



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

sc|nat 

Member of the  
Swiss Academy of Sciences



## SGK / SSCr NEWSLETTER

ISSN 1662-5358 (printed edition)

ISSN 1662-534X (electronic edition)

**No. 92**  
Jan 2015

In this issue:

Minutes of the SGK/SSCr General Assembly,  
held on 8.9.2014 at the EMPA-Akademie in Dübendorf

On the Cover:

Title page of the new book  
“Die Naturforschenden” – “Les Naturalistes”.  
A dozen historians are publishing a review on the history of  
natural sciences in Switzerland at the occasion of the  
200<sup>th</sup> birthday of ScNAT in 2015, details in this issue.  
© Hier und Jetzt Publishing, Baden, Switzerland

## **SGK/SSCr Newsletter No. 92**

<b>The President's Page</b>	<b>4</b>
<b>News for and from members</b>	<b>5</b>
<b>New members of the SGK/SSCr</b>	<b>5</b>
<b>ECM-30 Advertisement</b>	<b>5</b>
<b>Book announcement: "A Little Dictionary of Crystallography"</b>	<b>5</b>
<b>Travel grants for young SGK/SSCr members</b>	<b>6</b>
<b>Announcement: 23rd Annual Conference of the German Crystallographic Society (DGK) 2015</b>	<b>6</b>
<b>Conference announcement: ECM-29, Aug. 23-28, Rovinj, Croatia</b>	<b>7</b>
<b>Book announcement: "200 Years of ScNAT – Swiss Academy of Science "</b>	<b>8</b>
<b>Minutes of the General Assembly of the SGK/SSCr, 8.9.2014</b>	<b>9</b>
<b>Discovering "jumping crystals" in Montreal</b>	<b>12</b>
<b>Impressions of the Annual SGK/SSCr Meeting 2014 at Empa in Dübendorf, 08.09.2014</b>	<b>13</b>
<b>In Memoriam Hans Wondratschek (1925-2014)</b>	<b>20</b>
<b>Calls for proposals</b>	<b>22</b>
<b>Calendar of forthcoming meetings</b>	<b>23</b>
<b>Become a member of SGK/SSCr</b>	<b>24</b>
<b>Institutional members and supporting institutions</b>	<b>25</b>
<b>Members of the Board of the Society for the period 2012 – 2014</b>	<b>26</b>

## The President's Page

The year of crystallography is over and I use this opportunity to thank all of you for the numerous contributions. Two events should be especially emphasised: The crystal growth competition organised by the University of Geneva bringing our field closer to the youngest generation (thanks to Didier Perret and his collaborators) and the monthly calendar presenting nice works of Swiss crystallographers all over the country in a very colourful and attractive way. Special thanks to Therese Lüthi, Michel Bonin and Kurt Schenk for making this possible, also the effort to translate the captions into the four Swiss languages including *Italiano* and *Rumantsch*. Many of us enjoyed this monthly changing desktop background on our computers.



The activities of Swiss crystallographers were reflected at the 23<sup>rd</sup> IUCr congress in Montreal by a huge number of presentations, posters and chairs, and also at the annual meeting at Empa Dübendorf, organized by A. Neels. The scientific program of our annual meeting was focusing on *Modern Crystallography in Applied Research* and was attended by more than sixty scientists.

In the past months, some of our colleagues passed away: Dr. Heinz Josef Weyer and Dr. Roland Prewo (members of the SGK/SSCr since 2012 and 1985) and also Professor Dr. Hans Wondratschek – one of the very few founding members of our society, who was with us since 1969. In the name of the society, I want to express my condolences to their relatives and friends.

2015 is the “UN Year of Light” ([light2015.org](http://light2015.org)) and therefore logically attaches to the year of crystallography as synchrotrons and XFELs are major working tools in our field. Switzerland is very active here with the SwissFEL under construction. It also has been decided to study a possible SLS upgrade during 2017-20 (science case, technical design, expected performance, cost) with the possibility to realise it between 2021 and 2024. Having the possibility to make such investments is not self-evident, but a result of all the scientific work and the support by you and your colleagues.

*A Happy New Year* to you, and also to your families

Jörg Schefer



## News for and from members

### We welcome the following new members of the SGK/SSCr

Mlle. Noémie Voutier, University of Fribourg  
Dr. Matthias Frontzek, Paul Scherrer Institut, Villigen  
Mr. Erik Stronks, University of Zürich  
Dr. Jun Han, Paul Scherrer Institut, Villigen  
Prof. Claire Gervais, Berner Fachhochschule – Hochschule der Künste  
Dr. Michela Brunelli, The Swiss-Norwegian Beamlines at ESRF, Grenoble, France  
Ms. Luzia Germann, University of Bern  
Dr. Aaron Finke, Paul Scherrer Institut, Villigen  
Ms. Nadia Opara, Paul Scherrer Institut, Villigen  
Mr. Gregor Hofer, ETH Zürich

### ECM-30 Advertisement

We have produced two slides for promoting the ECM-30 conference. These are available on our home page. Please include these slides at the end of your seminars and talks, thereby helping us to spread the information (<http://www.sgk-sscr.ch>).

