Vol. 72, No. 1 ISSN 0432-7136

BULLETIN DU GROUPEMENT

d'informations mutuelles

Groupement
AMPERE

SE CONNAÎTRE, S'ENTENDRE, S'ENTRAIDER

January to March 2023

No. 290

Office: ETH Zürich, Laboratory of Physical Chemistry
8093 Zürich, Switzerland, www.ampere-society.org

Contents

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Special Editorial

Groupement AMPERE

Dear Members of the Groupement AMPERE,

Since the second half of 2021, there is a new (another) worldwide helium shortage on the market. If we want to buy liquid helium (LHe) now, an institute without a contract must pay up to 75 EUR/liter, which is to be contrasted with 10 EUR/liter before the crisis. This sudden price increase by a hardly believable factor of 7.5 is a challenge for the magnetic resonance spectroscopists. For the institutes that perform helium liquefaction by their own liquefiers, and having a contract for a gas helium supply, the situation is a bit better. For a bundle of high-pressure helium gas cylinders that yield 200 liters of LHe after liquefaction, the price of 3500 EUR before the crisis has raised to 5000 EUR, thus by a factor of about 1.4 “only”. A severe inconvenience is also the fact that most helium suppliers in EU are able to supply only up to 50% of the helium quantities before the crisis, until further notice (currently undefined in time). All this raises vital questions on the future activities of the magnetic resonance community.

Considering the available quantities of helium gas as a raw material in nature, there is no reason for the shortage. Terrestrial helium is constantly created within the lithosphere via the natural radioactive decays of thorium and uranium that emit alpha particles (helium-4 nuclei), to which electrons combine into ^{4}He atoms as soon as the particles are stopped by the rock. This helium is trapped with natural gas in the subsurface regions in concentrations up to 7% by volume, depending on the location on the Earth. Helium is then extracted from the natural gas commercially by fractional distillation. As of 2021, the world’s helium reserves were estimated at 31 billion cubic meters. In 2021, the total helium gas production was 158 million cubic meters, with the largest producer being USA (about 50% of this amount), followed by Qatar (32%), Algeria (9%) and Russia (6%). The main (claimed) reason for the current helium shortage is the maintenance work at the US processing plant Cliffside in Texas. It was expected that the Russian Amur plant, one of the world’s largest helium gas plants that was put in operation in September 2021, would compensate the production. However, due to two fires in October and January, the helium production at Amur has ceased even before the Ukrainian war has started. The existing sanctions will now inevitably delay the repair works, so that the end of the helium shortage with unbearably high prices is nowhere to be seen.

In this unfavorable situation, I wish to the magnetic resonance community a smooth continuation of their research. To conclude optimistically (and semi-seriously), the resistive magnets and the NQR spectroscopy remain our last resort.

Best regards,
Janez Dolinšek, Vice-President, Groupement AMPERE

Portrait:

Yi-Qiao Song

Why magnetic resonance and why NMR and MRI?
I would tell someone without NMR background that NMR/MRI is a power tool to understand molecules and molecular dynamics and has a wide range of applications. With a veteran of NMR, I would enjoy the exchange of our appreciation of the sophistication of NMR/MRI and dreaming of incredible future experiments, theory, and applications that would further expand the impact of MR.

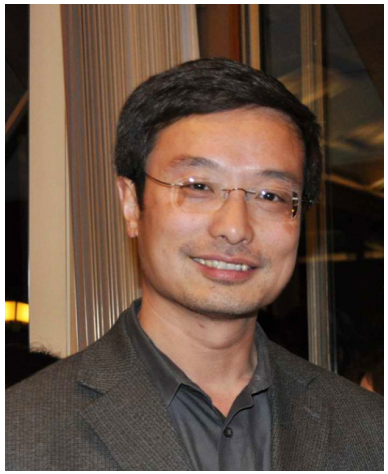
What is your favorite frequency?
21 MHz and lower for now. At these frequencies, small MR sensors can be readily made from permanent magnets to allow miniaturization and portable applications.

What do you still not understand?
Microstructure in inorganic porous materials and biological tissues. Even though MR has been applied to study microstructures with many successes, our ability to describe such structures remains rudimentary, e.g. surface-to-volume ratio or bulk anisotropy. For the complexity of real materials, be it biological cells/tissues or inorganic rocks, our theory and techniques can only be considered to be the first order (even zeroth order) description.

Luckiest experiment you have ever done
Realtime optimization experiment [JMR 2018]. Together with a colleague Ray Tang, we attempted a method to let the computer choose the parameters for relaxation measurement. The method is loosely based on Bayes theorem and to our surprise it worked pretty well the first time we ran it. The parameter choice was peculiar at first glance but we gradually understood and appreciated the brilliance of Bayes' theorem and the very "intelligent" parameter selection.

What was the worst mistake you have made during your lab time?
When I failed to fill the magnet …
But that incident had led me to learn the inner working of NMR magnets, superconducting circuits, superconducting switches, how to charge a magnet etc. These knowledge were all become useful many years later.

