



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

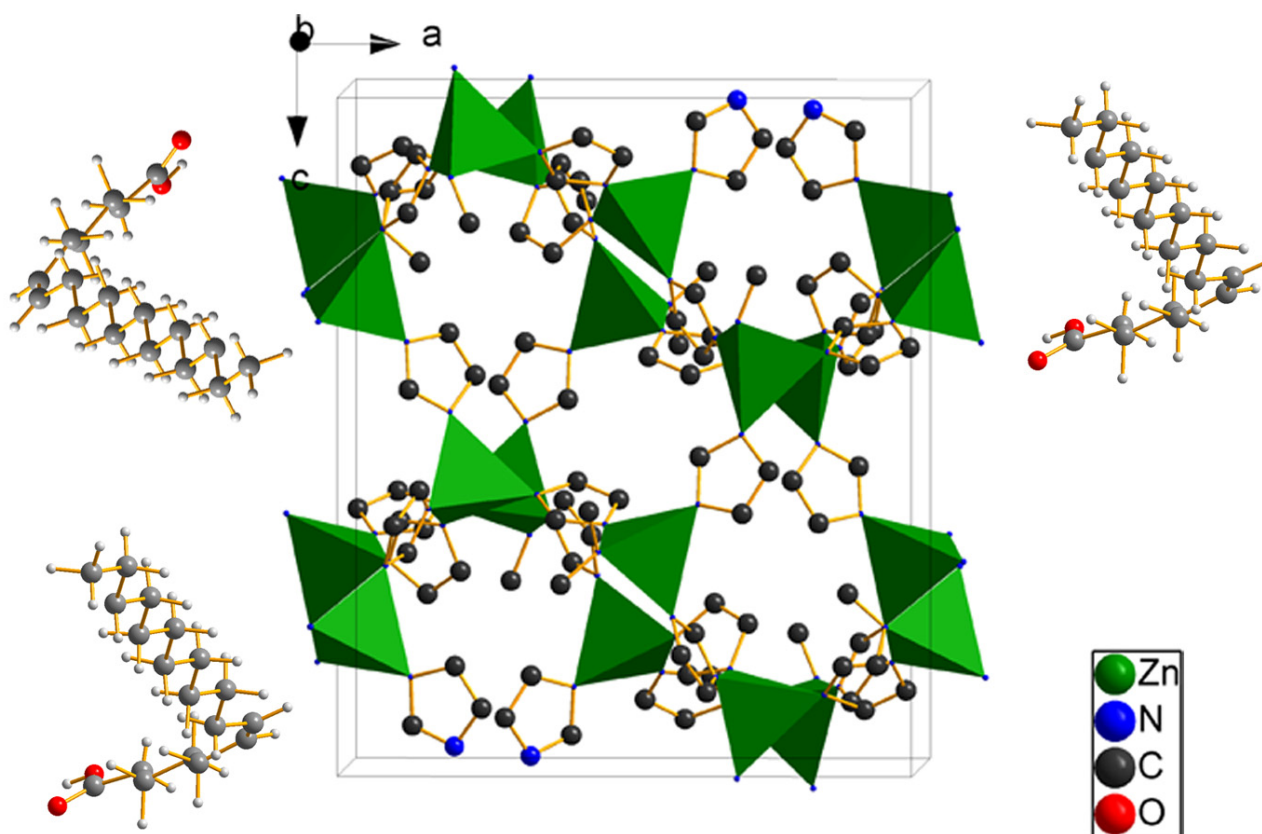
sc | nat 

Member of  
the Swiss Academy of Sciences

## SGK/SSCr NEWSLETTER

ISSN 1662-5358 (printed edition)  
ISSN 1662-534X (electronic edition)

No. 83  
April 2011



Zeolithe framework ZIF-4  $[\text{Zn}(\text{Im})_2]$  under pressure in Daphne oil

**In this issue:** Annual Assembly 2011 – Sept. 16, Berne – Call for Abstracts

**On the Cover:**

High pressure powder diffraction investigation (SLS MS Beamline) of evacuated ZIF-4 in Daphne oil.

Details are given in the report see page 6.

## **SGK/SSCr Newsletter No. 83**

The President's Page	5
New high pressure X-ray powder diffraction capabilities at the SLS- Material Science Beamline	6
Science as Art – Art as Science	10
News for and from members	12
Welcome of new SGK/SSCr members	12
Annual Membership Fee 2011	12
Missing Members	13
Travel grants for young SGK/SSCr members	13
Corrigendum funding of the poster price 2010	13
Section crystal growth: financial report 2010	14
SGK/SSCr financial report 2010, report of the auditors	14
News from the European Crystallographic Association - ECA	15
Golden mouse award 2010: Iphone application for crystallography	15
2013 – year of crystallography	15
IUCR World Directory of Crystallographers	15
9 <sup>th</sup> Ewald Price to be presented in Madrid	16
Hommage en l'honneur du Prof. Gervais Chapuis	17
New publications	19
Annual meeting 2011 in Berne – call for abstracts	20
Flyers	22
Fourth Erwin Felix Lewy Bertaut Prize - Call for Nominations	24
Call for proposals: SLS, SINQ, SMS, SNBL/EMBL, ILL, FRM-II	25
Calendar of forthcoming meetings	26
European Network on Crystal Growth	
Become a member of SGK/SSCr	31
Institutional members and supporting institutions	33



## Dear members of the Swiss crystallographic society,



Who in Switzerland knows about us? Are we a visible society? We are working on it... Indeed, we try on one hand to attract sponsors to our activities such as the annual meeting. On the other hand, the Society can support special events with high impact. One of these was the recently held inaugural lecture of the Fribourg Chaim Weizmann Lectureship: So, we have had her here in Switzerland, our recent Nobel laureate in Chemistry with a subject on crystallography, Prof. Ada E. Yonath from the Weizmann Institute, Israel, and some of you came to see her giving a great lecture on behalf of the inaugural Fribourg Chaim Weizmann Lectureship. The event was well appreciated by researchers as well

as students from all kinds of different fields: chemistry, geosciences, medicine, biochemistry, physics, and we had more than 300 guests in our auditorium, which normally holds 280...

Such events do not go without the officials, and we had the Rector of the University of Fribourg, who is from the Faculty of Theology, and the Vice-Rector of research of the University of Fribourg. The Ambassador of Israel to Switzerland brought along a delegation with his wife, his first secretary and the press and public relation responsible. They also do not pass unnoticed by the press, and we had both German and French journals of Fribourg as well as the local radio station presenting this event. We had the announcement spread on the internet at many different places. This event was co-sponsored by our Society who was the only outside contributor. This made appear our logo as unique one on the official announcements and presentations. Maybe this can be one way to become more present and known to the big public, which again raises the attention of possible new members on our Society. Also, our industrial members will certainly appreciate such activities in the future. Thus, help to place our logo in prominent places, on your web-pages and wherever your activity is related to crystallography! Many thanks for your collaboration.

