

AGREEMENT BETWEEN THE CENTRO DE INVESTIGACIONES ENERGÉTICAS MEDIOAMBIENTALES Y TECNOLÓGICAS, O.A., M.P. (CIEMAT) AND THE UNIVERSITY AHMED DRAIA. ADRAR (University of Adrar, ALGERIA) FOR COLLABORATION ON UNDERGRADUATE AND POSTGRADUATE EDUCATION

Madrid, March 2, 2022

APPEARING

On the one hand, Prof. BENAMAR Mohamed Amine, Rector of the University, having all the powers for the effect of this Convention, The University of Adrar Ahmed DRAIA, whose head office is located at Route national n ° 06 Adrar, 01000 Adrar , Algeria, hereinafter referred to in all that follows by the term: "University of Adrar Ahmed DRAIA".

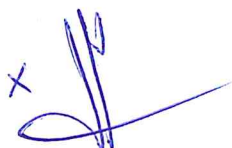
And on the other D. Carlos Alejandre Losilla, General Director of the Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas O.A., M.P. (hereinafter CIEMAT), business address in Madrid, Avenida Complutense nº 40, nominated by R.D. 1207/2018 on September 21st (B.O.E. 230 of 22 September) acting on behalf and in representation of CIEMAT by the powers invested in him by R.D. 1952/2000 of 1 December (B.O.E. 289 of 2 December).

RECITALS

1.- Goals of the University Ahmed Draïa, Adrar

University of Ahmed Draïa has among its goals, to approach university education to social and professional reality of our environment, by establishing relationships with external institutions, enabling complete the education process with an implementation of theoretical knowledge.

University of Ahmed Draïa develops teaching degree / postgraduate in which activities to be carried out by students in public to the University of Ahmed Draïa are planned. This aims to broaden the knowledge of students according to their specific vocation, providing professional guidance to enable them to join in the labor market in prime condition and to respond effectively and guarantees to the demands of society and its institutions and companies.



2.- Goals of the CIEMAT

Whereas among the goals of the CIEMAT are the following:

Promote and perform R&D following the directives of the Ministry of Science and Innovation in matters of energy, environment and technology, including the associated sociotechnical approach, as well as in specific fields of Basic Research.

Collaborate with other Spanish R&D centres, universities and companies.

Foster activities derived from their R&D in the fields of scientific-technical diffusion, education and technology transfer. And therefore, the CIEMAT wishes to participate in undergraduate and postgraduate education at University of Ahmed Draïa. Adrar, Algeria

3.- Purpose

Both parties consider it advisable to promote cooperation and collaboration in developing a traineeship programme for university students which enables them to achieve a more complete, personalised synthesis of their education for the better performance of their professional labour.

4.- Declaration of intentions

That both entities, considering that they have goals which are partly coincidental and complementary, they wish to sign the present Agreement to improve their respective commissions in matters of educational cooperation, for which they sign the present document subject to the following.

CLAUSES

ONE.- PURPOSE OF THE AGREEMENT

The purpose of this Agreement is to regulate the conditions under which students of University of Ahmed Draïa may take part in an external academic training programme at the CIEMAT.

TWO.- GENERAL CONDITIONS OF THE AGREEMENT

The CIEMAT may offer trainee positions with the frequency or number it wishes and indicate the specific offer for each trainee position open.



For each student who trains at the CIEMAT, a normalized declaration model shall be signed attached as an annex to this Agreement, with the details of the training to develop.

CIEMAT's participation in the training program does not assume that it acquires any more commitments than those stipulated in the present Agreement.

The students shall not perceive any amount for performing the training activities at the CIEMAT and no relationship with the CIEMAT shall be assumed. As there will be no employment relationship between the student and the CIEMAT, if at the end of the traineeship, the student should join its staff, the time spent as a trainee shall not be computed for purposes of seniority, nor shall it exempt him/her from the corresponding trial period.