Most memorable conference story
I have to say the NMR Gordon conferences I attended as a graduate student were the most incredible and memorable. The sincere and intimate atmosphere was a remarkable experience which I strive to emulate in other conferences. In addition to brilliant talks and intellectual exchanges, the social activities, e.g. soccer, boating, hiking, and the famous Maine lobster and bibs, helped forge lasting friendship. Many of the MRPM and ICMRM meetings shared the similar intimate atmosphere and a strong sense of community and were equally memorable and very special to me.



With whom (historical person) would you like to meet?
One of my current interests is Admiral Zheng He's voyages during the early Ming Dynasty of China. There has been much research in the routes of the voyages, the size and design of the ships and the navigation techniques. However, much of the details remains a mystery due to missing record and some suggested that his voyages extended far to the Pacific oceans and even discovered of America.

When do you get your best ideas?
When I talked to people from other disciplines. Not only may they inspire me with new ideas for NMR applications, such conversation often provides novel challenges for NMR, in hardware, data acquisition and physical models.

If you had just one month time for travelling - where would you go to?
Antarctica

Your idea of happiness
Professionally, I derive much happiness from doing science, learning from colleagues and enabling others. I really enjoy the friendship and company with colleagues and friends from near and far who share a similar interest. I love to travel with my wife and children to culturally interesting places …

Position: Research Scientist, Harvard University
Awards: ISMAR Fellow, APS Fellow
Education: Ph.D., Northwestern University, B.S. Peking University
Interests: Hard Science Fiction

https://www.magnetic-resonance-ampere.net

About Magnetic Resonance, the Open Access journal of the Groupement AMPERE

Nearly 4 years ago, on the occasion of the joint EUROMAR/ISMAR meeting that was held in Berlin in 2019, we embarked on the perilous adventure of creating a new journal *ex nihilo*. We were mostly motivated by the obvious advantages of Open Access (OA), meaning that all readers have free access to all papers, regardless if they are affiliated with a public or institutional library, if they are active or retired, if they are philosophers, novelists or journalists. We chose the 'Gold' route to open access, where the authors have to contribute a modest 80 € per page to Copernicus' cost of production, reduced to 75 € if the paper is submitted in LaTeX. Initially, we naively believed that it would be sufficient to put together a strong Editorial Board to warrant the success of our new journal. But we gradually came to realize that, no matter how prestigious our editors may be, their unwavering support does not suffice. All of us have our habits, and we tend to submit our papers to a handful of household journals because we are familiar with their editorial policies and websites. We underestimated the importance of the dreaded impact factor, not only for senior scientists, some of whom are dripping with ambition, but also for younger post-doctoral fellows who believe (not without some reason) that their career in academia may benefit from publications in high-profile journals like *Nature* and *Science*. We did not know that Clarivate, who run *Web of Science* and are responsible for calculating impact factors, only considers 'referencing' new journals after a waiting period of several years, and expects new journals to carry an unspecified minimum number of papers. The fact that our journal is now referenced by Elsevier's Scopus is a small consolation. Google Scholar is less picky and has contributed much more to our visibility. We also underestimated the reluctance of scientists in countries that do not provide specific budgetary support for Open Access, like the USA, to sacrifice some of their research funds for OA. Many authors are satisfied by the publishers' vague promises that their papers will become accessible after a few months or years ('green OA'), and many believe that the whole OA problem has long been resolved by repositories like 'arXiv', overlooking that the review process not only adds authority to accepted papers but often greatly improves their contents. Furthermore, public referee reports reveal to what extent a manuscript has been well received, and shine some light on the quality of the review process.

Despite all obstacles, *Magnetic Resonance*, receives about 24 new submissions per annum. In 2020, 2021 and 2022, we have published 27, 64 and 18 papers. (The second figure was boosted by two special issues.) To our surprise, the main advantage of our journal – and hence the main attraction for authors – is not so much its low cost, but the outstanding quality of the reviewing system that was designed by Copernicus in collaboration with the European Geosciences Union (EGU). Unlike virtually all other journals, the ***entire*** correspondence between authors, editors and reviewers is public. Moreover, if they wish, reviewers invited by the editors of *Magnetic Resonance* can

reveal their identity, thus making the job of reviewing more rewarding. In my view, this improvement is not a mere technicality, but *makes all the difference* with respect to established journals, no matter how famous.

The most serious critique to *Magnetic Resonance* we have heard concerns the so-called 'Harvard style' of referencing (e.g.: Porter, J. G., De Bruyn, W., and Saltzman, E. S.: Eddy flux measurements of sulfur dioxide deposition to the sea surface, Atmos. Chem. Phys., 18, 15291–15305, https://doi.org/10.5194/acp-18-15291-2018, 2018.) The fact that all authors are mentioned, along with the full title and DOI, is appreciated, but the main problem is the ungainly manner of 'calling' such references, which is much more clumsy than simple numbers in brackets that most physicists and chemists prefer. If the first author's name is part of the sentence, only the year is put in parentheses (e.g.: 'As we can see in the work of Porter et al. (2009) the precipitation has increased'). Alternatively, both name and year may be put in parentheses (e.g.: 'Precipitation increase was observed (Porter et al., 2009)'). If there are several references, they must be separated by semicolons (e.g.: 'Precipitation increase was observed (Porter, 2009; Mueller et al., 2010)'). Names obviously carry more information than numbers, and the reader can identify references straight away without looking them up in the list at the end of the paper. When preparing a manuscript, the Harvard style allows adding or deleting references without having to renumber, which is convenient when several co-authors use different programs for reference management. This format is shared with many scientific journals, including the *Journal of Biomolecular NMR*. In any case, Copernicus is reluctant to adopt a different style for each of its journals.

