Report on the activities of IUPAP Working Group WG.9

International Cooperation in Nuclear Physics

The past three years have seen a great deal achieved by this working group. The membership now includes the Directors of a broad representation of the world's major nuclear physics laboratories - from GANIL in France, GSI in Germany, Frascati in Italy, to BNL, FRIB, and JLab in the US, TRIUMF in Canada, J-PARC and RIKEN in Japan, Lanzhou in China and iThemba in South Africa. As a direct result of initiatives of WG.9 new regional organisations have been created in Asia (ANPhA) and Latin America (ALAFNA) with the express purpose of promoting international cooperation in research and education in the field of nuclear science. The Chairs and Past-Chairs of the peak advisory bodies in the US and Europe, NSAC and NuPECC, are actively involved. All of these representatives attend the annual meeting and contribute to the on-going activities.

The latest meetings of WG.9 were held in Vancouver, BC (July 4, 2010) and Boston, MA (July 24, 2011). It is traditional to hold this meeting the day before the meeting of C12, with members of C12 invited to attend as observers. Six members of C12 attended the latest meeting, including the Chair, who is ex-officio a member of WG.9. The membership of WG.9 has now been formalised and after serving 6 years as the inaugural Chair, Prof. Anthony W. Thomas will step down at the end of the year 2011. Prof. Robert Tribble was confirmed as his successor at the Boston meeting. Prof. Willem T.H. van Oers will continue as Secretary and Prof. Anthony W. Thomas will continue his involvement ex-officio as Past-Chair.

One of the major activities of the first three years of operation of WG.9 included the preparation of IUPAP Report 41, a handbook of the nuclear physics user facilities world-wide, together with a concise outline of the main physics challenges driving that work. Three nominees of WG.9 served on the OECD Global Science Forum working group (2006-2008) which used the handbook as an important source of information in preparing its roadmap for nuclear physics research worldwide (published by the OECD in 2008). In that report WG.9 was charged with a number of tasks, including the provision of a

framework within which scientific administrators could regularly meet with each other and with leaders of the scientific community. This led to the organisation of the first Symposium on Nuclear Science, a two-day workshop held by WG.9 before the triennial IUPAP International Conference on Nuclear Physics in Vancouver, July 2-3, 2010. This was the first occasion in which a significant number of representatives of funding agencies had the opportunity to meet with their international colleagues and leaders of the nuclear physics community.

At the 2011 Annual General Meeting in Boston, WG.9 began the planning for the second symposium in this series. Early preparation is considered essential in order to fully involve the agencies in the planning and hence maximise the effectiveness of the meeting. The AGM of WG.9 also received updates of the long-range planning activities of NSAC, NuPECC and ANPhA, as part of the on-going dialogue among world leaders in nuclear science which WG.9 seeks to encourage.

Over the past year members of WG.9 have overseen an effort to update the handbook, allowing laboratories the chance to bring their entries up to date. In addition the introductory section dealing with physics motivation has been updated by working group members. This edition is made available on-line through the IUPAP web pages.

As mentioned in the introduction the last three years have seen the formation, through the auspices of WG.9, of the Asian Nuclear Physics Association (ANPhA), with membership involving 7 countries and one region. The ANPhA Board meets twice per year, usually in connection with a symposium held by the host institute. The last meeting was held in Lanzhou China, in April 2011 and the next will take place in Vietnam in November 2011. While it may be some years before ANPhA can play a role as influential as that played by NuPECC in Europe, its members feel that it has enormous potential to aid the development of nuclear science in the region.

Following on the successful creation of ANPhA, WG.9 suggested that a similar initiative might be considered in South America and there is now a fledgling organisation of Latin American nuclear physicists, ALAFNA, formed under the Charter of Santiago in January 2010. The timing could not be better, with a

consideration now being given to a new underground project, ANDES, involving experiments of direct interest to nuclear physicists in a proposed tunnel between Argentina and Chile, beneath some 1500 m of rock. There are great hopes for this initiative.

Finally, it is to be noted that for the first time at the recent Annual General Meeting, WG.9 was able to add a member from South Africa, the Director of the iThemba laboratory. Dr. Zeblon Vilakazi was able to attend the meeting and present an overview of the current status of nuclear science in Africa. We expect to work with Dr. Vilakazi to support development activities which may one day lead to the formation of an African organisation along the lines of ANPhA and ALAFNA.

In summary, WG.9 not only provides a much needed forum for laboratory directors to share information but it is serving a very broad role in the development of nuclear science worldwide.

Anthony W. Thomas

Chair WG.9

August 1st 2011