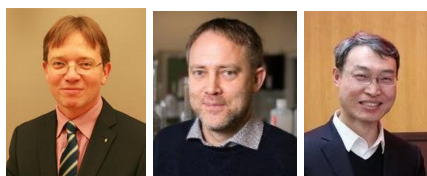


Selenium Research

International Society for Selenium Research

Issue 7, 2020

President's Remarks



Dear fellow researchers, scientists and friends of Selenium!

At the end of this year, we look back and shake our heads in disbelief. A worldwide pandemic has struck, to an extent we only knew from a particular genre of films in the movie theatres, where a gentle sense of horror developed and moved us deeply for a short period of time. Now, this horror has become real, we have to observe losses and to face an unprecedented challenge ahead of us. As a team, we nevertheless have to take it as it is, and to convert it into a positive opportunity, as far as possible. At least for science and technology, we witness an increasing appreciation and acceptance in the majority of the population, and more and more political decisions are becoming based and explained by scientific insights, facts and projections. However, here and now, it is not the place for intensive political discussion, but for us and our society.

May we start this newsletter expressing our sincere appreciation and gratitude to two important figures of our International Society for Selenium Research (ISSR) - two colleagues who shaped our society, the appearance in public and our financial backbone, without whom the ISSR would not have flourished as it did. Both have served our society since the very first days as President and Treasurer, respectively. The idea for our ISSR was born during the 2nd International Conference on Selenium in the Environment and Human Health (ICSEHH), which was held in Suzhou, China, during 23-28 October 2011. It was a wonderful come together, and many of us had the honor to attend and to learn the broad, fascinating and enjoyable facets of this type of meeting. We realized that having a group comprised of inspiring and charming colleagues who all are interested in selenium was the excellent opportunity to form a long-lasting and stable selenium research society. The years went by, our

society grew and its council worked diligently, efficiently, and successfully to keeping it alive and kicking.

According to our bylaws, the time came to elect some new officers at the end of 2019. The election results are found later in text where all new and continuing delegates are introducing themselves. For our part, as newly elected President and Vice Presidents, we now have the honor, duty and sweet burden to steer our society and help to develop it further. One of our first and very pleasant duties was decided on during a fast online discussion with an unanimous vote among the new council members in 2020, concerning the offering of honorary membership and a token of appreciation to the two colleagues mentioned above. Accordingly, we would hereby now like to appoint and proclaim the following two fellows to becoming our first lifelong *Honorary Members of the International Society for Selenium Research*. Both will receive as symbol of our appreciation the moon-colored Silver Medal of Selenium, to be presented to *Dr. Gary Banuelos* and *Dr. Zhi-Qing Lin* at our next convention, hopefully in 2022 in Berlin, Germany. In case we will not be able to meet in person, depending on the further development of the pandemic, we will organize a meeting in a hybrid form where local sub-divisions meet in person and the full society in virtual seminars, lectures and discussion rooms. It will for sure dampen some of our vibrant, controversial and most entertaining never-ending face-to-face discussions and interactions, but challenges are to be mastered and they offer a chance for new and delightful developments. Luckily, we do not yet have to decide on our next meeting, but we will do so in summer 2021, when a better global picture on the epidemiology, prevention and vaccination strategies and success is at hand. As additional information, *the 12th International Symposium on Selenium in Biology and Medicine* initially scheduled for early 2021 in Hawaii has been re-scheduled to December 1-5, 2021, but again, hard to predict whether it will be face-to-face.

The next pleasant duty refers to a very bright, most sincere and highly deserved Thank You to *Professor Dongli Liang* and her team for organizing a fantastic, smoothly running and most enjoyable *6th International Conference on Selenium in the Environment and Human Health*, which took place on October 27-30, 2019 in Yangling/Xi'an, China.