Some irritating features have become common to many journals. Personally, I dislike that *Magnetic Resonance* requires authors to add statements about 'Conflict of interest'. *C'est pour se donner bonne conscience*. I also have doubts about the usefulness of 'Author contributions' (e.g.: 'AA and BB designed the experiments and CC carried them out. DD developed the model code and performed the simulations. AA prepared the manuscript with contributions from all co-authors.') When PhD theses contain extensive paragraphs of published articles, examiners often wonder about the students' actual contributions to the work, but they rarely get a truthful answer. The same holds for applicants for academic jobs. The journal may be glorious, but the applicant may have contributed precious little. If big shots insist on being listed as co-authors merely because they have contributed some funds, the 'Author contributions' will give them an opportunity to concede this embarrassing fact.

Personally, I also have mixed feelings regarding the time-consuming obligation to deposit 'all' raw data. In truth, even raw data must have been selected, since not all experimental observations strike the authors as worthy of publication. Yet critical readers might be enabled to check some unexpected claims. The deposition of some 'raw' data and computer programs spares us hollow promises like 'data available from the authors upon request' which are not always honored.

Initially, we thought – like many editors of low-profile journals – that *Magnetic Resonance* should invite some well-known authors to contribute to Special Issues. After trying this twice (once for Rob Kaptein's 80th birthday, and once for the undersigned, following a proposal that, to my shame, I accepted in a moment of narcissistic weakness), we decided to discontinue this practice. We felt that the quality of papers submitted in honor of such-and-such was rather unpredictable. Some of us have gradually come to consider the very concept of special issues to be a hallmark of mediocre journals that are running out of steam. If you want to run a respectable journal, don't do any special issues, so goes our newly found ethics.

From the outset, we realized that *Magnetic Resonance* would have to compete with historical journals like the *Journal of Magnetic Resonance* (which contains many seminal papers), *Magnetic Resonance in Chemistry, Applied Magnetic Resonance, the Journal of Biomolecular NMR, Solid-State NMR, Magnetic Resonance Imaging, Magnetic Resonance in Medicine, Progress in NMR Spectroscopy,* not to mention a broad range of high-profile journals that specialize in chemical physics, physical chemistry, biological chemistry, chemical biology, analytical chemistry, material science, and much more. All of which are competing against a small club of highly visible journals like *Science, Nature, PNAS, Chem. Comm.* and *JACS*. Quite a challenge!

What we did *not* anticipate was Elsevier's initiative to create a brand-new *Journal of Magnetic Resonance Open*. Almost from the beginning, JMRO strayed from its official policy of providing *Gold* Open Access by offering *free* open access publishing, a policy that has been extended at least until the end of 2023. Normally, free open access (AKA *diamond* open access) is only possible for a handful of journals that are entirely supported by public funds, like the French Centre Mersenne (https://www.centre-mersenne.org) that specializes on pure mathematics such as the *Annales de l'Institut Fourier*. As many alchemists will know, 'Gold' and 'Diamond' cannot be easily transmuted into each other. When JMRO published 61 papers in 2022, Elsevier waived 'Gold' author pay charges of $1,500 per paper, thus sacrificing an income of $91,500. It seems fair to ask: what motivates Elsevier to be so generous towards the magnetic resonance community?

In addition to its unique open reviewing system, *Magnetic Resonance* practices strikingly low prices, a mere €80 per page. A few years ago, MDPI charged me €1,803.43 for a review on 2D ICR of only 20 pages, which would have cost me €1,600 at Copernicus' rate. (Admittedly, MDPI generously waived their charges altogether when I bitterly complained about the standards of their production.) More recently, *Science Advances* charged me ca. $4,500 for a paper of a mere 8 pages, which would have cost us 8 x €80 = €640 at Copernicus' rate. Unlike its famous mother journal, *Science Advances* is an open access journal, and the AAAS claims to be a non-profit organization. When I

enquired about their pricing policy, I received some remarkably transparent information: *Science Advances* pays an honorarium of $2,000 per year to each of its approximately 350 Associate Editors (who each handle about 50 papers a year), an honorarium of $15,000 per annum to each of the 40 Deputy Editors (who handle perhaps 500 papers a year), full-time salaries to approximately 10 members of office staff based in Washington DC, and appropriate remuneration to Associate Editors and Editor-in-Chief. This amounts to about $2,5 M. *Science Advances* receives and evaluates 20,000 papers a year; the processing cost of a rejected paper is perhaps $50 – that works out to another $1,0 M. The 2,000 papers that are actually published cost about $1,5 M, if one assumes $750 per paper to be a good estimate of the production costs, as it would be for Copernicus. The above total of $5 M for publishing 2,000 papers per year – that works out to $2,500 for a paper. One is left to wonder why *Science Advances* charges ca. $4,500 per paper.

