

IUPAC in Brussels in 1921: A Historical Photo

*Ernst Homburg, Danielle Fauque,
Peter J. T. Morris, Franco Calascibetta,
and Santiago Alvarez*

During a search of photographs and documentation on the Belgian photographer Benjamin Couprie, who took the well-known pictures of the Solvay Conferences during the first half of the twentieth century, Santiago Alvarez [1] came across an image in “La Digithèque des Bibliothèques de l’Université Libre de Bruxelles” with the title “Réception de l’Union Internationale de Chimie Pure et Appliquée, photographie de groupe” (Figure 1) [2]. It is a high-resolution copy of a very sharp photograph of a group of 86 people. On the frame of that photo one can read two inscriptions noted in pencil above and below the photograph, respectively: “Union Internationale de la Chimie pure et appliquée,” and “Reception au chateau de La Hulpe le 29 Juin 1921.” Moreover, just under the

photograph there are two inscriptions in smaller letters: “Bruxelles 1913,” on the left, and the signature of “Benj. Couprie” on the right, both in the same handwriting. Two questions arise: (1) Which is the correct date for that photograph? (2) Who are the persons that appear in the photo?

1913 was indeed the year in which the International Association of Chemical Societies (a forerunner of IUPAC) met in Brussels [3,4], a meeting that was arranged to coincide with the 50th anniversary of Solvay & Cie, and with the creation of the International Solvay Institute of Chemistry. The meeting, supported by Solvay, took place from 19-23 September, when a group picture might have been taken. The meeting must not be confused with the second Conseil Solvay de Physique, that also took place in Brussels from 27-31 October of the same year. In the picture under consideration (Figure 1), however, only a handful of the scientists present in



Figure 1. Participants at a reception given at the Château de La Hulpe, Brussels, on 29 June 1921. Photo: Benjamin Couprie.

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Key	Name	Country	Key	Name	Country
1	Edmund Trepka	Poland	39	Marcel Delépine	France
2	Angel Goslino	Uruguay	40	James Conant	USA
3	Maurice Huybrechts	Belgium	41	unidentified	
5	Kai Warming	Denmark	56	Charles Marie	France
6	Emil Votoček	Czechoslovakia	57	Gustave André	France
7	Marcel Guichard	France	58	André Kling	France
8	Gabriel Bertrand	France	59	Georges Urbain	France
10	René Etienne	France	60	Gerrit Hondius Boldingh	Netherlands
12	Piero Ginori Conti	Italy	61	Raymond Marquis	France
13	Raffaello Nasini	Italy	62	Jacobus Petrus Treub	Netherlands
14	Victor Grignard	France	63	Edmond Blaise	France
15	Birger F. Halvorsen	Norway	64	Frederick Cottrell	USA
16	Charles Moureu	France	65	Thomas Martin Lowry	UK
17	Fernand Bordas	France	66	Paul Pascal	France
18	Ernest Solvay	Belgium	67	Constantine Zenghelis	Greece
19	Camille Matignon	France	68	René Lucion	Belgium
20	William Pope	UK	69	Paul Nicolardot	France
21	Philippe A. Guye	Switzerland	70	Hugo R. Kruyt	Netherlands
22	Auguste Béhal	France	71	Nicola Parravano	Italy
23	Stephen Miall	UK	72	Enrique Moles	Spain
24	Frédéric Swarts	Belgium	73	Léon Crismer	Belgium
25	Armand Solvay	Belgium	74	Paul Cazeneuve	France
26	Amé Pictet	Switzerland	75	Einar Biilmann	Denmark
27	Edouard Bourgeois	Belgium	76	Oscar Scarpa	Italy
28	Adolphe Lecrenier	Belgium	77	Felice Garelli	Italy
29	unidentified		78	Umberto Pomilio	Italy
30	Octave Dony-Hénault	Belgium	79	Paul Kestner	France
31	José Rodríguez Mourelo	Spain	80	Francesco Giordani	Italy
32	Paul Dutoit	Switzerland	81	Francisco Pastori	Uruguay
34	Julien Bergé	Belgium	83	Domenico Marotta	Italy
35	Henri Wuyts	Belgium	84	Jean Voisin	France
36	Jean Timmermans	Belgium	85	Martiniano Leguizamón Pondal	Argentina
37	Stefan Minovici	Roumania	86	Mario G. Levi	Italy
38	Emil Bosshard	Switzerland			

Table 1. Identification of the scientists present in the group photograph (Figure 1), using the numbering of the attendees shown in Figure 2.

the photograph of the 1913 chemistry meeting can be identified: Auguste Béhal, Einar Biilmann, Léon Crismer, Thomas Martin Lowry, Charles Marie, José Rodríguez Mourelo, and Phillippe A. Guye, which clearly tells us that those are images of two different groups taken at two different occasions.

