

## Report on the activities on the history of geology in France in 2022

### Cofrhigéo activities:

In 2022, the French Committee on the History of Geology (Cofrhigéo) met three times.

The session of March 9<sup>th</sup>, 2022, was devoted to the **history of the glaciation theory**.

Its recording can be viewed at:

<https://www.youtube.com/playlist?list=PLrHyJcVtILnmSLafJdvVYlfj8BhZdd9WG>

Frédérique REMY: Les glaciations dans la littérature [The glaciations in literature];

Éric ASSELBORN: Glaciologie avant les glaciologues: la conquête naturaliste au Mont-Blanc [Glaciology before glaciologists: the naturalist conquest of Mont-Blanc];

Thierry MALVESY: « Histoire de la connaissance géologique du Jura franco-suisse », ouvrage collectif sous la direction de Thierry Malvesy, Jean-Pierre Tripet et Jean-Paul Schaer [“History of geological knowledge of the Franco-Swiss Jura”, collective book under the direction of Thierry Malvesy, Jean-Pierre Tripet and Jean-Paul Schaer];

Pascal RICHET: Les glaciations: Une histoire de controverses [The Glaciations: A History of Controversies];

Françoise DREYER: La Terre « boule de neige »: de l’hypothèse à la théorie [The “snowball” Earth: from hypothesis to theory].

The session of June 8<sup>th</sup>, 2022, was dedicated to the **history of Alpine geology**.

The recording can be viewed at:

<https://www.youtube.com/playlist?list=PLrHyJcVtILnI0c5SOEOSibk9ugiGON3MP>

Claudio ROSENBERG: Histoire des coupes géologiques alpines: un miroir de l'évolution des concepts tectoniques [History of Alpine geological sections: a mirror of the evolution of tectonic concepts];

Christian CHOPIN: Les Alpes, laboratoire naturel pour l'évolution des concepts pétrologiques [The Alps, a natural laboratory for the evolution of petrological concepts];

Philippe GRANDCHAMP: Une percée de la chaîne alpine sur fond de controverse géologique: le tunnel ferroviaire du Fréjus (1857-1871) [A section through the Alpine chain in a context of geological controversies: the Fréjus railway tunnel (1857-1871)];

Claudio ROSENBERG: Le tunnel du Simplon et l'histoire de la tectonique [The Simplon tunnel and the history of tectonics];

Giorgio Vittorio DAL PIAZ: Plans, études géologiques et forage du tunnel du Mont-Blanc [Plans, geological studies and drilling of the Mont-Blanc tunnel].

During the annual general meeting of December 14<sup>th</sup>, 2022, we paid tribute to our deceased members, in particular Claude Babin, before listening to three scientific talks

The recording of the talks can be viewed at:

<https://www.youtube.com/playlist?list=PLrHyJcVtILnkfnSL5DRejeA1t0nFtZXCi>

Jean-Paul POIRIER: L'Etna et le Vésuve, notes sur quelques grandes éruptions [Etna and Vesuvius, notes on a few major eruptions];

Philippe JANVIER: L'affaire Deprat revisitée: la biographie d'Henry Mansuy [The Deprat (or Trilobite) affair reconsidered: the biography of Henry Mansuy];

Cyril DEICHA & Jacques TOURET: Georges Deicha, pionnier de l'étude des inclusions dans les minéraux [Georges Deicha, pioneer in the study of inclusions in minerals].

### 47<sup>th</sup> INHIGEO Symposium, 15<sup>th</sup>-24<sup>th</sup> September 2022, Les Eyzies, France

Forty-five participants took part in the 47<sup>th</sup> INHIGEO Symposium, organized by the Cofrhigéo, from 16<sup>th</sup> to 26<sup>th</sup> September, 2022, in southwestern France (<https://www.inhigeo.com/france2022/index.html>; conveners: C. Cohen, F. Dreyer, G. Godard, P. Richet). The 5-day congress was hosted by the *Pôle international de la Préhistoire* at Les Eyzies-de-Tayac, a picturesque village in the Vézère Valley, otherwise known for its National Museum of Prehistory, its many prehistoric sites and decorated caves (Lascaux, Cro-Magnon, La Madeleine, Font de Gaume, Les Combarelles, etc.).