A quick comparison between *Magnetic Resonance* and *Science Advances* shows that (i) we do not pay our editors, (ii) our APCs cover the costs of language editing, typesetting and publishing by a respectable European not-for-profit publisher, who does not compromise on quality by outsourcing, (iii) we do not reject 90 % of the submitted papers, (iv) we handle merely 24, not 20,000 papers per year. Small is beautiful. Mercifully, by virtue of its legal ownership construct, Copernicus cannot be purchased by others, as unsuccessful attempts have proven.

Some of our NMR colleagues have pointed out that our 'crusade' against unfair publishing companies is a pure waste of time, since the cost of publishing is only a small fraction of the overall cost of scientific research. In France, the ministry of research has asked an outfit that goes by the name of *Datactivist* to carry out an enquiry (https://datactivist.coop/fr/). It turns out that the total expenses in France for publishing (fees and subscriptions) amount to ca. 117 million € per annum, which is equivalent to 2300 jobs for young scientists (*Le Monde*, 18th January 2023.) Not quite negligible if you care about science.

The methods used by many publishers to extract mind-boggling profits from public libraries carries all the hallmarks of abusive monopolies, and bears some similarities with the unbridled extraction of oil, coal and gas from our tormented planet. I view our 'crusade' against unfair practices in publishing as eminently constructive, and we should be grateful to the Groupement AMPERE for their support. Please consider to submit your next paper to https://www.magnetic-resonance-ampere.net.

Geoffrey Bodenhausen,
Paris, February 12th 2023

AMPERE café, a brief update:

Dear all,
Here is a brief update on the virtual AMPERE Café. We now have two editions behind us and, although it was pretty nerve racking, things went more or less according to plan. We received very positive feedback.
The edition from Oct 6th was a pub quiz with teams from universities and research institutes around the world, from Russia to New Zealand. After six rounds of questions on people, history, principles, and fun facts of magnetic resonance, the two teams with the most points progressed to the finale. In the finale, Un poco MAS, a team formed for the occasion, beat Solid stETH by a narrow margin. Congratulations Un poco MAS!
On Nov 17th, we had a panel discussion on magnetic resonance instrumentation. The panel members were Christian Griesinger, Jan Korvink, Joanna Long, and Graham Smith. We had a vivid exchange of experiences and ideas on topics such as which instruments are most essential in a start-up lab, how to make magnetic resonance instrumentation accessible to more users, the best methods of hyperpolarization, and the shortage of helium.

Next up, on Mar 2nd, 20:00 CET, is another panel discussion, this time on „Scientific Publishing". The panel members are all experienced current or former journal editors:

Geoffrey Bodenhausen (Magnetic Resonance)
Lyndon Emsley (Journal of the American Chemical Society)
Gunnar Jeschke (Journal of Magnetic Resonance)
Ilya Kuprov (Science Advances)
Registration is possible via the AMPERE website: https://ampere-society.org

For the remainder of 2023, the calendar looks as follows:
Wed May 17th, 16:00 CEST: Discussion on "PhD Supervision"
Thu Oct 12th, 20:00 CEST: Magnetic Resonance Trivia
Thu Nov 23rd, 16:00 CET: to be announced

Note that the editions in May and November are „early" editions to accommodate magnetic resonance enthusiasts with families (in Europe) and to the far east of us.

Best wishes,
Guinevere Mathies & Quentin Stern

P.S. If you have questions, comments, or suggestions, don't hesitate to get in touch: cafe@ampere-society.org.

First announcement:

Alpine Conference on magnetic Resonance in Solids
10-14 September 2023 Chamonix-Mont-Blanc, France

Dear Colleagues,
We cordially invite you to participate and contribute to the Alpine "Chamonix" Conference on Magnetic Resonance in Solids, that will take place in Chamonix Mont-Blanc, France, on 10-14 September 2023.

Aims and scope of the meeting
The Alpine conference is a high-level international forum for the discussion of recent developments and applications in the field of magnetic resonance in solids. The conference focuses on novel concepts, methods and instrumentation, as well as applications in fields including physics, chemistry, biology and materials science.
Beyond its original and still core focus on solid-state NMR, the Alpine Conference welcomes contributions from EPR and MRI in solids.

Program
The program of the conference will consist of plenary lectures, contributed oral communications, and roundtable sessions. Round table sessions will provide opportunities for discussions in small groups following a short pitch talk on contributed work. A perspective session will provide personal views on selected topics and questions of the field. A new tutorial session aimed at early career researchers, but open to everyone, covering solid-state NMR spectroscopy for materials and biochemical sciences will take place on the first morning (Sunday 10th).

The following speakers will give plenary lectures:
Enrica Bordignon (University of Geneva)
Galia Debelouchina (University of California San Diego)
Melinda Duer (University of Cambridge)
Mattias Edén (Stockholm University)
Gillian Goward (McMaster University)
Igor Koptyug (International Tomography Center)
Yoh Matsuki (Osaka University)
Rob Schurko (Florida State University, MagLab)
Markus Weingarth (Utrecht University)

Registration
Registration will open in March 2023 and the deadline for registration is May 31st, 2023. Registration will be limited to around 200 participants. A number of student grants will be available.

Venue and Accommodation
The conference takes place at Le Majestic, a beautiful and welcoming Belle Epoque palace, in Chamonix at the feet of Mont-Blanc. Three lunches (Mon. to Wed.) and two dinners (Sun. and Tue.) will also be served at le Majestic.