Many happy crystals,

Katharina Fromm

## New high pressure X-ray powder diffraction capabilities at the SLS-Material Science Beamline

Petra Simoncic<sup>1,2</sup>, Thomas Bennett<sup>3</sup>, Fabia Gozzo<sup>1</sup>, Piero Macchi<sup>2</sup>

<sup>1</sup>Paul Scherrer Institut, Swiss Light Source, 5232 Villigen PSI

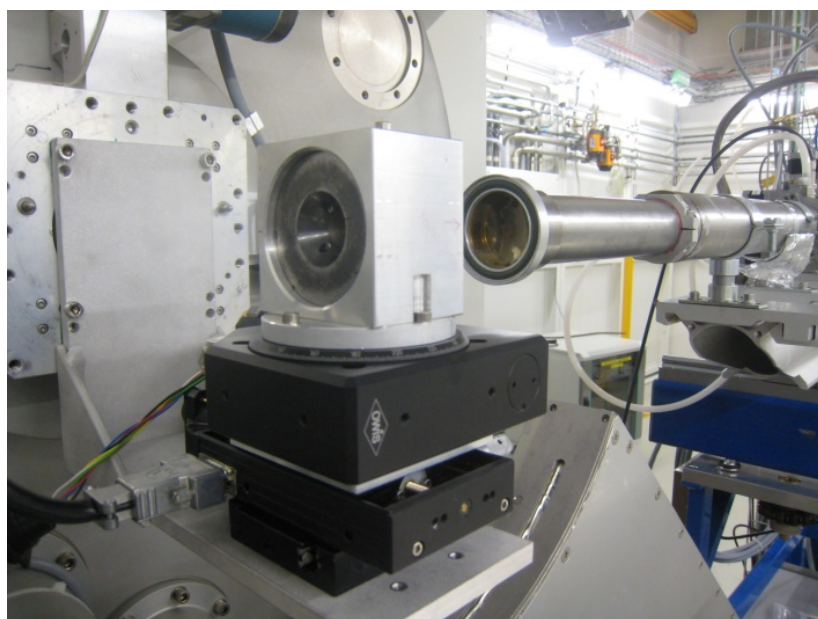
<sup>2</sup>Department of Chemistry and Biochemistry, University of Bern, 3012 Bern

<sup>3</sup>Department of Materials Science and Metallurgy, University of Cambridge (UK)

The Swiss Light Source Material Science (SLS-MS) beamline powder diffraction station has been recently equipped with a gas-driven diamond anvil cell for *in-situ* non-ambient high pressure X-ray powder diffraction investigations. First experiments have been conducted to investigate the structural behavior of organic and metal-organic compounds at non-ambient conditions.

High pressure XRPD equipment at SLS-MS Beamline Powder Station:

A gas-driven Boehler-type membrane diamond anvil cell is now available at the SLS-Material Science Beamline to perform high pressure X-ray diffraction experiments. The Boehler-type DAC has a large angular aperture (85°) that allows conducting high d-spacing resolution XRPD measurements. Non-ambient pressure up to 30 GPa can be reached with 500 µm diameter diamond culets with the pressure driven via a gas-membrane mechanism (Figure 1). Regulated by an attached gas line, the pressure can accurately be risen in small steps (0.1-0.2 kbar). Diffraction data are recorded using MYTHEN II detector [1]. Type IIa diamonds have been mounted, which are also suitable for in-situ high pressure infrared (IR) experiments. SR-XRPD and IR experiments can, therefore be performed under the same identical experimental conditions at the SLS-MS powder diffraction and SLS-IR spectroscopy beamlines. At this purpose, special attention has been paid to the geometry of the cell and the overall experimental set up so to not only fit both beamlines but also achieve a user-friendly swap between them. High pressure XRPD capabilities will be extended in the upcoming months by a gas-driven high temperature diamond anvil cell. The possibility of combined high temperature/high pressure experiments will be particularly interesting to probe the non-ambient structural behavior of pharmaceutical compounds. This includes crystallization experiments in the diamond anvil cell, applying temperature



gradients in isobaric conditions. Complementary single crystal high pressure XRD can be performed at the Laboratory for Chemical Crystallography at the University of Bern, using a screw driven DAC working in a pressure range 0-10 GPa

Figure 1:  
Boehler-type diamond anvil cell  
for at SLS-MS Beamline Powder  
Station

## First experiments and results:

We have undertaken some preliminary studies using the new equipment at the SLS-MS beamline on a rather large variety of subjects: a) structural behavior of metal organic frameworks (MOF) under high pressure; b) pressure induced changes of transition metal carbonyls; c) structure property correlation of organic non linear-optic active species; d) search of polymorphic forms of pharmaceuticals. We briefly report on the study of Zeolitic imidazolate frameworks, an interesting class of MOF's.

## Zeolitic imidazolate frameworks and ZIF-4:

Zeolitic imidazolate frameworks (ZIF's) are porous materials that form open framework structures by linking transition metals ions (Zn, Co) and the organic molecule imidazole and find applications in gas-separation, gas-storage, and heterogeneous catalysis. ZIF's are of particular interest because of their remarkable chemical and thermal stability [2]. Traditionally, these materials have been exposed only to very moderate pressures. An understanding of the behavior of metal organic frameworks under high pressure could give information on the mechanical properties of these materials and therefore lead to more advanced engineering and applications. So far, there has been only very few X-ray diffraction studies of metal organic frameworks under high pressure using diamond anvil cells.

The scope of this study was to investigate the structural response of the zeolitic imidazolate framework to elevated hydrostatic pressure in relation to potential phase transition, pressure induced amorphization and subsequent recrystallization. ZIF-4 [Zn(Im)<sub>2</sub>] was selected as a candidate for reversible amorphization, because amorphization of the framework was observed during thermal treatment [3]. The use of a pressure medium during high pressure experiments that is commonly employed to ensure hydrostatic pressure conditions, allowed us, in the case of the ZIF-4 system, to also probe the framework stability in relation to the presence of guest- and solvent molecules. Two types of pressure media have been used for this purpose: 4:1 methanol:ethanol and Daphne oil. Methanol is small enough to interpenetrate the framework, while Daphne oil (a type of mineral oil) is too large to enter the structure (Figure 2). To probe the effect of the pressure medium on the structural stability of ZIF-4 under high pressure, the following 4 experiments were carried out:

- 1) ZIF-4 as synthesized (containing DMF solvent molecule) using 4:1 methanol:ethanol
- 2) ZIF-4 as synthesized (containing DMF solvent molecule) using Daphne oil
- 3) ZIF-4 evacuated using 4:1 methanol:ethanol
- 4) ZIF-4 evacuated using Daphne oil

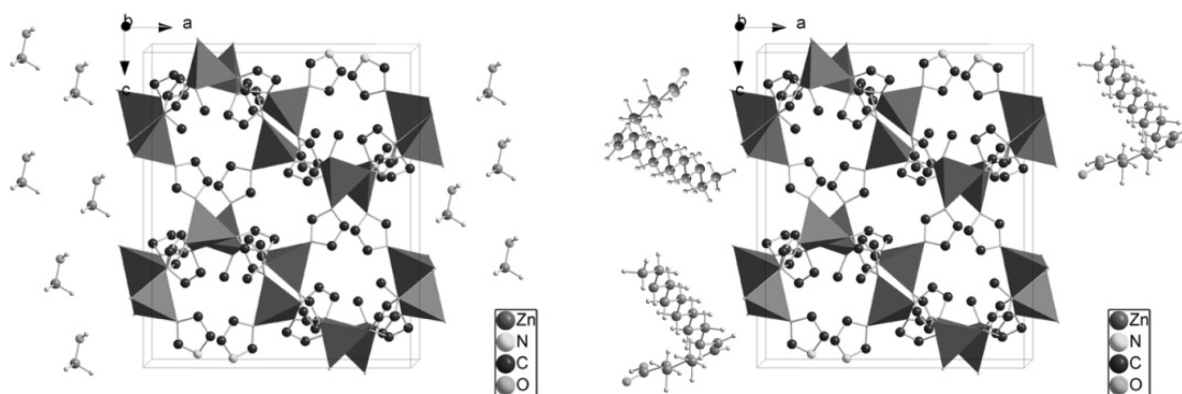


Figure 2: ZIF-4 and the pressure medium methanol (left) and Daphne oil (right)

Pressure induced amorphization occurred independent of the presence of a solvent molecule or the pressure medium used. However the pressure at which the amorphization occurred was significantly influenced by the presence of an interpenetrating guest molecule from the pressure medium. Using 4:1 methanol:ethanol as a pressure medium, crystalline features were present up to at least 40 kbar. Even at 75 kbar the sample appears not completely amorphous. Using Daphne oil as a pressure medium, amorphization started to set in at 5 kbar and the sample was entirely amorphous at 26 kbar. Independent of the pressure medium used, all samples showed recrystallization once the pressure was released to ambient conditions. High pressure phases were observed depending on the presence of the solvent molecule. ZIF-4 containing the DMF solvent molecule displays a orthorhombic  $P2_12_12_1$  and a monoclinic  $P2_1/c$  phase at high pressure. An orthorhombic-orthorhombic phase transition was observed in the evacuated ZIF4, while the monoclinic phase was absent.

