

## Dear SBIC members, colleagues and friends,

Welcome to the 2021.03 edition of our quarterly newsletter published by the Society of Biological Inorganic Chemistry (SBIC), which aims to keep you up to date with important developments in our society, award deadlines and other opportunities we are supporting! Your society was very busy over the last months with organizing eBIC and we thoroughly hope that you enjoyed the talks – read more about eBIC below!

As usual, we provide you the latest information from your society in this newsletter. We hope that you will continue to support our efforts to expand recognition of our discipline. If you are not a member of SBIC you can easily join at <a href="https://sbic.memberclicks.net/join-today">https://sbic.memberclicks.net/join-today</a> and begin contributing to our new inititatives as a new member. We would also like to invite you to pass the newsletter on to your students and colleagues and if you have news to share, please get in touch.

## Tim Storr - SBIC Early Career Award winner 2021

We congratulated Tim Storr for being selected as the SBIC Early Career Award winner 2021. Tim is a Professor of Chemistry and a Michael Smith Foundation for Health Research Scholar at Simon Fraser University, Canada. He has made diverse contributions to the field of medicinal inorganic chemistry, including the use of multifunctional ligands and metal complexes to target dysregulated metal ions and protein aggregation in neurodegenerative diseases and cancer. His fundamental research on redox-active ligands has allowed his team to turn on metal nitride reactivity based on peripheral electronics, and design tunable NIR-absorbing molecules. He edited the book entitled 'Ligand Design in Medicinal Inorganic Chemistry' (Wiley, 2014), and serves the bioinorganic community as an Associate Editor of the Encyclopedia of Inorganic and Bioinorganic Chemistry, and as an editorial advisory board member for J. Inorg. Biochem. and Metallomics. In 2019, Professor Storr received the Strem Chemicals Award for Pure or Applied Inorganic Chemistry from the Canadian Society for Chemistry.



If you are interested in reading some of Tim's work, here is a link to an open access paper which appeared in JBIC: Rachel Huang, Graeme Langille, Ravanjir K. Gill, Cindy Mei Jin Li, Yuji Mikata, May Q. Wong, Donald T. Yapp, Tim Storr, Synthesis, characterization, and biological studies of emissive rhenium–glutamine conjugates. J Biol Inorg Chem 18, 831–844 (2013).

# eBIC - The 1st SBIC Electronic Biological Inorganic Chemistry Conference

As ICBIC20 has been postponed to 2023, SBIC hosted **eBIC**, the electronic Biological Inorganic Chemistry meeting to ensure that our community can remain connected and active until in-person meetings resume. Ours was an ambitious initiative to bring the bioinorganic chemistry community together via a combination of 6 plenary, 2 Award and 50 invited talks. In addition, we hosted over fifty 4-minute pre-recorded videos with many filling our actual

program and allowing researchers to answer questions live. In order to achieve regional equality, we hosted the virtual format over a 48-hour period from July 20, 2021 (8:00 UTC/GMT) as a continuous series of seminars, and flash presentations as well as SBIC's annual general assembly in order to serve our international community fully. This rather audacious format injected tremendous energy into the participants and the community. As one attendee wrote "I hope you are well, after the eBIC great adventure. I did like it a lot. This week I had stars in my eyes ... I am happy to be back again to the Bioinor world." We made a special effort to intermix regional speakers across all time zones in order to ensure a truly international flavor to the event. We thank all the speakers, especially those who gave talks as late as 10 pm or as early as 7 am in their time zones for making the scheduling work. Thanks also go to the international organizing committee that selected the speakers, the session hosts and chairs that facilitated a lively Q&A and kept all sessions on time with the precision of a Swiss watch. A special thanks to Mr. Winston Pitts and Dr. Matthew Sullivan, two SBIC/eBIC volunteers, who compiled documents and held numerous live sessions to train hosts and speakers in the subtlety of Zoom Webinars and served as the technical hosts over the 48 hours to ensure a glitch free environment for each block. Selected presentations will be loaded onto the SBIC website for viewing for all SBIC members that missed plenary, award or flash presentations.

We encourage your feedback on *eBIC*, both positive and negative, especially your opinion as to whether this should be the first *eBIC* or the last. While we all look forward to gathering in person at ICBIC in Adelaide or at the regional BICS, we also realize that *eBIC* provides an opportunity for many people to hear world class science for a minimal price and time investment, which opens the world of Biological Chemistry to so many more people around the world.

