

ISTITUTO NAZIONALE DI FISICA NUCLEARE
CONSIGLIO DIRETTIVO

DELIBERAZIONE N. 12220

Il Consiglio Direttivo dell'Istituto Nazionale di Fisica Nucleare, riunito a Roma in data 24 febbraio 2012 alla presenza di n. 32 dei suoi componenti su un totale di n. 34;

- considerata la proposta, pervenuta dai Laboratori Nazionali di Legnaro, di stipulare con la International Atomic Energy Agency (IAEA) un Coordinated Research Project denominato "Research activities on still open issues aimed at Tc99m Accelerator-based production" relativo ad attività di ricerca di gruppo V;
- tenuto conto che l'INFN ha già stipulato in passato con la IAEA diversi Accordi relativi ad attività su specifici progetti di ricerca;
- preso atto che il Responsabile del Coordinated Research Project in qualità di Chief Scientific Investigator, è il Dr. Juan Esposito, ingegnere nucleare presso i Laboratori Nazionali di Legnaro;
- **visto che l'Accordo non comporta oneri finanziari aggiuntivi a carico dell'Istituto;**
- vista la nota del Direttore dei Laboratori Nazionali di Legnaro, Prof. Giovanni Fiorentini, del 16 gennaio u.s.;
- su proposta della Giunta Esecutiva;
- con n. 32 voti favorevoli;

DELIBERA

E' approvato lo schema di "Coordinated Research Project denominato "Research activities on still open issues aimed at Tc99m Accelerator-based production", allegato alla presente deliberazione e di essa parte integrante. Il Presidente è autorizzato a perfezionarlo e a sottoscriverlo.



IAEA

الوكالة الدولية للطاقة الذرية
國際原子能机构
International Atomic Energy Agency
Agence internationale de l'énergie atomique
Международное агентство по атомной энергии
Organismo Internacional de Energía Atómica

Atoms For Peace

Vienna International Centre, P.O. Box 100, A-1400 Vienna, Austria
Phone: (+43 1) 2600 • Fax: (+43 1) 26007
E-mail: Official.Mail@iaea.org • Internet: <http://www.iaea.org>

IAEA Research Agreement No: 17043

Research Agreement

This Research Agreement is made between the International Atomic Energy Agency (herein after referred to as the "IAEA") whose address is Wagramer Strasse 5, P.O. Box 100, A-1400 Vienna, Austria and the Istituto Nazionale di Fisica Nucleare (INFN) (herein after referred to as the "Institute") whose address is
Istituto Nazionale di Fisica Nucleare (INFN)
Piazza dei Caprettari, 70
00186 ROMA
ITALY .

Whereas

the IAEA, in the implementation of its statutory function of encouraging and assisting research on, and development and practical application of, atomic energy for peaceful users, desires to extend to research institutes in Member States the opportunity of participating in a Co-ordinated Research Project, to assist in broadening the contact between the personnel of such institutes having similar interests and to offer these institutes scientific consultation and support.

Whereas

the Institute desires to participate in the Co-ordinated Research Project referred to in Article 1 of this Agreement;

Now, therefore

the IAEA and the Institute hereby agree as follows:

1. Scope of the Research Project

a) The Institute shall undertake a Research Project entitled 'Research Activities on Still Open Issues Aimed at Tc-99m Accelerator-Based Production' which forms part of the IAEA's Co-ordinated Research Project in 'Accelerator-based Alternatives to Non-HEU production of Mo-99/Tc-99m' (herein after referred to as the "CRP").

The Chief Scientific Investigator shall be Mr. Esposito, Juan.

b) The programme of work shall be:

(1) Evaluation of cross sections for different nuclear processes relevant for the cyclotron production of Tc-99m with special emphasis on the reaction channel Mo-100(p,2n)Tc-99m. Comparison with data in the scientific literature. Theoretical remodelling of the nuclear process based on the new experimental data. Evaluation of the impact of the presence of increasing amounts of Tc-99g on the quality of diagnostic images carried out with a SPECT/PET/CT multimodality small-animal scanner and employing both phantom and animal models.

