



Schweizerische Gesellschaft für Kristallographie
Société Suisse de Cristallographie
Società Svizzera di Cristallografia
Swiss Society for Crystallography

Sektion für Kristallwachstum und Kristalltechnologie
Section de Croissance et Technologie des Cristaux

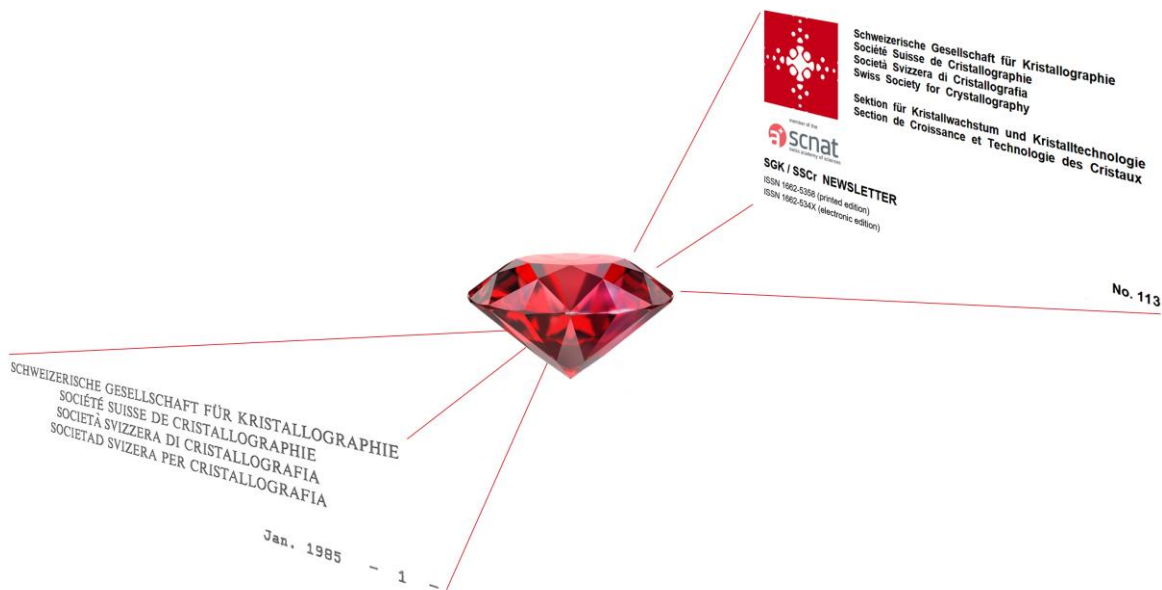


SGK / SSCr NEWSLETTER

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The President's Page



It is with feelings of honour and privilege that I write my first letter as President to you, the members of our Society. Thank you for putting your trust in me to lead the Society for the next three years. During my four years on the board, I have experienced firsthand the high standing and reputation the SSCr holds, both nationally and internationally. For example, whenever we invite speakers or sponsors for the Flack lectures, workshops and annual meetings, or even judges for the PhD prizes, the responses are not only always positive but surprisingly enthusiastic. It is not simply a result of the SSCr's rich history but stems from its forward-looking and vibrant current activities which is reflected in the great working atmosphere in the board.

And thus, I must immediately and sincerely thank my predecessor Pascal Schouwink. Pascal brought so many new ideas into the Society, investing an enormous amount of time to bring these ideas to life. The topical workshop introduced in 2023, and now always held on the day preceding the Annual Meeting, is an excellent example of one of Pascal's new initiatives. The first two events had student turnouts and engagement exceeding our expectations and capacities. Hence, I see my term in office more as an opportunity to consolidate and build on the new activities, in close collaboration with Pascal and the other members of the board.

The feedback to our new workshops highlights a problem in the Swiss academic landscape. Many of the methods and (scattering) techniques that lie at the heart of crystallography are no longer taught at universities, neither at undergraduate nor graduate levels. Yet, Master and PhD students need these techniques for their research projects and theses but have little structured guidance. The SSCr can at least attempt to fill this gap in the coming years. We have started internal discussions on this issue, which we want to continue with all of you at our upcoming meetings.

In a related challenge, crystallography has unfortunately become associated mostly with useful scattering techniques for materials characterisation rather than being recognised as a scientific field in its own right which is at the basis of the development of these techniques. The SSCr can contribute to a shift in perspective and revival of crystallography as a science by organising teaching, education and outreach events across Swiss institutions.

In this spirit, we are looking forward to the Society's highlights in 2025:

"Materials Discovery": the Annual Meeting in Lausanne on September 10

"Computational Methods in Crystallography": the topical workshop on the day before (September 9), jointly organised with CECAM (Centre Européen de Calcul Atomique et Moléculaire)

“Mineral Evolution”: the Howard Flack Lecture series by Professor Bob Hazen, Carnegie Science (Washington, D.C.), at five Swiss institutions starting November 10

“A Practical Introduction to Synchrotron Experiments”: workshop organised by the SSCr as a satellite of the ECM35 in Poznan in August.

I am looking forward to seeing many of you at these diverse events throughout the year!

Simon Grabowsky

Reports on Activities 2024

Report of the Annual Meeting of the SSCr 2024

By Alessandro Prescimone



The annual Meeting of the Swiss Society for Crystallography took place in Basel on the 12th of September. The event had been organized by Dr. Alessandro Prescimone from the University of Basel. More than 80 participants, mainly from Switzerland, but also from the neighbouring countries as well as UK, Morocco and the Netherlands attended the meeting. The three invited speakers Dr. Birger Dittrich from Novartis AG, Basel; Dr. Peter Wood from CCDC, Cambridge and Prof. Simon Parsons from the University of Edinburgh all gave fascinating talks, whose topics covered various aspects around the main theme of polymorphism. Additional 6 speakers gave great insights into the fields of applied, biological and chemical crystallography. An exhibition by seven, renowned companies and tour of the electron diffractometers of the company Eldico gave the participants the opportunity to discover the latest commercial developments in crystallography and adjacent areas.



