



# The European Neutron Scattering Association (ENSA)

## 23. Meeting of the ENSA Committee 27-28 September 2005, Didcot, UK

Chairman: H. Mutka

### Present:

#### Delegates:

Austria	-
Czech Republic and Slovakia	Pavol Mikula
Denmark	Kell Mortensen
France	Hannu Mutka
Germany	Thomas Brückel
Hungary	László Rosta
Italy	Antonio Deriu
Netherlands	Ad van Well
Norway	Kenneth Knudsen
Poland	-
Portugal	-
Romania	Ion Ionita
Russia	Victor Aksenov
Spain	Javier Campo (repl. Jose C. Gomez Sal)
Sweden	Aleksandar Matic
Switzerland	Peter Allenspach
U.K.	Don MckPaul (repl Keith.McEwen)

#### Institutions:

ILL:	Christian Vettier
HMI	Ferenc Mezei
ISIS	Uschi Steigenberger
FZJ	Reiner Zorn
PSI	Peter Allenspach
Budapest	László Rosta

#### Guests (under point 1-4)

Swedish Government, ESS	Allan Larsson
ESSS, Göteborg, Sweden	Partik Carlsson
Risø, Denmark	Kim Lefmann

## **AGENDA OF THE 23<sup>rd</sup> MEETING OF THE ENSA COMMITTEE**

### **1. Welcome, approval of the agenda**

### **2. Minutes of the 22<sup>nd</sup> ENSA meeting in Paris (and matters arising)**

### **3. Report of the Chairman**

#### 3.1. Contacts with other scientific societies

### **4. Prospects in Europe**

#### 4.1. Facilities

#### 4.2. ESS-I

#### 4.3. ESFRI

#### 4.4. ESS-Scandinavia

### **5. ENSA representatives:**

Brief reports from national user organizations and committees

### **6. Neutron conferences**

#### 6.1. ECNS 2007

#### 6.2. ICNS'05 – Sydney

##### 6.2.1. ENSA - Walter Hälgl Prize

##### 6.2.2. ICNS'09 – outlook for the venue

### 7. Follow-up of the ENSA survey

#### 7.1. Overview of results

#### 7.2. Literature survey

### 8. General discussion on the future of ENSA

#### 8.1. Looking for a legalised status

### 9. AOB - Date, venue and special topics for next meeting.

The meeting will end at 12:30 on sept. 28<sup>th</sup>

Dinner at 19.30 after the NMI3 general meeting

## 1. Welcome, approval of the agenda

The agenda was approved.

## 2. Minutes of the 22<sup>st</sup> ENSA meeting in Paris (and matters arising)

The minutes were approved without comments.

Kell Mortensen noted that Ana Claver also made minute from the meeting as posted on the web-side. Ana has agreed to make official minutes in the future, whenever she can attend the meeting.

## 3. Report of the Chairman

### 3.1. Contacts with other scientific societies

#### 3.1.a ISE

ENSA is a member of ISE, which is an organization that has worked for the establishment of an European Research Council ERC. Hannu Mutka and Peter Allenspach have participated in meetings. Fee for ISE membership is still not decided, but likely it will not be very large. The next meeting on November 10-11 will celebrate the establishment of ERC. HM will find out who will represent ENSA at that meeting.

#### 3.1.b ESS-I

Hannu Mutka and Antonio Deriu participated in the ESS-I meeting in September. Pavol Mikula could not attend and mentioned that it generally can be a problem traveling for such small meetings. Pavol Mikula proposed that either a delegate from the more nearby region would participate, or ENSA is represented by a delegate who will be there anyway. ESS will be discussed more under point 4

#### 3.1.c EMF

**The case of European Materials Forum is followed up by the chairman.**

## 4. Prospects in Europe

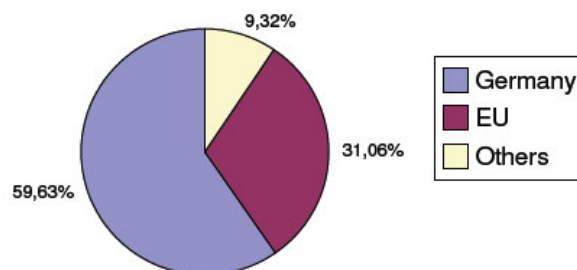
### 4.1. Facilities

#### FRM-II (no representative present at the meeting)

Hanny mentioned that FRM-II in Munich is operating successfully.

Jürgen Neuhaus mailed that FRM-II presently have a normal maintenance shutdown and will restart on 25<sup>th</sup> October for the 4th cycle. In 2005 FRM-II will then have all together 3 cycles. The plan for the next year will be 5 cycles, i.e. 260 days of operation.