(2) Development of Mo-100 targets for high-proton currents at energies between 19-25 MeV. Application of special protective layers for preventing target degradation. Design and testing of advanced systems for heat dissipation from the target irradiated at high proton fluxes.

(3) Start up of the production of Tc-99m using the high-energy 70 MeV cyclotron. Installation of a production facility for automated target reprocessing, radionuclide extraction and separation, control of radionuclidic and chemical purity. Preparation of commercial Tc-99m radiopharmaceutical using cyclotron-produced Tc-99m. Preliminary development of a pharmaceutical product.

The programme of work may be further detailed by exchange of letters between the IAEA and the Institute.

2. Duration

The Research Project shall commence on 2011-12-14 and shall continue for the full duration of the CRP.

3. Report

The Institute agrees to submit to the IAEA two copies of a report of work relating to the CRP for presentation at each Research Co-ordination Meeting held under the CRP and to assist other participants in the CRP when necessary.

4. Exchange of Information

The IAEA shall include the Institute in any reciprocal exchanges of information arranged by the IAEA among the institutes participating in the CRP and shall invite it to participate in any meetings convened by the IAEA for institutes participating in that project. The IAEA shall, upon request, consult with the Institute on technical questions connected with the Research Project.

5. Publications

a) The Institute agrees that the IAEA may, while giving due recognition to the author, publish in the original and other languages and make freely available, the reports transmitted to it by the Institute. In order that the results arising out of the Research Project may be made available for the development and practical application of atomic energy for peaceful purposes throughout the world, the IAEA and the Institute agree to co-operate in the prompt and extensive publication.

b) In publishing any results of the Research Project, the Institute and its staff may indicate that the project was part of a Co-ordinated Research Project carried out under the sponsorship of the IAEA.

6. Health and safety standards and regulations

The Institute agrees to observe any pertinent health and safety standards and regulations that are communicated to it by the IAEA except as may be otherwise agreed upon by exchange of letters.

7. Indemnification

The Institute shall indemnify, hold and save harmless and defend, at its own expense, the IAEA, its officials, agents, servants and employees, from and against all suits, claims, demands and liability of any nature or kind, including their costs and expenses, arising out of the acts or omissions of the Institute or its employees in the performance of this Agreement. The provision shall extend to claims and liability in the nature of workmen's compensation claims and those arising out of the use of patented inventions or devices.

8. Assignment

The Institute shall not assign, transfer, pledge or make other disposition of this Agreement or any part thereof or of any of the Institute's rights, claims or obligations under this Agreement except with the prior written authorization of the IAEA.

9. Use of name, emblem or official seal of the IAEA

Except as provided in Clause 5(b) above, the Institute shall not advertise or otherwise make public the fact of its relationship with the IAEA. Also the Institute shall, in no other manner whatsoever use the name, emblem or official seal of the IAEA or any abbreviation of the name of the IAEA in connection with its business or otherwise.

10. Status of Institute

The Institute shall have the legal status of an independent Contractor. The personnel of the Institute shall not be considered in any respect as being agents or employees of the IAEA.

11. Privileges and immunities

Nothing in this Agreement shall be construed as a waiver of the privileges and immunities accorded to the IAEA by its Member States.

12. Termination

Either Party may for valid cause terminate this Agreement, in whole or in part, upon thirty (30) days' notice to the other Party.

13. Settlement of Disputes

Any disputes arising out of or relating to interpretation or implementation of this Agreement, which cannot otherwise be settled by the Parties, shall be referred by either Party to arbitration for settlement in accordance with the UNCITRAL Arbitration Rules as in force at the date the dispute is referred to arbitration. The number of arbitrators shall be one. The place of arbitration shall be Vienna, Austria. The language of arbitration shall be English. The decisions of the arbitrator shall be final and binding on the Parties.

14. Amendment

No modification of, or changes to, this Agreement or waiver of any provision shall be valid unless made in writing and approved by the duly authorized representatives of the Parties.

15. Entry into force

This Agreement shall enter into force on the date of the last signature by the representatives of the Parties.

IAEA:

Institute



Ms Nathalie COLINET
Acting Head, Research Contracts Administration Section
Dept. of Nuclear Sciences & Applications

Date: 2011-12-15

Date: