



AGREEMENT FOR A JOINT RESEARCH DOCTORAL THESIS

The University of Universidad Católica del Norte, whose headquarters are in Antofagasta, Chile, address: Avenida Angamos 0610, represented for the purposes here of by the Rector Prof. Rodrigo Fernando Alda Varas, further to the powers vested in him

AND

The Università degli Studi di Palermo, whose headquarters are at Piazza Marina nr.61, Palermo, Italy, represented for the purposes here of by Rector Prof. Massimo Midiri, further to the powers vested in him,

For the The Universidad Católica del Norte:

- having regard to the Decree with Force of Law No. 2 of 02 July 2010 (General Law on Education), Art. 54 letters d) and e), concerning the granting of the academic degrees of Magister and Doctor;
- having regard to the Law No. 21.091 (Art. 3) of the Ministry of Education on Higher Education, promulgated on 11 May 2018;
- having regard to the Regulation of Doctoral Co-Doctorates of the Universidad Católica del Norte - 13 January 2021. 2021.

For the University of Palermo:

- having regard to the Law no. 210, 3 July 1998 art. 4 - "*dottorato di ricerca*";
- having regard to the D.M. 224/99 - "*norme in materia di dottorato di ricerca*";
- having regard to the D.M. 509/99 - "*norme concernenti l'autonomia didattica degli Atenei*";
- having regard to the D.M. 226/2021;
- having regard to the University Regulations on research doctorates;

united in their desire to contribute in establishing and/or developing scientific co-operation between Italian and foreign teams of researchers through the mobility of doctoral candidates.

AGREE AS FOLLOWS

Part One

Art. 1 – The Universidad Católica del Norte (as a leading institution) and the Università degli Studi di Palermo (as a secondary institution) agree, in accordance with the applicable laws, rules and regulations in force in each respective Countries and Institutions, to jointly organise a doctoral thesis for the benefit of the following PhD student:

Name and surname: Dott. *Pablo Alonso Paquis Chester*, born in Calama (Cile) on 16 September 1995 enrolled in the PhD course in: *Doctorado en Ciencias mencion Geologia*, at the Universidad Católica del Norte, title of the thesis:

"Ciclo biogeoquímico del azufre en ecosistemas hidrotermales de gran altitud en los Andes Chilenos: perspectivas de las interacciones biogénicas y endógenas e implicaciones para la comprensión de los ambientes de la tierra primitiva "



The principles governing the joint doctoral thesis as well as the relevant administrative procedures and education-related matters are established in this agreement.

Art. 2 – The period for researching and writing the thesis shall be four years, commencing from 21/03/2022. Where necessary such term can be prolonged in accordance with the rules in force in both Institutions.

Art. 3 – The thesis shall be prepared in alternating periods (more or less of equal duration) at both Institutions. The duration of these periods will be fixed by mutual agreement between the two thesis Supervisors. In any case, a period of at least one year stay at the University of Palermo should be provided. The two institutions will make available to the PhD student the necessary educational and research facilities and will guarantee the same services provided to their PhD students.

Art. 4 – Mister *Pablo Alonso Paquis Chester* shall be registered with both Institutions. The PhD student shall pay the normal registration fees to the University of Universidad Católica del Norte and be exempted from such fees at Università degli Studi di Palermo. At the University of Palermo, he will be included among the PhD students of the XXXVIII cycle, Ph.D. in "Scienze della Terra e del Mare", coordinated by Prof. Christian Conoscenti. The PhD student's registration and file will be managed by the main Institution, that is, the Universidad Católica del Norte.

Art. 5 – For the entire period required to research and write the thesis, Mister *Pablo Alonso Paquis Chester* shall be entitled to the benefits of the Italian Health Service (Mod. E128) in accordance with the relevant Community regulations in this regard. The candidate may independently take out personal insurance for any risks over and above those covered by the national health service

Part Two

Art. 1 – The PhD student shall research and write the thesis under the joint supervision of:

- Prof. Dra. Martha B. Hengst Lopez, (Faculty member at the Departamento de Ciencias Farmacéuticas), main thesis supervisor at the Universidad Católica del Norte;
- Prof. Dra. Joseline Tapia (Profesora del Departamento de Ciencias Geológicas), thesis supervisor at the Universidad Católica del Norte;
- Prof. Sergio Calabrese, (Faculty member at the Dipartimento di Scienze della Terra e del Mare), thesis supervisor at the Università degli Studi di Palermo;

each of whom undertake to fully perform their duties as tutors of the PhD student.