Number of Proposals round-2 July 2005



Routine operation started 3.Mai 2005 with second cycle. Second call for proposals in July 2005 for 15 instruments is under operation. From the diagram on the figure it appears that

about 1/3rd of the July-05 proposals came from EU-countries. They have asked for 28% of the total requested beam time (1310 days) and got about 27% of the available beam time, i.e. the quality of the EU-proposals has been judged to be the same as the German ones. This is much more as has been agreed with the NMI3 consortium.

To summarize: EU users are very welcome at the FRM-II. Next deadline for proposals is 20. January 2006.

**ISIS (Uschi Steigenberger)**

The ISIS Second Target station project is making very good progress. The construction of the new building is progressing very well and construction of the target station itself will commence in Spring 2006. The design of the seven Day One instruments is also progressing well. They include 3 reflectometers (PolRef - for polarized neutron reflectometry; INTER - for high intensity; OffSpec - optimized for off specular reflection), a small angle scattering instrument - SANS-2D; NIMROD, a diffractometer for disordered materials; LET, a cold chopper spectrometer with an innovative guide design and WISH, a high intensity diffractometer for magnetic materials, both single crystals and powders.

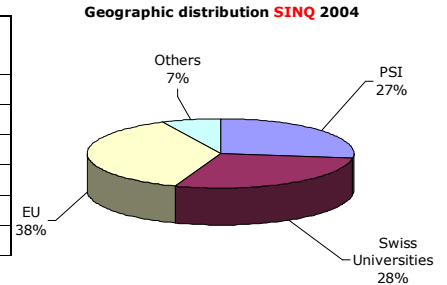
The process to develop the next phase of instruments for the second target station has started. Proposals include an instrument for extreme sample environment experiments, a large molecule diffractometer, a high resolution backscattering instrument and the development of energy selective neutron radiography.

The user programme on the Second Target Station is expected to start in autumn 2008.

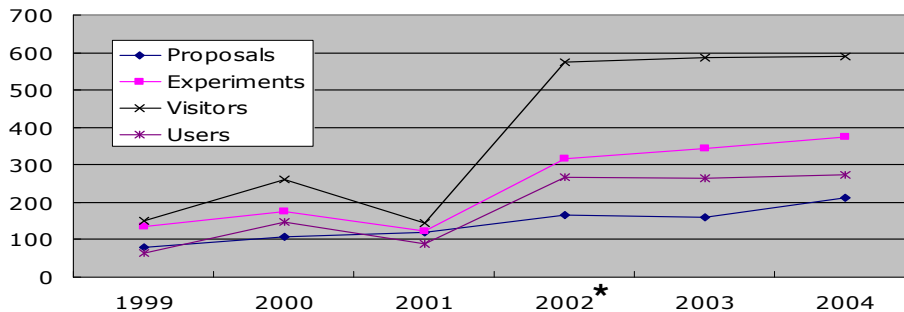
**PSI (Peter Allenspach)**

The user program is running successfully, as seen in the table and figure.

	SLS	SINQ	SmS	PSI-total
<b>Beamlines/instruments</b>	5	10	6	21
<b>Instrument days</b>	604	1516	479	2599
<b>Experiments</b>	479	374	60	913
<b>User visits</b>	1443	589	344	2376
<b>Individual users</b>	850	272	137	1259
<b>New proposals</b>	345	213	23	581



**SINQ User Operation 1999 - 2004**



\* Start up of user program

New PSI instruments and instrumentation upgrade:

MARS: High resolution backscattering spectrometer commissioning 2006.

EIGER: Thermal neutron triple-axis spectrometer commissioning: 2007.

MuPAD: Close to finished.

2D-TOF/FOCUS: 2-dim. small angle time-of-flight detector, a collaboration between PSI & Saarland University/DE. Commissioning spring 2006.

Actively shielded 16T-Magnet Consortium: SGN, PSI, SNS, MaNEP, SBF, (ILL).

Manufacturer: Bruker BioSpin Total cost: 2 MCHF

#### **HMI (Ferenc Mezei)**

Construction of the new, second neutron guide hall is complete. The neutron guide installation is delayed by the manufacturers, now it is planned for first half of 2006. The design of the two new instruments to be installed is complete and manufacturing is in progress. They are TOF instruments, which can also serve as prototypes for long-pulse neutron sources (ESS). One of the new instruments, VSANS is a focusing, multi-beam TOF small angle scattering machine with 10 times improved resolution compared to standard SANS machines. The other, EXED is a high and variable resolution TOF powder diffractometer, which will be used with the dedicated, very high field magnet in preparation. For this magnet funding has been obtained to achieve 25 Tesla, realization proposals from two potential manufacturers are due later in the year.