Report on the workshop “Tips and Tricks for the Crystal Growth of Inorganic Materials”

By Enrico Giannini, SSCr board, Section of Crystal Growth and Technology

on behalf of the Organizing Committee:

Monica Ciomaga Hatnean, ETH Zürich and PSI-Villigen, Chair; Ekaterina Pomjakushina, PSI-Villigen; Dariusz Gavrilluk, PSI-Villigen; Enrico Giannini, University of Geneva



In August 2024, the two-day workshop on “Tips and Tricks for the Crystal Growth of Inorganic Materials” was organised at PSI with the support of the Swiss Society for Crystallography, Section for Crystal Growth and Technology. The scope of the workshop was to discuss and share the details of various crystal growth methods and technologies, in a more technical and topical way than usually presented at large conferences on crystal growth. This was also the occasion to attract to Switzerland a panel of renowned specialists in this field, and favour an interaction between the Swiss researchers and the international community, with a particular benefit for the Swiss students and young scientists.

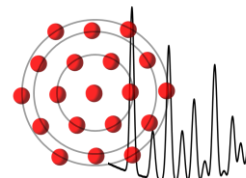
Thanks to the valuable financial support of the SSCr and the other partners (the Paul Scherrer Institute, the Swiss National Science Foundation, the MaNEP Network and the Swiss Society for Neutron Scattering) participation in the workshop has remained free of charge, which has favoured the attendance of young scientists and students. The event gathered about 70 scientists from nine European countries. Six experts were invited to open the six sessions dedicated to the various growth techniques. Christo Gugushev (IKZ-Berlin) opened with a keynote lecture on the bulk growth of oxide substrate materials and how the Edge-Defined Film-Fed Growth can be advantageous over the more conventional Czochralski pulling and Top-Seeded Solution Growth methods. Karl Krämer (University of Bern) gave a tutorial lecture on the Bridgman growth method and reported about the successful use of this technique in growing Rare-Earth halides. The Floating-Zone (FZ) growth method was reviewed by Geetha Balakrishnan (University of Warwick), who disclosed the secrets of crystal growth of refractory borides and silicides at very high temperature. A modification of the FZ technique to operate at high pressure (~10 MPa range) was successfully used for

growing the new family of high-temperature superconducting Rare-Earth nickelates, as reported by Pascal Puphal (Max Planck Institute, Stuttgart) in his keynote lecture. The beauty and power of the vapour transport growth techniques was presented by Anna Boehmer (Ruhr-Universität, Bochum), who applied it to superconducting FeSe and antiferromagnetic FeSe₂, as examples. The tricks and secrets of the growth of intermetallics from a flux (a high-T solvent) were discussed by Tomasz Klimczuk (Gdańsk University of Technology). One additional theoretical session on new materials prediction and high-throughput computation was opened by the keynote lecture of Nicola Marzari (EPF Lausanne), and led to a concluding round-table, at which a lively discussion involved a large audience. 11 contributed talks and 28 posters completed and further enriched the programme of the workshop.

More details about the programme of the workshop and the abstracts of the contributions can be found at <https://indico.psi.ch/event/15694/>.

Report on the SSCr Workshop on Pair Distribution Function (PDF) Principles and Applications 11.09.2024 Basel

By Paula Abdala, Nicola Casati and Pascal Schouwink
SSCr board



The Swiss Society for Crystallography (SSCr) successfully organized a focused workshop on Pair Distribution Function (PDF) techniques on September 11th, 2024. Hosted at the Switzerland Innovation Park Basel Area AG in Allschwil, Switzerland, the event drew approximately 40 participants and served as a valuable precursor to the SSCr Annual Meeting. The workshop was meticulously designed to introduce the fundamental principles and practical applications of total scattering and PDF analysis, with a strong emphasis on elucidating local atomic structure.

The main focus of the workshop was to provide an accessible and practical introduction to the principles and wide-ranging applications of the PDF technique. The primary audience included postgraduate students, but the event also attracted senior scientists and professors, which led to valuable exchanges between newcomers and experienced researchers. The content was designed to offer foundational knowledge while pointing participants toward resources for further in-depth analysis. The workshop was structured as a live, in-person event with interactive sessions and practical demonstrations of data processing and analysis of PDF data. A key aim was to prepare participants to begin applying PDF analysis in their own research and to point them toward resources for further study and technical support.

The workshop began at 9:00 AM with a welcome address from the SSCr. The morning program included two key presentations: Gwilherm Nénert from Malvern Panalytical discussed the concept of local order and experimental requirements for PDF analysis, while Michael Evans from Bruker demonstrated laboratory-based PDF measurements using a 2D detector. After a short coffee break, the focus shifted to demonstrations of data analysis and modeling, with Evans introducing the EVA and Topas software platforms, followed by Nénert presenting on HighScore Plus.



After lunch, the afternoon sessions highlighted the use of large-scale research facilities and cutting-edge techniques. Ann-Christin Dippel from DESY spoke on X-ray total scattering at synchrotron sources. This was followed by a presentation from Alex Hannon of ISIS, who introduced neutron-PDF for analyzing local atomic structures of glasses. Diana Piankova from ETH Zurich concluded the sequence with a talk on the challenges and opportunities associated with electron PDF (ePDF). The workshop wrapped up with a joint demonstration on analytical data modelling using PDFGui led by Dippel, Piankova, and Fernando Igoa from DESY, and was followed by closing remarks. To conclude the day, participants were invited to visit the facilities of Eldico Scientific, where they had the opportunity to see cutting-edge electron diffraction microscopes in operation.

The SSCr meeting dinner held at Restaurant ALEYDO in Basel on the evening of September 11 provided a relaxed environment for networking and informal discussions between participants and speakers.

This successful workshop underscored the increasing significance of local structure analysis methods, such as PDF, within the Swiss crystallographic and broader scientific community. By effectively introducing these powerful techniques to new researchers and promoting dialogue across different disciplines and career stages, the SSCr reaffirmed its commitment to nurturing innovation and collaboration within the field of structural science.