Finally, we would like to congratulate the following Flash Presentation Award Winners for their excellent videos and skill in answering questions. These awards caused significant difficulties for the Selection Committee as the quality of the work and the manner of presentation was excellent across the board. The first eBIC Flash Presentation Awardees are:

#### **SBIC Flash Presentation Travel Award**

- Veronica Ghini (University of Florence)
- Winston Pitts (University of Michigan)
- Chenyuan Wang (The University of Hong Kong)

## **JBIC Flash Presentation Award**

- Ana Cristina Garcia Alvarez (Instituto de Química UNAM)
- Lewis Green (University of Auckland)
- Thiago Valdares de Oliveira (University of Iceland)

# SBIC Flash Presentation Award (1-year SBIC Membership)

- Nicholas Bernier (University of California, Los Angeles)
- Raphael de Paiva (Griffith University)
- Johannes Karges (University of California, San Diego)
- Kateryna Kostenkova (Colorado State University)
- Sevasti Matsia (Aristotle University of Thessaloniki)
- Feriannys Rivas (Universidad de la República)
- Souryadip Roy (IISER Kolkata)
- Paramita Saha (IACS Kolkata)
- Martin Tovar (CINVESTAV)



## SBIC Early Career Researchers Committee

SBIC is pleased to announce the installation of a new committee called the Early Career Researchers Committee whose charge is to identify and implement opportunities to advance the career development of individuals at the beginning, or during transitionary periods, of their careers. The committee will be composed of 6 to 8 ECRs plus two members of the SBIC Council that will serve as liaisons to the committee and provide persistence to the group. The ECRs will be selected by the president with terms that will be for one or two years. In some cases, renewal for a second term can occur at the discretion of the president. Each ECR appointed to the committee must be an SBIC member; however, one may apply for this position prior to joining the society. As with all SBIC events, we strive for full representation of our members including race, gender, region and scientific diversity.

To apply for membership on the ECR committee, please include the following documents in an email to info@sbichem.org:

- 1) Your CV
- 2) A personal statement indicating why your circumstances would provide representation for the broad ECR community and how you feel you would be able to contribute both to career development of ECRs and also to the Society.
- 3) A letter of reference

These documents should be sent as a <u>single</u> pdf. The deadline to apply for these positions is May 5<sup>th</sup> at 11:59 pm UTC/GMT.

#### **Educational Resources**

We encourage you to visit our <u>educational resources webpage</u> where we have accumulated links to important pedagogical information and lectures to aid in teaching inorganic and bioinorganic chemistry. We will be uploading new content to this area over the next month which includes advanced lectures on metals in medicine, metalloprotein design and metal uptake and homeostastis. If you are an SBIC member, you also have access to members-only content which is continuously growing. Follow this link!

# Congratulations

We are keen to profile the success of our SBIC members and highlight recent awards and accolades. If you have received an award or know of someone who has received recognition for their work, please email the information to <a href="Christian Hartinger">Christian Hartinger</a>. Great to see how many bioinorganic chemists are recognized for the hard work and achievements – congratulations everyone!

Martin Högbom (Stockholm University) has been elected member of the Royal Swedish Academy of Sciences. Congratulations!

Members of the bioinorganic community Squire Booker (Penn State University) and Cathy Drennan (MIT) were selected in the first class of American Society for Biochemistry and Molecular Biology (ASBMB) Fellows.

Congratulations to Muhammad Hanif (University of Auckland) for being selected for the Alan Sargeson Lectureship by the Inorganic Division of the Royal Australian Chemical Institute.

Eszter Boros (Stonybrook University) is one of the recipients of the ACS Infectious Diseases Young Investigator Awards. Congratulations Eszter!

Nick Farrell (Virginia Commonwealth University) received the Institute of Chemistry of Ireland David Brown award 2021.

Martin Srnec (J. Heyrovský Institute of Physical Chemistry) and Ragnar Björnsson (Max Planck Institute for Chemical Energy Conversion) were announced as the recipients of the Quantum Bio-Inorganic Chemistry Society Awards.



