



European Association of Geochemistry



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BERNARD MARTY'S 2022 DISTINGUISHED LECTURE TOUR

I was delighted and honored to be asked to deliver the 2022 Distinguished Lecture Tour in eastern Europe, namely in Hungary and Romania. I am a geochemist and cosmochemist working on planetary volatiles, carbon, nitrogen, and noble gases, and was keen to share with the growing geochemistry communities there about how life-forming species could have been delivered to terrestrial planets. Unfortunately, due to scheduling constraints, I could not go to Bulgaria as initially planned. Wanting to take the “green” route, with Marie-Aude Hulshoff from EAG who organized the trip, we tentatively looked at options to travel by train, but it would have taken 13 hours to go to Budapest, and 9 hours more to reach Bucharest and Cluj in Romania. Thus, limited by the tight schedule, on a freezing December morning, I finally embarked at Luxembourg airport, the closest international hub to Nancy.



Prof. Steven Mojszis, my host at the Konkoli Observatory, Budapest.

In Budapest, I was welcomed by Steve Mojszis, a professor at Konkoli Observatory, who invited me to a nice small restaurant serving exquisite Hungarian specialties (you can enjoy many delicious dishes beyond the famous goulash!). Steve is a well-known geochemist working on many topics, including early life and environments. Born a New Yorker from Hungarian descendants, he was educated in the US but later decided to go to Budapest to experience the growing feeling of freedom in the

90s, when the country gained full independence. He recently decided to leave his professor position in an American university when Hungary decided to attract western scientists by proposing top-grade positions and accompanying benefits. We went for a night excursion around the castle of Buda and the Fisherman's Bastion, admiring the splendor of the Hungarian Parliament on the other side of the Danube River.

The following morning, we jumped on the tramway to reach the Konkoli Observatory on the suburb hills around Buda. There I met Ramon Brasser, a dynamicist working on the early evolution of the Solar System. I had previously met Ramon several times in Tokyo, where he was working at the Earth and Life Science Institute, and we had already had inspiring discussions on the fate of ices and gases during planetary formation. I gave my first talk on the origin of life-forming volatile elements in the inner Solar System. The audience consisted mostly of about 30 astrophysicists and astronomers, and we had a lively discussion on comparing remote observations made by this community with



The Hungarian Parliament designed by architect Imre Steidl in neo-gothic style and opened in 1902.



With the audience at the Physics Department, University of Bucharest.

geochemical measurements and interpretations. Steve and Ramon have assembled a group of enthusiastic students and postdocs, which augurs well for the successful establishment of this group in the Hungarian scientific community.

It was then time to move on to Bucharest where I was welcomed by professors Gabriela Iorga and Virgil Baran from the Physics Department of the University of Bucharest. After a tour of the city, we went to a modern building, the Physics Department, where I gave my second talk in front of a studious audience with numerous students and young researchers. We had a lively discussion afterwards; I guess my talk, which was grounded in the messages of isotopic systems, was particularly appealing to students and researchers on nuclear physics, one of the main departments of the university.

After the lectures, I had the pleasure to meet Mirel Birlan. Mirel is an astronomer who spent most of his professional life at the Observatoire de Paris and whom I met previously in French committees of planetary sciences. He gave me a tour of the Astronomical Institute of the Romanian Academy of Sciences, now used as an educational facility. It is a fascinating building that hosts a fantastic telescope and many measurement devices from the 19th and 20th centuries, some of them developed to track Western spy planes and satellites during the Soviet era. In the telescope room, the floor can move up and down to accommodate the height and direction of the instrument during measurements.



Visiting the Astronomical Institute of the Romanian Academy of Sciences with Prof. Mirel Birlan.



Historical center of the city of Cluj-Napoca. Contrary to Bucharest, most buildings survived the destruction of the Ceaușescu regime.

The following day, I moved to Cluj-Napoca in Transylvania, some 200 km north of Bucharest. Professor Călin Baci, a francophone and Francophile, kindly welcomed me at the airport. We went through the modern, clean, and busy city to the gorgeous Babeș-Bolyai University, the largest university in Romania.