In case of generating any economic obligation in terms of contribution to the Social Security of the student when the regulatory development of the fifth additional disposal of Royal Decree-law 28/2018, of December 28, is approved for the revaluation of public pensions and other urgent measures in social, working and employment matters, the appropriate modification addendum of the Agreement will be processed following the procedures foreseen in Law 40/2015, of October 1.

Student trainees must comply with the CIEMAT's internal rules although they depend administratively and for all purposes on the University of Ahmed Draïa, Adrar.

THREE.- UNIVERSITY AHMED DRAÏA RESPONSIBILITIES

The University of Ahmed Draïa shall supervise its students' activities and shall take the following actions upon itself and under its own responsibility with a view to developing this goal:

- 1) The person responsible for the traineeships designated by the University of Ahmed Draïa, shall provide the CIEMAT with all information related to the educational cooperation programmes and shall resolve any problems that could arise during training.
- 2) The University of Ahmed Draïa shall designate an academic tutor who shall watch over the normal development of the traineeships, collaborate with the corresponding CIEMAT tutor in all aspects that affect it, and shall be responsible for tutoring and supervising each of the students participating in the training programme.

3) The CIEMAT tutor shall receive from the University of Ahmed Draïa a certificate accrediting the work done and its duration.

FOUR.- CIEMAT RESPONSIBILITIES

The CIEMAT shall take the following actions upon itself and under its responsibility with a view to developing this goal:

1) The CIEMAT, in as much as it collaborates in an educational cooperation programme, shall make it possible for the student to take exams, and except for duly justified reasons communicated previously to the University of Ahmed Draïa, shall not cancel the programme included in the corresponding Annex.

2) The CIEMAT shall designate a tutor who shall be responsible for the training of each student and of evaluating his/her period of stay, providing the University of Ahmed Draïa, Adrar (the tutor responsible for training), with a final report of how the traineeship was carried out, stating the period of the traineeship as well as its content.

FIVE.- INSURANCE

The University of Ahmed Draïa undertakes to carry out health and accident insurance for participants, as well as liability insurance for the duration of the internship.

SIX.- FOLLOW-UP COMMITTEE

For the proper development of this Agreement, a Follow-up Committee shall be formed made up of a CIEMAT representative and a University of Ahmed Draïa representative, to be designated within a period of one month from the approval of the Agreement and the other Party shall be notified in writing of their designation. They will take care of tracing, monitoring and controlling the execution of the agreement and the commitments assumed. They will solve all the problems of interpretation and compliance that may arise.

The Follow-up Committee shall meet annually in ordinary meeting, and extraordinary when one of the Parties so requests.

Insofar as anything not foreseen in this Agreement, the organisation and functioning of the Follow-up Committee shall be as stipulated for associated organisms under Law 40/2015 of 1 October on the Public Sector Legal System.



SEVEN.- INFORMATION PROTECTION AND CONFIDENTIALITY

Any personal information to which the students may have access during the performance of their activities in the collaborating entity shall be held in secret, as well as the limitations in their use and transfer as imposed by current applicable legislation.

Likewise, students must keep the confidentiality of any other kind of information, oral or written, that they may know as a consequence of the activities carried out (whether the information is related or not with the program), providing, for these purposes, their express agreement. As well as to use this information only and exclusively to comply with the obligations derived from this Agreement. Neither shall he publish or reveal them by any means without the corresponding CIEMAT authorisation.

The obligation of confidentiality shall be in effect beginning with the signature of this Agreement and shall remain in so throughout the validity of this Agreement and up to five (5) years after its termination.

EIGHT.- PROPERTY OF RESULTS

The scientific results and any inventions that may be a consequence of the activity developed by the students within the traineeship programme shall be the exclusive property of the CIEMAT, without detriment to acknowledgment of the intellectual property rights that may correspond to the students.

NINE.- OTHER AREAS OF COLLABORATION

The CIEMAT may develop with the University of Ahmed Draïa, its Centres, its Departments or professors, research projects offered under official programmes or promoted in the interest of both parties. In such projects, participation of the students and the work done by them may be taken into consideration in the official recognition of research credits.