The 2-day pre-conference field trip started in Poitiers, where we visited the Palaeontology department of the university, which had a notable importance in the development of human palaeontology in France; we then

visited Nouaillé and finally the museum and meteoritic impact sites of Rochechouart, whose origin constituted a geological enigma from the 17<sup>th</sup> century until 1967.

Thirty-eight talks and four posters were presented on the history of prehistory, the history of Neogene geology, French geologists in the history of geology, and many other topics. During the conference, we also visited several prehistoric sites (Lascaux IV, Le Moustier, La Ferrassie, Commarque, Laugerie basse, Cro-Magnon).

The 3-day post-conference field trip included the visit of decorated caves (Abri du Poisson, Font de Gaume; Pech Merle, etc.), the historical phosphate mines of the Quercy (Cloup d'Aural), and ended with historical Miocene sites of the Bordeaux region, namely the paleontological Miocene site (and vineyard) of Sainte-Croix-du-Mont, described since 1622, and the Aquitanian and Burdigalian stratotypes at the geological reserve of Saucats-La Brède – not to forget the picturesque village of Saint-Cirq-Lapopie, and the cities of Agen and Bordeaux, where the conference ended in the afternoon of September 24<sup>th</sup>.

The proceedings will be published in special issue of the *Travaux du Comité français d'Histoire de la Géologie* (ISSN 1156-2919). Finally, most of the talks can be viewed online at the following addresses:

All talks: <https://www.youtube.com/playlist?list=PLrHyJcVtILn14-CpXWuoX9-451OS7xk3R>

Playlist on the History of Neogene geology:

[https://www.youtube.com/playlist?list=PLrHyJcVtILnntOZB0PQb6yr\\_0\\_YaXz07O](https://www.youtube.com/playlist?list=PLrHyJcVtILnntOZB0PQb6yr_0_YaXz07O)

Playlist on Prehistory & Geology:

<https://www.youtube.com/playlist?list=PLrHyJcVtILnnFDpL3r6LONN1Xs1WfoOH8>

Playlist on History of geology, Varia:

<https://www.youtube.com/playlist?list=PLrHyJcVtILnlGfTRIYW92SR5fIteRUNWn>

Playlist on French case studies in the history of geology:

<https://www.youtube.com/playlist?list=PLrHyJcVtILnnzAfI0auzFVdR7DCfiKZ7>

Playlist on History of geology, Concepts:

<https://www.youtube.com/playlist?list=PLrHyJcVtILnlqf0QRrTS0AfDSqJu0dx2J>

## Tributes to René-Just Haüy

Two centuries ago, in 1822, René-Just Haüy published the second edition of his *Traité de minéralogie*, in which he created the name of the rock “éclogite”, as well as mineral names like “pyroxene” and “amphibole”. The same year, he also published his *Traité de cristallographie*, in which he developed the concept of “molécule intégrante” (*i.e.*, the unit cell of a crystal). He finally passed away on the 1<sup>st</sup> June of the same year in Paris. To celebrate this bicentenary, several scientific events have been organized in France in 2022:

- On June 3<sup>rd</sup>, 2022, the *Sorbonne Université* held in Paris a conference day on Haüy's contributions to mineralogy and crystallography, as well as to the creation of the metric system (see: <http://impmc.sorbonne-universite.fr/fr/evenements/manifestations/bicentenaire-de-la-disparition-de-rene-just-hauiy.html>). An exhibition devoted to Haüy's contributions to crystallography was also organized (see Bouillard *et al.*, 2022).

- The 14<sup>th</sup> *International Eclogite Conference*, organized by Samuel Angiboust and Gaston Godard, took place in France in July 2022 to honour Haüy, the inventor of the name “eclogite”, meaning “chosen rock” (see <https://iec14.sciencesconf.org/>). In addition to field trips and 3 days of conference in Lyon, a special day was organized at Haüy's workplace in the Muséum National d'Histoire Naturelle (MNHN) in Paris, with talks and discussions on two centuries of studies on high-pressure metamorphic rocks, and the visit of the MNHN collections, in particular the type samples of Haüy's eclogite and Damour's jadeite.

