#### **ACADEMIC COOPERATION AGREEMENT**

between

## V.N. Karazin Kharkiv National University (Ukraine)

Represented by the Rector, academician Vil Savbanovych BAKIROV

and

# The University Lille 1, Sciences and Technologies (France)

Represented by the President, Prof. Philippe ROLLET

to achieve a double diploma Master 2 in Chemistry / Advanced Spectroscopy in Chemistry

According to the general agreement of cooperation signed between V.N. Karazin Kharkiv National University (Ukraine) and the University Lille 1, Sciences and Technologies (France) on September, 23, 2013,

V.N. Karazin Kharkiv National University (Ukraine), represented by the Rector, Academician Vil Savbanovych BAKIROV, and the University Lille 1, Sciences and Technologies (France), represented by the President, Prof. Philippe ROLLET, in order to strengthen the relationship between both academic Institutions for the implementation of a Master 2 in Chemistry / Advanced Spectroscopy in Chemistry in codiploma, hereby agree and stipulate as follows.

## **Article 1 - Aim of the Agreement**

V.N. Karazin Kharkiv National University and the University Lille 1, Sciences and Technologies, by means of an exchange program of students, professors and administrative technical staff from involved laboratories, will cooperate to realize a shared training program in order to issue a double degree in Chemistry.

V.N. Karazin Kharkiv National University and the University Lille 1, Sciences and Technologies will issue respectively a "Master in Chemistry" (in Ukraine) and a "Master in Advanced Spectroscopy in Chemistry" (in France) to the students who will attend the program according to the agreement rules.

#### **Article 2 - Program Management**

Prof. Alain Rives (Head of the Chemistry Department) and Prof. Sylvain Cristol (Responsible for ASC Master program) for the French part and Prof. Oleg N. Kalugin (Dean of the Faculty of Chemistry) for the Ukrainian part will be responsible for this agreement.

### **Article 3 - Selection of the Students**

Each University will designate among its students the ones who are admitted to the program. Then, the host university shall select among these students those who are admitted for making the academic year when the exchange starts. The maximum is 20 students per academic year, 10 for each institution. This provision could be modified subject to the agreement between parties in observance of terms of reciprocity.

# **Article 4 - Student Subscription Rules**

The students who will attend this Master's program will be enrolled at both the academic institutions from the academic year when the exchange starts. Entrance fees and any other taxes will be paid at the Sending Institution.

## **Article 5 - Program Articulation**

The involved institutions will organize courses, seminaries, and examinations by fixing the total number of credits (ECTS) assigned to the exchange program for the next academic year; they will also evaluate any other aspect able to reinforce the collaboration, by also implementing a technical annex which can be modified each year. The acceptance of the technical annex is essential at the start of the student exchange program.

# Article 6 - Development of the Program

The students will carry out part of the training program at V.N. Karazin Kharkiv National University and part at the University Lille 1, Sciences and Technologies, according to the Technical Annex and to the regulation rules of each academic institution. Students of the University Lille 1, Sciences and Technologies wishing to participate in the exchange program, must spend two semesters in the home university and two semesters in

the host university, the exchange being possible only for the second year of Master's level. Students of V.N. Karazin Kharkiv National University must spend two semesters of the Master's program at the University Lille 1, Sciences and Technologies. To get the Master Degree, courses attended and examinations passed at the partner Institution must be recognized by the University of origin.

#### Article 7 - Validation of Students' Courses

In addition to examinations, at the end of the master program, each student will prepare a graduation experimental thesis. The thesis will tutored by a professor or researcher from the University or an associated research laboratory (for example: CNRS, INRIA) where the stage takes place.

The thesis will be drawn up and delivered in English according to the rules provided by the University where the training takes place.

The thesis defence will take place in the language of the specific country or in English according to the teaching regulation of both academic institutions. The thesis discussion will take place only once in the University where the training takes place, in the presence of both members or by videoconference. The final manuscript as well as the data and the associated results will be subjected to the rules of confidentiality of the university where the training takes place.

## Article 8 - Coordination of the Program

The parties agree regularly to exchange information and teaching materials concerning this agreement, as well as consulting each other as regards to organizing and teaching matters concerning the cooperation in progress.