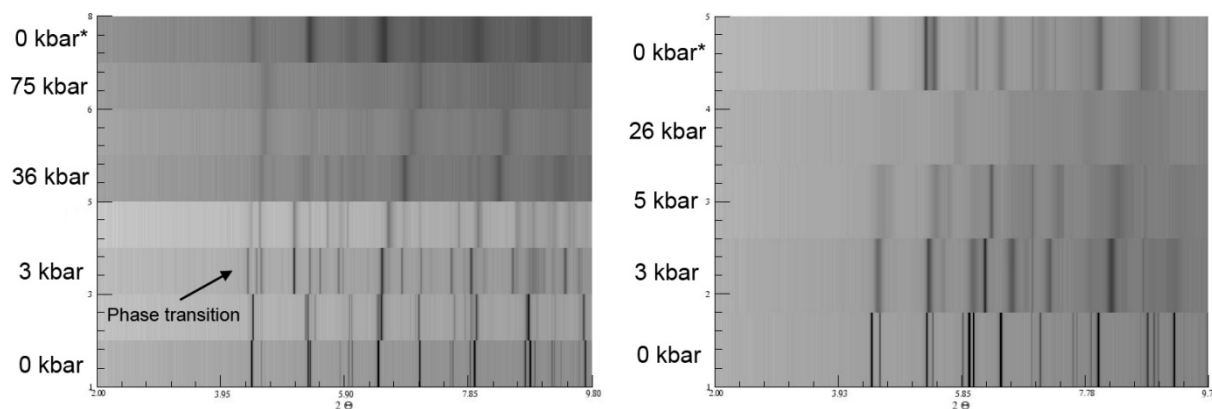


Figure 3:

High pressure powder diffraction data of evacuated ZIF-4 using methanol (left) and Daphne oil (right). 0 kbar\* shows the recrystallization after pressure release. (1 GPa = 10 kbar).



Solvent present	Hydrostatic Medium	Phase transition (GPa)	Amorphization (GPa)
Yes	Daphne oil	0.21 - 0.32	2.61 – 6.43
Yes	4:1 Methanol:ethanol	0.00 –0.12	2.02 – 4.53
No	Daphne oil	0.17 - 0.35	0.35 – 0.98
No	4:1 Methanol:ethanol	0.05 - 0.79	0.25 – 0.48

Table 1: Summary of synchrotron high pressure powder XRD investigating ZIF-4

The reversible pressure-induced amorphization of a Zeolitic Imidazolate Framework (ZIF-4) has been reported for the first time, as also observed in zeolites and aluminophosphates [4, 5].

- [1] A. Bergamaschi, A. Cervellino, R. Dinapoli, F. Gozzo, B. Henrich, I. Johnson, P. Kraft, A. Mozzanica, B. Schmitt, X. T. Shi, *Journal of Synchrotron Radiation* **2010**, 17, 653.
- [2] K. S. Park, Z. Ni, A. P. Cote, J. Y. Choi, R. D. Huang, F. J. Uribe-Romo, H. K. Chae, M. O'Keeffe, O. M. Yaghi, *Proc. Natl. Acad. Sci. USA* **2006**, 103, 10186.
- [3] T. D. Bennett, A. L. Goodwin, M. T. Dove, D. A. Keen, M. G. Tucker, E. R. Barney, A. K. Soper, E. G. Bithell, J. C. Tan, A. K. Cheetham, *Phys. Rev. Lett.* **2010**, 104, 115503.
- [4] Y. N. Huang, E. A. Havenga, *Chemical Physics Letters* **2001**, 345, 65.
- [5] M. B. Kruger, R. Jeanloz, *Science* **1990**, 249, 647.

## Science as Art – Art as Science

Contributed by Janet Iwasa & Edgar Meyer Edgar Meyer (model\_em@yahoo.com)

Abstracted from the winter 2010 edition of ACA RefleXions (acareflexions@gmail.com) with the permission of Dr. Judith Flippen-Anderson

Imagine the surprise when the earliest molecular models were presented to the public by Hoffmann in his 1866 Faraday Lecture, or the anticipation when Fischer used bread clumps and toothpicks to model the stereochemical properties of carbohydrates in the 1890s. A few of us were around in 1968 when a color monitor was first used to display 3-D images of molecules. The challenges then were daunting – it was not until 1975 that it became possible to fit a protein structure to density with molecular graphics. Early programs like ORTEP, DISPLAY, BILDER, FRODO evolved and matured, but were seldom used outside the lab. Later, visualization software, such as GRAMPS, and 16mm movies taken from the graphics terminal in the 1970s made it into the lecture room and laid the groundwork for videos now easily made from programs like KiNG or VMD ([molvis.sdsc.edu/visres/sculpture/subjects.jsp](http://molvis.sdsc.edu/visres/sculpture/subjects.jsp)). David Goodsell ([mgl.scripps.edu/people/goodsell](http://mgl.scripps.edu/people/goodsell)) took molecular visualization into the art gallery and Edgar Meyer started carving wooden sculptures of molecules ([molecular-sculpture.com/](http://molecular-sculpture.com/)); Byron Rubin (<http://www.molecularsculpture.com>) and Julian Voss-Andrae ([www.julianvossandreae.com/](http://www.julianvossandreae.com/)) made secondary skeleton sculptures in metal. Rapid prototyping ([3dmoleculardesigns.com](http://3dmoleculardesigns.com), Scripps) made it possible to create precisely scaled models (Figure 1, Edgar Meyer). To



Figure 1: Rapid prototyping was used to create a 20cm diameter plastic machete of the polio virus capsid (2.2Å resolution, Hogle Laboratory, Harvard Medical School) for the 2005 Smithsonian Exhibition commemorating the 50<sup>th</sup> anniversary of the polio vaccine with complementary walnut base

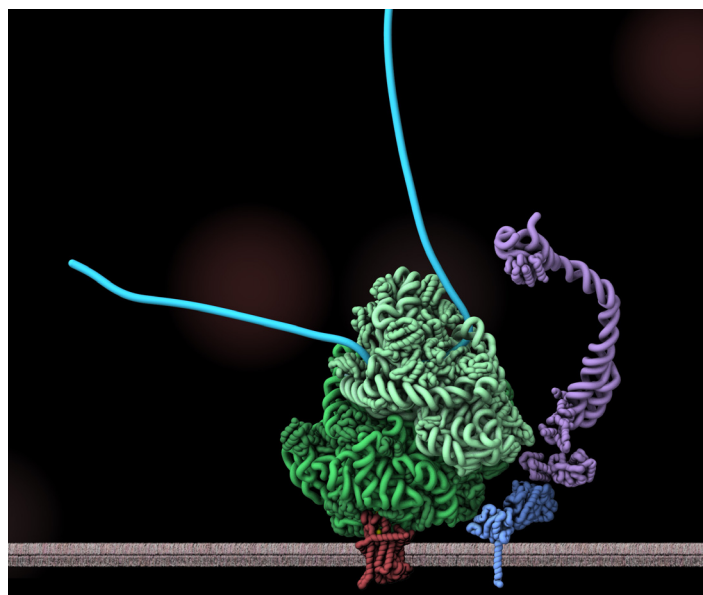


Figure 2: Animation of eukaryotic co-translational translocation, with a focus on the conformational changes of the protein channel Sec61.

