# Nineralosical Association

# INTERNATIONAL MINERALOGICAL ASSOCIATION

# IMA

# Minutes 1<sup>st</sup> Business Meeting (General assembly)

Time: Monday, August 19<sup>th</sup>, 2024 17:30 – 18:30 Irish Standard Time (CET +1:00) Location: Trinity College Dublin, Burke theatre (Meeting was held in hybrid form using ZOOM)

# 1. Opening, Welcome and Approval of the Agenda

The President opened the meeting and welcomed the participants. Participants agreed on the proposed agenda.

### 2. Roll Call of the Delegates

The President announced that national delegates from 12 countries were participating in person and 8 countries online. The number of participants was confirmed to be more than 1/4, which is the quorum for a Business Meeting as defined by the IMA Constitution.

- **3.** Approval of the Minutes of the Business Meetings at IMA Lyon 2022 The minutes of the Business Meeting in Lyon were unanimously approved.
- 4. Appointment of an Auditing Committee (IMA Constitution, Art. 5c)

Jun Tsuchiya and Klaus-Dieter Grevel were proposed and unanimously approved to act as members of the auditing committee.

# 5. Reports of Executive Committee

# (1) Report of the President

I am pleased to report that IMA has been very active during the past 2 years. Whereas the last IMA General Meeting in Lyon, France, suffered greatly from the problems caused by the Corona pandemic, we are fortunate to be almost back to normality now.

International integration and cooperation with other organizations, in particular, contributed significantly towards a better visibility of IMA. Our former President Anhuai Lu generated a collaboration with the Deep-time Digital Earth (DDE) project, where our Working Group on Mineral Informatics is also deeply involved. Together with our 2<sup>nd</sup> Vice President Xiancai Lu, he organized a well-

received conference on the International Year of Mineralogy in China. Former Past President Patrick Cordier is still very much involved in the affairs of IMA, which I highly appreciate. Patrick gave a highly regarded interview related to the International Year of Basic Sciences for Sustainable Development (IYBSSD) and presented the role of IMA there. In addition, together with me, he prepared the editorial for the book "Celebrating the International Year of Mineralogy - Progress and Landmark Discoveries of the Last Decades". My sincere thanks also go to the editors Luca Bindi and Giuseppe Cruciani from Italy, who were able to involve, in addition to various other competent authors, seven members of IMA (6 Members of Commissions/ Working Groups/Council Members/Medalists + one former President) as authors for this book.

Together with Christian Chopin, Bill Birch and Andreas Massanek, I intensified our cooperation with the International Union of Geological Sciences (IUGS) and coordinated a project with the International Commission on Geoheritage. We were able to get the following mineralogy-related localities included into the book of the 2<sup>nd</sup> 100 IUGS Geological Heritage Sites: Muzo (Colombia), Dora-Maira Massif (Italy), Mt. St. Hilaire (Canada), Sar-e-Sang (Afghanistan) and Broken Hill (Australia). Whereas I was invited, together with Juana Vegas (IUGS Geoheritage Sites Voting member), to work on the Preface for the Mineralogy chapter of the book on 1<sup>st</sup> 100 Geoheritage Sites and to coordinate the IMA-related chapter for the new book on the 2<sup>nd</sup> 100 Geoheritage Sites, Eiji Ohtani and Christian Chopin focused on the Mineralogy/IMA-related Preface for the latter. Since IUGS is the global voice of the Geological Sciences, with these activities IMA will reach more than one million geologists world-wide in more than 100 countries. The new book will be introduced next week during the 37<sup>th</sup> International Geological Congress (IGC) at Busan, South-Korea.

I am also happy to report that about one year ago IMA established a "Mediation Committee". Any significant concern involving nomenclature, the ratification of new minerals, or any issue related to one of the other Commissions and Working Groups, or even of a general nature, can now be addressed. We tried to find colleagues to support us who have experience in IMA affairs and who are known for their diplomatic and balanced approach to addressing potential problems. A very big thank you goes to Christian Chopin, Jane Gilotti, Walter Maresch and Catherine McCammon, who are the current members of this committee.