### A Little Dictionary of Crystallography



Edited by André Authier and Gervais Chapuis

This 252-page paperback book is a printed snapshot of the *Online Dictionary of Crystallography*. It is a reference for authors and referees of IUCr Journals and for research professionals in general: but will also be useful to students and to the general public. Sample pages are available.

The book is now available for a short time at a discounted rate (9 GBP, 11 EUR). Copies may be purchased online at the URL <http://tinyurl.com/little-dictionary>.

## **Travel grants for young SGK/SSCr members**

The committee will award the grants according to the following rules:

- Preference is given to PhD students
- Proof has to be given that there are no grants available covering the expenses
- A supporting letter by the supervisor of the applicant is necessary
- Applicant **MUST** be a member of our society

If you wish to apply for a travel grant, please send the above-mentioned documents to the president of the SGK/SSCr at any time. You should have been a member for at least one year before applying for a grant.

Travel grants are a good opportunity for young scientists to profit from our society during a period when they have low income. By subsequently becoming a long-term member of our society, you can return this good-will to the next generation.

Details for applications are given at: <http://www.sgk-sscr.ch/TravelGrants.pdf>

### **Conference:**

23rd Annual Conference of the German Crystallographic Society (DGK) 2015

### **Venue and Date:**

Institute of Geoscience  
Georg-August University Göttingen  
Goldschmidtstraße 1-3  
37077 Göttingen/Germany

16 - 19 March 2015

**Organizer:** German Crystallographic Society (DGK)

### **Conference Chair:**

Prof. Dr. Ralf Ficner  
Georg-August-University Göttingen  
Justus-von-Liebig-Weg 11  
37077 Göttingen

**Conference Language** The official conference language is English.

**Conference Homepage** [www.dgk-conference.de](http://www.dgk-conference.de)

### **Conference Organization/Contact**

Conventus Congressmanagement & Marketing GmbH  
Felix Angermüller  
Carl-Pulfrich-Straße 1  
07745 Jena (DE)  
Phone +49 (0)3641 3116-301  
Fax +49 (0)3641 3116-241  
[felix.angermueller@conventus.de](mailto:felix.angermueller@conventus.de)  
[www.conventus.de](http://www.conventus.de)

# The 29<sup>th</sup> European Crystallographic Meeting



August 23-28, 2015  
Rovinj, Croatia



Register at:

<http://ecm29.ecanews.org>

Follow the news at:

 **29thEuropeanCrystallographicMeeting**

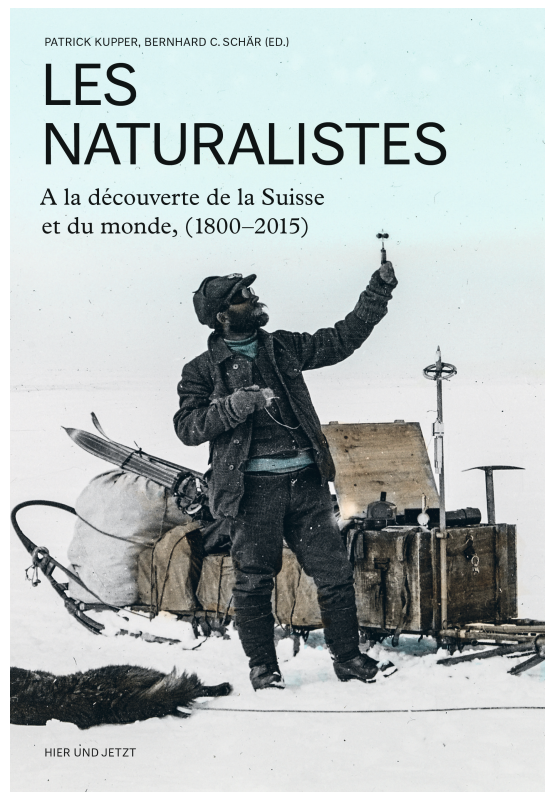
Abstract submission deadline: **23<sup>rd</sup> March 2015**

Early registration deadline: **23<sup>rd</sup> April 2015**

## 200 Years of ScNAT – Swiss Academy of Science

Buch «Die Naturforschenden»,  
Verlag Hier und Jetzt  
Vergünstigt bestellen → bis 31. Januar  
2015

Wir freuen uns mit Ihnen in ein ereignisreiches 2015 einzusteigen. Aus Anlass des 200. Geburtstages der SCNAT haben über ein Dutzend Historikerinnen und Historiker die Geschichte von 200 Jahren Naturwissenschaften in der Schweiz unter die Lupe genommen. Das dabei entstandene Buch «Die Naturforschenden» können Sie – und die Mitglieder von SCNAT-Organisationen – bis am 31. Januar 2015 stark vergünstigt bestellen. Bereits ab Mitte Dezember lade ich Sie zudem dazu ein, einen Blick in die erste Fassung des Portales Naturwissenschaften Schweiz zu werfen: <http://www.naturwissenschaften.ch>.