Chamonix Mont-Blanc is a charming lively town at the heart of breathtaking Alps, about 1 hour drive from Geneva Airport and about 2 hours drive from Lyon. Chamonix caters both to mountain enthusiasts who are into pushing their physical limits and being one with nature, and city dwellers whose idea of fun is more about enjoying a glass of wine and a spectacular view without breaking a sweat.
A number of hotels with a different range of comfort and affordability will be bookable during online registration at prices negotiated with the Office du Tourisme de Chamonix. All of the hotels are within a maximum 15 minutes walking distance from the conference center, Le Majestic.

Looking forward to seeing you in Chamonix!

Scientific Committee
David Bryce (University of Ottawa),
Sabine Hediger (CEA Grenoble)
Matthias Ernst (ETH Zurich)

Organizing Committee
Jean-Nicolas Dumez (CNRS, Nantes Université)
Daniel Lee (University of Manchester)
Michal Leskes (Weizmann Institute)
Józef Lewandowski (University of Warwick)
Charlotte Martineau-Corcos (CortecNet)
Giulia Mollica (CNRS, Aix-Marseille Université)

Contact:
Email: contact@alpine-conference.org | Web: www.alpine-conference.org
Facebook: www.facebook.com/alpine.conference | Twitter: @alpineconferen1

Organized under the auspices of the Groupement AMPERE
and the International Society of Magnetic Resonance

First announcement:

AMPERE NMR School is organized by the NanoBioMedical Centre under the auspices of the Groupement AMPERE.
This year's edition will take place in Zakopane, 18-24 June 2023.

The School is addressed to young scientists (postgraduate students, Ph.D. students, and post-doctoral fellows) and is focused on theoretical and experimental aspects of nuclear magnetic resonance (NMR) methods, as well as its application in nanoscience and nanotechnology.

The school covers the following topics:
- solid state and soft matter NMR
- NMR diffusometry and relaxometry
- application of NMR in biology, medicine, materials and environmental sciences
- magnetic resonance imaging and spectroscopy
- NMR and quantum information
- theoretical and experimental aspects of dynamic nuclear spin polarization
- advanced NMR techniques

Deadlines and Fees:

Early registration deadline: (payment up to March 31st)	31 March 2023	Euro 600
Regular registration deadline: (payment after March 31st)	31 May 2023	Euro 675
Abstract submission deadline:	31 May 2023	

Ampere NMR School Fee includes:
- Full board (breakfasts, lunches, dinners)
- Accomodation in twin room
- Conference participation
    - conference materials,
    - a personalized ID tag,
    - admission to all sessions (lectures, poster session, workshops),
    - participation in Opening & Closing Ceremony,
    - coffee breaks.

For more information, please see the website:
https://school.web.amu.edu.pl
or the Twitter account: @AmpereNMR

Contact email: school@amu.edu.pl

About Zakopane:
Zakopane is a city in southern Poland, in the Lesser Poland Voivodeship and is the largest town in the immediate vicinity of the Tatra Mountains. It is a large winter sports center, commonly referred to as the winter capital of Poland.

Zakopane is the highest located town in Poland. Its administrative borders also embrace part of the Tatra Mountains range, where the summit of Mr Świnica at 2301 m above sea level makes the highest point.
More information about Zakopane can be found at the city website:
https://www.zakopane.pl/en/tourist-area

AMPERE NMR School

NanoBioMedical Centre
Adam Mickiewicz University in Poznań

UAM

Announcement:

You can still submit a Poster Abstract and Register for the EUROMAR 2023 Congress here: https://euromar2023.org/

Progress is ongoing towards delivery of the Scottish edition of EUROMAR taking place in Glasgow, UK, Sunday 9th to Thursday 13th July 2023. The Scottish Events Campus (SEC) will form the backdrop to this great gathering of magnetic resonance enthusiasts. Keynote addresses will be delivered by Christophe Copéret, Simon Duckett, Gareth Morris, Marina Bennati, Chantal Tax, Jeff Reimer, Christina Thiele, Paul Schanda, Luisa Ciobanu, Patrick Giraudeau, Jiangfeng Du and Dmitry Budker. Gunnar Jeschke will also deliver a keynote address in recognition of being awarded the 2023 IES Gold Medal, the highest accolade of the International EPR (ESR) Society.

Tutors Warren Warren and Tatyana Polenova will share a platform to discuss best practice for preparing and presenting work for journal publication, which will particularly appeal to PhD students and early career researchers alike. Ilya Kuprov and Vladislav Orekhov will similarly share a platform to provide insights into artificial intelligence and foundations of machine learning in the context of magnetic resonance.

Our keynote speakers and tutors are joined by a fantastic line-up of invited speakers (details may be found on the EUROMAR website) who will share parallel sessions across the four full days of the congress covering all aspects of magnetic resonance. The EUROMAR 2023 Scientific Program Committee are very grateful to all who have agreed to come and talk to us about their work.