The SSCr board extends its sincere gratitude to Eldico Scientific for their generous support. Their contribution went beyond providing the workshop venue; they also offered an insightful visit to their state-of-the-art facilities and provided an engaging introduction to their advanced electron diffraction instrumentation.

SGK/SSCr Travel Grants 2024 - Second Semester

We congratulate Jocelyn Pradegan on receiving an SSCr travel grant in 2024

ICCC 45- Jocelyn Pradegan, University of Fribourg

July 28 – August 3 2024, Fort Collins, USA

The 45th International Conference on Coordination (ICCC 45) was held in Fort Collins, CO, USA. The conference was divided into six parallel sessions ranging from the intersection of coordination chemistry, biology and medicine to 3D-coordination networks, polymers, and organometallic compounds. Attending this conference allowed me to broaden my knowledge on coordination chemistry through the fantastic talks of experienced chemists like Professor Makoto Fujita or Professor Vincent Pecoraro. Furthermore, coffee breaks and poster sessions, where I presented my own research entitled Schiff Base heterometallic complexes, were moments of sharing and exchange with chemists from around the world. With Dr. Isabel Correia, assistant professor at the Instituto Superior Técnico (IST) and researcher at the Centro de Química Estrutural in Lisbon, whose research topic is on Schiff base, we discussed our respective research projects.

Apart from chemistry, I was able to enjoy American campus life and visit a typical bison ranch organized by the conference.

I am deeply grateful to SCNAT and SSCr for supporting my participation in this conference through a SSCr Travel Award. I had the opportunity to exchange with chemists from all over the world and came back with new ideas to continue my research.

Invited articles

40 years of newsletter

The archive of the newsletter of the Swiss Society for Crystallography is now available online!

By Enrico Giannini, SSCr board

It was January 1985 when the Swiss Society for Crystallography published the first issue of its newsletter. Eight typewritten pages that reported the minutes of the last assembly, the budget report and the composition of the board (not scientific reports yet). The first issue did not have a cover page, not even a number. The Society has already existed for 16 years, when this publication (not called newsletter yet at that time) made its appearance. Since then, the short report that we are still receiving twice a year has been the glue and the communication platform of our community.

At that time, the President of the Society was Dieter Schwarzenbach, who sadly passed away during the last year (see Newsletter #112), and Howard Flack was fulfilling as the Secretary and the Treasurer. Under the push and the guidance of these two remarkable personalities of our Society, the newsletter saw the light of day. In the early years, the newsletter was published five times per year and provided frequent updates about the epochal changes concerning crystallography: the creation of the first large diffraction facilities; the creation and publication of crystallographic databases; the increasing number of conferences and schools dedicated to crystallography. It is worth noticing that the crystallographic programs for personal computers were in their infancy in late eighties, and the newsletter was reporting and updating the advances in this field. A curious feature jumps out at the reader of the early issues of the newsletter: the articles and contributions were written in various languages (German, French and English), depending on the author and the subject!

The newsletter started soon reporting the highlights from various conferences, in particular from IUCr, and selected publications, as well as publishing a short summary of the PhD thesis, from the Swiss academy, related to crystallographic science. It was updating about the design and the construction of the beamlines dedicated to crystallography and materials science at the ESRF, SINQ and, more recently, SLS. Since the beginning, the newsletter has regularly informed our community about conferences, events and open positions around the world.

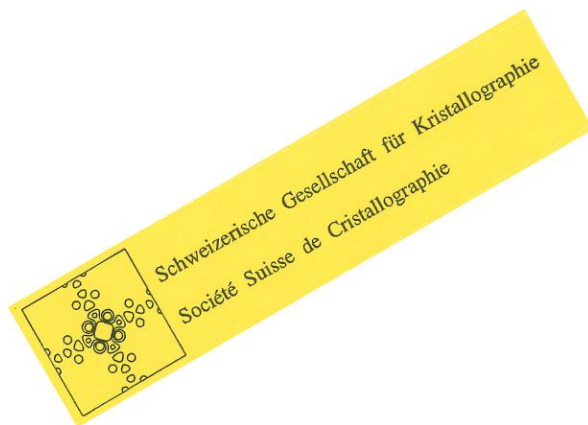
SCHWEIZERISCHE GESELLSCHAFT FÜR KRISTALLOGRAPHIE
SOCIÉTÉ SUISSE DE CRISTALLOGRAPHIE
SOCIETÀ SVIZZERA DI CRISTALLOGRAFIA
SOCIETAD SVIZZERA PER CRISTALLOGRAFIA

Professor Alfred Niggli
It is with the greatest sorrow that we have learnt just at the moment of writing these lines of the death on the 15th. January 1985 of our former president Alfred Niggli, Professor at the Z.T.H. in Zurich.

A Word or two from the Secretary
You will find enclosed with the current letter the information concerning the FICH workshop to be held starting from the 18th. to 19th. April 1985 in Courmayeur, Italy, the approved accounts of the Society for 1984, the Minutes of the Annual General Meeting held on the 4th. Oct. 1984 and the current list of officers of the Society.

New Members
We are pleased to welcome the following new members who have joined since the 1st. Oct. 1984: Dr. G. Bernardinelli, C.H. Gutzmer, Z. Kopajčić, F.A. Sarotti, Mae. K. Cenzual and P. Schliker. The Gruppe für Röntgenstrahlentechnik of the Swiss Army has retired from membership of the Society.