TEN.- VALIDITY

In conformity with Article 48.8 of Law 40/2015 of 1 October on the Legal System in the Public Sector, this agreement is perfected by mutual consent of the Parties and will become effective when it has been registered in the State Registry of Bodies and Instruments of Cooperation in the national government sector and it will be published in the Boletín Oficial *del Estado* [Official State Bulletin]. It will remain in effect for four years from the day of its registration.



Any complaint about the Agreement must be legalized through the Follow-up Committee three months before the date on which termination is desired, or otherwise, its extension.

If for any reason the parties agree to the early termination of the Agreement, at the proposal of the follow-up committee, clause six, they may agree on the continuation and completion of ongoing actions that they deem appropriate, establishing a non-extendable deadline for its completion.

ELEVEN.- MODIFICATION AND TERMINATION OF THE AGREEMENT

This Agreement may be modified, at the proposal of any of the parties by signature of an amendment to it, legalized before termination of the agreement.

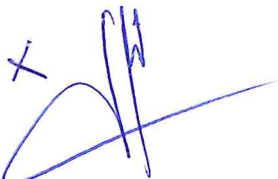
This agreement shall be extinguished by fulfillment of the actions which constitute its purpose, or for any of the following causes of termination:

- The effective term of the agreement has expired with no extension having been agreed to.
- By mutual agreement of the parties.
- Noncompliance by any of the parties of any of the clauses in this Agreement.
In this case, for severe or reiterated breach of the clauses of this agreement by any of the parties after prior demand to the party in breach, shall be given fifteen days from reception of the notice to comply with their obligations.

If at the end of the period indicated in the demand, should the Follow-up Committee find that party continues to be in breach, the party which addressed the notice shall notify the other parties to the signature of concurrence of cause for termination, and the agreement shall be understood to be terminated. Termination of the agreement for this reason could lead to indemnification by the party in breach for damages caused to the party pressing for termination.

- Decision by either of the parties if causes significantly impeding or hindering execution of the agreement should arise.
- Judicial decision annulling the agreement.

If the agreement should be terminated, the parties are still required to comply with their respective commitments up to the date of said termination, and it will result in its settlement in order to determine the obligations and commitments of each of the Parties in the terms established in Article 52 of Law 40/2015.



TWELVE.- APPLICABLE LAW

Any litigious matters which could arise concerning the interpretation and application of this Agreement shall be resolved first by mutual agreement of the parties.

And in witness whereof, the parties sign this document in duplicate for a single purpose and on all its pages, on the place and date indicated at the beginning.

FOR UNIVERSITY Ahmed Draïa, Adrar

Prof. BENAMAR Mohamed El-Amine
Rector of the University Adrar- Ahmed
DRAIA



أحمد الأمين بن عمر
مدير جامعة أدرار

FOR CIEMAT



Signed Carlos Alejandre Losilla
General Director of CIEMAT
04 ABR 2022

TECHNICAL ANNEX N° 1

TO THE AGREEMENT BETWEEN THE CENTRO DE INVESTIGACIONES ENERGÉTICAS MEDIOAMBIENTALES Y TECNOLÓGICAS O.A., M.P. (CIEMAT) AND THE UNIVERSITY OF AHMED DRAÏA (UNIVERSITY OF AHMED DRAÏA) FOR COLLABORATION ON UNDERGRADUATE AND POSTGRADUATE EDUCATION

The CIEMAT during academic year 2021/2022, shall host the student designated below, according to the terms of the Agreement on Undergraduate Education dated 02/03/2022 of which the present document is an inseparable Annex.