Further opportunities remain for YOU to present your science at EUROMAR 2023. While the abstract portal is now closed to oral submissions, it remains open for poster submissions until mid-May. The selection process for promoted parallel session speakers is in progress. Notifications will be issued after Easter. We're excited that for the first time at a EUROMAR Congress selected PhD students will have the opportunity to advertise their posters to a wider audience by delivering a one minute, one slide "Flash Talk" in a parallel session. With up to ninety flash talks being delivered across a total of six parallel sessions during the first full day of the congress, there'll be plenty of science to talk about! If you haven't yet signed up to present a poster at EUROMAR, there's still time to submit your abstract.

EUROMAR could not occur without the sponsorship backing and support of equipment and instrument manufacturers, hardware and software vendors and magnetic resonance societies, programs and publishers that underpin all of the science that the community delivers. Opportunities for sponsorship of different aspects of the meeting exist and a variety of sponsor packages are available, details of which can be obtained from the event management team at In Conference Ltd. or via the EUROMAR 2023 website. Vendors who are interested in running lunchtime workshops are encouraged to register early.

The program of events will include keynote addresses and parallel sessions each day, prize lectures, an afternoon of tutorials, daily poster sessions, flash talks during the first day and ample opportunity for delegates to interact with vendors and suppliers at the exhibitor stands and booths. Various associated scientific and social events accompany the congress. The Collaborative Computational Project for NMR (CCPN, https://ccpn.ac.uk) are hosting a pre-Congress meeting during 6th-8th July 2023 in Glasgow as a forerunner to EUROMAR 2023. Registration for this meeting can be accessed via a link to the CCPN website through the EUROMAR 2023 website. The Pan-EUROPEAN Solid-State Infrastructure for Chemistry-Enabling Access initiative (PANACEA, https://panacea-nmr.eu) will run a workshop during EUROMAR 2023 on Tuesday 11th July 2023. Look out for further details on the PANACEA website and via links from the EUROMAR 2023 website as more information becomes available. The Remote NMR project consortium (R-NMR, https://r-nmr-eu) will also hold an event during EUROMAR 2023. Our platinum sponsor Bruker, will host an afternoon symposium on Sunday 9th July 2023 immediately prior to the formal opening proceedings of EUROMAR 2023 and further details of this will become available. They will also host their "Bruker Night", a social event that will take place during the evening of Monday 10th July 2023 at the Glasgow Riverside Museum, a short distance from the conference venue along the River Clyde.

EUROMAR 2023 will begin in the late afternoon of Sunday 9th July 2023 with a series of prize lectures. This will be followed by a Civic Welcome Reception at the Glasgow

Science Centre sponsored by the City of Glasgow. Throughout the week there will opportunities to explore Glasgow and beyond during the evenings. Following the close of the Congress, a Gala Dinner and traditional Ceilidh will be hosted at Glasgow's Kelvingrove Museum. An accompanying persons program is also planned as part of the event.

This year's prize lectures include the prestigious Ernst Prize, the Ampere Young Investigator Award Lecture and the Raymond Andrew Prize Lecture. Additionally, the Scientific Program Committee will consider nominations for the Shimon Vega Travel Bursary Award, application details for which can be found on the EUROMAR 2023 website.

While financial circumstances are less favourable in 2023 compared with 2022, the organizers have worked hard to reign in costs to keep registration prices down and in line with the 2022 figures. It is hoped that this will make attendance as affordable as possible within the current financial climate.

Glasgow is proud to host EUROMAR 2023 and looks forward to welcoming you to what is sure to be a rich and varied program of events. Please join us!

Fáilte, Welcome!

John A. Parkinson, Chair, EUROMAR 2023

Minutes of the meeting of the AMPERE Bureau

online, on March 16. 2023

Members present (19):
B. Blümich, A. Böckmann, J.-N. Dumez, M. Ernst, S. Hiller, A. Kentgens, O. Millet, H. Oschkinat, G. Otting, J. Plavec, D. Kruk, G. Mathies, J. Parkinson, T. Prisner, L. Ciobanu, M. Baldus, P. Girardeau, Q. Stern, J. v. Duynhoven, G. Jeschke

Excused:
G. Bodenhausen, J. Dolinšek, B.H. Meier, Y.-Q. Song, K. Szutkowski

Agenda:
1. Approval of the agenda.
2. Approval of the minutes of the AMPERE Bureau meeting Utrecht on July 12, 2022
3. Report on the state of the AMPERE Society (A. Böckmann)
4. Financial Report (M. Ernst)
5. Report EUROMAR Division (T. Prisner)
6. Financial report EUROMAR division (A. Kentgens)
7. Report Publication Division (Magnetic Resonance) (G. Otting)
8. Report AMPERE Videos (S. Hiller)
9. Report AMPERE Café (G. Mathies)
10. Report on Andrew prize and funds to support meetings (B. Blümich)
11. Member Directory and Search (A. Böckmann)
12. Final reports past meetings 2022:
    EUROMAR 2022, Utrecht (The Netherlands), July 10-15 (M. Baldus)
    AMPERE NMR School, Zakopane (Poland), June 19-25 (D. Kruk)
    MR Food 2022, Aarhus (Denmark), July 10-14 (J. van Duynhoven)
    MRPM 2022, Hangzhou (China), August 21-26 (Y.-Q. Song)
    Alpine Conference, Chamonix (France), September 4-8 (J.-N. Dumez)
13. Future meetings 2023:
    AMPERE NMR School, Zakopane (Poland), June 18-24 (D. Kruk)
    Biosolid School 2023, Aarhus (Denmark), June 4-9 (H. Oschkinat)
    EUROMAR 2023, Glasgow (UK), July 9-13 (J. Parkinson)
    17th ICMRM, Singapore (Singapore), August 27-31 (Y.-Q. Song)
    Alpine Conference, Chamonix (France), September 10-14 (J.-N. Dumez)
    HYP23, Leipzig (Germany), September 24-28 (G. Bodenhausen)
    Conference Sustainability (A. Böckmann)
14. Varia
15. Date of next meeting

At 12:00 hours, Matthias Ernst opened the meeting.