Die Schweiz ist global vernetzt. Zu verdanken hat sie dies nicht zuletzt den Schweizer Naturforschenden, die seit dem 18. Jahrhundert die Welt erkundet und sich grenzüberschreitend mit anderen Wissenschaftlern ausgetauscht haben. Die Forschenden selbst sind jedoch kaum bekannt. Das Buch schliesst diese Lücke. 15 Autorinnen und Autoren beleuchten die Biografien von Naturwissenschaftlern und Naturwissenschaftlerinnen. Sie erklären, wie sie zu ihren Entdeckungen, Einsichten und Irrtümern kamen und wie sie dabei in den letzten 200 Jahren den Wissenschaftsstandort Schweiz mit aufbauten. Bekannte historische Persönlichkeiten wie Louis Agassiz oder Albert Einstein werden neu beleuchtet, bislang vernachlässigte Figuren wie Clémence Royer oder Boukary Porgo werden in ihrer Bedeutung für die Naturwissenschaften und die Schweiz sichtbar. Das Buch erscheint im Mai 2015 auf Deutsch und Französisch. Jetzt vergünstigt bestellen – das Angebot gilt bis am 31. Januar 2015! Mitarbeitende und Mitglieder der SCNAT und ihrer Fachgesellschaften, kantonalen und regionalen Gesellschaften, Kommissionen, Foren und Landeskomitees sowie Beteiligte an «Forschung live» können das Buch nun für sich und ihre Verwandten und Bekannten für 30 statt 49 CHF bestellen.

Bestellungen mit Angabe der gewünschten Sprache:

Per E-Mail an: [admin@hierundjetzt.ch](mailto:admin@hierundjetzt.ch)

oder per Post an: Verlag Hier und Jetzt, Langacker 16, Postfach, 5405 Baden

## Minutes of the SGK/SSCr General Assembly, 8.9.2014

EMPA Academy, Dübendorf, Monday 8. Sept. 2014

Annual General Assembly opened at 13.05;

Chair: Jürg Schefer, President

Welcome by the President.

Agenda presented as published in Newsletter no. 91. No changes requested.

A. Linden elected as minute taker.

32 in attendance – 10% quorum reached (minimum of 16 required)

Minutes of the previous meeting as printed in the Newsletter No. 89

No comments. Denis Sheptyakov thanked for his efforts preparing them. Approved.

Annual report presented by the President

Activities for the year:

- 2013 annual meeting together with the Italian and Spanish Crystallographic Associations, MISSCA-2013, Como, Italy
- Weizmann lecture in Fribourg
- Two newsletters published (nos. 89, 90)
- 2 board meetings: Bern and Basel (together with ECM local committee)
- Participation in MAP Meeting of the Academy of Science, April 2014
- IUCr-2014 activities included opening ceremony in Paris, special issue of postage stamps, calendar, NZZ article, Chimia special issue, crystal growth competition, article in Le Journal, SPS Large Scale Facility, exhibition in Fribourg.

Conferences & Courses:

- Financial support to the Zurich School of Crystallography 2013
- Annual meeting in Como 2013
- 2 travel grants to young students (reimbursed by ScNAT)
- Support for J. Schefer / K. Fromm to attend the ECA annual meeting in Montreal (reimbursed by ScNAT)
- Support for R. Cerny, P. Macchi to attend as Swiss delegates to the IUCr meeting in Montreal (reimbursed by ScNAT)

Membership statistics presented: 160 individual & 9 corporate members

Brief summary of IUCr Montreal meeting presented

- Highlights were: the 10th Ewald Prize to T. Janssen & A. Janner, the latter being a long-time member of the SGK and the Nobel laureate lecture by D. Shechtman
- IUCr 2020 to be in Prague. IUCr president is M. Hackert. P. Macchi is a new chair of Commission on charge, spin and momentum density
- Everyone encouraged to make or update their entry on the World Directory of Crystallographers: [www.iucr.org/people/wdc](http://www.iucr.org/people/wdc)



News from the ECA meeting in Montreal presented.

- ECM 31, 32 in Oviedo, Spain, and Vienna, Austria.
- ECA would like more interactions with the SIGS/GIGs to receive suggestions for conference microsymposia (contact persons: [www.ecanews.org/sig\\_officers.php](http://www.ecanews.org/sig_officers.php))
- Everyone encouraged to take out a personal membership of the ECA (only 10 Euros/year).

Financial report presented by the President in the excused absence of the Treasurer (P. Macchi)

Full details in the SGK/SSCr Newsletter no. 91.

- CHF 960.43 surplus for 2013, balance on account is CHF 40'339.
- Financial reports approved by the auditors.
- Meeting approved the financial report unanimously.

2014 Budget presented by the President.

Full details in the SGK/SSCr Newsletter no. 91.

