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International Mineralogical Association

FROM THE PRESIDENT

MONEY MATTERS

First of all, some important news about a change in the executive committee of IMA. Cornelis Klein, of the University of New Mexico, who has worked extremely hard as treasurer of IMA since 1995, has decided that the time has come to pass this task to someone else. As well as dispensing the sums of money needed to keep IMA running, for items such as maintenance of the website (www.ima-mineralogy.org), the operating costs of groups such as the Commission on New Minerals and Mineral Names, and support for meetings, Kase has worked tirelessly to collect the annual dues of member societies. What should be a routine activity is frustrating and time consuming because many supporting organizations seem to be unable or unwilling to transfer the relatively small sums involved. Based on Kase's experience I put forward below some ideas on how the situation might be improved by changes in the laws of IMA. We all have to be extremely grateful for the amount of work that he has put in on this task over the last decade.



Cornelis Klein



Robert T. Downs

We welcome as our new treasurer Robert T. Downs of the University of Arizona in Tucson, where he is associate professor of mineralogy and crystallography. Bob is Canadian and obtained his first degree (in mathematics) at the University of British Columbia before undertaking postgraduate

work in mineralogy at Virginia Tech and completing a post-doc at the Geophysical Laboratory in Washington. IMA has tax-exempt status in the United States, so it is logical to pass the position of treasurer to someone based there. For a person with Bob's background, balancing the books should be a piece of cake, but only if we can overcome the problem of non-payment of dues. Should you be the responsible person in one of the several countries that has still not paid its dues for 2005, please send your money now to:

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MODERNIZING IMA

IMA is living in a new world. It is no longer largely invisible between its four-yearly general meetings, Now, through *Elements* it can reach every mineralogist on Earth who has access to the Internet, every two months. If your country's mineralogical organization is not one of those supporting *Elements* directly, you (or your institutional library) may well receive a hard copy because you subscribe to one of the journals of the supporting societies. Even if you have no such access, *anybody*, two months after publication, can download a pdf from www.elementsmagazine.org. I think that this is remarkable, and it is an opportunity the whole international mineralogical community must embrace. In the next paragraphs, I am going to review some of IMA's financial difficulties and make some personal suggestions (the bullet points) for their solution.

Our difficulty getting some national groups to pay their annual dues is, I think, a symptom of a number of structural problems within IMA. You might imagine, since IMA exists to promote the interests of its supporting organizations, that collecting dues would be a comparatively routine activity. But in 2005 about a quarter of the 37 affiliated organizations had not paid by early December, making them at least one year late. Three organizations were more than two years behind in payment, and one was six years behind. Some of the defaulters are small communities in the less-developed world, and we should be sympathetic with their problems. But two defaulting organizations are located in countries that are among those with the biggest per capita incomes.

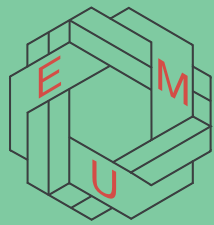
- At present IMA makes contact with societies through their national representatives. Although many do an excellent job, some do not and in future we shall also deal directly with society presidents and executive secretaries.
- At Kobe the business meeting should follow the rules of the IMA Constitution firmly. Countries in default for two years or more will not be

allowed to vote. Council will then consider whether any defaulting country should be deleted from the list of IMA members. This would, of course, be a matter of last resort, and we will always welcome letters of explanation from organizations who have genuine difficulties in paying.

A related problem concerns the formula used to calculate the subscription of each country. The amount (in US dollars) is calculated as $60 \times D$, where D is a number between 10 and 1 that depends upon the membership numbers of the supporting society. Thus the big societies of Germany, Russia and the USA, each with over 1000 members and $D = 10$, all pay \$600. At the other extreme, 16 societies have 25 members or less, $D = 1$, and they pay \$60. It isn't rocket science to figure out that an individual MSA member, for example, contributes a *maximum* of \$0.60, and a member of one of the little societies pays a *minimum* of \$2.40. This seems to me to be completely opposite to what is desirable.

- Societies should pay a per capita sum based on their exact paid-up membership. It would be up to each national society to decide how the money is collected, but it could form part of their own annual subscription and be identified as the IMA contribution. Of course, some individuals are members of more than one national society, but they have anyway been paying twice (sometimes more) under the present system.
- The exact sum will need careful consideration, but it will be not more than \$2 per member. Members of big societies will pay a little more than they do now, those in small organizations less.

This brings me to a final financial problem. Even if we do not change our funding formula, so that our 16 small societies continue to pay \$60, such is the avarice (defined, in my Oxford dictionary, as 'extreme greed') of the world's banks that the costs of international money transfer are almost as great as the amounts being collected, particularly if electronic



www.univie.ac.t/Mineralogie/EMU

European Mineralogical Union

EMU AND THE EUROPEAN GEOSCIENCES UNION

One of the largest geosciences events in Europe is the annual General Assembly of the European Geosciences Union (EGU). In 2005, this took place in Vienna (Austria) from April 24 to 29. Traditionally, the European Mineralogical Union meets in conjunction with the EGU (including holding its business meetings).