The thesis will be evaluated in accordance with the respective regulations of the two contracting institutions

For the University of Palermo (Article 8, paragraph 10,11, D.M. 226/2021), the thesis, accompanied by a PhD student's report on the activities of the PhD course and on any publications, is evaluated by at least two highly qualified teachers, including teachers from foreign institutions, different by the subjects awarding the doctorate, hereinafter referred to as evaluators. The evaluators express an analytical written assessment on the thesis and propose the admission to public debate or a delay for a period of no more than six months if they consider that significant integrations or corrections are required. After this period, the thesis is in any case admitted to the public discussion, accompanied



by a new written assessment of the same evaluators, carried out after any corrections or additions that may have been made.

Art. 2 – The one and only oral defence of the thesis shall take place at Universidad Católica del Norte.

Art. 3 – The examining Board, defined by mutual agreement between the two Institutions, shall be appointed by the Rector of the Universidad Católica del Norte, following the opinion of the Rector of the Università degli Studi di Palermo, and shall be composed of an equal number of university professors of both Universities. It should include at least: one committee chairman and two thesis supervisors.

Art.4 – The contracting Institutions, each for his own part, will be charged the mission costs of the thesis supervisor, as well as any commission member, if not otherwise agreed with the partner University.

Art. 5 – The thesis shall be written and orally defended in Spanish language; The Teaching Body may authorise the writing of the thesis in English or in another language of the European Union. The abstract shall be written in the language of the partner University or in English and shall be presented orally in that language at the time the thesis itself is being defended.

Art. 6 – Each of the two Institutions undertakes to award a doctoral degree for the same thesis following a favourable report issued by the examining Board.

The Universidad Católica del Norte will award a research doctoral degree in *Doctorado en Ciencias Mencion Geologia*.

The Università degli Studi di Palermo will award a research doctoral degree in *Dottorato Scienze della Terra e del Mare*. Both titles will include the statement: "*Joint research doctoral thesis with the University of*"

Part Three

Art. 1 – The PhD student shall observe the rules and customs of the host Institution.

Art. 2 – The contracting Institutions, through the offices of their respective thesis supervisors, undertake to notify each other of all the information and documentation useful for the purposes of organising the joint thesis that is the subject matter of this present agreement.

Art. 3 – The presentation, deposit and reproduction of the thesis shall be done in each and every country in accordance with the applicable regulations in force.

The protection of the subject matter of the thesis as well as the publication, exploitation and protection of the results obtained by the candidate's research in the contracting Institutions shall be subject to the applicable law in force and guaranteed in compliance with the specific procedures in this regard of each of the countries involved in the joint thesis.

If requested, the provisions related to the protection of intellectual property rights may be agreed in specific protocols or documents.



Art. 4 – This agreement shall be effective as and from the date of its execution by the authorised representative of each contracting Institution and shall be valid until the end of the academic year during which the thesis or study will be orally defended.

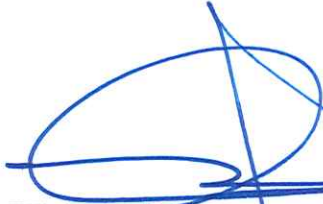

In the event that the PhD student does not register in one or other of the contracting Institutions, renounces in writing or is not authorised to continue researching and writing the thesis by virtue of a decision made by one of the two thesis supervisors, the contracting Institutions shall jointly and without delay terminate this agreement.

Art. 5 – This agreement is drawn up in five originals, which have binding legal force.

Date signature 30/01/2024

For the Universidad Catolica del Norte

For the Università degli Studi di Palermo



 THE RECTOR
 (Prof. Rodrigo F. Alda)

II RETTORE
(Prof. Massimo Midiri)

The Chilean Doctoral Coordinator
(Prof. Joseline Tapia)

The Italian Doctoral Coordinator
(Prof. Christian Conoscenti)



The thesis Chilean supervisor
(Prof. Martha B. Hengst Lopez)

The thesis Italian supervisor
(Prof. Sergio Calabrese)