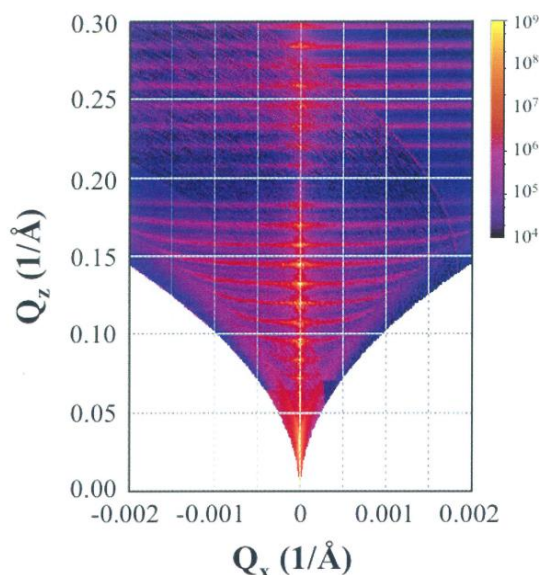
Annual Subscriptions
Your annual subscription for the year October 1984 - September is now due and should be paid using the enclosed green form as a reminder, full membership is 20 Frs a year while the Group Collective members pay an annual sum of 5 Frs for each of their first three Frs according to their category.



Until 1994 the Society had no logo, and that year the newsletter announced a contest to choose one. The winner logo, the 2D Fourier transform of the Swiss cross, was disclosed and officially adopted at the annual meeting of 1994, in Les Diablerets. In the mid-nineties the number of issues of the newsletter was reduced to three/year and from 2010 it was further reduced to two/year. The language of the articles became solely English from 2005 (with the exceptions of the report of the financial auditors and some rare

communication from the Swiss Academy of Natural Sciences).

Between late nineties and the beginning of 2000s, two new large diffraction facilities opened a new era for crystallography in Switzerland: the Swiss-Norwegian Beam Line (SNBL) at the ESRF and the Swiss Light Source (SLS) at the PSI. The newsletter therefore informed the community about user's meetings, developments, preliminary test measurements and the first scientific results from these instruments. The first



The first colour-printed cover page of the newsletter, issue #62

colour-printed cover page appeared on issue #62, in June 2004, and was dedicated to the early achievements of the Swiss Light Source. That cover showed a reciprocal-space-map of the reflectivity from an epitaxial Si-Ge superlattice, measured at the SLS. The issue #62 of the newsletter was dedicated to reviewing the SLS-beamlines for crystallography, at the Powder Diffraction and Surface Diffraction stations.

A new format of the newsletter was about to emerge: colour-printed, with an attractive graphic cover page, and with a more structured outline, always including scientific reports, updates of the crystallographic laboratories and facilities in Switzerland, reports from conferences and schools, and of course the programme and the abstracts of the annual meeting of

the Society, the minutes of the General Assembly, and the financial reports. Starting from issue #74 (2008) the newsletter of the SSCr was given an ISSN number and the newsletter started being published in both printed and electronic editions.

The newsletter of the SSCr was also distributed abroad and contributed to enhancing the visibility of the Swiss crystallographic community on the international stage. In August 2002, the IUCr congress was held in Geneva. On that occasion, 600 copies of the SGK newsletter, including a special issue of *Chemia* about "Crystallography in Switzerland", were distributed to the participants. The congress was accompanied by two satellite conferences in Switzerland, on "Crystal Physics" on the Rigi-Kulm and "Scattering experiments with neutrons and synchrotron radiation" at the PSI. This was a great opportunity to introduce our national community on the international stage. In the following years, two other major international events were organised in Switzerland

by the SSCr: the European Powder Diffraction Conference “EPDIC10” in 2006 and the European Crystallographic Meeting “ECM30” in Basel in 2016, to which the issues #67 and #95 of the newsletter were dedicated, respectively.

The first Zürich School on Crystallography was organised in 2007, and successfully repeated every second year. The newsletter reported on that school and, more particularly, on the student’s feedback, which confirmed the full success of the event. The PSI School on Powder Diffraction joined the educational schedule one year later, in 2008, and proved to be a necessary and complementary education, to which the newsletter gave space and recognition. Both schools have been organised for two decades, and attracted students from Switzerland and from abroad, whose impressions and reports were often published in the newsletter. Moreover, since 2005, the students who are awarded with a travel grant of the SSCr, for presenting their results at an international conference, are invited to write a short report on the conferences, to be published in the newsletter. Thanks to these contributions, from the mid-2000 the newsletter gave the opportunity to students and young scientists to express themselves and share their experience with the crystallographic community.

Looking back over the issues of our newsletter means rediscovering forty years of history of our society, and of crystallography. The newsletter has informed, promoted, favoured the exchanges, it has been the glue of our community and it was the little booklet that every member was proudly holding in his/her hand and leafed through. Many Presidents and Secretaries of the Society have contributed to this publication, always improving editing and keeping up with the time and the changes in the crystallographic science, with the aim of creating a tool for the member that was useful to everybody, and contributed to the dissemination of knowledge. They all deserve heartfelt thanks and warm congratulations for their work.

The archive of the SGK newsletter is now available online from the website of the Society, at the address: <https://swiss-crystallography.ch/en/newsletter>. The largest collection of old hardcopies was found at the University of Geneva (thanks to Howard Flack and Radovan Černý for the preservation). A dozen of issues from the years 1990-1993 were still missing, and could be found at the Swiss National Library in Bern, thus completing the collection. All issues have been digitised and can now be read and downloaded as pdf files.

We wish all members of the Society a great pleasure in reading the archive of our newsletter, and we are sure that they will not only find curious anecdotes and historical commemorations inside it, but also useful information, helpful citations, and unexpected news.

Announcements

The SGK / SSCr Annual Meeting 2025



Swiss Society for Crystallography Annual Meeting 2025

“Materials Discovery”

Meeting on September 10th
Workshop and Dinner Sept 09th

Lausanne EPFL

Information soon on:
<https://sscr2025.epfl.ch/>



Swiss Society for Crystallography Topical Workshop

Computational Methods in Crystallography

September 9, 2025

Location: CECAM-HQ-EPFL, Lausanne, Switzerland

Registration: <https://www.cecarn.org/workshop-details/computational-methods-in-crystallography-1456>

After a lecture about the background of computational methods under periodic-boundary conditions, two software packages will be introduced with 2.5-hour hands-on sessions each: Crystal 23 (www.crystal.unito.it) and CP2K (www.cp2k.org). Participants will learn how to run their own calculations, how to extract physical and chemical properties from them and how to display or analyze the results. The workshop is designed for beginners, primarily Master students, PhD students and postdocs, but everybody who wants to learn how to practically apply quantum chemistry to the solid state is welcome to join.