#### **ILL (Christian Vettier)**

ILL has presently a 9 month shut down. Start up again in June 2006.

The upgrade programme for instruments is continuing (backscattering instrument IN16), including the renewal of thermal guides. New instrument projects include a horizontal reflectometer (FIGARO), a powder diffraction machine (DRACULA) and neutron polarisation analysis on TOF instruments (PASTIS). A third SANS instrument is planned, primarily for magnetic studies. In the longer term, a third "cool" neutrons source is proposed to provide more end of guide positions for cold neutron instruments.

CV mentioned that the delivery of high quality neutron guides is presently a serious problem.

Sweden and Hungary are in the process of joining ILL. Belgium and Poland will start negotiating membership. Slovakia has expressed interests in membership.

#### **DUBNA (Victor Aksenov)**

The IBR-2 reactor was put into operation in 1984. In 2003-2004 replacement of the moveable reflector was executed. Basic parameters of the reactor today: the total flux of thermal neutrons ( $10^{16}$  n/cm<sup>2</sup>c), the pulse length of thermal neutrons (~400 mks), the power 1,5 MW. The operating life of the IBR-2 finishes in 2006 and in 2007 its modernization will begin, as a result of which a new reactor IBR-2M will be created. Basic parameters of the reactor after the modernization will remain practically unchanged.

Today on the reactor 12 spectrometers function (6 diffractometers, 3 spectrometers of inelastic scattering, 1 reflectometer, 1 spectrometer of small angle scattering and 1 spectrometer of polarized neutrons). Scientists from different countries can carry out necessary experiments. In the Frank Laboratory of Neutron Physics the user program operates. The reactor operates about 115 days per year. On average about 150 experiments are carried out per year on the spectrometers, out of which 100 experiments are carried out by external users. In the course of operation in 2004-2005 on the spectrometers of the IBR-2 reactor scientists from Germany (8), Poland (18), Romania (9) and other countries carried out their experiments. 82 propositions from 13 countries in all.

## **Jülich** (Reiner Zorn)

All instruments are still in operation, with a peak in number of external users.

There will in total be eight 'Jülich-instruments' at FRM-II; transferred, refurbished, and newly constructed. The first instruments will start to be transferred to FRM-II in October 2005. The Jülich instruments at FRM-II will be operated by Jülich personnel. With a better flux and improved instrumentation, 90% of the FZJ-user-program is expected to continue at the reactor in Munich.

## **Budapest** (László Rosta)

The Budapest Neutron Centre will have three new unique instruments available for external users: The high resolution diffractometer, based on the TOF multiframe monochromatisation principle is a joint project with HMI-Berlin. The commissioning is nearly completed and first neutron tests confirm the expected performance of the instrument. An In-Beam Mössbauer spectrometer will start operation early 2006, and an extension of the thermal three-axis spectrometer will serve as a dedicated instrument for atomic resolution neutron holography. Thanks to a national development grant in the coming three years-programme, the construction of two new instruments is funded: a horizontal sample geometry neutron reflectometer and a focussing SANS instrument will be installed. On the long term (2008-11), the transition from high to low enriched fuel to will be performed and an overall modernisation of the infrastructure is envisaged.

## **4.2. ESS-I**

Hannu Mutka and Antonio Deriu reported:

**ESS-Scandinavia** is in good progress, as will be described under point 4.4.

**ESS-Yorkshire:** Ongoing investigations on the required power supply for ESS, on environmental issues, etc.

**ESS-Hungary** will start investigations like those reported in the Allan Larsson report made on ESS-S (see also 4.5).

**ESS - Sachsen-Anhalt.** ESS-I judged that the Sachsen-Anhalt proposal presently is not active.

**ISIS** Hannu expressed a need for ISIS representative or observer at the ESS-I meetings. ISIS represents major experiences and knowledge which are important for ESS-I. Uschi Steigenberger agreed and will work for an ISIS representative in ESS-I.

There are presently no ongoing technical studies in the framework of ESS-I. There was an agreement that the final design cannot be defined by the first day of construction. The ESS design must be flexible and evolve during the construction phase.

It was also agreed that there presently is no need for a completely new 'scientific case study', the existing needs to be 'sharpened'

## **4.3. ESFRI**

ESFRI and ESFRI-expert groups are working on a Roadmap for European Research Infrastructure. Robert McGreevy, who is among the members of The Neutron Expert

group, reported that ESFRI will come up with a road-map, but this is not a priority list. It rather documents present opportunities for European research infrastructure.

