

# Conference Report

## PBA 2024

34<sup>th</sup> International Symposium on Pharmaceutical and Biomedical Analysis (PBA 2024)

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The PBA (Pharmaceutical and Biomedical Analysis) series started in Spain in 1987 and, since then, has been organized every year in different countries in Europe and also in North America and Asia. One of the main objectives of the Symposium is to provide a forum for high-level scientific exchange between analytical scientists from around the world in a friendly atmosphere. PBA is one of the most important events for pharmaceutical and biomedical analysis, including new analytical technologies and methods for active chemical compounds, (bio)pharmaceuticals, biomarkers, and ‘omics’.

The emphasis on new analytical technologies useful for the entire chemistry community has often highlighted the importance of staying at the forefront of innovation with this meeting. Continuous advancements in analytical techniques are generally presented to contribute to the development of more sensitive, specific, and efficient methods. Moreover, the multidisciplinary nature of the symposium fostered collaboration among researchers from various fields. The 34<sup>th</sup> International Symposium on Pharmaceutical and Biomedical Analysis (PBA 2024), was held on September 9–12, 2024 in Geneva, Switzerland, at UniMail (University of Geneva).



Fig. 1. A view of the opening ceremony at UniMail.

The planned PBA 2024 format was designed to fulfill the aims and objectives of the event in various ways. The symposium started with highly informative workshops conducted by recognized experts in their field, offering additional learning opportunities for participants. More than 80 attendees were present for half-day and full-day sessions, tailored to deepen their understanding and enhance skills in several crucial areas of study. Numerous colleagues from industry, young talents, post-docs and PhD students were registered to explore hands-on workshops dedicated

to simulation tools for education, Q2R2 - Q14 methodologies, and the methodological aspects related to the analysis of new therapeutics (oligonucleotides, bio-pharmaceuticals).

During the symposium, internationally renowned experts delivered plenary lectures, providing insights into innovative topics in pharmaceutical and biomedical analysis. Our outstanding plenary speakers included *Hugo Dumimil-Copin* from the University of Geneva, recipient of the 2022 Fields Medal. We were also privileged to hear some of the brightest minds in our field, including *Koen Sandra* from Ghent, *Gert Desmet* from Brussels (Belgium), *Coral Barbas* from Madrid (Spain), *Valérie Pichon* from Paris (France) and *Michal Holčapek* from Pardubice (Czech Republic). The symposium was divided into 16 sessions, ensuring the coverage of a diverse range of topics and research areas. These included: Sample Preparation and Spectroscopy; Miniaturized Approaches; Natural Products; Peptides; Clinical Analysis; Biomarkers and Diagnosis; Capillary Electrophoresis; Chiral Analysis; Computational approaches; ICH; QBD and regulatory aspects; Biopharmaceuticals and Therapeutics; and Technological Advances. Each session was introduced by a key-note speaker and their contributions have enriched our symposium and inspired us all. From *Jingwu Kang* (Shanghai, China) to *Kenji Hamase* (Kyoto, Japan) including *Myriam Taverna* (Paris, France), *Michal Markuszewski* (Gdansk, Poland), *Tim Causon* (Vienna, Austria), and others, each of them brought unique insights and broadened our perspectives on the future of pharmaceutical and biomedical analysis. During these 16 sessions, 48 oral communications were given. This year's edition has been marked by significant advancements in key areas such as the analysis of new therapeutic agents, bioinformatics, and omic techniques. We have been fortunate to welcome rising stars, and we believe these interdisciplinary exchanges were a powerful catalyst for future collaborations.

More than 100 posters were presented allowing a larger number of participants to share their research with a live audience. A significant percentage of participants came from Switzerland and this presence helped to raise the profile of research carried out by different Swiss laboratories, particularly during the presentations. It also enabled strong links to be forged and collaborations to be initiated not only with numerous European colleagues, but also with scientific groups from Japan, China and the USA.