STUDENT: Mohamed ali Mesaud Mahmud
of Undergraduate of program electrical control
PASSPORT N° 177854207

Telephone: 00213664726756

e-Mail: medalimasud@univ-adrar.dz

UNIVERSITY TUTOR: HARROUZ AbdelKader

FACULTY: Sciences and Technologies

DEPARTMENT: Hydrocarbon and Renewable Energy

POSITION: deputy head of department in charge of research and post-graduation

Telephone: 00213664311537

e-Mail: abd.harrouz@univ-adrar.edu.dz

CIEMAT TUTOR: Gonzalez Ayuso, Tomas

CIEMAT DEPARTMENT: Energía

Telephone: +34913466148/+34629540460 e-Mail: tomas.gonzalez@ciemat.es

DURATION OF PERIOD: From: 15-05-2022

To: 15-12-2022

GOALS, BRIEF DESCRIPTION AND BREAKDOWN OF PROJECT TASKS:

Currently, the energy crisis and the increase in the level of pollution are major problems through the world. New, renewable and clean energy sources must therefore be considered. A new system hydrogen-based energy source which has great hope of replacing fossil fuels in the long term, especially as it is the most abundant element in our universe and is non-toxic because its combustion only releases water. The fuel cell is the electrochemical element that directly converts the chemical energy of hydrogen and oxygen into electrical energy, using a controlled electrochemical process. The theoretical expected returns are very high, and the by-products very little polluting. The fuel cell is the best way to use this energy carrier in order to supply electrical loads, particularly in the context of residential power supplies and transportation. Fuel cells are presented as the energy of tomorrow, alongside hydrogen. Yet they are not a new technology, since their operating principle was discovered in 1839. However, this technology faces many challenges, both technical and economic, before it is mass marketed. The cost of the cell itself (contains a certain range of platinum), the integration of the fuel cell into a energy

system, production and storage of hydrogen, poorly understood battery aging are just as many disabilities that remain to be overcome. We aspire, through this practical internship, to compare the theoretical results obtained and their adequacy through practical work, because theoretical studies have shown that there are factors such as temperature, humidity of the cell membrane, load, the gas pressure and its purity, all factors that have an impact on the work of the cell, which is why we proposed to use fuzzy logic.

The student's activities shall be carried out in the offices of the collaborating entity at Av. Complutense, 40 - 28040 Madrid, performing them on Monday to Friday from 9:00 to 16:00 h.

The student promises to respect the Centre's rules and to make maximum use of the possibilities of the training offered. He/she shall also maintain absolute discretion concerning the events and documents that may result from the work done by reason of inclusion in the training programme and of any other information, oral or written of which he/she could have knowledge, whether included or not in the Programme.

The scientific results and any inventions which may be a consequence of the activity carried out by the student within the training programme shall be the exclusive property of the CIEMAT, without detriment to acknowledgment of the intellectual property rights that could correspond to him/her as author or inventor.

If the student should drop out of the training programme and not complete his/her traineeship, the student promises to notify the University of this within a period of seven days counting from the date this occurs.

Upon completion of activities, the student shall make a report based on which the Academic and Professional Tutors shall make an evaluation.

The parties shall consult with each other immediately for the solution of any difficulties that could arise in the application of this Annex.

Madrid, on april, 25th, 2022

For Université of Ahmed Draïa

For CIEMAT

أحمد محمد الأمين بن عمر

Prof. BENAMAR Mohammed El-Amine
Rector of the University Adrar-Ahmed
DRAÏA



Claudia López del Prá
Head of the Division of Knowledge
Management

Student agreement



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STUDENT: Boussaid Ibrahim
of Undergraduate of program electrical control
PASSPORT N° 177734696
Telephone: 00213662053815 e-Mail: Bih.boussaid@univ-adrar.edu.dz

UNIVERSITY TUTOR: HARROUZ AbdelKader
FACULTY: Sciences and Technologies
DEPARTMENT: Hydrocarbon and Renewable Energy
POSITION: deputy head of department in charge of research and post-graduation
Telephone: 00213664311537 e-Mail: abd.harrouz@univ-adrar.edu.dz

CIEMAT TUTOR: Gonzalez Ayuso, Tomas
CIEMAT DEPARTMENT: Energía
Telephone: +34913466148/+34629540460 e-Mail: tomas.gonzalez@ciemat.es

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