Programme:

- 09:30 to 10:30 - **Janine George**: Introduction to computational methods with periodic boundaries
- 10:30 to 11:00 - Coffee break
- 11:00 to 11:30 - **Silvia Casassa**: Introduction to Crystal 23
- 11:30 to 12:30 - Hands-on-Session for Crystal 23 (Silvia Casassa, Chiara Ribaldone)
- 12:30 to 13:30 - Lunch
- 13:30 to 14:30 - Hands-on-Session for Crystal 23 (Silvia Casassa, Chiara Ribaldone)
- 14:30 to 15:00 - **Jan Wilhelm**: Introduction to CP2K
- 15:00 to 15:30 - Coffee break
- 15:30 to 17:30 - Hands-on-Session for CP2K (Michelle Ernst, Jan Wilhelm)



Swiss Society for Crystallography

The Howard Flack Crystallographic Lecture Series

On the topic:
Mineral Evolution and Mineral
Informatics

The 2025 Howard Flack Lecture Series will focus on mineral evolution and the role of minerals in the evolution of life with Professor Robert M. Hazen as our invited Flack Lecturer. Bob uses advanced analytical methods based on crystal structures, compositions, and physical properties to make data-driven discoveries that cover a broad range of disciplines beyond the Earth sciences (theoretical physics, philosophy, linguistics, engineering, soil ecology, cancer research, and more).

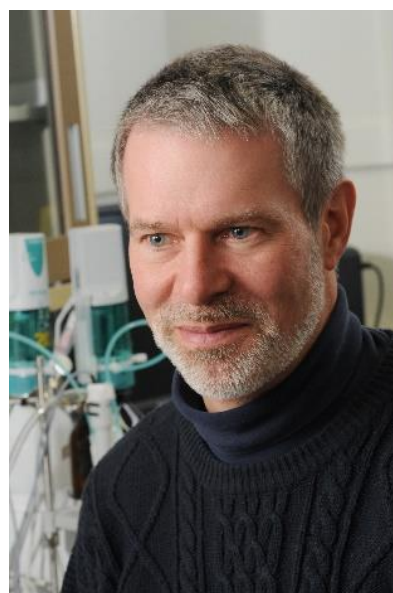
November 10th to November 14th, 2025

Professor Robert M. Hazen, Carnegie Science

Talks at Zurich, PSI, Bern, Lausanne, and Geneva

Abstracts for both talk topics are on the following page. A more detailed schedule will be published soon on swiss-crystallography.ch/en/flack_lectures.

Robert M. Hazen, Staff Scientist at the Earth and Planets Laboratory of Carnegie Science in Washington, DC, and Robinson Professor of Earth Sciences, Emeritus, at George Mason University, received degrees in geology from MIT and Harvard. Author of more than 500 articles and books on science, history, and music, Hazen has been recipient of numerous awards, including the 2021 IMA Medal, the 2016 Roebling Medal of the Mineralogical Society of America, and the 2012 Virginia Outstanding Faculty Award. His book *The Story of Earth* (Viking-Penguin) was finalist in the Royal Society and Phi Beta Kappa science book competitions. The biomineral “hazenite,” as well as a fossil dolphin and a fossil hermit crab, were named in honor of Robert and Margaret Hazen. Since 2008, Hazen and his colleagues have explored “mineral evolution” and “mineral informatics”—new approaches that exploit large and growing mineral data resources to understand the co-evolution of the geosphere and biosphere. In October 2016 Hazen retired from a 40-year career as a professional trumpeter, during which he performed with numerous ensembles including the Metropolitan Opera, Royal Ballet, and National Symphony.



Robert M. Hazen—Lecture #1

Mineral evolution and the search for critical resources, life's origins, and time's second arrow

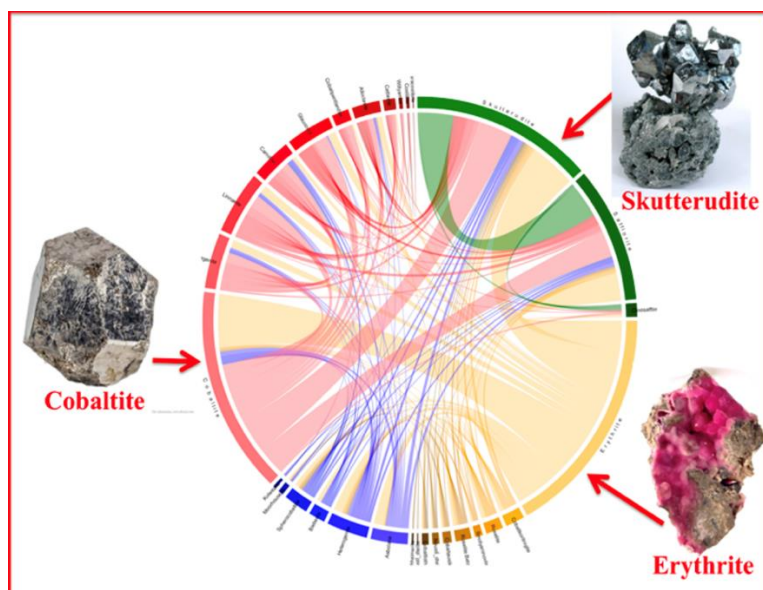
Minerals, which display dramatic increases in diversity and complexity through more than 4.5 billion years of Earth's evolution, provide a quintessential example of an abiotic evolving system. Quantitative studies of mineral evolution rely on large and robust mineralogical data resources, including crystal structures, compositions, and physical properties. These data, coupled with advanced analytical and visualization methods, enable us to search for new deposits of critical resources, to probe near-surface environments thought to have influenced the origins of life, and to suggest a framework that unifies behaviors of both biotic and abiotic evolving systems. We posit that all such systems are characterized by combinatorial richness subject to selection—characteristics that hint at a second arrow of time.

