MEMORANDUM OF UNDERSTANDING

BETWEEN

THE UNITED STATES DEPARTMENT OF ENERGY

AND

THE EUROPEAN ATOMIC ENERGY COMMUNITY REPRESENTED BY THE COMMISSION OF THE EUROPEAN COMMUNITIES

CONCERNING

RESEARCH ON THE HEALTH AND ENVIRONMENTAL

EFFECTS OF RADIATION

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ARTICLE I

OBJECTIVES OF THE MEMORANDUM

IN ORDER TO PROVIDE A MECHANISM FOR COOPERATION ON A RANGE OF RESEARCH AND DEVELOPMENT ASPECTS OF RADIATION PROTECTION, THE UNITED STATES DEPARTMENT OF ENERGY AND THE EUROPEAN ATOMIC ENERGY COMMUNITY REPRESENTED BY THE COMMISSION OF THE EUROPEAN COMMUNITIES (HEREINAFTER REFERRED TO AS THE "PARTIES") HAVE AGREED TO PROCEDURES FOR COOPERATION AS DEFINED IN THIS MEMORANDUM OF UNDERSTANDING.

BOTH PARTIES HAVE DEVELOPED RESEARCH PROGRAMMES IN LINE WITH THEIR OWN NEEDS. BOTH PROGRAMMES HAVE A NUMBER OF SIMILAR ACTIVITIES. THE PURPOSE OF THIS MEMORANDUM IS TO ESTABLISH A FRAMEWORK FOR THE EXCHANGE OF NONPROPRIETARY TECHNICAL AND INFORMATION FOR THE AUGMENTATION 0F THE TECHNICAL CAPABILITIES OF BOTH PARTIES IN RESEARCH ACTIVITIES WHERE BOTH PARTIES ARE SIMILARLY INVOLVED.

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ARTICLE II

SCOPE AND DEPTH OF COOPERATION

POSSIBLE AREAS OF COOPERATION MAY INCLUDE THOSE TECHNICAL TOPICS OF RADIATION, HEALTH, AND ENVIRONMENTAL EFFECTS RESEARCH DECRIBED IN ANNEX 1. THE SCOPE OF COOPERATION MAY BE EXPANDED BY AMENDMENT TO THIS MEMORANDUM PURSUANT TO ARTICLE VIII. THE TOPICS LISTED IN ANNEX 1 WOULD INCLUDE BOTH BASIC AND APPLIED RESEARCH.

ARTICLE III

MODALITIES_OF_COOPERATION

COOPERATION UNDER THIS MEMORANDUM MAY TAKE, BUT IS NOT LIMITED TO, THE FOLLOWING FORMS:

- A. EXCHANGE, ON A CURRENT BASIS, OF SCIENTIFIC AND TECHNICAL INFORMATION, AND RESULTS AND METHODS OF RESEARCH AND DEVELOPMENT, IN THE AREAS LISTED IN ANNEX 1.
- B. EXCHANGE OF SCIENTISTS, ENGINEERS, AND OTHER SPECIALISTS FOR EXTENDED PERIODS, SUBJECT IN EACH CASE TO A SEPARATE WRITTEN PERSONNEL ASSIGNMENT AGREEMENT.
- С. SHORT VISITS BY SPECIALIST TEAMS OR INDIVIDUALS TO THE RESEARCH AND DEVELOPMENT FACILITIES OF THE OTHER PARTY, INCLUDING IN THE CASE OF THE EUROPEAN ATOMIC ENERGY COMMUNITY SUCH FACILITIES OF THE Member States WHICH AGREE THERETO, ALL VISITS TO THE LABORATORIES 0R FACILITIES OF A RESEARCH INSTITUTE OF A MEMBER STATE SHALL REQUIRE THE PRIOR WRITTEN CONSENT OF SUCH INSTITUTE,

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- D. THE ORGANIZATION OF SEMINARS AND OTHER MEETINGS ON SPECIFIC AGREED TOPICS CONCERNING RADIATION PROTECTION RESEARCH, IN THE AREAS LISTED IN ANNEX 1.
- E. EXCHANGE OF SAMPLES, MATERIALS, INSTRUMENTS, AND COMPONENTS FOR TESTING.
- F. JOINT RESEARCH PROJECTS IN WHICH THE PARTIES AGREE TO SHARE THE WORK AND/OR COSTS, SUBJECT IN EACH CASE TO A SEPARATE WRITTEN AGREEMENT BETWEEN THE PARTIES.