One of the projects that was very important to me during my presidency was a possible expansion of IMA through the membership of other additional countries. In a first step, and many thanks go to Eiji Ohtani and Michele Zema for supporting me, several countries from the African continent and from Latin America were contacted. I am pleased to report that we had a first success. With Costa Rica we gained a new member country. Let me, with this report, officially welcome Costa Rica as a new member of IMA; it is planned that Guillermo Alvarado will be the IMA Representative and Andrés Ulloa his deputy. Our Communication Officer Michele Zema is already in contact, preparing a short article for "Elements".

Meetings like the EMC in Dublin (many thanks go to our hosts and especially Kevin Murphy) are also important events to celebrate our IMA medalists. There are many prestigious scientists worldwide who have contributed to a better understanding of the role of mineralogy on our planet and even beyond. This year we will very much enjoy listening to the plenary lecture of Patricia M. Dove from Virginia Polytech Institute and State University, USA, who is the 2022 Medalist - congratulations! During the IMA General Meeting in Nanjing 2026, the IMA 2023 and 2024 Medalists will receive their awards and will present their related lectures. Congratulations go to Tetsuo Irifune from Japan and Hailiang Dong from China.

I should not forget to thank all Council and Committee Members for their help, support and their activities. This is very important for advancing an organization like ours. IMA has benefited very much from Michele Zema's diverse international contacts and his collaboration with the journal "Elements"; Ross Angel compiled guidelines for future IMA General Meetings and coordinated the work on the suggested revisions of IMA constitution and bylaws. On the initiative of our Treasurer Travis Olds, IMA became a charitable organization exempt from federal income tax according to the legal provisions of the US. Our Secretary Sylvie Demouchy (who stepped down in February of this year) and Hiroaki Ohfuji (Council Member and new Interim Secretary) have been intensively involved in the development of our new website. Shaunna Morrison helped to develop plans for the future General Meeting in 2030, and Catherine McCammon helped to coordinate our slate of nominees for the new Council. Desh Chetty, Xiancai Lu and Anhuai Lu were always available for fruitful discussions and supported me with vital suggestions and great ideas. Daniela Rubatto has done a perfect and exemplary job as Chair of the Medal Committee. Our Subcommittee on Archives and History is also very active; many thanks to Annamária Kis and her team. In addition, I am very grateful to Eiji Ohtani, our 1st Vice President. I profited very much from his assistance and support; it was a great pleasure working with him and I wish him much success as the future President.

Finally, my sincere thanks go to our Commissions and Working Groups, who are doing an enormous amount of work; without any doubt, they are the backbone and mainstay of our association.

### (2) Report of the Secretary

After the former IMA Secretary, Sylvie Demouchy resigned for personal

reasons in the middle of February, 2024, I accepted an offer by the President, Hans-Peter Schertl to take over her position as Interim Secretary. Subsequently, my appointment as interim secretary was formally approved by council at an adhoc IMA Council ZOOM meeting held on March 19. Then, I have been handling my duties with appropriate support from Hans-Peter Schertl and Eiji Ohtani (1<sup>st</sup> Vice President) on an e-mail basis.

My first important work was the preparation for the Council and Business Meeting at EMC 2024 Dublin and the election of new officers/council members of IMA. I was in charge of the practical part of the process of selecting candidates for the election and supported Hans-Peter. We evaluated the candidates recommended the present council members (we also asked national representatives to nominate candidates, but no nominations were received) based on the scientific expertise, geographical location and gender balance. Finally, a list of nominees was prepared and disseminated to the national delegates four weeks prior to the election in accordance with the IMA constitution. The list was also posted on the IMA website.