Robert M. Hazen—Lecture #2

Data-Driven Discoveries in Mineralogy

The story of Earth is a 4.5-billion-year saga of dramatic transformations, driven by physical, chemical, and biological processes. The co-evolution of life and rocks unfolded in an irreversible sequence of evolutionary stages. Each stage re-sculpted our planet's surface, while introducing new planetary processes and phenomena. This grand and intertwined tale of Earth's living and non-living spheres is coming into ever-sharper focus, thanks to advances in “mineral informatics”—a field that employs large and growing mineral data resources to tell the deep-time stories of our evolving planet. Minerals are remarkably information rich, holding dozens of trace and minor elements, scores of stable isotopes, solid and fluid inclusions, chemical zoning, twinning, exsolution, countless defects, and a host of optical, magnetic, electrical, and other properties. Every mineral specimen is a time capsule waiting to be opened—waiting to

tell its story. This lecture will explore some of the advanced data analytical and visualization methods that are shining new light on the old field of mineralogy.



The **Howard Flack Lecturer Award** is conferred annually by the Swiss Society for Crystallography on a scientist who is making or has made significant recent contributions to the field of structural science or involving the use of structural science

in the chemical, biological, physical, medicinal, or materials sciences. The awardee is then normally invited for a week-long tour of Switzerland to present seminars as part of The **Howard Flack Lecture Series** at several Swiss institutions and research facilities.

The Howard Flack Lecture Series was created by the SGK/SSCr in 2018 in honour of **Howard Flack** (1943–2017), a colleague and a friend, who is remembered for his enormous contributions to crystallography and structural science in general and to Swiss science in particular. This initiative has attracted interest from the Swiss Academy of Sciences (Platform, Mathematics, Astronomy and Physics, to which we belong), which partially sponsors the lecture series.

Howard undertook his PhD studies with Kathleen Lonsdale at University College London, then worked as a research assistant in the Cavendish Laboratory in Cambridge, UK. How better to become interested in research and crystallography? He moved to the Laboratoire de Cristallographie at the University of Geneva, Switzerland in 1971 and spent the rest of his career there. David Watkin and Dieter Schwarzenbach eloquently describe his life and work in *J. Appl. Cryst.* **2017**, *50*, 666.

Howard made many significant contributions to the field of crystallography but is perhaps best known for his seminal ideas concerning the determination of absolute structure by X-ray diffraction, which originated in 1983, but were constantly being improved upon and extended until his untimely passing. Prior to 1983, it was challenging to determine the absolute configuration of chiral organic molecules, even though this information was vitally important for many chemists and for the pharmaceutical industry, in particular. Howard developed a robust mathematical algorithm, which substantially improved the ease and reliability of the absolute structure determination. This algorithm is now incorporated in all the usual software and produces a value, now known widely as the Flack parameter, which most people take for granted these days. This development is described articulately by David Watkin in *Tetrahedron: Asymmetry* **2017**, *28*, 1189. Additional information on absolute structure determination can be found in A. Linden, *Tetrahedron: Asymmetry* **2017**, *28*, 1314 and references therein.

Howard was a humble man, who had a special sense of humour. The Swiss Society for Crystallography is proud to name an award and lecture series in his honour.

SSCr Satellite Workshop at ECM35

Swiss Society for Crystallography Satellite Workshop at ECM35 in Poznań

A practical introduction to synchrotron experiments

August 25, 2025

**Location: Faculty of Chemistry, Adam Mickiewicz University in
Poznań**

Registration: <https://ecm35.ecanews.org/synchotron-intro>

The workshop aims to answer pragmatic questions that new and experienced synchrotron users may have when trying to optimize their beamtime. These include finding a suitable beamline, access modes to synchrotrons, proposal writing, designing, and conducting an experiment, troubleshooting during the measurement, and post-experiment activities. As such, the workshop is suited for a range of audiences: first-time users, researchers without immediate contact at synchrotrons, advanced users aiming to improve their use of beamtime, and users from the industry. Five speakers, researchers, and beamline scientists will share their advice and provide guidance in a form of short lectures followed by discussion rounds. The audience can learn how to optimize beamtime for various applications, including operando scattering and spectroscopy, macromolecular crystallography, small molecule crystallography, industrially relevant applications. During lunch, there will be time for further discussions with speakers, be it specific questions on the technique or what can we learn from other techniques.

Programme:

9:30-9:40 Introductory remarks, **Simon Grabowsky** (President of SSCr)

9:40-10:30 Introductory lecture on synchrotrons in Europe and their history, **Philip Willmott** (Swiss Light Source); incl. questions

10:30-11:00 ☕ **Coffee break**

11:00-11:45 The anatomy of a protein crystallography beamline, **Sam Horrell** (Diamond Light Source); incl. discussion

11:45-12:30 Diffraction for Materials, from the lab to the synchrotron, **Nicola Casati** (Swiss Light Source); incl. discussion

12:30-13:30 ☕ **Lunch break**

13:30-14:15 In situ, operando experiments at DanMax, **Mads R. V. Jørgensen** (MAX IV); incl. discussion

14:15-15:00 Industry access to synchrotrons, **Fabia Gozzo** (Excelsus Structural Solutions); incl. Discussion