#### **Article 9 - Program Funding and Suspension**

According to the rules of their respective Countries, the parties attempt to find the necessary European, national and regional tools to achieve the goals of this agreement. Student's travel and accommodation, as well as those of the professors and researchers involved in the project, will be promoted by international, national and regional grants aimed at promoting exchanges of students in the European Union.

If a provided fund is not available, the involved Institutions will make any effort to find any economical support for the program, before the suspension of the program of exchange of students.

#### **Article 10 - Accommodation**

It is agreed that each institution must help the students from the partner institution in its efforts regarding accommodation, within the limits of local availability.

#### Article 11 - Insurance

The member Institutions undertake to cover each student admitted to the study programme with insurance coverage for any accidents incurred within the university buildings and third party liability for damage which they may involuntarily cause to a person or their properties.

Kharkiv National University students who do not have EU citizenship are required to obtain the French student health insurance. Lille 1 students have to notify their departure to their insurance company.

Each Institution undertakes to provide appropriate information to students for their registration in the national health system or for the provision of other kinds of health insurance which may be required either before their arrival or once they have registered at the hosting Institution.

# **Article 12 - Validity of the Agreement**

The agreement comes into effect from the date of the last signature given in this document. It is concluded for duration of five years. The partners agree that the agreement may be modified or extended, at least three months before its expiry date, by mutual written agreement signed by the authorized representatives of the partners, according to the rules of their respective Countries.

This agreement may be terminated by either party upon six (6) months advance written notification. In the event of termination or non-renewal of the agreement, the partners should enable students, teachers and researchers involved to complete the activities agreed upon between the partners and in which they are already involved.

# **Article 13 - Dispute between Parties**

Dispute between parties will seek an amicable solution and concerted. If an agreement is not reached, the dispute will be remedied by relatively competent bodies for each part.

Kharkiv,	Villeneuve d'Ascq,					
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Legal Representative	Legal Representative					
V.N. Karazin Kharkiv National University	University Lille 1, Sciences and Technologies					
Acad. Vil Savbanovych BAKIROV	Prof. Philippe ROLLET					

# **Technical Annex**

This appendix describes the program of the second year of the Master of each university: the V. N. Karazin Kharkiv National University and the University of Lille 1 Sciences and Technologies.

Programme of the  $2^{nd}$  year of the Master in Chemistry in V. N. Karazin Kharkiv National University

# Semester 3

Semester/UE	ECTS	Teaching content	СМ	TD	TP	Individual work
	2	Methods of teaching in high school	18	-	18	42
	3	Actual Problems of Physical Chemistry	36	18	-	56
	2	Ecoanalytical chemistry	18	18	-	42
	2	Methodology and technology of organic synthesis	18	18	_	42
	2	Crystal Chemistry and X-ray analysis of functional materials	18	_	18	42
	2,5	Assistant Practice	ı	-	-	90
	16,5	Special courses graduating departments (1. physical chemistry of solutions and nanodisperse systems; 2. inorganic chemistry; 3. analytical chemistry and chemical metrology; 4. organic chemistry; 5. materials design and chemical informatics; 6. functional materials and chemical control of the environment; 7. pharmaceutical chemistry; 8. computer chemistry and molecular design)	108	_	108	316
Total S3	30					630

## Semester 4

Semester /UE	ECTS	Teaching content	СМ	TD	TP	Individual work
	1	Civil defence	13	7	-	16
	1	Higher Education of Ukraine and the Bologna Process	13	_	_	23
	1	Occupational Health in the area	13	-	-	23
	1	Intellectual Property	13	-	-	23
	1	English for scientists	13	-	-	23
	25	Diploma project				
Total S4	30					108

# 2nd year Master of Advanced Spectroscopy in Chemistry University Lille 1 Sciences and Technologies

# Semester 3

Semester /UE	ECTS	Teaching content	СМ	TD	TP	Individual work	Total duratio n
	5	Solid-state NMR					50
	5	Modeling in spectroscopy					50
	5	Nuclear combastibles					28
	5	Electron microscopy					40
	10	Studies project					10
Total S3	30						178

# Semester 4

Semester/UE	ECTS	Teaching content	СМ	TD	TP	Individual work	Total duration
UE Stage	30	Research internship in the laboratory (6 months)					
Total S 4	30						