The second date written on the frame is close to, but earlier than, that of the First Solvay Conference on Chemistry (1922). In fact, this photograph may have been taken at Château La Hulpe (Belgium), Ernest Solvay's summer mansion, on Wednesday, 29 June 1921, as written below the picture, during a reception given by Solvay to the attendees of the 2nd International

Conference on Pure and Applied Chemistry, or as it is called today "General Assembly." This Conference was held at the Palais des Académies in Brussels from 25-30 June 1921. The local organisation of the conference was the responsibility of Prof. Octave Dony-Hénault and the social programme was organised and sponsored by the Belgian government and local industrialists.

The programme of the Brussels conference for Monday evening included a reception by the Belgian Minister of Science and the Arts, Jules Destrée. On Tuesday afternoon, a convoy of motor cars took the participants to Tirlemont, where they saw the ruined buildings left by the Germans after the war, and

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Figure 2. Key for the identification of the attendees to the 1921 IUPAC conference present in the reception offered by Ernest Solvay at Chateau La Hulpe. (a) Back rows, (b) front rows.

the large sugar refinery where they admired how the equipment and organisation were up-to-date. They then went to Lubeck, to Lucien Beauvuin's estate where they were received by the industrialist and his family for lunch [5-8]. On Wednesday, the participants were taken by motor cars to the mansion of La Hulpe. Solvay and his family received the participants for lunch and the children had the opportunity to stroll around the park. On Thursday evening, participants and their wives enjoyed a conference banquet offered by the Belgian National Committee of Chemistry at the Taverne Royale in Brussels. Frédéric Swarts, president of the Committee, chaired the banquet flanked by Jules Destrée and Charles Moureu, President of IUPAC, while Joseph Wauters, Minister of Industry, Labour and Food Supplies sat next to Moureu. Toasts were given in French by Swarts, Moureu, Destrée, and William Pope, IUPAC's Vice president.

It is no coincidence that Ernest Solvay is standing in the La Hulpe picture in between IUPAC president Charles Moureu, who would also become a regular attendee of

the prestigious Solvay Chemistry Councils, and Pope, who would become the next IUPAC president. At that time Solvay would have been working on the preparation of the first Solvay Chemistry Council, which would take place in 1922 [10,15]. The dates and programme for the 1922 Solvay Chemistry Council were discussed and approved in a meeting of the organising committee held in the private laboratories of Ernest Solvay on 24 June 1921 [10], just before the IUPAC meeting. This committee was chaired by Pope and the other participants were Paul Hegel, Émile Tassel, Georges Chavanne, Jean Perrin, Phillippe A. Guye, André Job, and Dony-Hénault. Ernest Solvay himself did not participate in this committee, as there is a decision mentioned in the minutes to send him a telegram of recognition.

The list of participants [7,8] includes 82 scientists from 18 different countries.¹ With the help of that list, we compared other photographic sources in which the same chemists are unequivocally identified [11-14] with the faces in Couprie's photograph, and could identify a number of them. A few more were identified with the

¹The chemists from Germany and the other Central Powers were excluded from the IUPAC conferences by the statutes approved in 1919, a situation that lasted formally until 1931, although some chemists from those countries were personally invited to the Hague (1928) and Liège (1930) IUPAC conferences. For other political reasons chemists from the Soviet Union did not participate either.