Approved unanimously. Piero Macchi thanked for his efforts as treasurer.

Setting of Annual Membership fee.

Recommended no change: CHF 30/10/130 for regular/student/corporate.

Approved unanimously.

Election of Office Bearers.

- Existing Board presented.
- No new candidates proposed.
- The President mentioned that some board members will reach their maximum allowed term in 2015 and that proposals for new Board members will be required. Please make suggestions at any time to the board.
- H. Grimmer recommended that as 3 Board members are reaching their maximum terms, the Board should actively try to attract new members to the Board.
- Yousef Asadi volunteered to join the board in 2015.
- Existing Board approved unanimously under the understanding that some members are to be replaced within one year and nominations for new board members must be presented at the next annual meeting for election.
- J. Schefer approved unanimously to continue as SGK President until the end of his term in 2015. A new president has to be elected in 2015.
- Auditors: B. Spingler & K. Schenk approved unanimously.
- IUCr delegates: P. Macchi, R. Cerny approved unanimously.
- ECA delegate: J. Schefer approved unanimously.

News on ECM-30 Basel (2016) preparation.

A list of preparatory meetings held so far presented. List of Local Organizing Committee presented

(Chair: K. Fromm). Updated list can be added to. No discussion. Suggestions for microsymposia welcome through the SIG's and GIG's. Please inform in parallel the local organizers.



#### Next SGK/SSCr annual meeting 2015

Suggestion made to have it at a Fachhochschule, e.g. Biel/Bienne. Suggestions welcome. If no proposal received by the end of November 2014, the Board to make contacts with possible venues and organizers.\*

#### Any other business (AOB)

Hans Scheel made the point that crystal growth activities and teaching thereof have diminished. We have excellent instruments, but samples are often poor, so the efficiency of the big instruments is poor. There is a lack of experienced people to run the machines. Proposed that ETH should be encouraged to develop a training programme to educate "Crystal Technologists". Crystallization Technology Education could be supported by the SGK and recommended to the ETH.

H.-B. Bürgi asked the Board about the proposal he made in Como that surplus SGK funds be used to support a special lecture and medal. Has any further action been taken yet?

Answer: none yet, will take the matter up again.

H.-B. Bürgi asked if the SGK is liable for losses incurred for ECM-30.

Answer: will have to check by-laws.

A. Linden asked if there was a loss of, say CHF 80,000, who pays?

Answer K. Fromm: Hoping to get letters of deficit guarantee from Swiss universities. 750 participants needed to break even. The President said he expects to obtain good sponsorship support.

The President thanked everyone for attending and closed the meeting at 14<sup>10</sup>h.

A. Linden, 18.9.2014.

---

\* Later remark: the meeting will be held at CSEM Neuchâtel, Sept. 2015.

## Conference report: 23<sup>rd</sup> Congress and General Assembly of the IUCr, Montreal, Canada, August 5-12, 2014

### Discovering "jumping crystals" in Montreal

Contributed by Sonja Kracht,

PhD student at the Department of Chemistry, University of Fribourg.

One hot topic this year in Montreal during the IUCr was the further investigation of the already known phenomenon of „jumping crystals“. The reasons for the physical movement are thermosalient<sup>(1)</sup> or photosalient<sup>(2)</sup> effects in the crystal. The reaction of the crystal to stimuli can include shape changes like bending or twisting and locomotion like jumping or rotation. In some cases, it can even lead to cracking and splitting of the crystal.<sup>(3)</sup>

A group from the New York University Abu Dhabi around P. Naumov presented the latest approaches in investigating the mechanism and quantifying the physical movements of these crystals. With the help of 2D snapshots from high-speed cameras the locomotion and possible splitting of the crystals were examined and tried to quantify while X-ray analysis before and after applying the stimulus gave additional information about the structure and phase changes in the crystal itself.<sup>(2)</sup> For a visual demonstration please have a closer look at the recently published following movie by "New Scientist" <http://www.youtube.com/watch?v=3mAhs9Tdd1A>.

An example for a jumping crystal, showing the photosalient effect, was the complex  $(\text{Co}(\text{NH}_3)_5(\text{NO}_2))\text{Cl}(\text{NO}_3)$ .<sup>(2)</sup> When irradiated with UV light the binding site from the nitrite ligand to the central cobalt ion is exchanged. Binding with the nitrogen atom first, the irradiation breaks this coordination bond and allows the ligand to rotate so that it will exchange binding sites to one of its oxygen atoms. Due to this rotation strain is induced in the crystal and can only be released by locomotion and fractioning of the crystal. The intensity of the physical movement is dependent on a few parameters like the duration and intensity of the irradiation and the crystal size. Because the strain in the crystal is released all at once, high-speed cameras attached to a microscope are needed to visualize this motion. Due to their size smaller crystals flip sooner than larger ones upon stimuli. Playing with the intensity of the irradiation demonstrated that high intensities lead to splitting of the crystal while weaker intensities induce rolling or jumping.