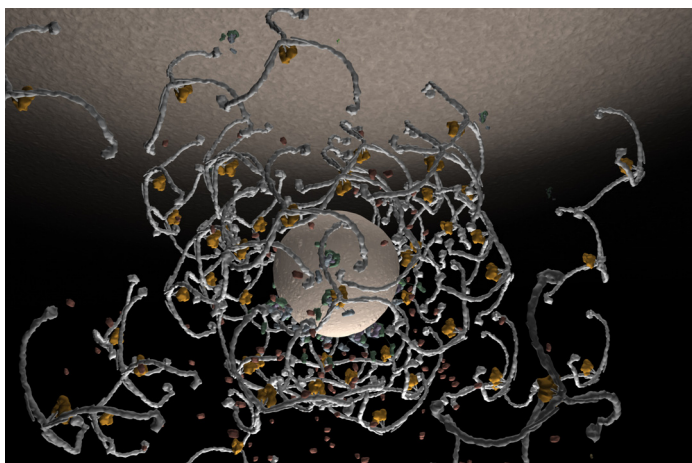


Figure 3: The animation at [https://iwasa.hms.harvard.edu/project\\_pages/endocytosis/endocytosis.html](https://iwasa.hms.harvard.edu/project_pages/endocytosis/endocytosis.html) shows the process of clathrin-mediated endocytosis.

monumental molecules will have lasting value, telling future generations about the 'golden age' of crystallography and the heroic efforts to elucidate the individual molecules of life. The recent increased use of physical, hand-held static models has been well complemented by the growing use of dynamic visualization tools. In the past decade, an increasing number of scientists have turned to 3-D animation software to create Pixar-quality movies of dynamic molecular events. These molecular animators, including recent MacArthur Foundation awardee Drew Berry ([www.macfound.org/site/c.lkLXJ8MQKrH/b.6241243/k.30C1/Drew\\_Berry.htm](http://www.macfound.org/site/c.lkLXJ8MQKrH/b.6241243/k.30C1/Drew_Berry.htm)), Janet Iwasa (<http://iwasa.hms.harvard.edu>), and Graham Johnson ([fivth.com](http://fivth.com)) use animation software from Hollywood, such as Autodesk Maya, Maxon Cinema 4D and Blender to bring static molecular structures to life within their natural biological contexts. Efforts are currently underway to give these animation programs some of the capabilities of molecular viewer software ([www.molecularmovies.com/toolkit/](http://www.molecularmovies.com/toolkit/), [epmv.grahamj.com/forum](http://epmv.grahamj.com/forum)) and to provide tutorials specifically targeting researchers ([www.molecularmovies.com/learning/](http://www.molecularmovies.com/learning/)).

While molecular images and models are intrinsically artistic, they are seldom seen outside the laboratory or classroom and rarely used to illustrate science news in the media. The crystallographic community is now challenged to find ways to exhibit visual and tactile images of our most significant structures. Imagine exhibiting your finest structure in 3-D as a dynamic video or accessible sculpture.

With the centennial of the discovery of X-ray diffraction and the International Year of Crystallography just around the corner, here is our chance to make a visual and lasting impact on public consciousness and sensitivity.

commemorate the sesquicentennial of the polio vaccine in 2005, the Smithsonian commissioned scaled bronze sculptures of the polio virus capsid structure and the capsid+receptor complex (Hogle's lab, HMS). Mixing fantasy with art and science, images of molecules have been juxtaposed with flowers or in sculpture gardens ([molecular-sculpture.com/Campus-sculptures/Imagine.html](http://molecular-sculpture.com/Campus-sculptures/Imagine.html)). But, do we find life-sized bronze sculptures of biomolecules in public spaces, like a model of penicillin in a hospital terrace or a blockbuster drug in the offices of a pharmaceutical company? These sculptures of

## News for and from members

**We welcome the following new members of the SGK/SSCr:**

### Personal members

Dr. Riccarda Caputo  
(Laboratory for Inorganic Chemistry, ETH Zürich, CH-8093 Zürich)

Dr. Jürgen Thun  
(Solvias AG, Römerpark 2, CH-4303 Kaiseraugst AG, Project Leader)

Dr. Volodymyr Svilyk  
(ESRF Grenoble, F-38042 Grenoble Cedex, France, Postdoc)

Ms. Claire-Lise Chanez  
(Department of Chemistry, Université de Fribourg, Chemin de Musée 9,  
CH-1700 Fribourg, ph.D.)

Ms. Pascal Alexander Schouwink  
(Laboratoire de Cristallographie, Quai Ernest-Ansermet, CH-1211 Genève, ph.D.)

Mr. Rangana Warshamanage  
(Organisch-Chemisches Institut, Universität Zürich, Winterthurerstrasse 190,  
Y12 E25, CH-8057 Zürich, ph.D.)

### Membership fees 2011

The membership fee for 2011 stays unchanged: **CHF 30** for regular members, CHF 10 for students (up to PhD. candidates, post-docs are regular members).

The fee is already included in the new balance stated on the back of the mailing letter. We may remind you that you also **can pay for up to three years in advance**.

Please pay the full amount due immediately **by bank transfer** to the UBS account:  
IBAN CH39 0027 9279 C029 1110 0 , BIC: UBSWCHZH80A  
Please avoid cash payments at a post office (PC 80-2-2, UBS Zürich,  
Account No. 230-C0291110.0) as Postfinance is charging significant handling fees  
to the society.

Thank you for your cooperation.

Your new (and your old) treasurers,  
Piero Macchi (and Michael Hennig)

## Missing Members

Universities and research institutions are not forwarding the mail anymore properly to their ancient staff members. As a consequence, numerous letters sent to our mobile members are returned without any comment.

We are presently missing the actual addresses of:

- Frédéric Gabriel Paul Arod (Cristallographie, EPFL)
- Fabrice Albert Camus (Cristallographie, EPFL)
- Peter Mandalive (EMPA Dübendorf)
- Laurette Schmitt (Inorganic Chemistry, Neuchâtel)

Please send the correct address to: Jurg.Schefer@psi.ch, subject=SGK/SSCr Membership

## 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 anytime. You should have been member for at least one year before applying for a grant.

Travel grants are good opportunity allowing young scientist to profit from our society in a period with low income. By becoming afterwards a long-term member of our society, you can return this good-will later to the next generation.

Details for applications are given at:

<http://www.sgk-sscr.ch/TravelGrants.pdf>

## Corrigendum: Poster Price 2010 – funded exclusively by PANalytical

The 2010 poster price of the annual meeting 2010 was funded by PANalytical only. We want to make a formal apology for this mistake in the last newsletter No. 82 on page 11. The poster price 2009 in Fribourg was sponsored by ILFORD.

In addition, we would like to thank Bruker for the generous lunch offered on the annual meeting 2010 in Geneva.

## Section Crystal Growth: Financial Report

The balance of our account (Credit Suisse) per 31.12.2010 equals CHF 6504.96.

### SGK/SSCr: Revisorenbericht für die Jahresrechnung 2010

Konten:

UBS	UBS	279-C0291110.0
Credit Suisse	CS	913652-00

Die Unterzeichneten haben Kenntnis genommen von der Jahresrechnung der Schweizerischen Gesellschaft für Kristallographie. Die Rechnungsprüfung betrifft die Periode vom 1. Jan. 2010 bis 31. Dez. 2010. Die Unterzeichneten stellen fest, dass die Abrechnung mit den vorgelegten Belegen übereinstimmt.

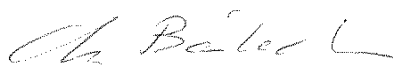
Am 31. Dez. 2010 ist der Stand der Konten und der Kasse:

UBS	SFr.	17'747.36
CS	SFr.	17'700.04
<u>Kasse</u>	<u>SFr.</u>	<u>1'566.40</u>
Summe SGK	SFr.	37013.80

Die Unterzeichneten beantragen der Versammlung die Entlastung des Kassierers und der Revisoren für die geprüfte Periode.

Ort / Datum  
Basel, 15. März 2011

Unterschriften



Ch. Bärlocher  
(ETH Zürich)



K. Schenk  
(EPF Lausanne)

## **Macedonia joins the ECA – European Crystallographic Association**

I am pleased to inform you that the application for membership of the Society of Chemists and Technologists of Macedonia (Former Yugoslav Republic of Macedonia), Division of Crystallography as ECA National Member adhering body was accepted by absolute majority of the Councilors. Thus the number of member countries of ECA increased to 33.

Petra Bombicz, Secretary ECA

## **IPHONE application for crystallography – Golden Mouse Award 2010**

The iPhone application on crystallography (see our report in the SGK/SSCr newsletter No. 80, p.17, <http://escher.epfl.ch/iphone/>), developed by Dr. Ivan Orlov and Prof. Gervais Chapuis, has been awarded the second prize of the Golden Mouse Award 2010.

This is a distinction for a Swiss Innovation in IT domain. In 2010 it was awarded for the best application for mobile phone intended for education and e-learning.