Martin Högbom Stockholm University



Squire Booker Penn State



Cathy Drennan MIT



**Muhammad Hanif** The University of Auckland



**Eszter Boros**Stonybrook University



**Nick Farrell**Virgina Commonwealth University



**Martin Srnec**J. Heyrovský Institute of Physical Chemistry



Ragnar Björnsson Max Planck Institute for Chemical Energy Conversion

Marie Heffern (UC Davis) and Daniel Suess (MIT) received the 2022 Saltman Awards.

The 2022 Stiefel Award Winners are Kelly Chacón (Reed College) and Joseph Cotruvo (Pennsylvania State University).

Congratulations to Peter Faller (University of Strasbourg), who was awarded the Senior Researcher prize by the Coordination Chemistry Division of the French Chemical Society.

Alison Butler (UCSB) is the recipient of the 2022 William H. Nichols Medal. Congratulations Alison!

The Société Chimique de France awarded Vince Pecoraro (University of Michigan) the 2021 SCF/ACS French-American Prize and the Aix-Marseille Universitè will award our president a Docteur Honoris Causa this fall!



Marie Heffern UC Davis



Daniel Suess



Kelly Chacón Reed College



Joseph Cotruvo Pennsylvania State University



Peter Faller University of Strasbourg



Alison Butler University of California Santa Barbara



Vince Pecoraro University of Michigan

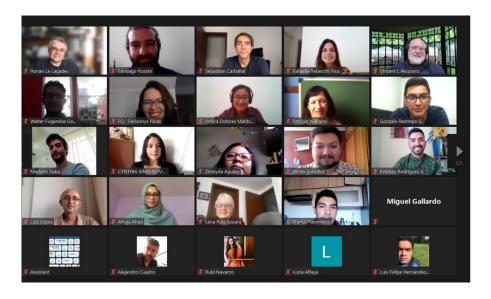
## Conference Report VII LABIC

Due to COVID 19 the VII Latin American meeting on Biological Inorganic Chemistry, VII LABIC, had to move to virtual modality. Nevertheless, it was successfully held from the 6<sup>th</sup> to the 9<sup>th</sup> April, Montevideo, Uruguay.

The meeting had 130 participants from different countries: Argentina, Brazil, Canada, Colombia, Chile, Germany, Israel, Mexico, Peru, Portugal, Puerto Rico, Uruguay and USA. The exciting program included 7 plenary lectures, 10 keynote lectures and 19 invited lectures given by renowned researchers from all over the world, and particularly from Latin America. Latin American women in Science were represented by two plenary lecturers with vast and inspiring research carriers: Ana Maria Da Costa Ferreira (USP, Brazil) and Lena Ruiz Azuara (UNAM, Mexico). Thanks to the online development of the event and the SBIC support, a high number of students from different countries were able to show results of their own research work on Biological Inorganic Chemistry (21 students' oral presentations and 52 poster presentations). Although in person meetings allow better discussion and scientific exchange, in this case virtual modality offered Latin American students and researchers the opportunity of participating overcoming funding constraints.

The next LABIC meeting, VIII LABIC, will be held in Viña del Mar, Chile, in November 2022.

Dinorah Gambino Chair of VII LABIC



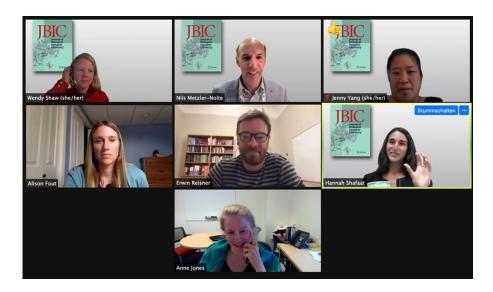
# JBIC Symposia

In spring 2021, a new seminar series was introduced under the brand name "JBIC Symposia". The JBIC Symposia cover recent, hot topics in Bioinorganic Chemistry in a focused, online-only format, presented by leading researchers in the field.

The opening symposium entitled "Artificial metallocatalysis towards *in vivo* applications" featured six presentations that discussed the challenges and opportunities of designing new-to-nature catalysis in living cells. Packed into concise 15-minute presentations, our speakers showed the production of value-added chemicals from microorganisms, the complete re-programming of microbes as "chemical factories", the in situ activation of drugs, and several more. Speakers were Woon Ju Song (Seoul National University), Tom Ward (Basel), Clemens Mayer (Groningen), Cathleen Zeymer (TU Munich), José Mascarenas (Santiago de Compostela), and Asier Unciti-Broceta (Edinburgh). Many (though not all) presentations dealt with organometallic chemistry and catalysis by organometallics in natural systems, and the JBIC Symposium thus nicely aligned to the first day of the *International Symposium on Bioorganometallic Chemistry* (ISBOMC) seminar series, organized by Ingo Ott from Braunschweig, that was held the day before.