#### 4.4. ESS-Scandinavia

Allan Larsson and Patrik Carlsson presented status of the ESS-Scandinavia.

Allan Larsson is appointed by the Swedish government to evaluate the European support for ESS located in Sweden and the economic and socio-economic prospects of ESS. He finalized a report in June 2005 and is presently discussing his investigations with relevant organizations. Patrik Carlsson is project manager in the ESS-S.

**Patrik Carlsson** presented the ESS case based on a long-pulse facility with mercury target and proton accelerator. The design should be open for a future second target station, long-pulse (LP) or short-pulse (SP) source.

The foundation of ESS-Innovation Forum (ESS-IF) was presented. ESS-IF is a consortium of European academic institutions, companies and public authorities. The ESS-IF consortium will follow the ESS project with the aim to get influence on the facility, economically and technically.

**Allan Larsson** presented the outcome of his investigations

(see also the English summary on

<http://www.ess-scandinavia.org/new/source/dokumentation/ESSexecutiveSummaryCorrectedVersion6July2005.pdf>

- full report in Swedish: <http://www.regeringen.se/content/1/c6/04/67/76/a7d2931d.pdf>)

**Allan Larsson** has met several European government representatives, who overall declared willingness to participate in the project and become a member of an ESS located in Sweden. A Larsson argue that at the present stage, *one* country has to take the responsibility for initiating the project.

Larsson noted that is clear that scientists from Sweden and other countries can get access to ESS wherever it is located in Europe. National research funding cannot and shall not accommodate the costs of ESS construction. The financial contribution from the Swedish research funding should be the same, whether the ESS is located in Sweden or anywhere else in Europe. Allan Larsson argues that the major cost for the ESS construction should be covered by private investors, in terms of Private-Public-Partnership, PPP-organization.

The arguments for Sweden to host ESS, is to develop a regional center of excellence.

Allan Larsson had the following recommendations for the Swedish government:

**Sweden should make a declaration of intent, clarifying the conditions for Sweden to host the ESS.**

**Sweden should make a formal offer to host the ESS**, including location and financial terms. The offer should be submitted soon after ESFRI has formulated the roadmap on the significant upcoming major European infrastructure projects, likely by the end of 2006.

**Sweden must plan the location of ESS next to the planned MAX-IV synchrotron x-ray facility**, to create strong synergy effects within both research and business. This is in line with other successful science-parks like ILL/ESRF, ISIS/DIAMOND, SINO/SLS etc.

**ESS should be put into a wider regional scientific / industrial development context.**

Lund has already Biomedical Centre, Laser Centre, the MAX-lab synchrotron laboratory. In Copenhagen, there is a new large national centre for bio/medical research, and centers

for nanotechnology and optical technology. In Hamburg, the x-ray laser facility will be built and there is the European Molecular Biology Laboratory.

**The ESS project should be designed as a partnership between central government and the business sector.** The aim should be to bring about a strong commitment from the business sector in the establishment and use of ESS and in the scientific, technical and industrial development. Industry contracts may include dedicated access/ownership to ESS-instruments, possibly with right to sell parts of the allocated beam-time.

**Sweden should establish a management organization for international negotiations and national preparations.** Program for recruitment of both management personnel and scientists/students should be started as soon as possibly.

Both the European Investment Bank and the Nordic Investment Bank are foreseen to be active partners in financing ESS.

It was discussed among the ENSA delegates whether industry can be foreseen to use of the ESS facility significant beyond the present utilization of neutron sources.

In the discussion it was further proposed, that EU (FP7) for a period should guarantee ESS-membership for new EU-member states that presently lack economics possibility themselves.

Hannu Mutka expressed scientism concerning guaranteed continuous operation of the ESS, if major costs have to be decided by the business sector. A. Larsson proposed that the governments may give this guarantee.

#### **4.5. other**

##### **ESS-Hungary**

**László Rosta** reported that Hungary aim for a project based on a long-pulse target station. Much works has been done to express the project to politicians, but with a new government much of the information is lost. The Hungarian prime minister has asked the minister of education and the minister of research to start investigations on the scientific value and impact.

Hungary is working on two site-proposals, one in eastern Hungary and one near Budapest. Both places have major universities. The government is expected to make a decision on their interests in hosting ESS by the end of 2005.