Words from Former President

It was another great event in the history of our society, and more information and conference photos can be found in this newsletter and also on the conference website. The time and place for this event was chosen wisely and fortunate, ahead of the problems that should throw a shadow on our planned 2020 activities. The conference was characterized again by a sense and quest for fruitful interactions, collaborations and exchange, the key ingredients needed for successful meetings. A large number of young, helpful and highly motivated local students with an obvious thirst for deeper knowledge of Se and its biological and medical roles was again patiently guiding the foreigners through the area and the meeting. Their humble but efficient taking care of the ordinary and extraordinary technical and personal challenges was rejuvenating the conference events, and reminded us again on a prime mission of our ISSR, i.e., the education, support and care for our future generation of young scientists.



Student volunteers at the 6th International Conference on Selenium in the Environment and Human Health, which took place on October 27-30, 2019 in Yangling/Xi'an, China, with Conference Chair Professor Dongli Liang.

In reference to the younger generation of scientists, we are still too quiet about reporting on their importance on our website and other social media channels. Ideas for including additional content on them and their activities are highly welcome! Please do send them directly to one of the members of the council of the ISSR. With these positive reflections and perspectives, we will end this presidential note here – but not without thanking you all for your support, encouraging you to contribute further ideas and activities to the ISSR, and with wishing you all the best, good luck and robust health, for the days and months ahead. May we be able to having our next meeting in person soon again. Please stay positive, happy, avoid unnecessary risks and choose your diet wisely (which supports your Se status as one of the central guardians of your well-being).

With warmest greetings and best wishes from Berlin, Ghent, and Suzhou.

Sincerely yours,

*Lutz Schomburg, President (Germany)
Gijs Du Laing, Vice President (Belgium)
Xuebin Yin, Vice President (China)*

Dear Se Community,

It has been over a year since we have made contact with each other- seems so long ago. In our previous days, we were able to speak and laugh with each other; now we must zoom together. Life has changed and we have been forced to change. We must now transform ourselves into more creative and flexible scientists to somehow continue our international exchanges on the many faces of selenium. The uncontrollable power of the virus and its strength to exert its will upon us, has been unwelcomed throughout the world. Eventually, the virus will be managed and we will find ourselves in a newly- formed normality. Once this transformation gradually and hopefully occurs, we will again begin thinking about non-virus topics that are important to us, including our selenium society. We will begin pondering the thoughts “Who is the new president?” “When and where will the next selenium conference take place?” “Will it be a virtual conference?”

Our society is only as good as what we individually put into it. We as a society elected a new President Professor Lutz Schomburg. Our newly elected officers and council members have occupied their new positions and their visions, dreams, and thoughts are in the making. They will now have a chance to stimulate growth, diversity, interaction, and excitement for our growing society. I will of course remain as a consulting voice, remain as council member, and support the new President in any way that is useful for him and beneficial for our society. With member support and under the new leadership of Professor Schomburg, we will continue having the opportunity to interact with each other in enhancing our understanding on the many faces of selenium. We will gradually grow stronger and again become a society that promotes interaction within our selenium community. Exciting days lie ahead, and I am very excited to continue to be a part of our new growing society.

The future selenium conference for 2022 in Berlin Germany will be planned under the leadership of conference organizers Professor Lutz Schomburg and Professor Lenny Winkel as well as co-organizers Professor Zhi-Qing Lin and myself. Along with changes imposed upon us by the virus, we as a selenium society have also made changes, and its quality and growth lies within all of you. As I once said at our conferences - “Long live Selena and live long with Selena”.

*Gary S. Banuelos
Parlier, California*



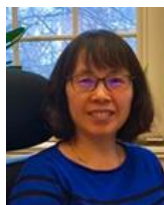
Elected ISSR Council Members and Officers for the term of 2020-2022



Elias Arner, *Council Member*
Karolinska Institutet, Sweden
<https://staff.ki.se/people/eliarn>



Gary S. Banelos, *Council Member*
USDA-ARS, USA
<https://www.ars.usda.gov/pacific-west-area/parlier/sjvasc/wmr/people/gary-banelos/>