The second JBIC Symposium covered "Energy Conversion inspired by Bioinorganic Chemistry", and was kindly co-hosted by Wendy Shaw from Pacific Northwest National Laboratory (Richland, Washington, USA). A

spectacular line-up of speakers included Hannah Shafaat (Ohio State Univ.), Jenny Yang (UC Irvine), Alison Fout (Univ. of Illionis), Anne Jones (Arizona State Univ.), and Erwin Reisner (Cambridge, UK). Topics ranged from primordial energy conversion and small molecule conversions and energy storage, artificial photosynthesis all through to microbial nanowires, showcasing how some of the most pressing questions related to saving our planet are deeply rooted in Bioinorganic Chemistry. A third symposium on nanomaterials for applications in Bioinorganic Chemistry is planned for (late) autumn, and we will also work with speakers and participants to develop these symposia into JBIC Special Issues.



Reflecting back, the responses to the symposia were overwhelming with ca. 300 registrations each and around 220 / 160 participants actually watching the presentations. The online format also included more personal discussions with the speakers in individual breakout rooms after the talks, and a private "speakers' function" with drinks & food afterwards to reflect on the symposia (see screenshot taken after the second symposium). As the organizer, I am immensely grateful to all participants, of course our speakers, and everyone else who gave useful input, suggestions, and helped making these two inaugural editions of *JBIC Symposia* a success. Erwin Reisner, Thomas Ward, and most importantly Wendy Shaw were an enormous help to shape the format and set the quality to the highest possible standard.

Nils Metzler-Nolte

JBIC Editor

# **JBIC Cover Competition**

Do you want to see your work featured on the cover of JBIC, our Society's official publication? It's easy, and unlike most other journals, cover art for JBIC is free of charge to authors! JBIC will accept suggestions for cover art from any authors who publish an article in JBIC in 2021 - the only condition being that you are a member of SBIC. If chosen, your artwork will be shown as cover on all eight issues of JBIC 2022. You may submit your suggestion at any time during the year, e.g. after acceptance of your article, or later. The editorial team will make the decision towards the end of the calendar year and the production team will work with the author to optimize the artwork for production. Please contact <a href="mailto:JBIC-EiC@rub.de">JBIC-EiC@rub.de</a> for details, and we look forward to your suggestions for our 2022 JBIC cover!



## Journal of Biological Inorganic Chemistry (JBIC) Highlights

JBIC is the well-reputed journal of our society. Nils Metzler-Nolte is the Editor-in-Chief and in this role serves as a member of the SBIC Council. Nils always welcomes manuscripts with high impact results for publication in our journal. By submission of impactful articles to JBIC you demonstrate your active support of SBIC, our global learned society, regardless of whether you are a member of SBIC or not!

Here are some of the paper highlights recently published in JBIC and their full text is available free of charge for the next months. These articles have been selected by the journal Editor-in-Chief for their exceptional interest to members of the biological inorganic chemistry scientific community.

Miles S. Capper, Alejandra Enriquez Garcia, Nicolas Macia, Barry Lai, Jian-Bin Lin, Masaharu Nomura, Amir Alihosseinzadeh, Sathish Ponnurangam, Belinda Heyne, Carrie S. Shemanko, Farideh Jalilehvand

Cytotoxicity, cellular localization and photophysical properties of Re(I) tricarbonyl complexes bound to cysteine and its derivatives

JBIC J. Biol. Inorg. Chem. 25, 759-776 (2020)

The intracellular fate of the Re tricarbonyl fragment is investigated by a host of different methods in the paper from Jalilehvand's group.

Nipa Chongdar, Krzysztof Pawlak, Olaf Rüdiger, Edward J. Reijerse, Patricia Rodríguez-Maciá, Wolfgang Lubitz, James A. Birrell, Hideaki Ogata

Spectroscopic and biochemical insight into an electron-bifurcating [FeFe] hydrogenase

JBIC J. Biol. Inorg. Chem. 25, 135-149 (2020)

The biochemical and spectroscopic characterization of a very special electron-bifurcating [FeFe] hydrogenase elucidated in a German-Japanese collaboration.