Prof. Chapuis and Dr. Ivan Orlov are currently searching for funding for creating multimedia crystallography book for iPads. This is an interactive schoolbook covering principal topics of crystallography and supported with interactive applets and simulations, similar to "The Elements": A Visual Exploration', e-learning iPad application thoroughly explaining the Periodic Table in interactive way.

Press release EPF Lausanne:

<http://actu.epfl.ch/news/golden-mouse-award-crystallography-on-iphone-2/>

To download the app: search for Escher Mobile on AppStore,  
or visit <http://escher.epfl.ch/iphone/>

## **2013 – Year of crystallography**

The year 2013 has been declared the International Year of Crystallography. It follows the centennial of the discovery of X-rays in 1912.

## **IUCr - World directory of crystallographers**

<http://ww1.iucr.org/wdc/>

In this directory of information you find useful information for practicing crystallographers, but also for other scientists.

Presently, 142 Swiss crystallographers are listed in the directory. Do not hesitate to add your name with your affiliation and your interests into these databases.

## Ewald Prize

The 9<sup>th</sup> Prize will be presented at the Madrid Congress in August 2011. The name of the recipient will be communicated later.

The International Union of Crystallography is awarding this prize for outstanding contributions to the science of crystallography. The Prize is named after Professor Paul P. Ewald, in recognition of his significant contributions to the foundations of crystallography and to the founding of the International Union of Crystallography. Professor Ewald was the President of the Provisional International Crystallographic Committee from 1946 to 1948, the first Editor of the IUCr publication *Acta Crystallographica* from 1948 to 1959 and the President of the IUCr from 1960 to 1963.

The Prize consists of a medal, a certificate and a financial award, and is presented once every three years during the triennial International Congresses of Crystallography. The recipients to date are as follows:

### Year Place

1987 Perth, Australia  
1990 Bordeaux, France  
1993 Beijing, People's Republic of China  
1996 Seattle, USA  
1999 Glasgow, UK  
2002 Geneva, Switzerland  
2005 Florence, Italy  
2008 Osaka, Japan

### Recipients

Professor J.M. Cowley and Dr A.F. Moodie  
Professor B.K. Vainshtein  
Professor N. Kato  
Professor M.G. Rossmann  
Professor G.N. Ramachadran  
Professor M.M. Woolfson  
Professor P. Coppens  
Dr. D. Sayre



## Hommage en l'honneur du Prof. Gervais Chapuis

Contribué par Dieter Schwarzenbach (Dieter.Schwarzenbach@epfl.ch)

A la fin de l'été 2009, le professeur Gervais Chapuis a pris sa retraite à l'Ecole Polytechnique Fédérale de Lausanne (EPF-L). Professeur à l'Université de Lausanne jusqu'en 2003, Gervais Chapuis est devenu professeur de l'EPF-L avec le transfert de la Section de physique de l'Université à l'EPF-L. Les deux hautes écoles lausannoises lui ont décerné le titre de Professeur honoraire.



Né en Ajoie (alors Canton de Berne) en 1944, Gervais Chapuis obtient la maturité type C au Gymnase cantonal de Porrentruy en 1962 et poursuit ses études à l'Ecole Polytechnique Fédérale de Zurich (EPF-Z). Diplômé en cristallographie en 1966, il obtient un doctorat ès sciences en 1971 sous la direction du professeur A. Niggli de l'institut de cristallographie de l'EPF-Z. Le sujet de sa thèse concerne la structure de  $\text{Cu}_2\text{CdSiS}_4$ , structure dérivée de wurtzite. Il complète ensuite sa formation en Californie au Lawrence Berkely Laboratory sous la direction du professeur D. H. Templeton, de 1972 à 1975. C'est le professeur Templeton, un spécialiste reconnu dans le domaine de la diffusion résonnante des rayons-X, qui le persuadera de l'importance du rayonnement synchrotronique pour la cristallographie. En 1980 et en 1983, il collaborera avec le professeur Templeton au laboratoire de radiation synchrotronique de l'Université de Stanford.

Gervais Chapuis est nommé maître-assistant à l'Institut de Cristallographie de l'Université de Lausanne (IC) en 1975. Cet institut avait été créé peu avant en 1973, doté d'un professeur, de quelques locaux vides dans le Bâtiment des sciences physiques nouvellement construit, d'un crédit d'investissement de CHF 500'000 et d'un crédit annuel de fonctionnement de CHF 30'000. Gervais Chapuis a été impliqué dans la croissance et dans tous les développements, événements, agrandissements, luttes et fêtes de l'IC. Il l'a marqué par sa mentalité, ses orientations et ses valeurs. L'IC est le fruit d'une collaboration intense et Gervais Chapuis est un de ses réalisateurs.

Jusqu'en 1982, l'IC ne comprenait pas de secrétaire: on écrit les publications et documents administratifs avec deux doigts sur une machine à écrire; on gère personnellement fonds, subsides du Fonds National et crédits de roulement déposés sur des comptes bancaires privés au nom de l'IC. On aligne diffractomètre et chambres à filme la nuit parce que le laboratoire ne disposait pas encore de stores. Quand une demande pour des stores a été finalement acceptée, c'est Gervais Chapuis qui arriva à les faire motoriser. Pourtant, en été rien ne fonctionnait parce que la climatisation était insuffisante. Lors de pannes graves, en voiture privée, on transporta à Zurich disque dur et cartes de mémoire de l'ordinateur pour réparation. Les charges administratives étaient alors généralement moins lourdes, et on pouvait passer beaucoup de temps auprès des installations de diffraction et des ordinateurs.

Dans les années 1970, une nouvelle loi sur l'Université n'admettait plus de nominations renouvelables en dessous du rang de professeur associé et une promotion de Gervais Chapuis semblait devenir très difficile. Cependant, cette loi a été progressivement assouplie. En 1979, Gervais Chapuis est nommé professeur assistant, avec la charge d'un nouveau cours pour chimistes. En 1983, sa promotion au rang de professeur associé, nomination renouvelable, assure son futur à l'Université de Lausanne. Il est nommé professeur ordinaire en 1991. En 1998, il reprend la direction de l'IC. Il s'occupe du développement technique de l'IC, évalue de nouveaux diffractomètres, déménage le laboratoire dans des locaux plus appropriés, assure la transition vers le "in-house computing".

Dans les années 1980, la Faculté des sciences de l'Université ne comptait pas de professeur d'informatique, domaine considéré comme "artisanal". Puisque la cristallographie s'est développée au rythme de la puissance de calcul, les cristallographes de l'époque étaient connus pour être proches de l'informatique, et le Rectorat de l'Université offrait à l'IC la fonction de "délégué du rectorat en informatique". C'est Gervais Chapuis qui assumait cette charge politique pour de nombreuses années. Les conséquences pour l'IC étaient réjouissantes: la décharge de Gervais Chapuis de sa fonction de professeur valait un nouveau poste à mi-temps de chargé de cours qui a permis plus tard à l'IC de se lancer dans la création de la ligne lumière Swiss-Norwegian Beam Lines (SNBL) au synchrotron européen de Grenoble. Le fer de lance dans cette aventure a été Gervais Chapuis.

Dès les débuts, la recherche de Gervais Chapuis visait les transitions de phase dans des composés lamellaires dites du type perovskite, en collaboration avec le laboratoire de physique du solide de l'EPF-Z. La suite logique de ces travaux conduisait aux recherches sur les structures aperiodiques incommensurables qui ont fait la renommée internationale de Gervais Chapuis. En plus, il est connu pour les modules informatiques d'enseignement de cristallographie, mis à disposition des intéressés sur Internet.

Gervais Chapuis a siégé durant de nombreuses années au comité de la Société suisse de Cristallographie et a été son président. Il a été président de la Section de physique de l'Université de Lausanne, président du 3<sup>e</sup> cycle de physique de la Suisse romande, et président du comité directeur du Swiss National Supercomputing Centre à Manno. Il est vice-président et délégué du Canton de Vaud auprès de la Fondation SWITCH. Il est co-éditeur du périodique Acta Crystallographica B (Structural Science). Il poursuit actuellement sa carrière très active et enseigne dans diverses écoles et cours en voyageant à travers l'Europe. Nous lui souhaitons bonne continuation, non seulement dans le domaine de la science, mais encore dans les loisirs qu'il affectionne particulièrement, l'alpinisme et le ski.