A detailed understanding of the process of converting thermal or light energy into a mechanical response could be of great interest in building device components in the future. We are looking forward to hear, and in the meantime read, more about the progress in this fascinating field, perhaps even at the ECM-30 in Basel 2016.

(1) Z. Skoko et al., *JACS* **2010**, 132, 14191.

(2) P. Naumov et al., *Angew. Chem. Int. Ed.* **2013**, 52, 9990.

(3) N. K. Nath et al., *Cryst. Eng. Comm.* **2014**, 16, 1850.

## Impressions of the Annual SGK/SSCr Meeting 2014 at Empa in Dübendorf, 08.09.2014

### 2014 Poster Prize

The poster prize goes to Nadia Opara from the PSI. The Prize was sponsored by ScNat. We congratulate the prize winner and thank the ScNat for the support.

#### **“Membrane supports for X-FEL based protein crystallography”**

N. Opara<sup>1,2</sup>, C. Padeste<sup>1</sup>, T. Braun<sup>2</sup>, H. Stahlberg<sup>2</sup>

<sup>1</sup>*Paul Scherrer Institute, 5232 Villigen, Switzerland*

<sup>2</sup>*C-CINA, University of Basel, Switzerland*



Jürg Schefer, Hans Grimmer & Nadja Opara



### Impressions from the Meeting



Julian Stangl (invited talk)



Steven Peetermans



Xavier Maeder



Erik Stronks





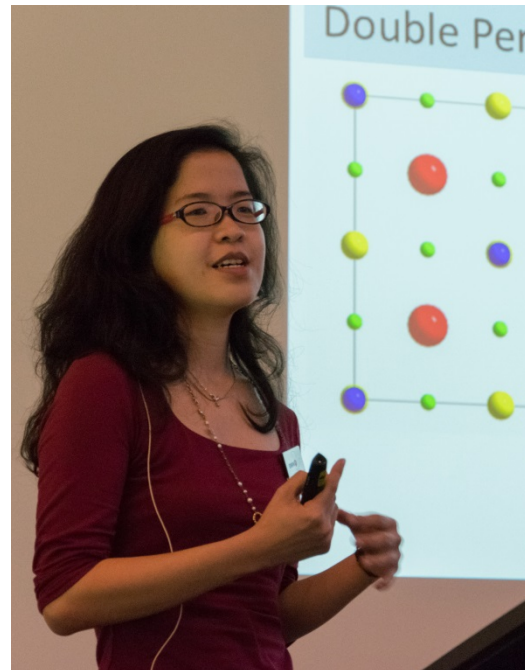
Jürg Schefer



In the audience



Luc Patthey



Yolanda Sadikin



Aurélien Crochet



Arndt Remhof (invited talk)