- The *International Mineralogical Association* (IMA) paid also tribute to Haüy during its 23<sup>rd</sup> general meeting in Lyon, France, from 18<sup>th</sup> to 21<sup>st</sup> July (e.g., <https://sfmc-fr.org/wp-content/uploads/Min2022-flyer.pdf>).

## Cofrhigéo's publications

The Cofrhigéo publishes an annual periodical, *Travaux du Comité français d'Histoire de la Géologie* (ISSN 1156-2919), which is available online at the following addresses:

<https://hal.archives-ouvertes.fr/COFRHIGEO/browse/period>

<http://www.anales.org/archives/cofrhigeo/travaux.html>.

The 35<sup>th</sup> volume of this periodical was issued in 2022 and contains the following articles:

Lydie TOURET: Naturalistes hollandais et microcosme parisien à la fin du XVIII<sup>e</sup> siècle [Dutch naturalists and Parisian microcosm at the end of the 18<sup>th</sup> century];

Maddalena NAPOLITANI: Les enjeux esthétiques des collections de Balthazar-Georges Sage, premier directeur de l'École royale des mines (1783-1825) [The aesthetic challenges of the collections of Balthazar-Georges Sage, first director of the Royal School of Mines (1783-1825)];

Pascal TASSY: Conserver, étudier, développer la collection de paléontologie du Muséum national d'histoire naturelle: ce qu'en disait Albert Gaudry (1827-1908) [Conserving, studying, developing the palaeontology collection of the Muséum national d'histoire naturelle: what Albert Gaudry (1827-1908) said about it];

Philippe TAQUET: Jean-Marc Drouin (1948-2020);

Jacques TOURET: Hommage à Jean-Paul Schaer (1928-2021), ami du Cofrhigéo et grande figure universitaire et scientifique [Tribute to Jean-Paul Schaer (1928-2021), friend of the Cofrhigéo and great academic and SCIENTIFIC FIGURE];

PHILIPPE GRANDCHAMP: Présentation de l'ouvrage de Gilbert Boillot « Comment l'idée vient au géologue », Orizons, Paris, 176 p. [Presentation of a book by Gilbert Boillot];

Philippe GRANDCHAMP: Les portraits au vitriol de quelques grandes figures de la minéralogie et de la géologie françaises croqués par Isidore Salles de Gosse en 1847 [The merciless portraits of some great figures of French mineralogy and geology sketched by Isidore Salles de Gosse in 1847];

## Other publications

Several studies by Cofrhigéo's members were published in 2022 (non-exhaustive list):

BOUILLARD, J.-C., CABARET, D., GIURA, P. René-Just Haüy and the birth of crystallography. IUCr Newsletter, 30 (4): [https://www.iucr.org/news/newsletter/etc/articles?issue=155353&result\\_138339\\_result\\_page=25](https://www.iucr.org/news/newsletter/etc/articles?issue=155353&result_138339_result_page=25)

COHEN, C. Altruisme, genre et hominisation. *Communications*, 110 (1): 153-165.

COHEN, C. « V comme Vénus ». In: *Abécédaire de la Beauté*, ed. B 42, pp. 211-217.

COHEN, C. « Féminicides et violences dans la préhistoire ». In: *Féminicides, une histoire mondiale*, Ed. La Découverte, pp. 37-45.

COHEN, C. « Vénus impudiques »; « La Dame de l'abri Pataud ». In: *Femmes en Périgord*, Sédiments, 14, pp. 4-5, 6-7.

LE VIGOUROUX, Ph. The XIII International Geological Congress of 1922 in Brussels (Belgium): between wounds of the Great War and theory passed under silence. *Episodes Journal of International Geoscience*, 45(4): 457-467; <https://doi.org/10.18814/epiugs/2022/022030>.

SAVATON, P. L'histoire de la géologie dans la Revue d'histoire des sciences de 1947 à 2022, *Revue d'histoire des sciences*, 75(2): 413-443.