Contributions to the EGU meeting cover a broad spectrum of topics related to the geosciences, including space and planetary sciences. The mineralogical sciences were strongly represented in the 2005 programme. The programme section 'Volcanology, Geochemistry, Petrology and Mineralogy' (VGPM) included 22 sessions. In particular the EMU was involved in convening the following symposia:

- High-pressure and high-temperature mineral physics: contributions towards the understanding of planetary interiors
- Spectroscopy of Earth's material: experiments and numerical modelling

During the first of these symposia, the EMU medal ceremony took place. The EMU annually awards a silver medal to a young scientist who makes significant contributions to research and who is active in strengthening European scientific links. The EMU Medal for 2005 was awarded to David Dobson (University College London, UK; see the citation in volume 1, issue 5, page 312 of *Elements*).

In addition, Eugen Libowitzky (University of Vienna, Austria), the 2003 EMU medallist, belatedly gave his medallist lecture entitled 'Dynamic disorder in crystal structures: results from diffraction and vibrational spectroscopy.' In this lecture, he noted that hydrogen can be a major, minor or trace constituent of a broad variety of minerals in the Earth's lithosphere. Hydrogen

atoms in crystal structures can be characterised by both diffraction and spectroscopic methods. Whereas the former are suitable for the investigation of stoichiometric phases exhibiting long-range order with atomic sites at least predominantly occupied by hydrogen atoms, IR spectroscopy is an excellent method for the characterisation of traces of hydrogen atoms in a crystal. The advantage of spectroscopy is the high time-resolution as compared to diffraction methods. Furthermore, the interaction between matter and radiation takes place on one site only. Spectroscopy using polarized radiation allows determination of the orientation of a vibrating molecule. As examples of phase transitions involving hydrogen, the minerals lawsonite and hemimorphite were discussed in detail. Both exhibit dynamic disorder-order processes involving hydrogen-bonded H₂O molecules and OH groups at low temperatures. Furthermore, it has become clear that even anhydrous minerals may contain hydrogen atoms at structural defects in relatively large amounts. Such minerals persist to great depths in subduction zones and may be responsible for recycling water. Because of the enormous volume of the Earth's mantle, nominally anhydrous minerals under high P-T conditions, and which contain hydrogen only as a minor or trace constituent, may play an important role in the water budget of the Earth. Nevertheless, there is still controversy as to whether the mantle is enriched or depleted in hydrogen through the processes associated with subduction zones.

FORTHCOMING GENERAL ASSEMBLIES OF EGU

The next EGU General Assembly will be held in Vienna from April 2-7, 2006. We would like to draw your attention to the following sessions planned for the VGPM section of the EGU meeting:

- Nanoscale analytical and high-resolution (S)TEM techniques for the characterisation of environmental and geological processes
- Accessory minerals in metamorphic and igneous rocks: petrogenetic indicators of chemical and physical processes
- Urban mineralogy
- Experiments under HP-HT conditions: applications in the geosciences

We encourage you to participate in this conference. Further information is available at <http://meetings.copernicus.org/egu2006>.

Suggestions for sessions in mineral physics, mineralogy, and crystallography at the 2007 EGU General Assembly would be very welcome and should be addressed to Professor Peter Ulmer of ETH Zurich (peter.ulmer@erdw.ethz.ch) before September 1, 2006.

Peter Ulmer, President
David Vaughan, Past President
Herta Effenberger, Secretary

transfer is used; thus the originating society might pay \$45 and IMA a further \$10-\$15 on receipt. Banker's drafts sent by post are somewhat cheaper, but most of our members prefer not to use them. I can see two possible solutions:

- Recognize that the dues paid by societies with less than 25 members are almost trivial and allow them free membership. This does rely on high standards of honesty, but then, we are all scientists.
- Agree that payments by smaller societies can be made in cash at IMA business meetings, which now take place every two years.

One thing that the president of IMA rapidly learns is that the societies that support IMA vary enormously in their size and strength. On the one hand are large organizations like the Mineralogical Society of America, which have permanent staff and offices and are substantial publishing businesses. On the other hand there are small groups, sometimes within a national geological society, full of enthusiasm but lacking any formal structure. To members from richer countries \$2 may seem trivial (a litre of gasoline costs \$1.60 in the UK), but to less-well-off countries it may be substantial. Council appreciates all these issues. But making IMA work well is in

everyone's interest. International scientific collaboration should be a major force in the world, and we can all play our part in this.

Wherever you work I welcome your views and fresh ideas as to how we can achieve our aims. Please email: ian.parsons@ed.ac.uk, Bob Downs, or any member of the IMA Council (addresses at www.ima-mineralogy.org). Any changes will be discussed fully by Council and by delegates at our business meetings in Kobe in July 2006 (www.congre.co.jp/ima2006/).