Jürg Schefer, Alex Dommann & Luc Patthey



Donat Adams



Céline Besnard



During the breaks

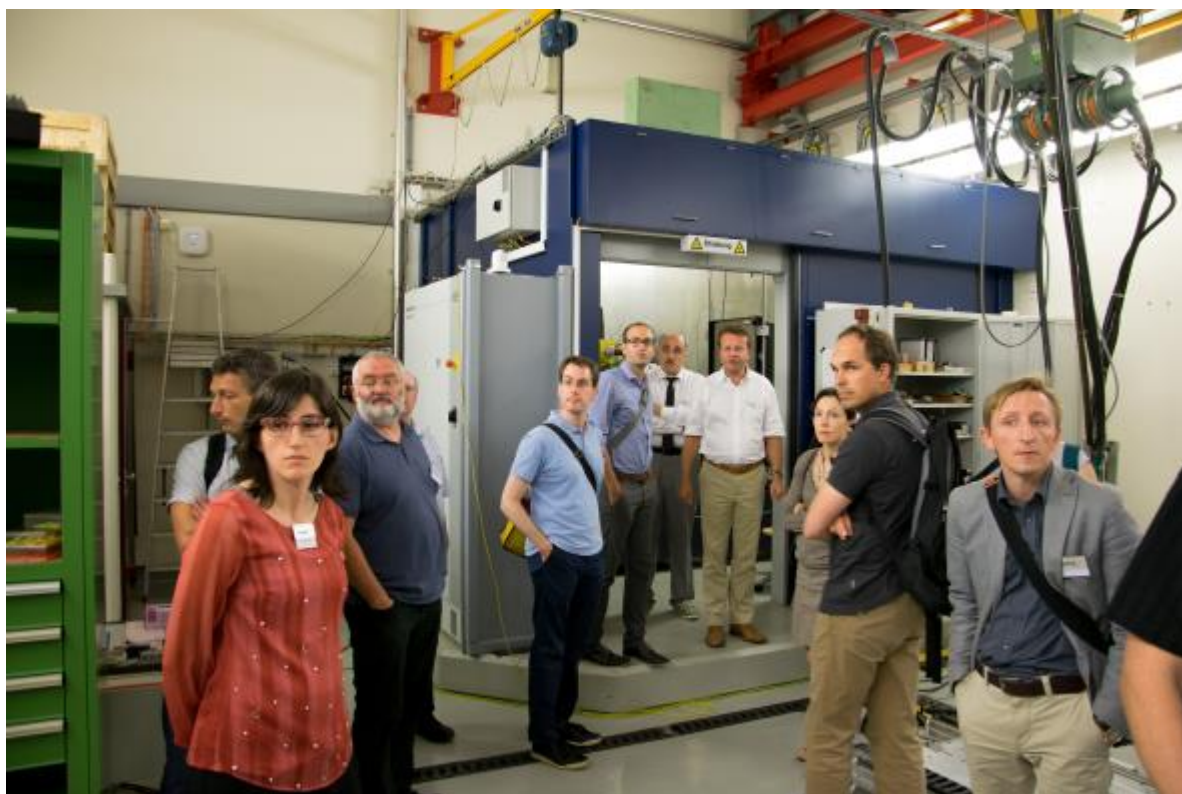




Antonia Neels



Visit to the Center for X-ray Analytics



## In Memoriam Hans Wondratschek (1925-2014)

Hans Wondratschek, professor emeritus of crystallography at the University of Karlsruhe, died on Sunday, October 26, 2014. He was a member of the Swiss Society for Crystallography from its beginnings and participated for many years in its scientific meetings. His German colleagues being better qualified to appreciate his many important scientific contributions, I shall emphasize his close ties to crystallography in Switzerland.

In October 1968, Werner Nowacki organised in Bern the 10<sup>th</sup> discussion meeting of the section for crystal science of the German Mineralogical Society.

Hans Wondratschek presented there a keynote lecture *"Neuere Ergebnisse der mathematischen Kristallographie"*. By analogy with Germany, most Swiss crystallographers were members of the Swiss Mineralogical Society at that time. On Nowacki's initiative the Swiss Society for Crystallography was founded a month later. I do not know whether Hans Wondratschek was among those who met in Bern on November 9, 1968; the earliest entry year mentioned in the records of our society is 1969, and he joined then.

Hans Wondratschek was born in Bonn in 1925, where he studied at the university, passing the examination as teacher of chemistry and mathematics and obtaining his doctorate in 1953 with a thesis in mineralogy. He then worked for five years under Heinz Jagodzinsky at the Max Planck Institute for silicate research in Würzburg before becoming an assistant of Fritz Laves in Zürich, where he wrote a number of publications on IR absorption of quartz together with Fritz Laves and Georg O. Brunner. With Alfred Niggli, he investigated generalized point symmetries, which they called crypto-symmetries. It was Alfred Niggli who drew his attention to a publication by A.C. Hurley on the crystal classes in 4-dimensional space, a theme that laid the basis for Wondratschek's later research on crystallography in Euclidean spaces of higher dimensions.

From Zürich he returned to Bonn, where he submitted his habilitation thesis on pyromorphites in 1961. His next station was Freiburg im Breisgau, where he taught crystallography as a *"Privatdozent"*, until, in 1964, he succeeded Heinz Jagodzinsky as professor of mineralogy in Karlsruhe. There he published on pyromorphites, the structure of silicate glasses and later on sanidines, but his main interest was in symmetry aspects of crystallography. An early paper on subgroups of space groups was written in 1969 together with Edgar Ascher (Battelle Institute Geneva) and his former diploma student Volker Gramlich (ETH Zürich). Hans Wondratschek very successfully collaborated with the mathematician Joachim Neubüser, first on maximal subgroups of space groups, then for many years on space groups in 4-dimensional space.



Many publications between the mid-seventies and the mid-nineties dealt with orbits of space groups, to which also the book "The non-characteristic orbits of the space groups" by Peter Engel (Bern), Takeo Matsumoto, Gerhard Steinmann and Hans Wondratschek was devoted.

Hans Wondratschek was a member of the prestigious ad-hoc committee of the IUCr on the nomenclature of symmetry. An addendum to two of its reports was published by Howard Flack (Geneva), Hans Wondratschek, Theo Hahn and S.C. Abrahams.

Beginning in 1988 and continuing long beyond retirement he organized with Theo Hahn many summer schools on the "Symmetry of Crystals", where the students were introduced to using the wealth of information contained in volume A of the "International Tables for Crystallography".

At that time started also his very fruitful collaboration with Mois Aroyo on irreducible representations of space groups, which continued when Aroyo moved from Sofia to Bilbao and became involved with the development of the Bilbao Crystallographic Server. The research of Hans Wondratschek on subgroups of space groups culminated in volume A1 of the "International Tables for Crystallography" (2004), which he edited together with Ulrich Müller. Both, the crystallographic server and volume A1 are precious tools for crystallographic research and both profited a lot from the collaboration between Hans Wondratschek and Mois Aroyo.

The award of the "Carl-Hermann-Medaille" by the German Crystallographic Society in 2001 recognized Hans Wondratschek's many outstanding contributions to crystallography during his scientific career.