SAVATON, P. The contribution of the 1822 map by Jean-Baptiste Julien d'Omalius d'Halloy to the geological cartography of France. *Anniversaries in Geo-History, IUGS E-Bulletin*, Issue 189, August 2022, published online in the IUGS E-Bulletin.

SAVATON, P. Philippe Taquet, Georges Cuvier: Anatomie d'un naturaliste (Paris: Odile Jacob, 2019). *Revue d'histoire des sciences*, 75(1): 275-277.

SAVATON, P. A metaphor dismantled. *Metascience*, 31: 73-75. <https://doi.org/10.1007/s11016-021-00687-4>

## Conferences and webinars (non-exhaustive list)

BOULLIARD, J.C. & CABARET, D. « Haüy: un savant hors du commun », 3<sup>rd</sup> June 2022, Sorbonne Université, Paris.

CHIAPPERO, P.J. « Haüy conservateur: les collections », 3<sup>rd</sup> June 2022, Sorbonne Université, Paris.

CHOPIN, C. « A brief account of the discovery of metamorphic coesite, and the rise of ultrahigh-pressure metamorphism », Haüy's day, IEC14, 10<sup>th</sup> July 2022, MNHN, Paris.

COHEN, C. « Literary imagination and fictions of Fossil Humans », Conference *Imaginaires de l'homme fossile*, Collège de France, Paris, June 10<sup>th</sup> 2022.

COHEN, C. « Darwin, the descent, and the origin of gender », Conference on Darwin's Descent of Man, 150<sup>th</sup> anniversary, 5<sup>th</sup>-6<sup>th</sup> July 2022, Hotel de Lauzun, Paris.

COHEN, C. « Morphology, Diversity and beauty of living beings. From Richard Owen to Stephen Jay Gould », Conference *Beautés vitales, pour une approche contemporaine de la beauté*, 15<sup>th</sup>-21<sup>st</sup> July 2022, Cerisy.

COHEN, C. « Are aesthetic values a social construct or do they have a biological origin? », Conference *Aesthetic Values and Decision-Making in the Brain*. IAS, ENS, EHESS, 19<sup>th</sup>-21<sup>st</sup> October 2022.

COHEN, C. « Where do Humans come from? », International Symposium of the UNESCO, Philosophy section, *Humans to come*, 16<sup>th</sup>-18<sup>th</sup> November 2022, Le Fresnoy.

FARGES, F. « Haüy gemmologue: des minéraux aux pierres précieuses », 3<sup>rd</sup> June 2022, Sorbonne Université.

FERRARIS, C. « René-Just Haüy (1743-1822), mineralogist », Haüy's day, IEC14, 10<sup>th</sup> July 2022, MNHN, Paris; 3<sup>rd</sup> June 2022, Sorbonne Université, Paris.

GODARD, G. « Two centuries of studies on Haüy's "chosen rock" », Haüy's day, IEC14, 10<sup>th</sup> July 2022, MNHN, Paris.

LE VIGOUROUX, Ph. « 13<sup>th</sup> IGC (1922) in Brussels, Belgium », The roots of a geological union for the future of the Earth, IUGS 60<sup>th</sup> Celebrations – online INHIGEO special event, October 2022, Virtual event.

PARODI, G.C. « L'Haüyne, histoire d'une espèce », 3<sup>rd</sup> June 2022, Sorbonne Université, Paris.

SAUTTER, V. « Haüy pétrologue: les éclogites, un bon choix ? », 3<sup>rd</sup> June 2022, Sorbonne Université, Paris.

SAVATON, P. « Pluton contre Neptune: controverse sur l'origine des basaltes et des granites », MiniConf n°17, Géole/Société géologique de France, 1<sup>er</sup> novembre 2022 (<https://youtu.be/aqV5aYz-slg>).

SMITH, D. « 40<sup>th</sup> anniversary of the International Eclogite Conference and 4 decades of study on high-pressure rocks », Haüy's day, IEC14, 10<sup>th</sup> July 2022, MNHN, Paris.

G. Godard, secretary of the Cofrhigéo.