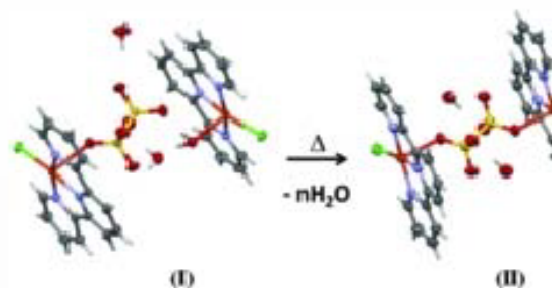
## Recent Publications from our members

Crystal-to-crystal transformation upon dehydration of a copper(II) 2,2':6',2''-terpyridine complex

Acta Crystallogr C Cryst Struct Commun **66**: m343-7 (2010)

[doi.org/10.1107/S0108270110041090](https://doi.org/10.1107/S0108270110041090)

Crystal-to-crystal transformations are not uncommon and many are the result of dehydration of transition metal complexes. By carefully heating the ionic copper(II) terpyridine complex, (I), the coordinated water molecule of the cation could be eliminated, leaving a free coordination site on the metal. This was then filled by a suitably positioned O atom of the thiosulfite ligand of the anion, and resulted in the transformation of the ionic complex (I) into a centrosymmetric binuclear complex (II).



The crystal-to-crystal transformation of the ionic copper(II) terpyridine complex (I) into the binuclear complex (II).

***L. Schmitt, G. Labat and H. Stoeckli-Evans***



# 2011 Meeting of the Swiss Crystallographic Association

## Call for Abstracts

The annual meeting of the SGK/SSCr and general assembly will take place at Department of Chemistry and Biochemistry, **University of Bern, Freiestrasse 3**, Bern on **Friday 16 September 2011**. The meeting is jointly organized by the groups of Mineralogical Crystallography (Prof. Dr. T. Armbruster) and Chemical Crystallography (PD Dr. P. Macchi) of the University of Bern.

A **social dinner** is scheduled on **Thursday September 15, 2011** (evening before the meeting).

More details on the website: <http://www.sgk2011.unibe.ch>

### Deadlines Abstract submission:

Oral Presentation: June 30, 2011

Poster Presentation: July 31, 2011

Please use the template .rtf available on the meeting website; abstract should be sent by e-mail at [sgk2011@dcb.unibe.ch](mailto:sgk2011@dcb.unibe.ch)

**Registration (meeting and dinner):** September 1, 2011

The meeting is free of charge (except for dinner and accommodation).



Berna and Urs are waiting for you!

Meeting Title: **Modern crystallographic techniques for new materials**  
**Program**

- 9.00-10.00      *registration /Poster session*
- 10.00-10.10    Welcome message
- 10.10-11.00    Prof. R. Miletich (University of Wien) "Single-crystal diffraction at extreme conditions: Innovative techniques and new trends"
- 11.00-11.15    *Coffee break /Poster*
- 11.15-12.30    Session 1 (*Inorganic materials and minerals*)  
3 talks selected from the abstracts
- 12.30-13.15    *Lunch/Poster*
- 13.15-13.45    General Assembly of the SGK
- 13.45-14.00    *Coffee break /Poster*
- 14.00-14.50    Prof. D. Jayatilaka (University of Western Australia) "Charge density refinement of X-ray diffraction data without the multipole model: what else can we squeeze out of the data?"
- 14.50-15.00    Poster Prize Winners announcement
- 15.00-16.15    Session 2 (*Biomaterials and Organic Chemistry*)  
3 talks selected from the abstracts
- 16.15-16.30    *Coffee Break/Poster*
- 16.30-17.45    Session 3 (*Facilities and new instruments*)  
3 talks selected from the abstracts
- 17.45-18.00    Closing Ceremony

## 2011 International School on Charge Density –

Jaca(Spain) - Aug. 30 – Sept. 4, 2011



**2011 International School on Charge Density**

30 August - 4 September 2011  
Jaca (Spain)

Madrid 2011 IUCr

**CSIC**  
CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

Satellite of the XXII Congress and General Assembly International  
Union of Crystallography

**CRM<sup>2</sup>**  
Cristallografie, Résonance Magnétique et Modélisations

**BRUKER**

**Oxford Cryosystems**

**GEBC**

Nancy-Université  
Université Henri Poincaré

**Agilent Technologies**

### THE SCHOOL

Charge density determination through accurate high order X-ray diffraction experiments is a powerful method to get a detailed description of the chemical and physical properties of molecules and materials. This approach has become quite accessible for organic and first row transition metal complexes using user-friendly software. This school will cover all aspects of the methods, from data collection procedures to the analysis of derived properties. Extension to proteins and heavy atoms will be discussed. Tutors of the school are recognized scholars and specialists in the field and main software authors will attend the school to demonstrate their programs. Software training will be extensively provided to the participants. Therefore the number of students will be limited to 50. The school program is available at:

<http://www.iucr2011madrid.es/index.php/program/satellite-meetings>

### ORGANIZERS

Prof. Claude LECOMTE, CRM2 UMR 7036 CNRS - Nancy University, France

Prof. Fernando J. LAHOZ, ICMA-CSIC - University of Zaragoza, Spain

### SECRETARY

Dr. Pilar GARCIA-ORDUÑA, ICMA-CSIC - University of Zaragoza, Spain

### CONTACT

E-mail: lahoz@unizar.es ; mpgaror@unizar.es

### TRAVEL

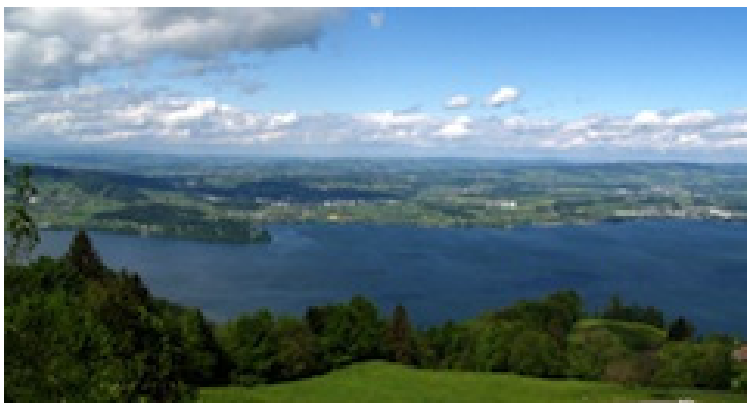
The School organization provides facilities (with an extra-cost) to travel from Madrid to Jaca (departure at Madrid "Puerta de Atocha" station at 9:00 a.m. on 30<sup>th</sup> August), by fast train from Madrid to Zaragoza and in a private hired bus to Jaca. The return journey from Jaca to Madrid is expected to arrive at Madrid "Puerta de Atocha" Station at 11:52 a.m. on 4<sup>th</sup> September. If you need to arrive to Madrid earlier, please, contact the organization to help you to arrange your journey back in the best way.

## 10<sup>th</sup> PSI Summer School on Condensed Matter

Zugerberg, Switzerland – August 13-22, 2011

Probing Phase Transitions using Photons, Muons and Neutrons

with training possibilities at PSI



Phase transitions are not only a well known fact of everyday life, but also an important field of current research and of technological applications. In this Summer School, more than 20 world-class experts will introduce the different aspects of phase transitions from an experimental and theoretical point of view. Following the school, a practical training at PSI will allow approx.

25 students to gain hands-on experience with state-of-the-art instrumentation using photons, neutrons, and muons.

It is the very first time that the PSI Summer School will be held in Zug - on the premises of the **Institut Montana Zugerberg** (international boarding school), Zug, Switzerland.

As in the 2 previous years, the PSI Summer School offers again a twofold educational program with the school in Zug followed by hands on training at the PSI Facilities in Villigen. The practical training will be available for approximately 20 students. The transfer from Zug to Villigen will take place on Friday, August 19, 2011.