#### **5. ENSA representatives: Brief reports from national user organizations and committees.**

##### **Austria** (no delegate present at the meeting)

Helmut Rauch mailed that the Austrian neutron community held together with the synchrotron user community the Winter school at Planeralm/Styria 5.-12.March 2005 with about 90 participants. The continuation of the scientific membership at ILL has been extended for the next 3 years and the related consortium (MENI) has been transformed into CENI (Central European Neutron Initiative) including Austria, Czech Republic, Hungary and tentatively Slovakia. Intense discussions are going on concerning a more balanced distribution of large scale facilities within Europe.

##### **Czech Republic and Slovakia** (Pavol Mikula)

The neutron community is organized as part of the Czech and Slovak Crystallographic Association (CSCA).

CSCA meetings are arranged several times a year, typically with specific topics. The 2005 meetings include Symposium in Memory Václav Petržilka (1905-1976), Charles University Prague, March 25, 2005; National Powder Diffraction Conference, Stará Lesná Slovakia, September 20-24, 2005; International Crystallization Course CC2005, Nové Hradky, October 10-12, 2005; Symposium in Memory of George Placek (1905-1955), Brno, Sept. 21-24, 2005; and one day seminar of Czech and Slovak Crystallographic Society, October 25, 2005, NPI Řež.

Parts of the Studsvik powder diffractometer have been transferred to the Czech reactor. New neutron optical bench is under development.

### **Denmark (Kell Mortensen)**

The Danish society has a stable number of members. Most of the Danish scattering experiments are performed at the 'home base' at PSI in Switzerland, but significant number of experiments are done at ILL, HMI and ISIS.

The Danish society is evolving from that of relative few full time neutron scattering experts, to a user community of scientists using neutron scattering as one of several tools. The Danish group is working for keeping a group of scientists with the more special competences including instrument design etc. This group is essential for the successful outcome of a larger user group, providing neutron courses and expert help. A dedicated university course in neutron scattering was held in the spring, and is expected to continue on regular basis.

The Danish neutron scattering is supported in terms of post doc(s) and travelling expenses from the Research Council. The funding must be renewed by the beginning of 2006.

The annual DANSSK meeting will be arranged together with the Swedish and Norwegian associations in Göteborg 6-7th October.

Denmark is heavily involved in the work for ESS-Scandinavia. ESS-S has succeeded bringing the project up to the highest political level where socio-economic arguments will make the basis for a decision.

### **France (Hannu Mutka)**

SFN board meetings 14/01/05, 11/03/05 24/05/05.

JDN13 at Anglet 4-10/06/05. (Soubeyroux, Schober), thematic school on 'Polarized Neutrons'(Ressouche, Kernavanois). The school was this time with international attendance and NMI3 support. In addition to the activities in France (LLB/Mangin & ILL/Vettier, CRGs/Regnault) a status report on FRM-II Munich was presented by W. Petry.

SFN thesis prize to Ronan Le Touquin from Rennes.

General Assembly at JDN13, renewal of council V. Coulet(Marseille), F. Leclercq (Lille), V. Paul-Boncour (Thiais), J. Ollivier (Grenoble), G. Chaboussant (Saclay).

Preparation of the JDN14 (May -06, Murole, Puy de Dome) has started (Avignat, El-Ghozzi). School will be on 'Surfaces and Interfaces, Confinement'(Chaboussant, Brûlet).

Return to normal situation of the national source LLB, with 180 d operation foreseen in 2006.

Actions in association with the 2005 World Year of Physics and in the framework of the 'Itinerant Neutron Chair', poster presentation of neutrons and scientific themes, introductory talks at several faculties (Douai, Besançon, Bousicaud, Clermont-Ferrand, Pau etc.).

### **Germany** (Thomas Brückel)

A new KFN committee has been elected. A new ENSA delegate will be nominated soon. KFN has finished a strategy report on German neutron scattering, as requested by the ministry. It is expected to be published in October 2005. Besides the strategical recommendations, the report contains e.g. a scientific case for research with neutrons and the results of a national user survey, available at <http://www.physik.uni-kiel.de/kfn/Nutzerumfrage/index-engl.php>.

Laboratory courses for young scientists were held in spring at HMI and in September at FZJ. As an example, at FZJ 55 students from 15 countries could perform experiments on 11 neutron instruments.

