





# AGREEMENT FOR COLLABORATIVE RESEARCH BETWEEN THE UNIVERSITY OF PALERMO DEPARTMENT OF EARTH AND MARINE SCIENCES (ITALY) AND BABES-BOLAY UNIVERSITY OF CLUJ-NAPOCA, FACULTY OF ENVIRONMENTAL SCIENCE AND ENGINEERING (ROMANIA)

The Babes-Bolyai University, Faculty of Environmental Science and Engineering (FSIM), with address Fantanele Street 30, Cluj-Napoca (Romania), represented by Dean dr. Nicolae Ajtai, and the University of Palermo, Department of Earth and Marine Sciences hereafter named DISTEM, with address in Via Archirafi, 22, Palermo (Italy) represented by the Director Prof. Valerio Agnesi

# CONSIDERING THAT

- There is a common interest to jointly maintaining, exploring scientific and technical activities among FSIM and DISTEM;
- There is a mutual convenience in promoting actions of interchange of students, professors, researchers and technicians that assist to the scientific activities and advancement and the strengthening of its specialized human resources;
- 3. FSIM develops studies and research activities in the framework of the environmental sciences from environmental chemistry, environmental radioactivity, environmental geology, natural hazards and risk mitigation that occurred in the different spheres of our planet over time (e.g., earthquakes, hydrocarbon reservoirs, volcanic activities, Earth degassing);
- 4. DISTEM aims at promoting research in Earth Sciences and develops research and monitoring activities in the fields of volcanic and tectonic degassing and volcano monitoring, and its Volcanology Laboratory (LabVulc) acts as a reference laboratory for the development of new techniques for real-time observation of volcanic gas composition;
- Scientific activities are developed in collaboration between researchers of the two
  institutions for three years and the obtained results strongly support to increase and improve
  the collaboration between DISTEM and FSIM;
- 6. There are the right conditions that the common investigations projects yield an effective synergy for the advance and developments of both the involved institutions.





#### AGREE IN THE FOLLOWING

### ART. 1

FSIM and the DISTEM with the present agreement, establish a relationship of mutual scientific collaboration aimed at the activation of research projects and dissemination of information at National and International levels.

### ART. 2

The following scientific cooperation areas can be identified:

- Study of the earth's degassing in different geodynamic settings including processes occurring during the Earth's evolution;
- to join our expertise in volcanic and active faults geochemistry of fluids in order to recognize and constrain tools for the surveillance and risk mitigation;
- to promote and organize join conferences and meetings between DISTEM and FSIM in order to share knowledge and improve a mutual collaboration that goes beyond the geochemistry including all the disciplines of the Earth science that both the institutions develop. This collaboration also furnishes a great opportunity for a multidisciplinary approach to the study of active geological processes, like seismicity, Earth degassing and volcanic eruptions.

#### ART. 2

In order to fulfil the previous article, the DSITEM and the FSIM will constitute a joint committee aimed at:

- a) Setting-up research proposals for projects to submit to national and international financing frameworks and/or to carry out on the basis of own funding;
- b) Defining the organization, logistics and realization of the study activities, optimising the resources available from them;
- c) Proposing plans for the training of young scientists and/or technicians, thorough fellowships;





### AGREE IN THE FOLLOWING

### ART. 1

FSIM and the DISTEM with the present agreement, establish a relationship of mutual scientific collaboration aimed at the activation of research projects and dissemination of information at National and International levels.

## ART. 2

The following scientific cooperation areas can be identified:

- Study of the earth's degassing in different geodynamic settings including processes occurring during the Earth's evolution;
- to join our expertise in volcanic and active faults geochemistry of fluids in order to recognize and constrain tools for the surveillance and risk mitigation;
- to promote and organize join conferences and meetings between DISTEM and FSIM in
  order to share knowledge and improve a mutual collaboration that goes beyond the
  geochemistry including all the disciplines of the Earth science that both the institutions
  develop. This collaboration also furnishes a great opportunity for a multidisciplinary
  approach to the study of active geological processes, like seismicity, Earth degassing and
  volcanic eruptions.

#### ART. 2

In order to fulfil the previous article, the DSITEM and the FSIM will constitute a joint committee aimed at:

- Setting-up research proposals for projects to submit to national and international financing frameworks and/or to carry out on the basis of own funding;
- Defining the organization, logistics and realization of the study activities, optimising the resources available from them;
- Proposing plans for the training of young scientists and/or technicians, thorough fellowships;





d) Proposing the organisation of conferences and seminars;

e) Proposing the publication of articles and documentation for scientific advancement.

# ART. 3

The collaboration can include all activities of common interest with the aim of benefiting from synergy and expertise of both DISTEM and FSIM. To this aim, DISTEM and FSIM will provide research and technicians, own laboratories, instrumentation and in general all resources necessary for the realization of the projects agreed, as well as the exchange of personnel for appropriate periods.

The collaboration also includes: a) the join participation in programmes promoted by international institutions and foundations and b) the joint establishment of lectures, meeting, seminars and field trips.

The cooperation agreement is also a further possibility to organize joint training and educational activities for the benefit of students engaged in under-graduated and PhD courses or young scientists performing their activities within the Parties signing the Cooperation Agreement.

### ART. 4

Both parties in the framework of their own activity will use the results of the studies. If the results can be published, the parts will define their own specific contribution.

### ART. 5

The responsibilities of the scientific activities carried out under this Cooperation agreement within the contracting parties are:

DISTEM: Prof. Alessandro Aiuppa

FSIM: dr. Artur Ionescu

The above-mentioned responsible together with the directors of both the Institutions constitute the joint committee members





### ART. 6

The parties to this Cooperation are committed to find, jointly and separately, the funds to carry out the research activities of mutual interaction by applying to calls for project funding in national and international research programmes as well as Romania-Italy bilateral research programmes.

# ART.7

This agreement will last 3 years starting from the signing date and will be tacitly renewed according to both parts willingness.

#### ART. 8

This agreement does not constitute, nor is it intended to be, a legally binding arrangement or contract among the Parties. It serves only as a record of each Party's separate intention pending execution of specific agreements for the undertaking of activities as contemplated by this document.

Read and signed by the parts on the 26/12/200 on behalf of

UNIPA

Department of Earth and Marine Sciences

Prof. Alessandro Aiuppa

Dean

Prof. Valerio Agnesi

UBB

Faculty of Environmental Science and Engineering

Dr. Artur Ionescu

Dean

Dr. Nicolae Ajtai

Firmato digitalmente da:Valerio Agnesi Organizzazione:UNIVERSITA' DEGLI STUDI DI PALERMO/80023730825 Data:02/07/2020 17:06:25