Li Li, *Council Member*
USDA-ARS, USA
<https://www.ars.usda.gov/northeast-area/ithaca-ny/robert-w-holley-center-for-agriculture-health/plant-soil-and-nutrition-research/people/li-li/>



David Hughes, *Council Member*
University College Dublin, Ireland
<https://people.ucd.ie/david.hughes>



Lenny Winkel, *Council Member*
ETH Zurich, Switzerland
<https://usys.ethz.ch/en/people/profile.lenny-winkel.html>



Linxi Yuan, *Council Member*
Xi'an Jiaotong-Liverpool University, China
<https://www.xjtlu.edu.cn/en/departments/academic-departments/health-and-environmental-sciences/staff/linxi-yuan>



Lutz Schomburg, *President*
Charité Universitätsmedizin Berlin,
Germany
https://www.researchgate.net/profile/Lutz_Schomburg



Gijs Du Laing, *Vice President*
Ghent University, Belgium
https://www.researchgate.net/profile/Gijs_Du_Laing



Xuebin Yin, *Vice President*
University of Science & Technology
of China, China
<https://www.researchgate.net/scientific-contributions/Xuebin-Yin-39902850>



Graham Lyons, *Treasurer*
The University of Adelaide, Australia
<https://www.adelaide.edu.au/directory/graham.lyons>



Zhi-Qing Lin, *Secretary*
Southern Illinois University -
Edwardsville, USA
<https://www.siu.edu/~zhlin>



How to Become a Member?

Membership is open to all who are interested in fostering the expansion of communication and scientific exchange of new and emerging concepts centered within the multi-disciplines associated with current and future worldwide selenium research efforts. The membership will include regular, student and honorary members. A regular member has the right to elect, or to be elected, as an officer of the ISSR. To join the ISSR, individuals will need to complete the membership application form. The membership due for a

regular member is \$50 (USD) for a two-year membership, and \$20 (USD) for a student member. For a lifelong membership the membership due is \$300 (USD).

How to Pay Your Membership Fee?

The membership due of \$50 (for a regular member for two years), \$20 (for a student member for two years), or \$300 (for lifelong membership) can be paid via the following approaches: (i) The payment can be made in cash at the selenium conference; (ii) The fund can be transferred through Western Union or other companies with money transfer service; or (iii) Remitting the payment in the form of a cashier's check, certified check, or money order payable to: *International Society for Selenium Research*. A personal check in US currency will also be acceptable. Please send your check or fund transfer notice to: Dr. Zhi-Qing Lin, Department of Environmental Sciences, 2165 Science West, Southern Illinois University, Edwardsville, Illinois 62026-1099, USA; Tel.: 1-618-650-2650; Email: zhlin@siue.edu.

Congratulations to the Successful 6th International Conference on Selenium in the Environment and Human Health

October 27-30, 2019, Northwest A&F University, Yangling/Xian, China

The 6th International Conference on Selenium in the Environment and Human Health was successfully held at Northwest A&F University in Yangling/Xi'an, China on October 27-30, 2019. Over 240 selenium researchers, government officials, and enterprise representatives from 20 countries participated in this conference. There were more than 140 extended abstracts submitted to the conference for consideration, and 103 extended abstracts were selected, after peer reviews, for publication in the conference proceedings entitled "*Selenium Research for Environment and Human Health: Perspectives, Technologies and Advancements*" published by CRC press.

A total of 46 oral presentations were scheduled, along with 36 research posters, during the 3-day conference time. The research topics included biogeochemistry of selenium,

effects of selenium on animal and human health, biological uptake and accumulation of selenium, selenium biofortification, cellular and molecular functions of selenium, and selenium pollution and control. Both oral and poster presentations reflected the latest progress in selenium research worldwide. Indeed, this conference provided an effective platform for selenium researchers to conduct in-depth discussions and exchanges around the theme of "selenium's multi-faceted and interactive impact on the environment and biological systems". For the very first time under the leadership of *Dr. Linxi Yuan*, the conference has also organized a special session - *Graduate Selenium Research* for nearly 60 graduate students. The special session included 12 student oral presentations. The conference has also selected the students for the best poster awards and the best oral presentation awards.



