

MINUTES OF THE BUCHAREST EWON / EURONS and SEENet Meetings

Bucharest, 13-14 May 2005

organized by

"Horia Hulubei" National Institute of Physics and Nuclear Engineering (IFIN-HH) The Romanian Ministry of Education and Research

AGENDA

Friday, 13th of May

- 9:30 10:30 Meeting Opening
- 11:00 12:00 M. Harakeh, "The Future of Nuclear Physics in Europe"
- 12:00 13:00 Visit of Tandem and Advanced Detectors Laboratories

13:00 - 15:00 Lunch

15:00 - 16:00 C. Scheidenberger : Presentation of EURONS. Discussions

16:00 – 17:00 S. Harissopulos: Presentation of EWON. Discussions

Saturday; 14th of May

- 9:30 11:00 Future of SEENet collaborations
- 11:00-11:30 Coffee-break
- 11:30 13:00 Future of SEENet collaborations (continued)
- 13:00 13:30 Final discussions
- 13:30-15:30 Lunch

List of participants

- 1. Prof. Muhsin HARAKEH, Chaiman NuPECC, KVI, NL
- 2. Dr. Christoph SCHEIDENBERGER, GSI, D
- 3. Dr. Sotirios HARISSOPULOS, NCSR-Athens, EL
- 4. Dr. Dionysos BONATSOS, NCSR-Athens, EL
- 5. Dr. Roza Zanni VLASTOU, NTU-Athens, EL
- 6. Prof. Dimiter BALABANSKI, U-Sofia, BG
- 7. Dr. Chavdar STOYANOV, INRNE Sofia, BG
- 8. Dr. Zoran BASRAK, IRB-Zagreb, HR
- 9. Prof. Nizamettin ERDURAN, U-Istanbul, TR
- 10. Prof. Miroslav VESKOVIC, U-NoviSad, CS
- 11. Prof. Istvan BIKIT, U-NoviSad, CS
- 12. Dr. Nebojsa NESKOVIC, VINCA-Belgrad, CS
- 13. Prof. Gheorghe CATA-DANIL, U-Bucharest, RO
- 14. Prof. Nicolae Victor ZAMFIR, NIPNE, RO
- 15. Dr. Florin BUZATU, NIPNE, RO
- 16. Dr. Ioan URSU, NIPNE, RO
- 17. Dr. Dorel BUCURESCU, NIPNE, RO
- 18. Dr. Florin NEGOITA, NIPNE, RO

Friday, 13th of May

The agenda of the meeting was adopted without changes.

Prof. N.V. Zamfir presented NIPNE-Bucharest. The institute's history, structure, personnel, funding, projects, and international collaborations were reviewed. The number of nuclear physics reasearchers is about 300, of which 10-20% are working in particle physics. He streesed that the personel reduction during the last years is mainly due to a diminishing in the auxiliary services. Answering a question concering the relationship of PhD students with NIPNE, the speaker explained that in Romania the National Institutes can no longer deliver PhD titles. The titles are formally issued by Universities, although all the PhD work is done in the Institute, the supervisers having the status of Associated Professors (without teaching duties).

Prof. M. Harakeh, NuPECC chairman, gave a lecture entitled "The Future of Nuclear Physics in Europe". Presented as a general seminar, more than 50 attendants from various NIPNE departaments had the opportunity to listen an overview of the most important and promising topics under study in Nuclear and Particle Physics. Of special interest were the NuPECC recomandations and priorieties related to several projects devoted to accelerator and instrumentation developments in Europe during the next 10-15 years.

The participants visited the 30 year-old, 9 MV FN Tandem of NIPNE and its associated experimental equipment, as well as the Advanced Detectors Laboratory that was recently opened with EC support, and is currently lead by Prof. M. Petrovici.

Dr. C. Scheidenberger, assistant to EURONS Project Coordinator - Prof. Alex Muller, presented the EURONS contract: goals, budget, activities listed by types of activities, the management structure and team, and the tools to monitor the project progress. The speaker stressed the importance of EWON activity within EURONS, and the responsibility assumed by EWON in regard with the East-European countries on their way towards a unified Europe.