# For your diary: Upcoming conferences supported by SBIC

- 12<sup>th</sup> International Copper Meeting, Sorrento, September 19-24, 2021.
- The International Symposium on Bioorganometallic Chemistry 2021 (ISBOMC21) in Braunschweig was postponed to 2023 and has been replaced by three ISBOMC webinars, the last of which being held on October 13, 2021 (<a href="https://www.tu-braunschweig.de/en/pharmchem/isbomc21">https://www.tu-braunschweig.de/en/pharmchem/isbomc21</a>)
- 2021 Gordon Research Conference Cell Biology of Metals GRC: <a href="https://www.grc.org/cell-biology-of-metals-conference/2021/">https://www.grc.org/cell-biology-of-metals-conference/2021/</a> and 2021 Gordon Research Symposium Cell Biology of Metals GRS: <a href="https://www.grc.org/cell-biology-of-metals-grs-conference/2021/">https://www.grc.org/cell-biology-of-metals-grs-conference/2021/</a>, October 17-22, 2021

- 2022 Gordon Research Conference Metals in Biology (<a href="https://www.grc.org/metals-in-biology-conference/2020/">https://www.grc.org/metals-in-biology-conference/2020/</a>)
- 2022 Gordon Research Conference The Roles of Tetrapyrroles in Catalysis, Regulation, Metabolism and Disease (<a href="https://www.grc.org/chemistry-and-biology-of-tetrapyrroles-conference/2020/">https://www.grc.org/chemistry-and-biology-of-tetrapyrroles-conference/2020/</a>)
- GRC Metals in Medicine, June 26–July 1, 2022, Proctor Academy, NH (<a href="https://www.grc.org/metals-in-medicine-conference/2022/">https://www.grc.org/metals-in-medicine-conference/2022/</a>)
- International Conference on Metal-binding Peptides, July 5 8, 2022, Nancy, France
- EuroBIC, July 17-21th, 2022, Grenoble, France
- LABIC-8, Chile, November 2022
- AsBIC 10, November 28-December 3, 2022, Kobe, Japan
- ICBIC 20, July 16–21, 2023, Adelaide, Australia (www.icbic2023.org)

## Call for applications for conference support

SBIC financially supports international meetings on subjects related to Biological Inorganic Chemistry organized by members of our society. At many of these conferences, SBIC members will pay special, discounted registration fees and students and early career members may be eligible for travel awards.

In order to be eligible for conference support, the conference organizers need to be SBIC members. Applications need to be sent to the SBIC Treasurer <a href="Charles G. Riordan">Charles G. Riordan</a>. Please include a detailed conference program. Diversity in gender, age, race, ethnicity, geography and research topics covering a broad range of biological inorganic chemistry is a prerequisite to obtain SBIC funding. Adequate representation from underrepresented groups, including women for Plenary and Keynote lectures in particular, and the program in general, must be demonstrated. A maximum of 2,000 US\$ (conferences) or 3,000 US\$ for student workshops will be granted to non-BIC conferences. All SBIC financial support is exclusively given out as SBIC travel bursaries to be awarded to young researchers (PhD students and postdocs), being SBIC members, and the financial support by SBIC must be acknowledged.

For ICBIC, AsBIC, EuroBIC and LaBIC, special funding rules apply. Please contact the SBIC Treasurer Charles G. Riordan for details.

National meetings and those organized by national chemical societies are not eligible for SBIC support, including Pacifichem Symposia.

**DEADLINES for applications**: March 1 and October 1 each year.

# Stay in touch with SBIC: Follow us on our Social Media channels!

You have been included in this mailing list as a current member of the society or because you have attended a conference of the BIC series (ICBIC, EuroBIC, AsBIC, LABIC). If you would prefer not to receive this information, please let us know and we will remove your email address from the distribution list. If you would like to receive the latest SBIC news on your social media feeds, like us on Facebook <a href="https://www.facebook.com/officialSBIC/">https://www.facebook.com/officialSBIC/</a>, or follow us on Twitter <a href="https://twitter.com/sbicofficial/">https://twitter.com/sbicofficial/</a>. If you would like to advertise your events or anything biological inorganic chemistry-related, please email Christian Hartinger with all the relevant information.