Synchrotron Powder Diffraction School



15 – 19 September, 2025 / PSI, Villigen

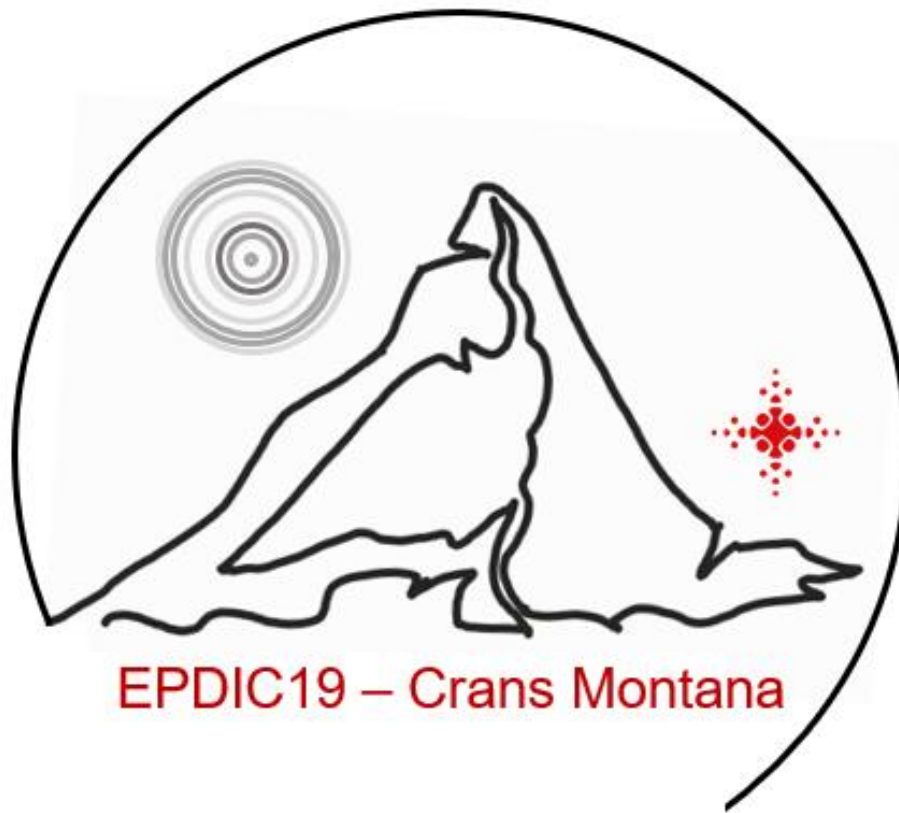
The Synchrotron Powder Diffraction School, **to be held at the Paul Scherrer Institute in Villigen, Switzerland**, will give a broad overview of all the modern possibilities using synchrotron radiation, starting with a general theoretical introduction to the various methods and applications.

Hands-on practicals, with selected synchrotron XRPD measurements and experiments, are the central part of the school and will provide the student with a solid fundamental understanding of these essential and versatile experimental techniques.

An exhaustive hands-on data analysis of the collected data, with various approaches and programs, will complete the course.

Registration is now open at

<https://www.epfl.ch/research/domains/ccmx/ccmx-legacy/courses-and-events/2025pds/>









Save the date!




The European Powder Diffraction Conference EPDIC will be back to Switzerland in 2026









Calendar of Events




 **International school of crystallography: Electron Crystallography**
30 May - 7 June 2025
 Erice, Italy
 <https://crystalerice.org/2025/>




 **International school of crystallography: Quantum Crystallography**
30 May - 7 June 2025
 Erice, Italy
 <https://crystalerice.org/2025/>

 **Swiss Summer School on Materials Chemistry 2025**
23.-24 June 2025
 Fribourg
 <https://matsem25.scg.ch/>

 **19th International Summer School on Crystal Growth (ISSCG-19)**
July 28-Aug 2 2025
 Xi'an, China
 <https://isscg-19.com/>

 **21st International Conference on Crystal Growth and Epitaxy (ICCGE-21)**
August 3-8 2025
 Xi'an, China
 <https://www.iccge21.com/>

 **Computational Methods in Crystallography**
9 September 2025
 CECAM-HQ-EPFL, Lausanne, Switzerland
 <https://www.cecarn.org/workshop-details/computational-methods-in-crystallography-1456>

 **2025 SSCr Annual Meeting and General Assembly in Lausanne**
10 September 2025
 Lausanne EPFL
 <https://sscr2025.epfl.ch/>



PSI Synchrotron Powder Diffraction School

15-19 September, 2025



PSI, Villigen



<https://www.epfl.ch/research/domains/ccmx/courses-and-events/2025pds/>



A practical introduction to synchrotron experiments ECM35 satellite workshop

25 August 2025



Faculty of Chemistry, Adam Mickiewicz University in Poznań



<https://ecm35.ecanews.org/synchotron-intro>



European Crystallographic Meeting ECM35

25-29 August 2025



Lviv - Poznań



<https://ecm35.ecanews.org/>



The Zurich School of Crystallography 2026: Bring Your Own Crystals

17-27 Jun 2026



University of Zurich, Switzerland



<https://www.chem.uzh.ch/linden/zsc/>



IUCr 2026 Congress

11-18 August 2026



Calgary, Canada;



<https://www.iucr2026.org/>



The European Powder Diffraction Conference EPDIC19

23-26 June 2026



Crans Montana



Tba/ <https://swiss-crystallography.ch/en>

Calls for proposals at large scale facilities

Beside normal proposals, most facilities allow urgent beam time requests.
Please check directly with the facility. (tba = to be announced)

Facility	Deadline(s)	Link
SLS-2		
All except non PX	Limited calls should be opened in the coming months for few beamlines	
Protein crystallography (PX)	Limited calls should be opened in the coming months for few beamlines	
Mesquik	suspended	
SINQ/SLS-2	suspended	https://www.psi.ch/de/useroffice/proposal-deadlines
Joint x+n proposals (MS/HRPT)		
SINQ		
All instruments regular calls	15.05, 15.11	
SμS: Swiss Muon Source		
FLAME, GPD, GPS, HAL-9500, LEM	01.06	
DOLLY, FLAME, GPD, GPS, HAL-9500, LEM	01.12	
SwissFEL		
ARAMIS-Alvra, ARAMIS-Bernina	15.03, 15.09	
ESRF		
Standard, BAG proposals	01.03, 10.09	http://www.esrf.fr/UsersAndScience/
Long Term Project, HUB proposals	16.01	
CRG SNBL	01.03, 10.09	www.esrf.fr/UsersAndScience/Experiments/CRG/BM01# For more details on the access mode to SNBL: wouter@esrf.fr
ILL	17.2, 15.9	www.ill.eu/users
FRM II	tba	http://www.mlz-garching.de/user-office/
All instruments/ Rapid access program		
SNS Oak Ridge	30.08	https://neutrons.ornl.gov/users/proposal-calls
DESY	01.03, 01.09 plus rolling access	https://photon-science.desy.de/users_area/calls_deadlines/index_eng.html

Travel Grants for SSCr Members

Our Society supports members participating in international conferences, workshops, and schools.