Ad 1.
The agenda was approved as is.

Ad 2.
The minutes of the AMPERE Bureau were approved unanimously.

Ad 3.
The president A. Böckmann acknowledged the successful conferences in the past year, in particular the EUROMAR in Utrecht and highlights the various upcoming conferences to be discussed later in the meeting. The AMPERE Café has been a very successful new element of the society. Q. Stern will leave the Bureau due to family obligations and A. Böckmann thanked him for his contributions.

Ad 4.
M. Ernst presented the financial report. Finances are continuing to be stable. The financial situation of all subdivisions is stable and partially very positive.

Ad 5.
T. Prisner reported on the EUROMAR division. There are several groups of interested organizers for future EUROMARs, which underlines the sustained impact of this conference to the community. The committee was approached from ISMAR by S. Grzesiek to merge the EUROMAR and ISMAR in 2027, following the model of Berlin 2019. A majority within the division is likely in favor of this suggestion. This merger likely will propel the total attendance to around 1000 people. The division will make a final decision on this issue at their meeting in Glasgow.

Ad 6.
A. Kentgens reported on the finances of the EUROMAR division. Finances are stable.

Ad 7.
G. Otting reported on the publication division. The journal Magnetic Resonance is publishing fewer articles than comparable journals and it would be great to receive more articles. The competitor journal JMR Open by Elsevier is continuing to waive the submission fees, now for 4 years in a row, and manages to achieve a continuous stream of submissions. This appears to be a major financial investment by Elsevier and seems to specifically target Magnetic Resonance. The quality of the publications in Magnetic Resonance is sufficient, but the number of articles is not yet sufficient for getting an impact factor. The journal has no income to waive publication fees as JMR Open does. G. Otting urges everyone to submit articles.
The Bureau discusses how to improve interest in the journal, including waiving of fees.

It was proposed that AMPERE supports Magnetic Resonance with 5000 EUR to enable waiving of fees. A positive decision for this was made later in the meeting.

Ad 8.
S. Hiller reported on the Ampere video collection. The committee did not receive any new videos in the last half year. It is more difficult than anticipated to obtain videos and the committee will assess how to move forward.

Ad 9.
G. Mathis reported on the AMPERE Café. She organized, co-hosted by Q. Stern, this event 3 times already. There was a Pub Quiz and two discussion sessions with regular attendance of around 60 people.
Q. Stern steps down as a bureau member. A call for a new young member will be made and B. Blümich will evaluate candidates with his committee.

Ad 10.
B. Blümich reported on the Andrew Prizes and the AMPERE prize. There were around 10 nominations for each prize, with 3 women in each category. For each prize, among the 3 top candidates, the committee did not rank a woman. The Bureau discusses possible activities to increase the visibility of female researchers. A specific prize for women is discussed but not supported. The committee is asked to encourage research groups to specifically nominate women.

B. Blümich reported that two applications for competitive funding of events were received. The AMPERE summer school asked for 8000 EUR and ICMRM Singapore asked for 7000 EUR. The available total is 7000 EUR. The Bureau decides to support each by 3500 EUR. At this point, the discussion from point 7 above was taken up again how to support Magnetic Resonance. It was decided to support Magnetic Resonance with 5000 EUR to subsidize open-access fees.

Ad 11.
A. Böckmann presented the progress towards establishing a public or non-public members directory with search function. The Bureau discussed what information to be included and whether the directory better be public or for society members only.

Ad 12.
Final reports of past meetings 2022:
- M. Baldus reported on the EUROMAR 2022 in Utrecht. There were 635 participants including 183 students, 121 accepted talks, 370 posters. The final budget was 91’000 EUR positive. This was mainly due to a decreased costs and strong efforts to recruit sponsors. A satisfaction survey was made, which was also very positive, including interest in posters, topics, etc. The overall rating of the event was very good.

- AMPERE NMR school in Zakopane was reported by D. Kruk. The conference worked out well and will be continued along the same lines.

- MRFOOD in Denmark was reported by J. v. Duynhoven. The conference had almost 100 participants, half of them students. It included a workshop on relaxometry, diffusometry and foodomics, which was well received. The conference made positive revenue for first time in 10 years. The next meeting will be held in Brazil, which has a strong local community, in 2 years.

- A report of the MRPM in China was not given, as it was recently printed in the AMPERE bulletin.

- Alpine conference in Chamonix was reported by J.-N. Dumez. Additionally, a specific report had appeared in the bulletin. The conference had 160 participants. Participants from North America were fewer than in previous years. Science prices went to T. Polenova and A. Ajoy. In the upcoming year 2023, the conference will switch back the biannual rhythm to the odd years, which had been altered due to COVID. In particular, the meeting wants to interleave with the Rocky Mountain Conference, which stays in the even years. Abstract submission for 2023 is open.