Since the IMA meetings at EMC 2024 will be held in a hybrid format, a series of zoom meetings have been set up for three Council meetings and two Business Meetings. Some of these meetings will overlap with the EMC session in terms of times and locations, I discussed with Kevin and adjusted the time and location of the meetings. It is very convenient to be able to keep updated on these changes on the IMA website in addition to the announcement by email.

I also worked to improve and update the new IMA website. The information posted includes the 2023 IMA Medalist (Tetsuo Irifune), an interview (movie) of the Past President Patric Cordier about Mineralogy 2022 (IYBSSD 2023-2023), the Mineral of the Year 2023 (Batoniite), and information on IMA Meetings at EMC 2024 Dublin.

During the period before I took over the secretary duty (from IMA Lyon to February 2024), the former Secretary, Sylvie Demouchy worked hard to prepare the minutes of the IMA Meetings at IMA Lyon 2022 and requested and compiled the annual activity report to the IMA Commissions / WGs. She also worked on the compilation of opinions of council members about the potential candidates of the next council members and prepare a preliminary list of candidates.

### (3) Report of the Treasurer

### Membership Dues and Financial Overview

In May and June of this year, I issued invoices for 2024 membership dues and a few payments have been received to date. Last year, we received dues from 17 members, leaving 18 members unpaid. Unfortunately, about one-third of our membership has been unreachable and have not paid any dues since 2020, significantly impacting our growth. Several organizations have yet to appoint an IMA representative, remain undecided on who will assume the IMA representative or treasurer roles, or have not determined who is responsible for making payments, or have no budget. Additionally, many members still make payments via wire transfer, which for our smaller "A" members, often costs more than the membership dues themselves. Wire transfers are an archaic and inefficient method, so we introduced a new payment option via PayPal last year. This allows members to pay by credit card or bank transfer at a significantly lower fee in most cases, and also allows for donations to be made at any time via a link on our website. As a reminder, we have been a 501(c)(3) organization since 2022, simplifying our tax situation and return documentation, as we do not pay taxes.

### **Financial Performance and Investment Strategy**

In 2023, we received \$5,887 in dues, approximately \$1,000 more than our long-term average, but this is offset by several members who opted to pay several years in advance. Our expenses for 2023 and so far in 2024 have been related to the maintenance of our old website (mineralogy-ima.org) and the recently published WordPress site, which Hiroaki has significantly contributed to. The 2024 website fees so far total \$467, covering domain name registration and protections for both sites, a cost we expect to decrease once we retire the old site.

Our investment portfolio is divided into three segments, with a total balance of \$126,040. The first segment consists of ~\$20,000 in a money market account yielding approximately 4.7%.

The second segment, which constitutes the bulk of our portfolio, holds \$85,000 in three laddered certificates of deposit (C.D.s) yielding just under 5% with two-year maturity dates, and maturing at different times next ~autumn. As these C.D.s have matured, we have laddered, or reinvested the original principal and some of the interest gained into new C.D.'s. The previously laddered C.D.'s (not shown) have yielded over \$1,000 in interest year-to-date. Given the current high-interest rates, this laddering strategy will continue until their rates lower significantly.

The final segment comprises \$21,000 in mutual funds. These investments, which can be thought of behaving similar to stocks, track the broader market performance depending on their holdings, and several pay dividends that are automatically reinvested to benefit from compounding growth.

### **Future Investment Strategy**

I would like to discuss with you our long-term investment strategy and some of the coming changes to our outlook. The U.S. Federal Reserve may start lowering interest rates as early as September or October, following the European Central Bank and other's lead. It is uncertain how quickly the rates will drop, but we need to be prepared to adjust our investments. When rates decrease, the interest on money market accounts and C.D.s will likely fall significantly, potentially ranging between 1% and 2% by 2026. We will consult our investment managers, but my recommendation is to methodically reinvest a significant portion of the C.D. and money market holdings during market downturns over the next year into our existing mutual funds and diversify into other investment types, such as index funds.