Conditions for travel grants for young SSCr members (under 35):

Only current members of the SSCr can be supported financially. Student members are PhD and Master students. They can receive up to CHF 500 for a poster presentation and CHF 750 for an oral presentation. Attendance at a workshop or school outside Switzerland, if the programme does not permit participant presentations, can be supported with up to CHF 500.

Postdocs can be supported only for oral presentations with a maximum of CHF 500. Per institute and year, a maximum of two people can be supported. There are no strict submission deadlines for travel grant applications, requests will be reviewed upon submission. We advise you to submit as early as possible in the year.

Please submit applications to the President of the Society at swiss-crystallography@gmail.com including the following documents:

- Conference abstract if applicable
- Type of presentation/involvement (poster, talk or workshop/school without presentation)
- Letter of motivation (specify the date you first joined the SSCr)
- Letter of support from your supervisor
- Brief budget of expected costs of attending the meeting

A 1-2 page scientific report for the SSCr newsletter is expected within 2 months of the meeting.

Financial support can also be granted to retired SSCr members:

Active participation at an event is required, e.g., presentation, lecture, session chair, organizer.

Young researchers have priority if our budget is limited.

The grant amount will be decided by the board, depending on the available budget, but not exceeding CHF 750.

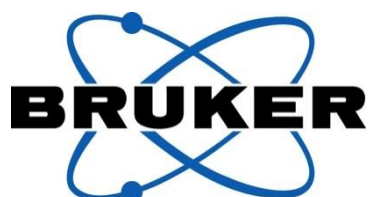
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- Conference abstract if applicable
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The board of the SSCr wishes you an exciting year with lots of scientific exchanges around the world!

Institutional members and supporting institutions

Corporate members

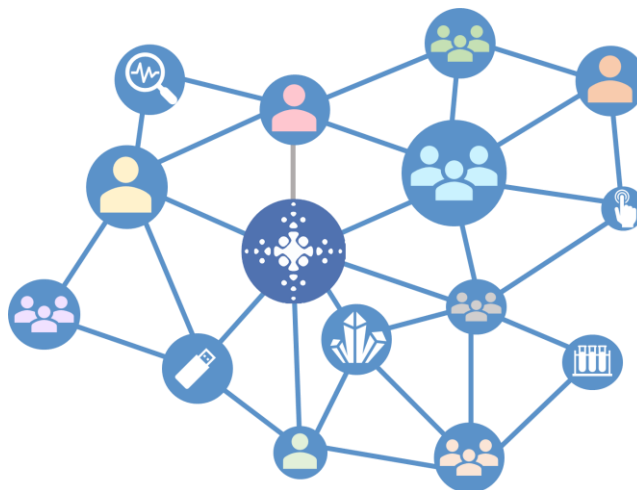


Supporting institutions



(If you would like to see your logo here, please contact our treasurer)

Become a member of the SSCr!



- ✓ Connect with researchers, scientists, and students from across scientific fields.
- ✓ Take part in events organized by the society.
- ✓ Drive the future activities of the society.
- ✓ Benefit from travel grants and PhD awards.
- ✓ Benefit from a network providing access to new collaborations and infrastructure.
- ✓ Stay up to date on upcoming events.

For more information as well as online registration, please go to our website <https://swiss-crystallography.ch/en/membership>

The yearly membership fee is CHF 40 for regular members and CHF 10 for students. SGK/SSCr is a member of the Swiss Academy of Science.

Connect with us!

Web: swiss-crystallography.ch

E-mail: swiss.crystallography@gmail.com:

 [Swisscrystallog](#)

Members of the Board of the SSCr for the period 2024 – 2025



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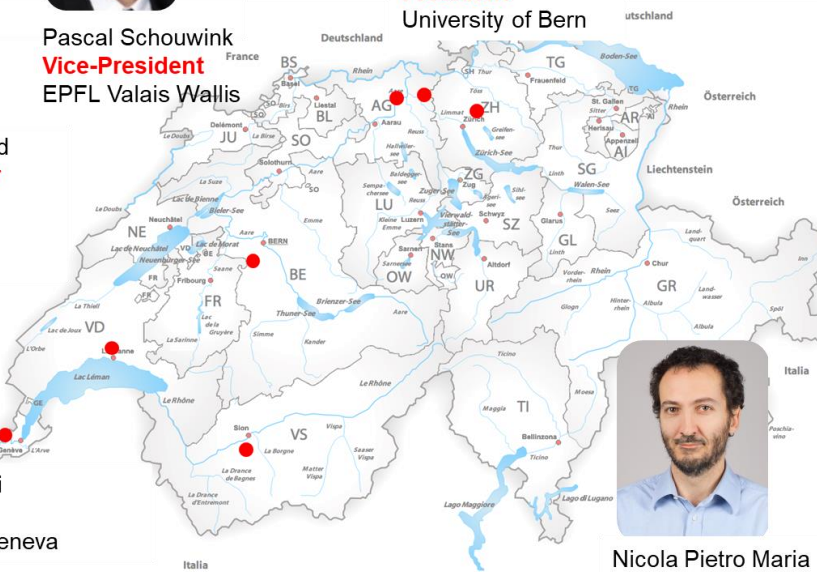
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Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

The newsletter of SGK/SSCr is published 2-3 times a year with a circulation of 250. Contributions are welcome at any time, as well as illustrations for the cover. Articles in English, German or French may be submitted. Please send all interesting material directly to the editor.

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