- **10<sup>th</sup> PSI Summer School on Condensed Matter Research**  
August 13 - 19, 2011 at the Institut Montana Zugerberg, Zug, Switzerland
- **Practical Training** at the Paul Scherrer Institut -  
Neutron & Muon Sources & Swiss Synchrotron Light Source  
August 20 - 22, 2011 at PSI Villigen, Switzerland

More information: <http://indico.psi.ch/conferenceDisplay.py?confId=258>  
<http://www.psi.ch/num/>

## **Fourth Erwin Felix Lewy Bertaut Prize - Call for Nominations**

The European Crystallographic Association (ECA) and the European Neutron Scattering Association (ENSA) announce the call for nominations for the **Fourth Erwin Felix Lewy Bertaut Prize** in honor of the late Erwin Felix Lewy Bertaut, and in memory of his scientific achievements and cornerstones in crystallography and in neutron scattering. The prize is awarded to a young European scientist, with a career extending to 5 to 8 years after thesis defense, in recognition of notable experimental, theoretical or methodological contributions in the field of analysis of matter using crystallographic or neutron scattering methods.

Nominations for the prize may be submitted by European scientists as individuals (self-nomination excluded) or on behalf of a group. Nominations should include the motivation for the award, brief curriculum vitae of the nominee and a short list of major publications. Letters of support from authorities in the field are accepted. Nominations for the prize will be treated in confidence and although they will be acknowledged there will be no further communication. Nominations are to be addressed in electronic form to Michael STEINER ( [steiner@helmholtz-berlin.de](mailto:steiner@helmholtz-berlin.de) ) or Andreas ROODT ( [roodta@ufs.ac.za](mailto:roodta@ufs.ac.za) ). The nominations for the prize will be examined by a Selection Committee. ECA and ENSA will agree on the composition of a Selection committee for the evaluation of the quality the candidates and the recipient of the prize. Membership in the Selection Committee is obtained by invitation extended jointly by ECA and ENSA executives, with a delegate of each executive representing the associations. The Selection Committee is chaired by the representative of the association that organizes the prize ceremony for a specific year. The prize ceremony is organized at European conferences organized by ECA or ENSA. The two associations will decide on an alternate timing of the venue of the prize ceremony and organize the call for nominations according to their respective schedules of conferences.

The call for nominations for the **Fourth Erwin Felix Lewy Bertaut Prize** is open until **20<sup>th</sup> April 2011**. It will be awarded at ECNS2011 (5<sup>th</sup> European Conference on Neutron Scattering in Prague, Czech Republic, 17<sup>th</sup> - 22<sup>nd</sup> July 2011.)

The amount of the prize is 2000 Euros. ECA and ENSA aim to equal contribution towards the financing of the prize through donations, sponsors etc. A dedicated fund has been established to maintain the prize on long term.



## Calls for proposals

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

<b>Facility</b>	<b>Deadline(s)</b>	<b>Link</b>
<b>SLS: Swiss Light Source</b> All except PX lines Protein beam lines (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>SμS: Swiss Muon Source</b> All instruments	Dec. 5	<a href="http://www.psi.ch/useroffice">www.psi.ch /useroffice</a>
<b>ESRF: European Synchrotron</b> All instruments, long term proposals	Jan. 15	<a href="http://www.esrf.eu">www.esrf.eu</a>
All instruments, short term proposals	March 1, Sept. 1	<a href="http://www.esrf.eu">www.esrf.eu</a>
<b>SNBL: Swiss Norwegian Beam Line</b>	March 1, Sept. 1	<a href="http://www.esrf.eu/UsersAndScience/Experiments/CRG/BM01/">www.esrf.eu/ UsersAndScience/ Experiments/ CRG/BM01/</a>
<b>ILL: Institut Laue Langevin</b> All instruments	Mid February/September	<a href="http://www.ill.eu">www.ill.eu</a>
<b>FRM II: Heinz Maier-Leibnitz</b> All instruments	May 6, 2011	<a href="http://user.frm2.tum.de">user.frm2.tum.de</a>

## Calendar of forthcoming meetings

(Please mail missing information on meetings of interest to [Jurg.Schefer@psi.ch](mailto:Jurg.Schefer@psi.ch))

			Deadlines:
<b>2011</b>			
April 25-29	Mahdia Tunisia	School on Fundamental Crystallography	
May 2-6	Newtown, PA USA	ICDD XRF Clinic – Practical X-ray Fluorescence Session I	
May 8-13	Leuven Belgium	Short Course on Physical Characterization of Nanostructures <a href="https://wet.kuleuven.be/nano">https://wet.kuleuven.be/nano</a>	April 15, 2011
May 9-11	Shanghai China	Energy Materials Research by Neutrons and Synchrotron Radiation	
May 16-19	Lyon France	PPXRD-10: 10 <sup>th</sup> Pharmaceutical Powder X-ray Diffraction Symposium, <a href="http://www.icdd.com/ppxrd/">http://www.icdd.com/ppxrd/</a>	
May 22-27	Granada Spain	3 <sup>rd</sup> International School on Biological Crystallization	
June 2-12	Erice Italy	Electron Crystallography – New methods to explore structure and properties of the nanoworld	
June 2-12	Erice Italy	The power of powder diffraction	
June 13-17	Aussois France	Resonant Elastic X-Ray scattering in condensed matter	
June 13-17	Newtown, PA USA	ICDD XRF Clinic – Practical X-ray Fluorescence Session II	
June 13-26	Zürich CH	The Zurich School of Crystallography: Bring Your Own Crystal, <a href="http://www.oci.uzh.ch/group/pages/linden/zsc/">http://www.oci.uzh.ch/group/pages/linden/zsc/</a>	closed
June 26-30	Berlin Germany	5 <sup>th</sup> International Workshop on Crystal Growth Technology <a href="https://iwcgt5.ikz-berlin.de">https://iwcgt5.ikz-berlin.de</a>	closed
June 28-July 1	Luzern CH	European Fuel Cell Forum 2011 <a href="http://www.efcf.com">http://www.efcf.com</a>	closed
June 29-July 1	Le Diablerets CH	2011 Swiss Workshop on Materials with Novel Electronic Properties (MaNEP), <a href="http://www.manep.ch/swm11">www.manep.ch/swm11</a>	April 18, 2011
July 17-21	Prague Czech Rep	5 <sup>th</sup> European Conference on Neutron Scattering <a href="http://www.ecns2011.org">http://www.ecns2011.org</a>	closed
Aug. 13-20	Zugerberg CH	10 <sup>th</sup> PSI Summer School on Condensed Matter: Phase transitions probed by Neutrons, X-Rays and Muons <a href="http://indico.psi.ch/event/psi-summer-school-2011">http://indico.psi.ch/event/psi-summer-school-2011</a>	June 30, 2011
Aug. 22-29	Madrid Spain	IUCr-2011, 22 <sup>nd</sup> General Assembly and Congress of IUCr <a href="http://www.iucr.org/iucr/cong/iucr-xxii">http://www.iucr.org/iucr/cong/iucr-xxii</a>	April 15, 2011
Aug. 30 – Sept. 4	Jaca Spain	2011 International School on Charge Density <a href="http://www.iucr2011madrid.es/index.php/program/satellite-meetings">http://www.iucr2011madrid.es/index.php/program/satellite-meetings</a>	May 15, 2011
Sept. 12-15	Montpellier France	Euromat 2011 – Advanced Materials and Processes <a href="http://euromat2011.fems.eu">http://euromat2011.fems.eu</a>	closed
Sept. 15-16	Villigen CH	JUM@P 11: Second Joint Users Meeting at PSI <a href="http://indico.psi.ch/conferenceDisplay.py?confId=42">http://indico.psi.ch/conferenceDisplay.py?confId=42</a>	to be announced
Sept. 16	Bern CH	SGK/SSCr Annual Meeting <a href="http://www.sgk2011.unibe.ch">http://www.sgk2011.unibe.ch</a>	To be announced
Sept. 20-24	Salzburg Austria	Joint Meeting of the German Crystallographic Society (DGK), German Mineralogical Society (DMG) and Austrian Mineralogical Society (ÖMG) <a href="http://www.salzburg2011.org">http://www.salzburg2011.org</a>	May 30, 2011