### Summary

At the end of 2023, our total balance was \$110,144.15, and as of today, it stands at \$126,040.12, reflecting a positive balance of \$15,896. This is great news and I think we are on a certain path of growth from here.

### (4) Report of the Communication Officer Year of Mineralogy 2022-2023

My mandate as Communication Officer in the Council of the IMA started at the 23<sup>rd</sup> General Meeting of the IMA in Lyon, France, 18-22 July 2022, during which I gave the opening speech for the Year of Mineralogy 2022-2023, an initiative coordinated for the IMA by Patrick Cordier and for which I facilitated obtaining the support of UNESCO. Events were organized in several countries and at different levels. These were highlighted at the microsymposium: "*The future of Mineralogy: events and outcomes of the Year of Mineralogy*", that I coconvened with José Reyes Gasga from Mexico at the IUCr Congress and General Assembly, held in Melbourne (Australia), 22-29 August 2023, featuring the keynote talks of Razvan Caracas and Giuseppe Cruciani, and other contributed talks.

### **Elements magazine**

IMA Society News are appearing regularly in Elements. These include communications about IMA Medal of excellence in Mineralogical Science, Mineral of the Year, and other articles. Some new articles are in press (e.g., Mineral of the Year 2023 expected in issue v20n5) or in preparation (Mineralogy in Costa Rica; ore mineral of the year).

All IMA SN articles published since 2005 have now been collected and made available from the new IMA website, with the agreement of Elements editorial office.

### Outreach

I am conducting several outreach actions aimed at building capacity in mineralogy and related disciplines. In some cases, I have been collaborating with the President Hans-Peter Schertl and 1<sup>st</sup> Vice President Eiji Ohtani towards reaching out to new member countries. I am also activating contacts with the

aim of evaluating possible venues for future IMA General Meetings. Positive feedback has been shown by Brazil and Uzbekistan so far.

A partnership has been established with the African Light Source foundation for IMA-related sessions at AfLS conferences. These have been successfully held during AfLS2022 and AfLS2023 under the theme "Big Science and Big Goals for Africa", with 1<sup>st</sup> IMA Vice-President Eiji Ohtani welcoming the participants on behalf of the association and the IMA CPM coordinating part of the talks.

The X-TechLab in Benin is a research and training facility funded by the Government of Benin and acting as a hub for Western Africa. It was founded by *LAAAMP* (https://laaamp.iucr.org) and has seen a fast development in the past few years, with appointment of staff and acquisition of new instruments, which now include single-crystal and powder XRD, micro-CT, thermal analysis, and XRF (the latest recently commissioned and to be installed by the end of the year). The formal inauguration of the XRPD lab in Sept 2023, at the presence of local and international authorities, featured the welcome speech of IMA President Hans-Peter Schertl, who assured the support of IMA to the local scientific community and paved the way to establishing some mineralogical activity at the facility. In fact, mineralogy has been given a central focus in all training sessions held at the X-TechLab ever since.

More recently, outreach activities have started in Jamaica and Uzbekistan under the framework of the initiatives for the Greater Caribbean Light Source and the Central Asia synchrotron, both coordinated by *LAAAMP*. Jamaica is well known for its bauxite mines. Mining, mineralogy and conservation of the built Cultural Heritage are of central importance for the local economy in Uzbekistan. Therefore, a direct involvement of the IMA community in the initiative for future developments in these regions is crucial and might also lead to bring new countries into the Association.

Bari (Italy), 12 August 2024

# 6. Introduction and discussion of the changes to the IMA constitution (Art. 8) and by-laws (Art. 14) recommended by Council

The Constitution of the IMA was last reviewed and modified in 2014. At the first Council meeting in Lyon in 2022 Council decided it was time to review and revise both the Constitution and the By-Laws to 1) make the procedures of governance clearer, especially to the national representatives in order to encourage their more active participation in IMA, and 2) make the document consistent with current practice. Councilor Ross Angel led this review which involved all Council members. After several rounds of drafting and discussion, Council unanimously voted to recommend the proposed changes to the business meeting for approval.