We also had the opportunity to celebrate the work of emerging talents. The award session was a testament to the bright future of our field. Several awards were delivered with the support of scientific partners, societies and/or sponsors. Posters have played an essential role in fostering interaction, and we were grateful to our jury members for their time and dedication in selecting the winners. Forty two posters participated in this year's competition, with 10 being shortlisted, and 4 receiving special recognition with the Three-Minute Poster Pitch Sessions which facilitated concise presentations, encouraging interdisciplinary discussions and providing oral presentation experience, especially for early career researchers. Another special session dedicated to young researchers offered them a platform to highlight their work, encouraging their active participation for a prize of CHF 300 for the Best Young Scientist Short Oral Communication Prize. It was an ideal opportunity for postgraduate students to present their

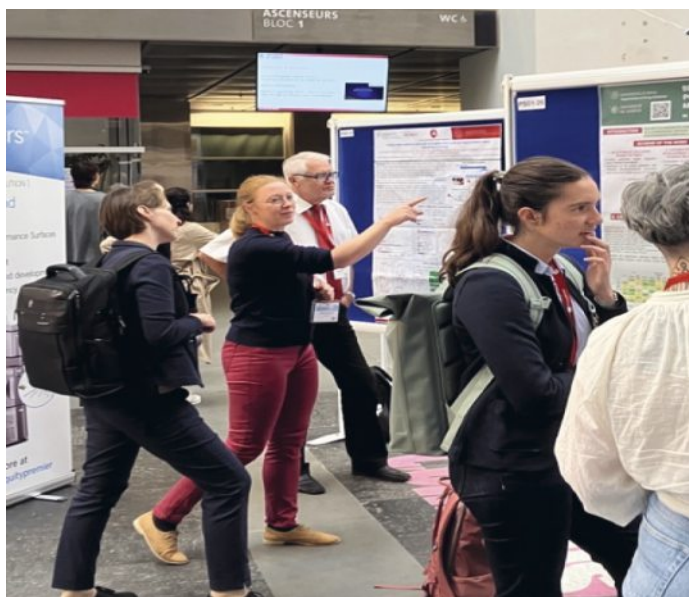


Fig. 2. Poster Pitch and sessions at PBA2024.

work in a friendly, but specialized environment. These young colleagues have demonstrated remarkable scientific rigor and enthusiasm. Their presentations and posters sparked vibrant discussions, and senior scientists were excited to see how their work could shape the future of analytical technologies and pharmaceutical sciences. For the first time, a Women in Analytics Award was also delivered, sponsoring a scientific career development project for women holding a doctorate. The jury panel consisted of 16 women scientists from 9 different countries. The selection criteria for this prize were 1) a project in line with the applicant's present career achievements and envisioned career path and 2) a clear link of the applicant to analytical sciences. The prize of CHF 4000 was awarded **Guizhen LIU** (Germany).

The local organizing committee is convinced that PBA 2024 has accelerated the transfer of knowledge in our community and the establishment of many new collaborations. We must acknowledge also volunteers who have worked tirelessly to make this event a success. Without their dedication, none of this would have been possible.



Fig. 3. Part of the team of volunteers at the lunchbreak.

Many sponsoring exhibitors have placed their trust in us for this edition of PBA 2024, and thanks to their supports, numerous social activities were achieved, including lunches, welcome cocktail, coffee breaks, guided tours of the city of Geneva during the conference, and congress dinner, which have all contributed to the creation of a friendly atmosphere for participants to share, discuss, and exchange ideas. An excursion to Chamonix after the event was part of the activities proposed to stimulate interactions between participants.



Fig. 4. Conference Dinner with a nice and friendly atmosphere.

To summarize, thanks to the support of the Swiss Chemical Society (SCS) the PBA 2024 meeting was a success not only in terms of the quality and content of the presentations, but also because it has fostered stimulating exchanges, new collaborations and significant scientific advances. This year's edition has been marked by significant advancements in key areas such as the analysis of new therapeutic agents, bioinformatics, and 'omics' approaches with interdisciplinary exchanges as a powerful catalyst for future collaborations between analytical scientists. Photo Credits: Prof. Serge Rudaz.

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