## 2012

April 29 – May 4	Vancouver Canada	ARRS 2012: Meeting of the American Röntgen Ray Society <a href="http://www.acr.org">http://www.acr.org</a>	to be announced
Aug. 7-11	Bergen Norway	ECM-27 <a href="http://ecm27.ecanews.org">http://ecm27.ecanews.org</a>	to be announced
April 29- May 4 cancelled	Vancouver Canada Villigen CH	ARRS 2012 – Meeting of the American Roentgen Ray Society PSI Powder Diffraction Summer School	to be announced Next school: 2014
Nov. 18-23	Sidney Australia	SAS2012: International Small Angle Scattering Conference	

## 2013

July 7-12	Moscow Russia	17 <sup>th</sup> International Zeolithe Conference <a href="http://www.izc17.com">http://www.izc17.com</a>	to be announced
April 14-19	Washington DC, USA	ARRS 2013 – Meeting of the American Roentgen Ray Society	to be announced
Aug. 25-29	Warwick UK	European Crystallographic Association, ECM-28 <a href="http://ecm28.org">http://ecm28.org</a>	to be announced

## 2014

August	Montreal Canada	IUCr-2011, 23 <sup>rd</sup> General Assembly and Congress of IUCr <a href="http://www.iucr.org/iucr/cong/iucr-xxiii">http://www.iucr.org/iucr/cong/iucr-xxiii</a>	to be announced
to be decided	Villigen CH	PSI Powder Diffraction Summer School	to be announced

## 2015

to be decided	To be decided	European Crystallographic Association, ECM-29 <a href="http://ecm29.org">http://ecm29.org</a>	to be announced
---------------	------------------	--	-----------------

## European Network on Crystal Growth

Contributed by thierry.duffar@grenoble-inp.fr

I am collecting the information on the European laboratories and industries involved in crystal growth activities. Our idea is setting-up a network between these institutes and industrial partners. If you have such activities in your laboratory or in your company, do not hesitate to contact me or/and to submit your coordinates with some keywords of your skills by E-Mail.

For laboratories:

- If you are belonging to a large interdisciplinary lab or institute, limit the data to the crystal growth activity only

For companies:

- If you are belonging to a large interdisciplinary company, limit the data to the crystal growth activity only.
- If you feel some details should remain confidential, you are not obliged to fill in!

<b>Laboratory Details</b>
---------------------------

Laboratory name	
Director/Head of the laboratory	
Name of contact	
Address	
Tel :	
e-mail:	
Web Site	
Number of permanent researchers	
Average number of people working in the lab (incl. Techn., Admin., students, post-docs...)	
Number of thesis defended per year	
Average number of refereed papers /year	
Industrial contracts (average number, income)	
Did you already get research projects funded by the European Community? How much?	
International collaborations	
Keywords describing the research	
Crystals or Materials, or processes developed/studied	

For Laboratories and Companies:

**Short description of company activity:**

**What would you expect from a European Network on Crystal Growth:**

COMPANY NAME	
President or Director	
Address	
Tel:	
e-mail:	
Web Site	
Number of employees	
Activity type (raw material, crucibles, crystal growth, equipment, machining/polishing, characterization, crystal application ....)	
Main application of products:	
Market share : Inside European Community Outside European Community	
Sales (annual income)	
Did you already get funding from European Community? Several?	
Which kind of funding: - Research Project - Development project - Specific SME funding - Regional funding - Other	



## Become a member of SGK/SSCr

If you are working in the field of crystallography, you will be interested to become a member of our society. For more information as well as online registration, please have a look on our website (<http://www.sgk-sscr.ch>). Presently, the yearly membership fee is sfr. 30 (sfr. 10 for students). For new members, the membership is free until the end of 2007. Please note: SGK/SSCr members can also apply to be a member of the subsection crystal growth (no additional charge) or for individual membership of the European Crystallographic Association, ECA (additional charge: 10 Euro).

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

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

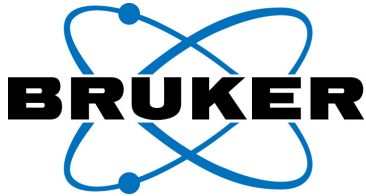
Date: ..... Place: .....  
Signature: .....

**FAX the completed form to: Dr. Radovan Cerny, 022 379.6108**  
**or use our online application form at <http://www.sgk-sscr.ch>**

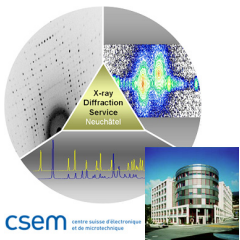




## Corporate members



Stoe & CIE GmbH  
Wissenschaftliche Instrumente



X-Ray Diffraction Services  
CSEM, Neuchâtel

## Supporting institutions



Member of  
the Swiss Academy of Sciences



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



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

**Membres du Comité pour la période 2009 – 2012**

**Présidente**

**Prof. Dr. Katharina Fromm**

Département de Chimie  
Chemin du Musée 9  
CH-1700 Fribourg  
Tél.: +41 26 300 8732 Fax: +41 26 300 9738  
e-mail: KATHARINA.FROMM@UNIFR.CH

**Vice-Président**

**Prof. Dr. Marc Schiltz**

Laboratoire de Cristallographie 2  
BSP 514  
Bâtiment Science Physique UNIL  
CH-1015 Lausanne  
Tél.: +41 21 693 06 31 Fax: .. 05 04  
e-mail: MARC.SCHILTZ@EPFL.CH

**Secrétaire**

**Dr. Jürg Schefer**

Laboratorium für Neutronenstreuung (LNS)  
Paul Scherrer Institut, WHGA-244  
CH-5232 Villigen PSI  
Tél.: +41 56 310 43 47 Fax: +41 56 310 31 91  
e-mail: JURG.SCHEFER@PSI.CH

**Trésorier**

**PD Dr. Piero Macchi**

Department of Chemistry & Biochemistry  
University of Berne  
Freiestrasse 3  
CH-3012 Bern  
Tél.: +41 31 631 43 61 Fax: +41 31 631 80 57  
e-mail: PIERO.MACCHI@DCB.UNIBE.CH

**Webmanager**

**Dr. Céline Besnard**  
Laboratoire de Cristallographie  
Université de Genève  
24, Quai Ernest Ansermet  
CH-1211 Genève 4  
+41 22 379 62 02  
E-Mail: CELINE.BESNARD@UNIGE.CH

**Autres membres**

**PD Dr. Michael Hennig**  
F. Hoffmann - La Roche  
Pharma Research 65/319  
CH-4070 Basel  
Tél.: +41 61 688 60 46 Fax: +41 61 688 74 08  
e-mail: MICHAEL.HENNIG@ROCHE.COM

**Prof. Dr. W. Steurer**  
Laboratorium für Kristallographie  
ETH Zürich  
HCI G 511, Wolfgang-Pauli-Str. 10  
CH-8093 Zürich  
Tél.: +41 44 632 66 50 Fax: +41 44 632 11 33  
e-mail: STEURER@MAT.ETHZ.CH

**Prof. Dr. Klaus Yvon**  
Laboratoire de Cristallographie  
Université de Genève  
24, Quai Ernest Ansermet  
CH-1211 Genève 4  
Tél.: +41 22 379 62 31 Fax .. 69 06  
e-mail: KLAUS.YVON@UNIGE.CH

**Auditors:**

Ch. Bärlocher (ETH Zürich), K. Schenk (EPF Lausanne)

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

Editor : Dr. Jürg Schefer  
Laboratory for Neutron Scattering (LNS)  
Paul Scherrer Institut  
Building WHGA-244  
CH-5232 Villigen PSI, Switzerland

e-mail: Jurg.Schefer@psi.ch

<http://www.sgk-sscr.ch>

SGK/SSCr, CH-1211 Genève

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

Printing and Mailing: Paul Scherrer Institut, Villigen

---

The newsletter of SGK/SSCr is published 3-4 times a year in a circulation of 350. Word files (Font Tahoma 12) 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 advertisement rates.