There I gave a talk in the Geology Department, where I had the pleasure of meeting Professor Nicolae Har, the head of the department. Unfortunately, the talk coincided with a university day off, resulting in a sparser audience than we had hoped for. Nevertheless, the topic was appreciated and the students and researchers are now eager to organize topical short courses, an excellent idea for future EAG lectures.



Lecture at the geology department of Babeș-Bolyai University, introduced by Profs. Călin Baci and Nicolae Har.

I also had the chance to take a guided tour of the department's fabulous geological collection, before spending the last night of the lecture tour exploring a lively Christmas market with stands selling excellent delicacies and comforting hot drinks.

This trip was a great experience, giving me the opportunity to meet and engage with young researchers and colleagues from different horizons and to establish durable links. I would like to thank Marie-Aude Hulshoff and Alice Williams at EAG for superb organization and edition of this memo, and the many colleagues from Hungary and Romania who welcomed me so warmly.

REVIEWING WITH BENEFITS, BY SONJA AULBACH

When asked by the EAG Communications Committee whether I would write a short piece on the art of reviewing, I hesitated. It's not that I haven't reviewed a tonne (gasp – a non-SI unit!) of manuscripts. Moreover, as one editor of *Chemical Geology* (which is affiliated with the European Association of Geochemistry), I am now actively trying to hook up manuscripts with an optimal set of reviewers, which requires some left swipes before a promising match is found. The reason is that I realised that my approach as reviewer has been simple and intuitive. I have endeavoured to write the type of reviews that I would like to

receive: thorough, insightful, fair, polite, and constructive. This seems self-evident. It is also good to highlight the positive and find words of encouragement, especially for early-career researchers and if the list of issues is long. Less obvious might be that journals have specific scopes (e.g., regarding novelty and broadness of the implications) that we, as reviewers, should also consider. There are great online resources available for getting started on the art of the review. Most publishers provide them on their sites as 'Guidelines for Reviewers' or similar, and occasionally, journals publish a piece about the philosophy of reviewing.

In my view (therefore debatable), unless data quality is compromised, in which case rejection is the logical consequence, the task of the reviewer (and editor!) is to help the authors turn their manuscript into the most informative, balanced, and authoritative piece it can be. This implies that you are not doing authors a favour by being 'nice', rather than trying your best to find points for improvement, be that clarity, brevity, presentation, or flow. Manuscripts that are so impeccably illustrated, written, and argued that little is left for reviewers to do are the exception. Although getting a manuscript back with requests for major revisions always seems daunting (and perhaps a little annoying) at first, as an author, I have never gone through the process, however painful, without finding that this really did significantly improve the manuscript, and without being sincerely grateful for the input received.

One thing to consider is that, because as authors we need reviews to get our manuscripts published in reputable journals, we should give back by accepting review requests. But preparing reviews is not just an onus. Doing so can alert us to new methodologies, applications, and avenues of fruitful research we were not previously aware of (or only vaguely so), in particular if we dare to venture to the fringes of our comfort zones and review manuscripts that are not exactly within our core expertise. The opportunity to have a positive impact on the work that is published, and getting the deserved recognition for it (be that in the acknowledgments section of the paper or in the yearly reviewer recognition some journals put out) is another rewarding aspect. I have also learned a lot from the replies/rebuttals of authors to my comments (and to those of other reviewers), which can be accessed on some journal sites, because reviewer comments are not invariably insightful, accurate, or incontrovertible. Ideally, this amounts to a friendly back-and-forth between authors and reviewers, with mutual benefits.



About the author: Sonja Aulbach is Heisenberg Fellow at Goethe University Frankfurt, Germany, recipient of the 2021 Paul W. Gast Lecture, and Co-Editor-in-Chief of *Chemical Geology*. Her main research interests are in the origin, modification, and destruction of continental lithosphere in the context of the physicochemical evolution of terrestrial reservoirs, volatile cycling, and geodynamics through time. Sonja trained as

a business administrator before discovering her passion for Earth sciences while roaming United States national parks. She studied geology and mineralogy at Goethe University Frankfurt and received her PhD at Macquarie University, Australia in 2005, followed by postdocs at the University of Maryland, USA and the University of Alberta, Canada before returning to Frankfurt as a research associate and then fellow of the German Research Foundation. Sonja has served as reviewer for some 200 papers and proposals submitted to various journals and funding agencies and has been recognised multiple times for reviewing excellence.