 8. David Tilley, Assistant Professor, Department of Chemistry, University of Zurich
- 9. Christophe Copéret, Professor, Department of Chemistry and biosciences, ETH Zürich
- 10. Maksym V. Kovalenko, Professor, Inorganic Chemistry, ETH Zurich (CH)
- 11. Donald Hilvert, Professor, Department of Chemistry and Applied Biosciences, ETH Zürich
- 12. Antonio Togni, Professor, Department of Chemistry and Applied Biosciences, ETH Zürich
- 13. **Helma Wennemers**, Professor, Department of Chemistry and Applied Biosciences, ETH Zürich
- 14. **Gunnar Jeschke**, Professor and Head of the Department of Chemistry and Applied Biosciences, ETH Zürich
- 15. **Markus Reiher**, Professor, Department of Chemistry and Applied Biosciences, ETH Zürich
- 16. Peter Chen, Professor, Department of Chemistry and Applied Biosciences, ETH Zürich

### The United States

- 1. Arieh Warshel, Distinguished Professor of Chemistry, University of Southern California, Nobel Prize 2013
- 2. Peter Kasson, Assoc. Prof, University of Virginia and Uppsala University
- 3. Michael P. Doyle, Professor, Dept. of Chemistry, University of Texas at San Antonio
- 4. Daniel J. Mindiola, Professor, Dept. of Chemistry, University of Pennsylvania
- 5. Robert Crabtree, Professor, Dept. of Chemistry, Yale University
- 6. **Susannah Scott**, Distinguished Professor of Chemical Engineering, University of California, Santa Barbara
- 7. Kenneth D. Karlin, Professor, Dept. of Chemistry, Johns Hopkins University
- 8. James Mayer, Professor, Dept. of Chemistry, Yale University
- 9. Andrei Chirila, Research Associate, Dept. of Chemistry, University of Washington
- 10. **Anna Krylov**, Gabilan Distinguished Professor in Science and Engineering, University of Southern California
- 11. **Rick Anderson**, Associate Dean for Collections & Scholarly Communication, J. Willard Marriott Library, University of Utah
- 12. **Robert Nakamoto**, Professor, Dept of Mol. Physiology and Biol. Physics, University of Virginia
- 13. **Rachel Segalman**, Professor of Chemical Engineering and Materials, University of California, Santa Barbara
- 14. **Phillip Christopher**, Associate Professor of Chemical Engineering, University of California, Santa Barbara
- 15. Joanna Aizenberg, Professor of Materials Science and Chemistry, Harvard University
- 16. Juergen Eckert, Research Professor, Texas Tech University