(After the ENSA meeting, H. Schober has been nominated new German ENSA delegate)

### **Hungary** (László Rosta)

A consortium of four Hungarian institutes lead by BNC responded to the call for proposals for Large International Projects and the proposal was accepted. The project was started at September 1st for 3 years. It has 3 main objectives: a) improvement and development of equipment and access services at BNC; b) finance the ILL scientific membership of the Hungarian neutron user community c) perform high level research with special emphases on bio- and nanotechnology related materials, engineering systems as well as for exploring objects of cultural heritage and ancient technologies. As a first step, an interim agreement was signed for the scientific membership of Hungary at the ILL. From January 2006 this agreement will be extended in a way that Hungary will join Austria and Czech Republic to form the CENI Consortium (Central European Neutron Initiative). As a part of this project BNC - as an association of 3 academic institutes - will be extended by a fourth institute, entering by the installation of a new polarised neutron reflectometer.

The 2005 BNC neutron scattering school (including hands-on training on 6 instruments) was held in April with 32 participants. The attendance from 11 countries had a quite specific feature for the Central European region. Special emphases was made on neutron optics, since a COST action training joined also this event.

### **Italy** (Antonio Deriu)

The present situation in Italy is not very favourable for basic research: government funds are mostly devoted to industrially oriented activities. Nevertheless the budget for neutron activities in 2005 has been almost constant with respect to the previous year so that all main activities have been kept at the same level as before. The participation at the ILL is at the 3.5% level and Italy participates to two CRGs (IN13 and BRISP).

At ISIS the Italian contribution is 4% and we will contribute to a new instrument (Nimrod) to be installed at TS2. A new experimental station (called INES), downstream with respect to TOSCA, has been installed and is now under commissioning. It will be mostly used for preliminary experiments and test as well as for training purposes.

The annual meeting of SISN took place in the last week of June in Monte Conero (Sirolo) near Ancona, a very nice location inside a natural park. The meeting was preceded by a three day thematic school that this year was devoted to magnetism. The participation was quite large especially from young scientists and students.

### **The Netherlands** (Ad van Well)

The Netherlands will have (October) a meeting together with the Belgian neutron scatterers. Ongoing discussions whether the neutron scattering societies in Netherlands and Belgium should join into one organization.

Since 1<sup>st</sup> January 2005 The Interfaculty Reactor Institute (IRI) does not exist anymore. It has been split into the facility Reactor Institute Delft (RID) and a scientific department Radiation, Radio nuclides and Reactors (R3) of the faculty Technical Sciences (TNW) of the Delft University of Technology. The Delft neutron facility RID has been given three years to prove their justification – value for money! Delft has proposed an upgrade from 2 to 3MW with compact core and with cold source. This should give about a gain in flux by a factor of 50 for 4 angstrom neutrons.

**Norway** (Kenneth Knudsen)

In August 2005 an agreement was signed between the director of the Studsvik Neutron Research Laboratory (NFL), the University of Uppsala (UU) and Institute for Energy Technology (IFE, Kjeller) concerning transfer of equipment from Studsvik to IFE. The agreement concerns the R2D2 powder diffractometer (former Risø instrument) and the FYRIS reflectometer (partially completed) plus some additional equipment. IFE and UU plan to co-operate in the use of the neutron scattering instruments and envisage use for joint research and teaching activity. A new powder diffractometer for (PUS2) is now in the process of being built, jointly financed by the Norwegian Research Council and the University of Oslo, and intended primarily for studies on hydrogen storage materials.

**Poland**

No delegates present. No report

**Portugal**

No delegates present. No report

**Romania** (Ion Ionita)

The two instruments existing in INR Pitesti, a crystal diffractometer and a SANS instrument) will be operational the November.

The Romania group is still working on the realization of ILL partnership.

New initiatives are taken to identify the researchers working in the field of material science at the universities and at other Romanian research institutes, to make them join the ROMANIAN NEUTRON SCATTERING SOCIETY.

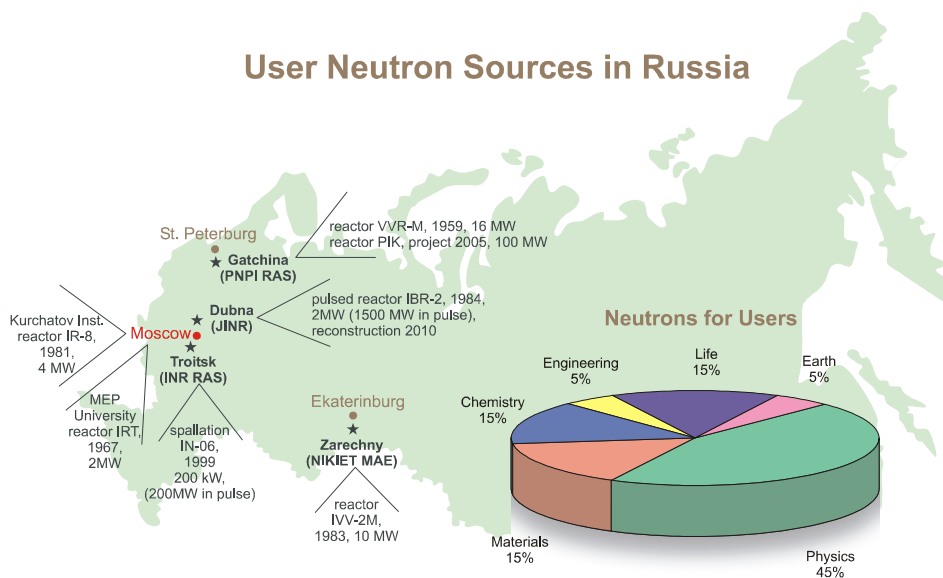
**Russia** (Victor Aksenov)