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Year	Location and Conference	Participants also listed in the 1921 IUPAC Conference	Reference
1913	Brussels Int. Assoc. of Chemical Societies	Béhal, Biilmann, Crismer, Guye, Lowry, Marie, Rodríguez Mourelo, Paternò, Wauters	3
1920	Rome 1st IUPAC Conference	Bertrand, Biilmann, Bordas, Crespi, Garelli, Gérard, Kestner, Kruyt, Lindet, Lucion, Marie, Marotta, Matignon, Moureu, Nasini, Nicolardot, Paternò, Pope, Swarts, Votoček, Warming, Zenghelis	16
1922	Brussels 1st Solvay Chemistry Council	Biilmann, Chavanne, Delépine, Dony-Hénault, Lowry, Moureu, Pope, E. Solvay, Swarts, Urbain, Wuyts	15, 17
1923	Cambridge 4th IUPAC Conference	Béhal, Bertrand, Biilmann, Bordas, Bourgeois, Crespi, Delépine, Dutoit, Étienne, Gérard, Ginori Conti, Giordani, Holleman, Huybrechts, Kestner, Kling, Kruyt, Lecrenier, Lindet, Lowry, Marie, Marquis, Miall, Minovici, Moles, Moureu, Nasini, Parravano, Paternò, Pictet, Pomilio, Pondal, Pope, Swarts, Warming, Zenghelis	18,19
1924	Copenhagen 5th IUPAC Conference	Bertrand, Biilmann, Crespi, Gérard, Marie, Matignon, Moureu, Nasini, Pope, Scarpa, Votoček, Warming	20
1925	Bucharest 6th IUPAC Conference	Bourgeois, Étienne, Gérard, Ginori Conti, Giordani, Kling, Parravano, Pope, Swarts, Votoček	21
1925	Brussels 2nd Solvay Chemistry Council	Chavanne, Dony-Hénault, Job, Lowry, Moureu, Pope, Swarts, Timmermans, Wuyts	22
1926	Washington 7th IUPAC Conference	Bertrand, Crespi, Ginori Conti, Giordani, Holleman, Minovici, Moles, Parravano, Pomilio, Swarts, Voisin	23, 24

Participants identified in group photographs of Chemistry conferences contemporary to the IUPAC 1921, and who participated at the 1921 IUPAC Conference (which does not necessarily imply that they are on the 1921 picture).

help of an international team of historians of chemistry, familiar with several of the chemists on the picture. The identification of most of the participants (all men) is summarised in Table 1, using the numbering shown in Figure 2. As a final step, we systematically studied pictures of other chemistry conferences from that period (Table 2), in conjunction with the lists of participants of those conferences, helped by keys to those pictures. There are also several women in the picture, but none of them participated in the Conference, and it was impossible to identify them with any degree of certainty.

We have not been able to reasonably identify the faces of the following people that appear in the list of participants: Victor Cambon (France), Giuseppe Paternò (Italy) and J. F. Schmitz (Roumania). There were also participants whose images we had at hand and who were almost certainly not in the group picture taken at La Hulpe: Georges H. Baril (Canada), Daniel Berthelot (France), Pierre Bruylants (Belgium), Georges Chavanne (Belgium), Emilio Crespi (Italy), Jean Gérard (France), Arnold Frederik Holleman (Netherlands), André Job (France), Edgar de Laire (France), Léon Lindet (France), Colin M. Mackall (USA), Emanuele Paternò (Italy), Georges Peny (Belgium) and Jules Wauters (Belgium).

Leaving aside one child and 18 women who are not listed as participants of the conference, there are a total of 67 males in the photograph, 65 of which have been confidently identified. This leaves us with only two unidentified scientists in the picture (numbers 29 and 41 in Figure 2). Taking into account that Ernest Solvay was not on the list of 82 participants, we may conclude that 15 persons in that list did not attend the Solvay reception or were not in the group when the picture was taken, as was the case of Lindet and E. Paternò, whom we know that were present at the conference on the 27th. In the case of Gérard, he was present at the beginning of the conference, but left in the morning of 29 June because he was ill, and was substituted by Voisin. The almost complete match between the list of participants at the 1921 IUPAC conference and the faces found in the group photograph leaves no doubt that it was taken during that conference, and that the annotation of the date of 1913 by Couprie was probably made at a later stage, and he probably mistook it for another photograph taken earlier on the occasion of the International Association of Chemical Societies and the creation of the International Solvay Institute of Chemistry.

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In the year that marks the centennial of IUPAC, we find it appropriate to publicly document a photograph of such a historically important event, especially given the scarcity of individual portraits of scientists of that time. 📷

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Ernst Homburg, Faculty of Arts and Social Sciences, Maastricht University, P.O. Box 616, 6200 MD Maastricht, The Netherlands. Danielle Fauque <danielle.fauque@u-psud.fr> Université Paris Sud / University Paris Saclay, 91405 Orsay Cedex, France. Peter J. T. Morris, The Science Museum, Exhibition Road, London SW7 2DD, U.K. Franco Calascibetta, Dipartimento di Chimica, Università degli Studi "La Sapienza" di Roma, Italy. Santiago Alvarez, Departament de Química Inorgànica i Orgànica (Secció de Química Inorgànica) and Institut de Química Teòrica i Computacional, Universitat de Barcelona, Martí i Franquès 1-11, 08028 Barcelona, Spain.