Let me end by telling you what Hans Wondratschek meant for me. As a physicist who got involved with crystallography only after my doctorate, I owe my deeper knowledge of space group symmetry mainly to his publications and lectures, whose clear and didactically outstanding structure I admired. Later, when I was asked to teach "Crystallography for physicists" in Zürich, I based my lectures in the first years to a considerable extent on a script that he had given to me with the generous permission to make such use.

I am grateful to Hans Wondratschek for the interest he showed in my research. I always enjoyed meeting him at conferences and like to recall the school organized by the working group "Theoretical crystallography" of the German Crystallographic Society in April 2000. Two days were devoted to the representation theory of point and space groups, which he presented together with Mois Aroyo in excellent lectures alternating with very instructive exercises.

I esteemed Hans Wondratschek as a modest person, interested in the work of his colleagues and always ready to help.

Hans Grimmer

I am grateful to Klaus Wondratschek for the picture of his father, taken by Daniel Warnicke.

## Calls for proposals

Beside normal proposals, most facilities allow urgent beam time requests. Please check directly with the facility.

Facility	Deadline(s)	Link
<b>SLS: Swiss Light Source</b> All except PX lines Protein crystallography beamlines (PX)	March 15, Sept. 15 Feb. 15, June 15, Oct. 15	<a href="http://www.psi.ch/useroffice">www.psi.ch/useroffice</a>
<b>SINQ: Swiss Spallation Neutron Source</b> All instruments (regular calls)	May 15, Nov. 15	<a href="http://www.psi.ch/useroffice">www.psi.ch/useroffice</a>
<b>SINQ/SLS</b> Joint x+n proposals (MS/HRPT)	Feb. 15, 2015	<a href="http://www.psi.ch/useroffice">www.psi.ch/useroffice</a>
<b>SpS: Swiss Muon Source</b> All instruments	Dec. 9, June 10	<a href="http://www.psi.ch/useroffice">www.psi.ch/useroffice</a>
<b>ESRF: European Synchrotron</b> long term proposals short term proposals	Jan. 15 March 1, Sept. 1	<a href="http://www.esrf.eu/UsersAndScience/">www.esrf.eu/ UsersAndScience/</a>
<b>ILL: Institut Laue Langevin</b> All instruments	Feb., Sept.	<a href="http://www.ill.eu">www.ill.eu</a>
<b>FRM II: Heinz Maier-Leibnitz</b> All instruments	Aug., 2015	<a href="http://user.frm2.tum.de">user.frm2.tum.de</a>
<b>SNS Spallation Neutron Source</b> Oak Ridge	various	<a href="http://neutrons.ornl.gov">neutrons.ornl.gov</a>



## Calendar of forthcoming meetings

(Please mail the missing information on meetings of interest to Jurg.Schefer@psi.ch)

			Application Deadline
<b>2015</b>			
Mar. 1 – Apr. 1	Grenoble France	HERCULES 2015: Higher European Research Course for Users of Large Experimental Systems hercules-school.eu	in the past
Mar. 16-19	Göttingen Germany	23rd Annual Conference of the German Crystallographic Society (DGK) 2015 www.dgk-conference.de	in the past
May 25-28	Como Italy	Total Scattering for Nanotechnology on the Como Lake www.toscalake.com	now open
Jun. 5-14	Erice Italy	The 48th crystallographic course, Erice, Italy www.crystalerice.org/Erice2015/2015.htm	in the past
Jun. 7-20	Zurich Switzerland	Zurich School of Crystallography – Bring Your Own Crystals www.chem.uzh.ch/linden/zsc/	20.01.2015
Jun. 14-18	Cavalese- Trentino, Italy	DSE 2015 – 100 Years of Debye Scattering Equation dse2015.org	As long as vacant places are available
Jun. 30 – Jul. 03	Lucerne Switzerland	5th European Pefc & H2 Forum www.efcf.com	now open
Aug. 23-28	Rovinj Croatia	The 29th European crystallographic meeting (ECM-29) ecm29.ecanews.org	23.03.2015
Aug. 30- Sep. 4	Zaragoza Spain	VI European Conference on Neutron Scattering (ECNS) www.ecns2015.eu	15.03.2015
Sep. 14	Neuchâtel Switzerland	Annual Meeting (2015) of the SGK / SSCr	to be announced
<b>2016</b>			
Aug. 28 – Sep. 01	Basel CH	The 30th European crystallographic meeting (ECM-30)	to be announced
<b>2017</b>			
Aug. 21-29	Hyderabad India	The XXIV Congress & General Assembly of the International Union of Crystallography (IUCr-2017) www.iucr2017.org	to be announced

## Become a member of SGK/SSCr

If you are working in the field of crystallography, you might be interested in becoming a member of our society. For more information as well as online registration, please go to our website (<http://www.sgk-sscr.ch>).

Presently, the yearly membership fee is CHF 30 (CHF 10 for students).