The 6th International Conference on Selenium in the Environment and Human Health was successfully held on October 27-30, 2019 at Northwest A&F University in Yangling/Xi'an, China.

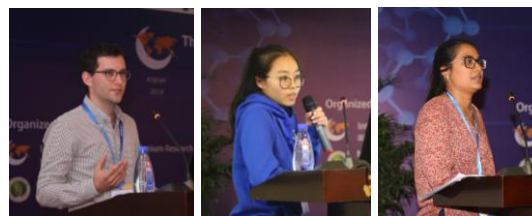
(Dongli Liang, Northwest A&F University, China)



STUDENT AWARDS

During the 6th International Conference on Selenium in the Environment and Human Health in Yangling/Xi'an, China, a special session of student oral presentation was organized by Dr. Linxi Yuan, Associate Professor at Xi'an Jiaotong-Liverpool University in Suzhou, China. The special student session was held on 19:00-22:00 of October 28, 2019. Six faculty served as judge for the Student Presentation Award, including Dr. Joel Caton from North Dakota State University, Dr. Huaifen Li from China Agriculture University, Dr. Tao Yu from China Geoscience University (Beijing), Dr. Xiaohu Zhao from Huazhong Agriculture University, Dr. Haibo Qin from Institute of Geochemistry, Chinese Academy of Sciences, and Dr. Julie Tolu from Swiss Federal Institute of Aquatic Science and Technology in Sweden.

There were 12 oral presentations by graduate students, and three students were selected to win *the Best Oral Presentation Award*: **Aryeh Feinberg**, Swiss Federal Institute of Aquatic Science and Technology, "Modelling Atmospheric Selenium Transport and Deposition on a Global Scale"; **Jun Li**, Ghent University, "Exploration of Selenium-Rich Bioproducts Generated from (Waste) Water as Micronutrient Fertilizers"; **Chandnee Ramkissoon**, University of Nottingham, "Effect of Soil Properties and Contact Time on Selenium Transfer to Wheat".



(left to right: A. Feinberg, J. Li, C. Ramkissoon)

During the conference there were 52 poster presentations, and three student presenters were selected by the judge committee to receive *the Best Student Poster Presentation Award*: **Qing Cheng**, Huazhong Agriculture University, "Selenium Protects Oilseed Rape against *Sclerotinia sclerotiorum* Attack"; **Min Wang**, Northwest A&F University, "Effects of Soil Selenate and Selenite on Selenium Uptake and Speciation in Wheat"; **Jiao Li**, Northwest A&F University, "Inoculation of AM Fungi Enhanced Rhizosphere Soil Selenium Bioavailability of Winter Wheat".



(left to right: Q. Cheng, M. Wang, J. Li)

(Linxi Yuan, Xi'an Jiaotong-Liverpool University, China)



12th International Symposium on Selenium in Biology and Medicine

After some rescheduling and adjusting of plans, *the 12th International Symposium on Selenium in Biology and Medicine* is back on! This important conference will be held at the Hilton Hawaiian Village in Honolulu, Hawaii from December 1-5, 2021.

The Organizing Committee will be putting together an exciting scientific program featuring 6 plenary speakers, dozens of short talks in a wide variety of scientific fields involving selenium, and 3 days of poster sessions featuring cutting-edge research. There will be many opportunities to exchange ideas and discuss your selenium-based research with colleagues, including a 3-hour dinner cruise off the Waikiki coast!

We hope that you will be able to join us in beautiful Hawaii for this much needed chance to reconnect with fellow selenophiles. Information regarding registration, abstract submission, and accommodations will be forthcoming on the conference website: <https://se2021.jabsom.hawaii.edu>. Mahalo and Aloha!

(Peter Hoffmann, University of Hawaii, USA)



Season's Greetings and Best Wishes for 2021

Editors: Lutz Schomburg, Zhi-Qing Lin & Gary S. Banuelos

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