Dr. S. Harissopulos introduced EWON. The institutional membership, structure, objectives, and first-evidence deliverables expected were reviewed, in the context of a comprehensive discussion of the organization's mission and milestones. It was announced that the Network Coordination Committee (NCC), beside the two co-ordinators of EWON (Dr. S. Harissopulos and R. Broda) and NuPECC Chairman, has to include two other members: one from SEE countries and one from NEE countries. Prof. Gheorghe Cata-Danil, proposed Prof. Nicolae Victor Zamfir, General Director of NIPNE for such position, pointing out that the Romanian nuclear physics community is the largest within SEE countries and that Prof. N.V. Zamfir is an well known nuclear scientist both in Europe and U.S.A.

Concering the deliverables, it was commented that it is desirable that the first deliverable, the report on research activities of SEE/NEE groups at European Large Scale Facilities, should be ready at least in a draft version, before the end of 2006, when the first FP7 proprosal will be prepared.

Several financial, logistic and legal aspects and approaches were brought to attention. Sensitive issues, working assumptions and alternative scenarios have surfaced in the context, as to the current, and sought, relationship between the Northwest, and the Southeast, networks. Unfortunately, Prof. R. Broda, the second coordinator of EWON was not able to attend the meeting in Bucharest. An announcement was made, to the effect that the site of EWON (www.ipn.demokritos.gr/EWON) is now active and participants were invited to make contributions and link on, from their own web-pages.

In his second presentation, **Dr. S. Harissopulos** reminded to participants the essential role of SEENet collaboration and its relationship with EWON activity of EURONS. He continued by presenting the status, achievemnts and tipical problems as well as the future actions to be taken, presentation that was eventually appreciated as a key-note address and an issueoriented document for reflection. Participants were particularly sensitive to speaker's appraisal on several shortcomings haunting the nuclear physics research – and the scientific establishment in general, in his country of origin, and have found that many countries in the region would share, to a degree or another, the same problems. The issues included decaying infrastructures, quasi-non-existent state of the art instrumentation, limited training and mobility programs, a poor management of the human resources, non-optimized EC competitive programs, and a continuing brain drain. A weak, or even non-existent interest and confidence in scientific innovation as a business and societal resource, on behalf of key stakeholders was also noted. It was in this context that the opportunity and mission of SEENet was commented, as a vehicle expected to be instrumental in focusing motivations, manpower and resources around a shared inventory of major hardware assets and excellence centres.

Dr. C. Scheindenberger brought into attention the fact that, nowadays, the term "research infrastructures" has a larger meaning, which do not mandatory include an expensive experimental facility. The ICT^{*}(Trieste, Italy) is a very good example. The SEE/NEE institutions could seek to jointly establish such an infrastructure, devote for example to nuclear data of interes for applications or astrophysics.

In accordance with SEENet MoU, the SEENet Chairman and his deputy had to be appointed for next two years. The participants unanimously decided that Dr. S. Harissopulos (SEENet Chairman) and Prof. D. Balabanksi (deputy) will keep these functions during the mentioned period.

Following the proposal of Dr. S. Harissopulos and Prof. R. Vlastou, the application of two institutions from Greece, namely NTUA and AUTH, to become members of SEENet have been approved. Later on, the proposal of Prof. N.V. Zamfir to include Faculty of Physics form Bucharest University (Romania) as SEENet member institution has been accepted, too.

Saturday, 14th of May

The session started with the election of Prof. N.V.Zamfir as member of NCC of EWON.

Discussion on the EWON working-groups structure have been concluded by definition of three working-groups (WG):

i) Physics (including applications): responsible Dr. S. Harissopulos

- ii) Instrumention and facilities: responsible Prof. D. Balabanksi
- iii)Education: responsible Prof. M. Veskovic

The members of WGs will be appointed by each institute. The number of members of WGs was not established and can be different from one WG to another. Questionarais have to be prepared by WGS and distributed by each SEE country to its scientific community. Prof. M. Harakeh remained that similar approach have been employed by NuPECC in the past and the questionaires used that time are a good starting point in the preparation of new ones.