Ross explained the policy and outline of the changes and announced that any proposed revisions or comments should be communicated to the Secretary before the 2<sup>nd</sup> Business Meeting, where a resolution for approval would be proposed.

### 7. Guidelines for future IMA General Meetings

The IMA General Meeting Guide, which had been drafted by the Council led by Councilor Ross Angel, was presented to delegates.

### 8. Nominations for Election of Council Members

The President presented the list of candidates for IMA Executive Committee, Council Officers and Councilors, which were announced to the national delegates and posted on the IMA website 4 weeks prior to the meeting.

Candidate for 1 <sup>st</sup> Vice President:	Nancy Ross (USA)
Candidate for Secretary:	Hiroaki Ohfuji (JAPAN)
Candidate for Treasurer:	Travis Olds (USA, reappointment)
Candidate for Councilor:	Ross Angel (Italy, reappointment)
	Vincent van Hinsberg (Canada)
	Encarnación Ruiz Agudo (Spain)

It was also announced that if any of the national representatives want to propose additional candidates, they should contact the Secretary at least 30 hours before the vote, which was scheduled for the 2<sup>nd</sup> Business Meeting

### 9. New IMA Website

The status of the new IMA website was reported to the Meeting by the secretary. All the data files of IMA homepage were moved from a server of the University of Vienna, where the former webmaster, Wolfgang Zirbs worked, to a rental server of Bluehost in the US in June 2022 due to his retirement. After that, a new IMA website was built using WordPress by Sylvie Demouchy, the former secretary and Hiroaki Ohfuji, council member/interim secretary and officially opened at the end of 2023 (https://mineralogy-ima-wordpress.website/).

Hiroaki has been working on further improving and updating the layout and information. Compared to conventional HTML-based web management, WordPress is user-friendly and much easier to operate, and the website can be managed by secretary, communication officer and some others without hiring an official webmaster in the future, which will save IMA budget.

### 10. Mineral of the Year 2023 (Batoniite)

For 2023 the "Mineral of the Year" award has been assigned to batoniite. The mineral was discovered in a sample collected at the Cetine di Cotorniano mine, Siena Province, Tuscany, Italy, and was fully characterized by a research team

lead by Daniela Mauro from the Department of Earth Sciences, University of Pisa, Italy. This news has been posted on the IMA website (<u>https://mineralogy-ima-wordpress.website/batoniite/</u>) and will be featured in the next issue of Elements.

### 11. Progress Report of IMA 2026 Nanjing

The President presented a progress report on the preparation for IMA 2026 Nanjing prepared by 2<sup>nd</sup> Vice President, Xiancai Lu, who was unable to attend the meeting.

The report is as follows,

- (1) The tentative date for the IMA2026 conference is around August 20, 2026, and the conference duration is five days. The selection of the conference dates primarily aims to avoid overlap with the 2026 Goldschmidt Conference (July 12-17 in Montreal, Canada) and The 23<sup>rd</sup> World Congress of Soil Science held in Nanjing (June 7-12, 2026). It is worthy to note that Nanjing is commonly terribly hot in July and early August.
- (2) The meeting topics, as originally planned, are set to be seven major themes, including Theoretical and Systematics Mineralogy, Mineral Evolution, Environmental Mineralogy, Critical Mineralogy, Carbon Neutral Mineralogy, 'Deep' Mineralogy (Extraterrestrial Mineralogy, Planetary interiors), and Societal Mineralogy. Each theme will be overseen by 2-3 professors in organizing, with several sessions under each theme. The application for these sessions will be open from January 2025.
- (3) We will schedule two or three plenary lectures (including 1-hour medal talks) every day, consisting of one opening lecture in the morning and one ending lecture in the afternoon. The invited lectures will focus the themes of IMA 2026. The poster session will take place every day (noon 12:00-13:30 and afternoon 17:00-18:00).
- (4) Field trips before and after the conference will give delegates a mineralogists' eye view of a range of geological sites (geological parks and ores) and exotic landscapes. Six geological survey routes have been basically confirmed, including Jiangxi granite-type lithium and tungsten deposits as well as highly differentiated granites, the Karst topography and carbonate-type manganese deposits in Guilin area, the Neoproterozoic phosphorus deposits-Chengjiang Biota-Cangshan metamorphic rocks-hydrothermal gold deposits in Yunnan, the granite domes and lithium deposits in Western Sichuan, the Cambrian microbialites and alkaline granites in Shandong, and the salt lake deposits and rocky desertification areas in Qinghai. Other field routes are under planning. Meanwhile, several one-day trip around Nanjing have been