In Russia there are several medium flux neutron sources, where the studies of matter on extracted beams are carried out quite actively. These reactors of continuous action are in Russian Research Center «Kurchatov Institute» (Moscow), St. Petersburg Nuclear Physics Institute of RAS (Gatchina), Institute of Reactor Materials (Zarechnyj), Moscow Engineering Physics Institute (State University, Moscow), branch of Physicochemical Institute (Obninsk), and also the pulsed source IN-06 on the basis of proton accelerator in the Institute for Nuclear Research of RAS (Troitsk).

The IBR-2 reactor (Dubna) has the world's largest pulsed neutron flux obtained on research neutron sources ( $10^{16}$  n/cm<sup>2</sup>/s) and it is the only world class neutron source to investigate condensed matters on the territory of Russia.

The IBR-2 reactor is mainly used for beam investigations in the sphere of condensed matter physics (solids and liquids), biology, chemistry, materials science, Earth sciences. The field experience of the IBR-2 reactor shows that it is a quite effective neutron source, which is not inferior to the best sources based on proton accelerators in the majority of fields of application.

On the whole in Russia the picture of distribution of neutron investigations according to the area of knowledge is as follows: physics – 45%; materials science – 15%, chemistry – 15%, life science – 15%, engineering -5% and Earth sciences -5%.



### **Spain** (Javier Campo, replacing Jose C. Gomez Sal)

The Spanish society has about 150 members.

The society arranges annual meetings, a school on magnetism in 2005 and in 2006 there will be a school on molecular magnets.

Spain has signed agreement with ILL/CNRS on the design of a new single crystal diffractometer, D15.

### **Sweden SNSS** (Aleksandar Matic)

The Studsvik reactor was stopped in June 2005, i.e. Sweden lost a national base and a local facility for students learning neutron scattering. Sweden is now a member of ILL, and is developing a program for keeping competences in the technique. The SNSS-annual meeting will be arranged on October 6-7 together with the Danish and Norwegian organizations. A new head of SNSS, and thereby a new Swedish ENSA delegate, will be appointed in October.

(After the ENSA meeting, Adrian Rennie has been nominated new Swedish ENSA delegate)

### **Switzerland** (Peter Allenspach)

The actively shielded 16T-magnet is fully financed now (Swiss government, SNS, PSI, Swiss National Science Foundation). Right now we are in the final phase of defining the specifications. Purchase order of the magnet should go out this year and the magnet should be operational in the end of 2007.

The Zuoz summer school (microscopy/spectroscopy) was held with the participation of 120 scientists. The subject of the next summer school on August 19-26, 2006, will be decided in few weeks.

PSI has introduced a digital user office, common for visitors to the neutron, synchrotron x-ray and myon facilities. This should lower the threshold to choose other techniques. We can expect a certain broadening of the neutron user base by this in the long run.

**U.K.** (Don MckPaul, replacing Keith.McEwen)

No information.

## **6. Neutron conferences**

### **6.1. ECNS 2007**

The ECNS-2007 conference is planned to take place in Lund, Sweden 25-29 June, 2007.

The first announcement flyer, including program- and advisory committees was presented by Kell Mortensen, and acknowledged by the ENSA delegates.

#### **Conference proceedings.**

It was agreed that the proceeding should include only papers that contain original work of high quality; that papers should be subjected to the normal refereeing procedure; and that publication should be in the frame of a respected journal.

KM reported that the local organization group, with the aim to attend most relevant and high-impact journals, had considered dividing the publications into two categories.

Papers reporting results from applied neutron scattering (condensed matter science, soft matter and interfaces) could be published in '*Journal of Physics " Condensed Matter*', while papers on Techniques and instruments should be published in '*Measurement Science and Technology*'.