Prof. Dimiter BALABANSKI has introduced the nuclear structure group at the University of Sofia. Its evolution throughout a decade and a half, main research interests, and

current openings towards the EC framework programmes were especially emphasized, as signals of relevance for the team's EURONS affiliation.

Dr. Chavdar STOYANOV presented the scientific activities of INRNE (Sofia) - the largest research institution in Bulgaria in the field of nuclear physics and applications. The activities of INRNE are directed to study of nuclear structure and nuclear reactions. Because of absence of accelerator facilities in Bulgaria the collaboration with the abroad institutions is very important. The collaboration within EURONS project will enlarge the opportunities of nuclear physics in Bulgaria. Recently, some projects devoted to applied fields, like radio-ecology and nuclear waste transmutation problem are in progress in INRNE. The help of NuPECC and EURONS could be useful for these projects.

Dr. Zoran BASRAK gave an enlighting presentation of the nuclear research status in Croatia. The status of the nuclear physics in the country's educational establishment was emphasized, and its vitality evidenced by data on its historical growth and current endeavors. A special focus was placed on the co-operative academic relations of Ruder Boskovitc Institute and other EURONS partners, and analytic accounts on the potential of the respective institutions – in terms of hardware, personnel, organization, and finances, were reported.

Prof. Nizamettin ERDURAN offered a comprehensive, top-down account of the institutional framework in Turkey that accomodates the nuclear physics research, from the national atomic energy authority to the teams active in the field. Apart from an informative description of capability, several issues hindering a better performance, and hints at what needs can best be served by a superstructure like EURONS, were tabled.

Dr. Dorel BUCURESCU presented an overview of nuclear structure and interdisciplinary research with ion beams performed at the Bucharest Tandem Accelerator during the last few years. He pointed out the importance in educational process of such small facilities in contrast with Large Scale Facilities where, due to complexity of experimental setup and long waiting time from proposal of the experiment to its realisation, the student oftenly analize experiment data without having the opportunity to perform the experiment themself.

Prof. Istvan Bikit's focus was on the topical orientation and scientific achievements of the nuclear physics group in Novi Sad, as an expression of the respective team's potential offer to the thematic pool of EURONS. Relevant results and cardinal experiments were pointed at, along with an introduction of the team members.

Dr. Nebojsa NESKOVIC has targeted the major nuclear research facilities of the Vinca Institute of Nuclear Sciences in Belgrade, seen as a potential asset for the foreseen EURONS co-operative effort. The TESLA accelerator and its existing and planned peripherals were presented at some enlighting length, in particular the excelent performances obtained by pVINIS ion-source. The speaker expressed his optimism that the funds for the completion of contruction of the first phase, devoted to radiopharmaceutical isotopes production (and therefore including the VINCY cyclotron commissioning) will be available within few month.

Dr. Roza Zanni VLASTOU has placed on the record an account of capability on behalf of the neutron-induced reactions group of the NTU Athens at the Athens' tandem accelerator at INP/NCSR 'Demokritos'. Both fundamental research aspects and the potential for applications of industrial and societal consequence were brought to attention.

Dr. Dionysos BONATSOS presented the status and the human resources at NCSR Demokritos.

The final discussions, initiated by **Dr. S. Harissopulos**, summarized the main problems encountered in the Balkans and put forward the solutions to these drawbacks.

Dr. Ioan Ursu proposed to adopt a common decision to diseminate these issues to the competent authorities in every country. Also, in order to strenghten the ties between the member institutions of SEENet, he proposed to settle an exchange scheme for short durations.

Prof. N.S. Zamfir proposed further to adopt and duly sign a agreement of collaboration between the member institutions of SEENet.

The participants agreed to the following actions:

- to adopt an open letter, to be addressed to the governance bodies (ministries of education and research, of foreign affaires, parlament) in every country, duly signed by the representatives of all the participant institutes and universities;
- to conclude an agreement of collaboration between all the participant institutions, in order to set an effective research network, that should enable at first pursuing of an exchange scheme of short duration

Next EWON Meeting will take place in Athens, in November, 2005.