### SGK/SSCr is a member of the Swiss Academy of Science.

Name			
Given name			
Title			
Institution			
Street			
Box/building			
ZIP Code			
Town			
Country			
Phone office	+	( )	
Fax office	+	( )	
Phone private	+	( )	
Mobile phone	+	( )	
E-Mail	@		
Interest			
Membership subsection crystal growth	Yes ( )	No ( )	
Birth date	Day:	Month:	Year:
Language(s)			
Major research interests			
Highest degree received			
from university			
Present position			

Date: Place: .....

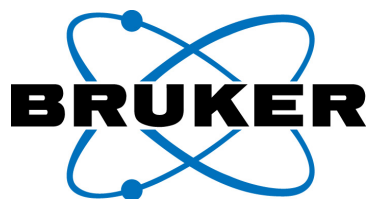
Signature: .....

Please FAX the completed form to: Denis Sheptyakov, +41 (0)56 310 2939  
or use our online application form at <http://www.sgk-sscr.ch>

You may also use this form if you need to update your contact information.

## Institutional members and supporting institutions

### Corporate members



Stoe & CIE GmbH  
Wissenschaftliche Instrumente



### Supporting institutions



Member of the  
Swiss Academy of Sciences



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



**Schweizerische Gesellschaft für Kristallographie**  
**Société Suisse de Cristallographie**  
**Società Svizzera di Cristallografia**  
**Societad Svizera per Cristallografia**

**Members of the Board of the Society for the period 2012 – 2014**

<b>President</b>	<b>Dr. Jürg Schefer</b> Laboratorium für Neutronenstreuung und Imaging (LNS) Paul Scherrer Institut, WHGA-244, 5232 Villigen PSI +41 56 310 4347, <a href="mailto:jurg.schefer@psi.ch">jurg.schefer@psi.ch</a>
<b>Vice-President, Treasurer</b>	<b>PD Dr. Piero Macchi</b> Department of Chemistry & Biochemistry University of Berne Freiestrasse 3, 3012 Bern +41 31 631 4361, <a href="mailto:piero.macchi@dcb.unibe.ch">piero.macchi@dcb.unibe.ch</a>
<b>Secretary</b>	<b>Dr. Denis Sheptyakov</b> Laboratorium für Neutronenstreuung und Imaging (LNS) Paul Scherrer Institut, WHGA-133, 5232 Villigen PSI +41 56 310 3070, <a href="mailto:denis.sheptyakov@psi.ch">denis.sheptyakov@psi.ch</a>
<b>Webmanager</b>	<b>Dr. Céline Besnard</b> Laboratoire de Cristallographie Université de Genève 24, Quai Ernest Ansermet, 1211 Genève 4 +41 22 379 62 02, <a href="mailto:celine.besnard@unige.ch">celine.besnard@unige.ch</a>
<b>Other members</b>	<b>Prof. Dr. Michael Hennig</b> F. Hoffmann - La Roche Pharma Research 65/319, CH-4070 Basel +41 61 688 6046, <a href="mailto:michael.hennig@roche.com">michael.hennig@roche.com</a> <b>Prof. Dr. Anthony Linden</b> Department of Chemistry A University of Zürich Winterthurerstrasse 190, 8057 Zurich +41 44 635 4228, <a href="mailto:anthony.linden@chem.uzh.ch">anthony.linden@chem.uzh.ch</a> <b>Prof. Dr. Katharina Fromm</b> Département de Chimie Université de Fribourg Chemin du Musée 9, 1700 Fribourg +41 26 300 8732 <a href="mailto:katharina.fromm@unifr.ch">katharina.fromm@unifr.ch</a> <b>Dr. Antonia Neels</b> Center for X-ray Analytics Empa - Swiss Federal Laboratories for Materials Science and Technology, Überlandstrasse 129, 8600 Dübendorf +41 58 765 45 07 <a href="mailto:antonia.neels@empa.ch">antonia.neels@empa.ch</a>
<b>Auditors:</b>	<b>B. Spingler</b> (University of Zürich), <b>K. Schenk</b> (EPF Lausanne)



SGK/SSCr Newsletter (ISSN 1662-5358, online version: ISSN 1662-534X)

Editor : Dr. Denis Sheptyakov  
Laboratory for Neutron Scattering and Imaging (LNS)  
Paul Scherrer Institut  
Building WHGA-133  
CH-5232 Villigen PSI, Switzerland

e-mail: [denis.sheptyakov@psi.ch](mailto:denis.sheptyakov@psi.ch)

[www.sgk-sscr.ch](http://www.sgk-sscr.ch)

SGK/SSCr, CH-1700  
Fribourg

Bank Account: UBS Zürich      IBAN: CH39 0027 9279 C029 1110 0  
BIC: UBSWCHZH80A  
BLZ: 279

Printing and Mailing:



---

The newsletter of SGK/SSCr is published 2-4 times a year in 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.

Commercial advertisements of material of interest to members of the SGK/SSCr are welcome. Please contact the treasurer for details of the advertising rates.