Richard Palmer and A. Stoneham from JPCM, have accepted to publish the applied papers, provided these are regular, original papers of at least 8 pages. The journal would take care of refereeing. There is still no agreement on costs. Sharon d'Souza from the Journal '*Measurement Science and Technology*' promised that the request will be discussed at an editorial board meeting in October 2005. d'Souza mentioned though that MST 'hesitate' accepting conference papers

The publication issue was discussed in some detail, including terms which involve traditional proceedings:

- the problem refereeing 4-500 full papers,
- the associated publication costs,
- the difficulty in getting papers from key speakers, etc.

It was agreed that the ECNS2007-organizing committee should work for

- Proceedings that include original papers of 4-6 pages (relaxed) and which are subjected to the normal refereeing procedure.
- All accepted papers should be published in a common digital journal, which must be included in the SCI database.
- The editorial board should select a number of the best papers (including invited papers) to be published in the paper-version of the journal (of the order of 300 printed pages in total).

## **6.2. ICNS'05 – Sydney**

### **6.2.1. ENSA - Walter Hälgl Prize** (see also point 8).

**The prize selection committee meeting will take place 21/10/05.** Hannu suggested that Walter Hälg prize winners should be member of the Walter Hälg prize committee for two years only in order to avoid an excessively big committee. The ENSA delegates agreed on this.

(After the ENSA meeting Walter Hälg has declared that he would be willing to give the whole CHF 200'000 to ENSA as a legacy. With a net interest of 2.5% the capital would be sustainable if every 2 years a price of CHF 10.000 is awarded.)

### **6.2.2. ICNS'09 – outlook for the venue**

ENSA will recommend that the next ICNS conference take place on the American continent, following the regular turn between Asia, America, and Europe.

## **7. Follow-up of the ENSA survey**

### **7.1. Overview of results**

Peter Allenspach presented the outcome of the survey, as documented in the included draft report. ENSA found the total return rate acceptable. Including group-representations, the return rate covered about 1/3 of the community.

The report was discussed in details, and a variety of suggestions was made for improving the text and outlook, including changes of a number of figures and notes.

I was discussed whether the total number of neutron-scattering users could be collected from the facilities, but it was concluded that since the facilities are not allowed to provide a database of names, this will be practically impossible.

It was concluded, that Peter Allenspach should make a revised draft that is send out to all delegates for comments. The resulting report will be send to ESF for their comment. Depending on the amount of responds that Peter Allenspach receives, the report may be discussed at the next ENSA meeting before publication.

### **7.2. Literature survey**

The aim of a literature survey should be to document impact of neutron scattering. ENSA should be proactive making these data available before any other organizations may do it on a different base with a worse outcome for neutron scattering.

Rauch have made a document reporting what can be done based on the “Science Citation Index” (SCI) database, how the data can be exported and evaluated and what difficulties this makes. Rauch estimate that a survey can be done for 32k€, and be available 7 months after start.

It became clear from the discussion, among the ENSA delegates however, that ENSA is not prepared for such survey yet. ENSA must decide, for example, whether a report on the literature of ‘European neutron scattering’ should include the comparison with other regions or with other techniques. It should also be decided if specific topics should be treated independently.

The group will continue the planning of a literature survey. Don MckPaul accepted to join the group.

## **8. General discussion on the future of ENSA**

### **8.1. Looking for a legalised status**

In the order that ENSA can treat finances, including the Walter Hälgl prize and participation in other associations and groups of interest, such as ISE for example, Hannu had requested information on the legal status of the national organizations. The outcome is that only few member-organizations have a formal legal status. Independent of these national conditions, however, ENSA can still have legal status. ENSA can for example be registered as an organization in Switzerland.

It was decided that ENSA should register in Switzerland and open a bank account in Switzerland. Peter Allenspach will look into this. The legal status of ENSA must be changed. Proposed revisions will be sent to delegates. The formal agreement will be taken at the next ENSA meeting. The action for registering ENSA are taken by the executive and the formalities will be carried out without further delay.

#### **Sources of income:**

Only few member organizations have member fee. Fee from member organizations can accordingly not be expected.

#### **Sponsorship:**

Companies supplying equipments (hardware/software) for neutron scattering.  
Facilities, possibly sponsoring prizes.  
Conferences. ECNS could include a fee (5-10€/participant), for ENSA.

#### **Use of money:**

Help financing startup of conferences (ECNS).  
Membership of international organizations (ISE)  
Support delegates to ENSA meetings.

## **9. AOB - Date, venue and special topics for next meeting.**

### **Next meeting in Prague, March 2006.**

Invitation to all ENSA delegates and Institutions.

**20. Nov. 2005**  
**Kell Mortensen**