UNIVERSITA' DEGLI STUDI DI CAGLIARI

Agreement of the establishment of postgraduated education in environmental studies PhD in Environmental Science and Engineering

entered into by

the Rector of the University of Aveiro (Portugal), hereafter referred to as UAVR, represented by Professor Maria Helena Vaz de Carvalho Nazaré

the Director of the l'Ecole Nationale de l'Industrie Minérale (Morocco), hereafter referred to as ENIM. represented by Professor Omar Debbaj

the Rector of the Pushchino State University (PSU) and the Director of the Institute of Biochemistry and Physiology of Microorganisms (IBPM), Russian Academy of Sciences, Pushchino (Russia), hereafter referred to as PSU & IBPM, represented by Professor Alexander Boronin

the Rector of the University of Cagliari (Italy), hereafter referred to as UNICA, représented by Professor Pasquale Mistretta

UAVR declares

- A. That it is an institution created in 1973 to impart higher Education and to plan and carry out research programs for the purpose of preservation and extension of knowledge, including the awarding of advanced degrees at the B.S., *Licenciatura*, M.S., and PhD levels.
- B. That in order to accomplish its mission, it is organised into the Department of Biology, Department of Ceramics and Glass Engineering, Department of Chemistry, Department of Civil Engineering, Department of Communication and Art, Department of Didactics and Education Technology, Department of Education Sciences, Department of Electronics and Telecommunications, Department of Economics, Management and Industrial Engineering, Department of Environment and Planning, Department of Earth Sciences, Department of Languages and Cultures, Department of Mathematics, Department of Mechanical Engineering, Department of Physics, Department of Social, Legal and Political Sciences, School of Health Sciences, Higher School of Management and Technology, Higher Institute of Accounting and Administration.
- C. That engineering, science, arts, humanities, business administration, economics and planning, education, communication, fine arts and health, complete the areas in which the University offers a wide range of Undergraduate and Master degrees, as well as several PhD and specialization programmes. At present the University has some 12.385 students enrolled, and a teaching staff body of 885 professors. As a modern institution designed for the acquisition of scientific, artistic, and technological knowledge, the University of Aveiro has tried to provide all the conditions and means necessary to develop research both in the University's Departments and in its 18 Research Units and 3 Associated Laboratories.

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D. That national and international exchange have also been among the University's main goals. The University sustains the idea that all its students shall have extramural training or some kind of Erasmus-like experience in a national or foreign university. For this reason, the University strongly supports student mobility and training courses, participating in many European Union, Education, Science and Technology Programmes. That active participation in international education and research programmes is in accord with its internal policy, and that this international dimension is particularly relevant for environmental issues, which have become supra-national, therefore requiring joint development of scientific and technological knowledge, and based on innovative approaches.

PSU & IBPM declare

- A. The PSU is an institution created in 1993 to impart higher Education and to plan and carry out research programs for the purpose of preservation and extension of knowledge, including the awarding of advanced degrees at the M.S., and PhD level.
- B. That in order to accomplish its mission, the PSU is one of the first universities in Russia to focus on the development of a Master's degree program and to integrate research and education. PSU now offers more than 20 master's degree programs in biology, environmental protection, soil science, etc. which previously never existed in Russia. As well, PSU develops Ph.D. education in the mentioned fields. Faculties of the PSU are based on six research institutes of Russian Academy of Sciences located in Pushchino. The fields of education include the following faculties: Astrophysics, Cell Biology, Biomedical Systems and Technologies, Biophysics, Biomedical Sciences, Histology, Mathematical Modeling, Agrochemistry, General Ecology, Soil Ecology, Biochemistry and Molecular Biology, Microbiology and Biotechnology.
- C. That the last mentioned faculty, Microbiology and Biotechnology, which is located in the IBPM, specialized in microbiology (biodiversity, biochemistry, physiology, genetics) as well in biotechnology and especially in environmental biotechnologies (development of biotechnological processes, ecological monitoring and safety, bioremediation and bio detoxification, selection and construction of microbial strains, etc).
- D. That the IBPM is a research institution of the Russian Academy of Sciences created in 1965. Education and training on the basis of the IBPM include both M.S. and PhD level at the Faculty Microbiology and Biotechnology, PSU, and the PhD level in the Russian Academy of Sciences educational system.
- E. That both the PSU and IBPM have active participation in international research and educational programmes in good accordance with its internal policy, and that this international dimension is particularly relevant for environmental issues, which have become supra-national, therefore requiring joint development of scientific and technological knowledge, based on innovative approaches.

UNICA declares

A. That it is an institution created in 1607 to impart higher education and to plan and carry out research programs for the purpose of preservation and extension of knowledge, including the awarding of advanced degrees at the B.S., M.S., and PhD level.