planned, including Cenozoic volcanic groups, Nanjing Ape-Man Cave (300 ka), distinctive mine parks after ecological environment restored, Mineral Carbon Storage Demonstration Project, and wonderful mineral museums.

(5) In 2025, we will continuously post conference information in various webpages, magazines and at different academic meetings. The members of the Local Organizing Committee will visit major universities and attend important conferences to introduce IMA 2026. In the second half of 2025, we will promote financial and policy support from the Chinese government and relevant departments.

### 12. Future General Meeting IMA-2030 (USA and/or Canada?)

The President presented a list of potential hosts for IMA 2030, prepared by Shaunna Morrison; she and her colleagues from MSA will work together to determine a final list of candidate sites.

### 13. Other Business

### a. Report of IMA Archive and History Subcommittee

The President presented a report from Annamária Kis, the secretary of the IMA Archive Committee and History Subcommittee. They collected IMA documents including abstracts from IMA General Meetings and old photographs, mainly from colleagues at some Hungarian universities, and scanned and digitized them as IMA Archive Materials at the Hungarian Natural History Museum. They also received documents from natural history museums in Australia and Slovakia and digitized for IMA Archive. In addition, they plan to ask collaborators in Bulgaria to provide old IMA documents including General Meetings, Business Meetings and Council meetings and old photographs.

### b. Change of the Chair of IMA Medal Committee

The President reported that Daniela Rubatto stepped down as the Chair of IMA Medal Committee, and Bruno Reynard was appointed by Council to serve as Chair from July 2024. Since two of the Committee members will retire this year, the committee will consider adding two new members.

### c. 2024 IMA Medalist

The President reported that Prof. Hailiang Dong of China University of Geosciences, Beijing is the winner of 2024 IMA medal. Prof. Dong has made seminal and transformative contributions at the interface of mineralogy and microbiology, particularly in the study of microbe-mineral interactions.

### d. Establishment of IMA Mediation Committee

The President reported that the IMA Mediation Committee has been established to fairly and neutrally review any important concerns involving nomenclature, the ratification of new minerals, or any issues related to one of the other Commissions and Working Groups, or even of a general nature. The Committee consists of members who have experience in IMA affairs and who are known for their diplomatic and balanced approach to addressing potential problems.

### e. Changes of officers of Commissions

The President announced the replacement of the following Commission Officers who were approved by acclamation: Commission of Museum (COM): Vice chair: Jakub Ciążela, Secretary: Nicola Mondillo; Commission of Physics of Minerals (CPM): Chair: Paola Comodi, Vice-Chair: Jun Tsuchiya, Secretary: Sujoy Ghosh

### f. New Member Country of IMA

The President reported that Costa Rica has recently become a new member of IMA. The IMA Representative and Deputy will be Guillermo Alvarado and Andrés Ulloa, respectively. The Mineralogical Commission of Costa Rica was recently approved by the Geological Society of Costa Rica and the strengthening of research collaborations and invitation of colleagues including young scientists is expected.

Sendai, Japan, September 2, 2024

A. Ohfuji

Hiroaki Ohfuji Secretary

Laure Pet Scherk

Hans-Peter Schertl President