ARTICLE IV

Source of Funds

THE ACTIVITIES CARRIED OUT UNDER THIS MEMORANDUM WILL BE SUBJECT TO AND DEPENDENT ON FUNDS AND MANPOWER AVAILABLE TO EACH PARTY. EACH PARTY WILL BEAR THE COSTS OF ITS OWN PARTICIPATION IN COOPERATIVE ACTIVITIES UNDER THIS MEMORANDUM. HOWEVER, WHERE RESEARCH OF THE TWO PARTIES IS COMPLEMENTARY, EACH PARTY WILL HAVE THE OPTION OF MAKING A CONTRIBUTION TO THE OTHER PARTY'S RESEARCH IF THE PARTIES AGREE THAT SUBSTANTIAL BENEFITS SHALL RESULT, SUBJECT IN EACH CASE TO A SEPARATE WRITTEN AGREEMENT BETWEEN THE PARTIES IN ACCORDANCE WITH ARTICLE III.F.

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ARTICLE V

INFORMATION AND PATENTS

- 1. Еасн Party SHALL MAKE AVAILABLE TO THE PARTY OTHER INFORMATION WHICH IT HAS THE RIGHT TO DISCLOSE AND WHICH IS EITHER IN ITS POSSESSION OR AVAILABLE TO IT. AS TO COPYRIGHTS ON MATERIALS OWNED OR CONTROLLED BY A PARTY WHICH A PARTY MAY MAKE AVAILABLE, THE TRANSMITTING PARTY SHALL GRANT TO THE OTHER PARTY A LICENSE TO REPRODUCE AND DISTRIBUTE SUCH COPYRIGHTED MATERIAL. THE PARTIES SUPPORT THE WIDEST POSSIBLE DISSEMINATION OF INFORMATION PROVIDED OR EXCHANGED UNDER THIS MEMORANDUM, SUBJECT TO PROVISIONS THE 0F PARAGRAPHS 3 AND 4 No BELOW, PROPRIETARY INFORMATION SHALL BE PROVIDED OR EXCHANGED UNDER THIS MEMORANDUM.
- 2. INFORMATION TRANSMITTED BY ONE PARTY TO THE OTHER PARTY UNDER THIS MEMORANDUM SHALL BE ACCURATE TO THE BEST KNOWLEDGE AND BELIEF OF THE TRANSMITTING PARTY, BUT THE TRANSMITTING PARTY DOES NOT WARRANT THE SUITABILITY 0F THE INFORMATION TRANSMITTED FOR ANY PARTICULAR USE 0R APPLICATION BY THE RECEIVING PARTY OR BY ANY THIRD PARTY. INFORMATION DEVELOPED JOINTLY BY THE PARTIES SHALL ΒE ACCURATE TO THE BEST KNOWLEDGE AND BELIEF OF BOTH PARTIES. NEITHER PARTY WARRANTS THE ACCURACY OF THE JOINTLY DEVELOPED INFORMATION OR ITS SUITABILITY FOR ANY PARTICULAR USE OR APPLICATION BY EITHER PARTY OR BY ANY THIRD PARTY.

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- 3. WITH RESPECT TO ANY INVENTION OR DICOVERY MADE OR CONCEIVED IN THE COURSE OF OR UNDER THIS MEMORANDUM:
 - IF MADE OR CONCEIVED BY PERSONNEL OF ONE PARTY (THE Α. ASSIGNING PARTY) OR ITS CONTRACTORS WHILE ASSIGNED TO THE OTHER PARTY (RECIPIENT PARTY) OR ITS CONTRACTORS IN CONNECTION WITH EXCHANGES OF SCIENTISTS, ENGINEERS AND OTHER SPECIALISTS, THE RECIPIENT PARTY SHALL ACQUIRE ALL RIGHT, TITLE AND INTEREST IN AND TO ANY SUCH INVENTION OR DISCOVERY IN ALL COUNTRIES SUBJECT TO A NON-EXCLUSIVE, IRREVOCABLE, ROYALTY-FREE LICENSE IN ALL SUCH COUNTRIES TO THE ASSIGNING PARTY, WITH THE RIGHT OF THE ASSIGNING PARTY TO GRANT SUBLICENSES UNDER ANY SUCH INVENTION OR DISCOVERY AND ANY PATENT APPLICATION, PATENT OR OTHER PROTECTION RELATING THERETO.
 - B. IF MADE OR CONCEIVED BY A PARTY OR ITS CONTRACTORS AS A DIRECT RESULT OF EMPLOYING INFORMATION WHICH HAS BEEN COMMUNICATED TO IT UNDER THIS MEMORANDUM BY THE OTHER PARTY OR ITS CONTRACTORS OR COMMUNICATED DURING WORKSHOPS OR OTHER JOINT MEETINGS, THE PARTY MAKING THE INVENTION SHALL ACQUIRE ALL RIGHT, TITLE AND INTEREST IN AND TO SUCH INVENTION OR DISCOVERY IN ALL COUNTRIES, SUBJECT TO A GRANT TO THE OTHER PARTY OF A NON-EXCLUSIVE, IRREVOCABLE, ROYALTY-FREE LICENSE, WITH THE RIGHT OF THE OTHER PARTY TO GRANT SUBLICENSES IN AND TO ANY SUCH INVENTION OR DISCOVERY AND ANY PATENT APPLICATION, PATENT OR OTHER PROTECTION RELATING THERETO, IN ALL COUNTRIES.