Ad 13.
Reports of planned meetings in 2023:
- Biosolid School in Aarhus. M. Ernst reported on this meeting which includes an online course for all participants and then two separate schools, in June in Aarhus on biosolids and a second school in Nimwegen on materials, i.e. for different interest groups. Around 50 participants expected combined in both schools.

- EUROMAR in Glasgow J. Parkinson reports on the planning. The conference is run by a dedicated company founded for it as a legal structure. The program will follow roughly the classical structure with the addition of 90 flash talks, where 1 minute is given to PhD students to present their posters in plenary. The CCPN conference is attached as a satellite meeting. There is a Bruker pre-congress workshop. So far 393 submitted abstracts were received. Poster abstract submission is possible until mid-May. The sponsoring is so far OK and expected to meet the target. There are no immigration issues expected.

- The report on HYP23 in Leipzig by M. Ernst was brief since the main organizer, G. Bodenhausen was excused. The meeting is supported by the German Science Foundation. Speakers are selected, and the overall planning and attendance are well on the way.

- The Bureau then discusses on the general topic of conference sustainability. Different possibilities to reduce the CO_2 output of conferences are discussed. A. Böckmann and A. Kentgens create a new committee to potentially establish guidelines for conference organizers.

Ad 14.
Varia. A. Kentgens highlights the new school in the Material school in Nimwegen and announces that next year another school on Materials will be held.

Ad 15.
The upcoming committee and Bureau meetings will be held at EUROMAR in person. The general assembly shall be kept online after the EUROMAR. The envisaged date of the next spring meeting of the AMPERE Bureau: March 14, 2024 on Zoom at 12:00.

The meeting closed at 15:29.

Basel / the internet, 16 March 2023
Minutes: Sebastian Hiller

Balance of the Accounts of the Groupement AMPERE and Subdivisions

Period from February 28. 2022 to February 28. 2023

	Balance on February 28. 2022	Membership Fees / Registration Payments	Donations/ Conference support / Licence Fees Copernicus	Conferences Grants / Travelgrants/ Ernst-Prize / Andrew Prize / Ampere Café prizes	Conference Sponsoring / Conference Organizers / donation to CARA	Conference Surplus	Payments made by Ampere Euro account reimbursed to CHF account	Administration Bulletin print Web, Bureau Meetings / MR design / CreditCard/ Domainname	Bank Charges / Depot Charges / further Bank Charges	Account Closing / Account carry over / Losses on Value Paper	Bank Interests Dividends / tax withholding Copernicus / Gains on Value Paper	**Balance on February 28. 2023**
Groupement Ampere												
Ampere (CHF)	**15'730.96**	3'115.00		58.00			2'967.30	972.00	27.00			**20'756.26**
Ampere (Euro)	**44'347.51**	15160.92		3'012.04	7'814.33			38.52	115.13			**48'528.41**
Andrew (CHF)	**24'124.74**			2'927.76						402.00	2.25	**20'797.23**
Andrew Depot (CHF)	**96'775.44**									8'433.15		**88'342.29**
Subdivisions												
Biol. Solid State (Euro)	**13'795.72**							66.00	36.46			**13'693.26**
EPR (CHF)	**7'428.55**							20.00	2.00		0.75	**7'407.30**
Food NMR (CHF)	**615.42**					6'540.67					0.10	**7'156.19**
MRPM (CHF)	**32'614.10**			3'115.00							3.20	**29'502.30**
SMRM (CHF)	**61'933.72**							39.54			6.20	**61'900.38**
Hyp (CHF)	**4'121.00**										0.40	**4'121.40**
Publication (Euro)	**293.28**		3'543.77						66.76		117.37	**3'887.66**
Euromar												
Euromar (Euro)	**98'540.94**		15'000.00	15'000.00	10'000.00				66.76			**88'474.18**

Executive Officers and Honorary Members of the AMPERE Bureau

The AMPERE BUREAU includes the executive officers (which take the responsibility and the representation of the Groupement between the meeting of the committee), the honorary members of the Bureau and the organizers of forthcoming meetings.

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Enrica Bordignon (2021-2025) University of Geneva, Switzerland

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Peter Crowley (2018-2026) National University of Ireland, Ireland

Janez Dolinšek (2016-2024) Institute Jozef Stefan, Slovenia

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Patrick van der Wel (2022-2026) University of Groningen, The Netherlands

Paul Vasos (2019-2023) Horia Hulubei Institute for Nuclear Physics (IFIN-HH), Romania

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Members:
Mark E. Smith, University of Southampton, England
Annalisa Pastore, King‘s College London, England
Alexej Jerschow, New York University, USA
Enrica Bordignon, University of Geneva, Switzerland

Future conferences

Ampere Event 2023

AMPERE NMR School	Zakopane (Poland)	June 18-24
Euromar 2023	Glasgow (United Kingdom)	July 9-13
17th ICMRM	Singapore (Republic of Singapore	August 27-31
Alpine Conference on Magnetic Resonance in Solids	Chamonix (France)	September 10-14
HYP23	Leipzig (Germany)	September 24-28

Groupement
AMPERE

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