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- B. That in order to accomplish its mission, it is organised into the Faculty of Law, the Faculty of Political Sciences, the Faculty of Economics, the Faculty of Philosophy, the Faculty of Education, the Faculty of Medicine and Surgery, the Faculty of Mathematics, Physics and Natural Sciences, the Faculty of Pharmaceutical Sciences and the Faculty of Engineering.
- C. That the project for the establishment of the International PhD Degree in Environmental Science and Engineering coordinated by Professor Giacomo Cao was approved by the Ministry of Education, University and Research (MIUR) of the Italian Government in the framework of the Three Year Plan 1998 2000 indicated as Internationalisation.
- D. That the International PhD Degree in Environmental Science and Engineering has been successfully coordinated since its beginning during the Academic Year 2001/02.
- E.That it is of strategic importance to maintain the International PhD in Environmental Science and Engineering program

ENIM declares

- A. That it is an institution created in 1972 to impart higher Education and to plan and carry out research and continuing education programs for the purpose of preservation and extension of knowledge, including the awarding of advanced degrees at the high engineering and equivalent M.S and PhD levels.
- B. That in order to accomplish its mission, it is organised into the Department of Mining, Department of Earth Sciences, Department of Industrial Process Engineering (Chemical Engineering), Department of Electromechanical Engineering, Department of Computer Science, Department of Materials Science, Common Trunk (Industrial Management and Environment and Security Engineering).
- C. That active participation in international education and research programs (including Environment) is in accord with its mission, and will join the efforts of the contributing institutions to make this program succeed.

Under the premises:

- A. That the institutions are united by common interests and objectives in academic, scientific and cultural affairs;
- B. That these Institution are the ones which by reason of their essence, ends and objectives are called upon to establish channels of communication that will facilitate intellectual interaction:
- C. That for the above reasons, the Institutions believe it is advantageous to promote their academic ties by entering into an academic, scientific and cultural Cooperation Agreement;
- D. That, because of mutual benefits to the Institutions in the advancement of graduate research and education through the scholarly educational, scientific, technological and cultural contribution of each, it is appropriate and advantageous to the Institutions to enter into this Cooperation Agreement.

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The terms agreed upon are:

Art.1 The objective of the present Agreement is to increase the academic, scientific and cultural relations among UAVR, UNICA, PSU & IBPM, and ENIM in identified areas, such as Environmental Science and Engineering where there is a mutual interest in establishing specific working Cooperation Agreement.

Art. 2 The objective of the present Agreement is to establish a postgraduate education in environmental studies, e.g. PhD Degree in Environmental Science and Engineering jointly awarded by the involved Institutions.

Art. 3 Under this general Agreement, each institution designate the following employed personnel who will serve as program leaders for the Agreement:

Professor Maria Helena Vaz de Carvalho Nazaré for UAVR

Professor Giacomo Cao for UNICA

Professor Mostafa Maalmi for ENIM

Professor Alexander Boronin for PSU & IBPM

- Art. 4 The program leaders will be responsible for the developing of a common post graduate education, i.e. a PhD program plan, including a description of the work and activities to be undertaken.
- **Art. 5** The Agreement obliges, in and of itself, the Institutions to commit the human, material and financial resources required for the execution of the program in accordance with high quality standards. In particular, the Agreement obliges, in and of itself, the Institutions to the following financial expenditures:

UNICA, either directly or through its Interdepartmental Centre for Environmental Science and Technology (CINSA) is typically allocating the budget for two PhD fellowships per year and is applying for other funds to accomplish this program

UAVR is applying for funds to realize this program.

ENIM is applying for funds to realize this program.

PSU & IBPM is applying for funds to realize this program.

Art 6. Access to emergency medical care for teacher and graduate students will be based on the health care programs available at the host Institution.

Each Institution will take steps to:

- A. Publicise the opportunities available under this Agreement of Cooperation and promote the development of Cooperation;
- B. Assist faculty, staff and attendants with the administrative details of interchange.
- Art 7. The Institutions, under the auspices of this Agreement, may jointly sponsor Conferences, short courses, regular courses, seminars and symposia, as well as exchange publications and other didactic and research materials.
- Art. 8 The present Agreement is for three (3) years, and it or any of its parts may be modified or terminated by written consent of all parties who will comply with the obligations, which might be in effect on the date of termination.
- Art 9. Regularly employed personnel, while involved in this Agreement of Cooperation, remain subject to the rules and regulations of their own Institution in all matters of employment, benefits, medical and life insurance, employee rights.

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Cagliari, 27/01/06

The Rector of the University of Cagliari (Italy)

Pasquale Mistretta

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The Rector of the Pushchino State University (PSU) and the Director of the Institute of Biochemistry and Physiology of Microorganisms (IBPM), Russian Academy of Sciences.

Pushchino (Russia)

- Alexander Boronin

The Director of the l'Ecole Nationale de l'Industrie Minérale (Morocco)

Omar Debbaj

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The Rector of the University of Aveiro (Portugal)

Maria Helena Vaz de Carvalho Nazaré

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