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- C. WITH REGARD TO RESEARCH COLLABORATION IN SELECTED PROJECTS IN ACCORDANCE WITH ARTICLE III.E. AND III.F. OF THIS MEMORANDUM, THE PARTIES SHALL ENTER INTO A WRITTEN AGREEMENT OR AN AMENDMENT TO THIS MEMORANDUM FOR EACH SPECIFIC RESEARCH COLLABORATION WHEREIN THE PARTIES SHALL ALSO PROVIDE FOR AN APPROPRIATE DISTRIBUTION OF RIGHTS TO INVENTIONS OR DISCOVERIES RESULTING FROM SUCH COOPERATION.
- 4. EACH PARTY SHALL, WITHOUT PREJUDICE TO ANY RIGHTS OF INVENTORS OR AUTHORS UNDER THE LAWS OF ITS COUNTRY, TAKE ALL NECESSARY STEPS TO PROVIDE THE COOPERATION FROM ITS INVENTORS AND AUTHORS REQUIRED TO CARRY OUT THE PROVISIONS OF THIS ARTICLE.

NEITHER OF THE PARTIES SHALL ASSUME THE RESPONSIBILITY TO PAY AWARDS OR COMPENSATION REQUIRED TO BE PAID TO INVENTORS OR AUTHORS, ACCORDING TO THE LAWS OF THEIR COUNTRY OF ORIGIN, EMPLOYED BY THE OTHER PARTY.

ARTICLE VI

PROGRAMME REVIEW

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IT IS ANTICIPATED THAT REPRESENTATIVES OF THE TWO PARTIES WILL, AT MUTUALLY AGREED INTERVALS, BUT AT LEAST ONCE A YEAR, REVIEW THE PROGRESS OF ACTIVITIES CONDUCTED UNDER THIS MEMORANDUM AND EXCHANGE PLANS FOR FUTURE PROGRAMMES AND ACTIVITIES.

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ARTICLE VII

GENERAL PROVISIONS

- 1. COOPERATION UNDER THIS MEMORANDUM SHALL BE IN ACCORDANCE WITH THE LAWS AND REGULATIONS UNDER WHICH EACH PARTY OPERATES.
- 2. COMPENSATION FOR DAMAGES INCURRED DURING THE ACTIVITIES UNDER THIS MEMORANDUM SHALL BE IN ACCORDANCE WITH THE APPLICABLE LAWS UNDER WHICH EACH PARTY OPERATES.
- 3. THIS MEMORANDUM SHALL APPLY IN SO FAR AS THE EUROPEAN ATOMIC ENERGY COMMUNITY IS CONCERNED TO THE TERRITORIES IN WHICH THE TREATY ESTABLISHING THE EUROPEAN ATOMIC ENERGY COMMUNITY IS APPLIED AND UNDER THE CONDITIONS LAID DOWN IN THAT TREATY.

ARTICLE VIII

ENTRY INTO FORCE AND TERMINATION

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THIS MEMORANDUM SHALL ENTER INTO FORCE UPON THE LATER DATE OF SIGNATURE BY BOTH PARTIES AND REMAIN IN FORCE FOR FIVE (5) YEARS, UNLESS EXTENDED BY AGREEMENT. THIS MEMORANDUM MAY BE AMENDED AT ANY TIME BY MUTUAL WRITTEN AGREEMENT OF THE PARTIES.

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THIS MEMORANDUM MAY BE TERMINATED BY EITHER PARTY UPON NINETY (90) DAYS WRITTEN NOTICE OF TERMINATION TO THE OTHER PARTY.

DONE IN DUPLICATE, IN BRUSSELS, ON THIS SEVENTH DAY OF JULY 1986

FOR THE EUROPEAN ATOMIC ENERGY COMMUNITY THE COMMISSION OF THE EUROPEAN COMMUNITIES FOR THE UNITED STATES DEPARTMENT OF ENERGY

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ANNEX 1

POSSIBLE AREAS OF COOPERATION

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- 1. Source and dose determination
- 2. ENVIRONMENTAL PROCESSES AND EFFECTS
- 3. SOMATIC HEALTH EFFECTS
- 4. GENETIC HEALTH EFFECTS.

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