## Double Master's Degree Cooperation Agreement

between

Mathematisch-Naturwissenschaftlichen Fakultät of the University of Rostock, Germany

and

School of Chemical Engineering of the Hanoi University of Science and Technology, Hanoi

regarding

**DOUBLE MASTER's DEGREE** 

### ARTICLE I - INTRODUCTION

The Hanoi University of Science and Technology (hereafter HUST) established in Hanoi, Dai Co Viet Road, Hanoi, Vietnam, represented by Prof. Dr. Hoang Minh Son, President of the HUST, and University of Rostock (hereafter UR) located at Universitätsplatz 1, 18055 Rostock, Germany, represented by its Rector, Prof. Dr. Wolfgang Schareck, express both their intention to strengthen their institutional cooperation in the field of higher education and to develop student exchanges between the two institutions.

HUST and UR have decided to undertake student exchanges leading to a double Master's degree, one from each institution including the diplomas described below in Article II.

The following articles aim to identify the terms of implementing the agreement, the rights and responsibilities of both parties and define the conditions in which students of the two institutions can obtain the double diploma.

### ARTICLE II - DIPLOMAS

HUST is enabled by the Higher Education Law, the Decree 86/2018/NĐ-CP on cooperation and investment of foreigners in the field of education and internal rules and regulations to award the Master's Degree diploma in *Master's program in Chemistry (MSc in Chemistry) to the students after* fulfilling 60 HUST Credits including the Master Thesis according to the programme.

UR is enabled by State Higher Education Act of Mecklenburg-Western Pomerania (Landeshochschulgesetz Mecklenburg-Vorpommern) and internal rules and regulations to award the Master's Degree diploma in *Master's program in Chemistry (MSc in Chemistry)* to the students that fulfil all the requirements specified by institutional graduate programme which comprises 120 ECTS including the Master Thesis.

### ARTICLE III - APPLICATIONS, ADMISSION AND REQUIREMENTS

HUST and UR will determine an exchange agreement coordinator for this double degree programme. Applications should be presented at the exchange agreement coordinator of the home university in the period established for each teaching term. The home university will pre-select the candidates to participate in the programme. Applications need to be approved by the hosting university. Students will be admitted to both master programmes, according to each university's prevailing admission criteria and the corresponding regulations. Both institutions agree that only students having sufficient scientific, personal, and language skills will be selected.

Students will be admitted on a full-time basis to the double degree programme. The application and admission regulations are specified in Annex I to the Agreement.

### ARTICLE IV - TUTORING STUDENTS

The host institution will name a member of the teaching staff to tutor each student. The teacher will act as intermediary with the home institution during the entire study period. The visiting students will have access to all the study resources available to students of both institutions.

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### ARTICLE V - TEACHING LANGUAGE

HUST offers its study programme in English and Vietnamese. UR offers its study program in English and German. Candidates must provide evidence of knowledge of English language of the advanced level (B2 - TOEFL, IELTS, Cambridge, TELC, UNICertII, TOEIC) in the respective medium of tuition of the host institution.

By the end of the 2<sup>nd</sup> Semester, participating students must provide evidence of knowledge of English language of the advanced level C1 offered by the university (e.g. elective course) or by external companies (TOEFL, IELTS, Cambridge, TELC, UNICertII, TOEIC).

In order to promote cultural integration, host universities will offer elective foreign language courses, Vietnamese at HUST and German at UR, for exchange students.

### ARTICLE VI - ADMINISTRATIVE AND ACADEMIC REGULATIONS

Throughout the study period in the host establishment, the visiting student is subject to the administrative and academic regulations of the host institution. The home institution will accept these regulations.

If a student fails to obtain the corresponding credits at the home university in the 1<sup>st</sup> and 2<sup>nd</sup> Semester, the following conditions hold:

- The local home examination committee should decide if the missing lectures may be held during the exchange year at the partner university. If this is not the case, cancellation of the exchange stay combined with a change to a local Master program could be performed.
- If an exchange stay cannot be performed (extraordinary reasons, e.g. illness, pregnancy) the local examination committee may decide to change the Master program to a local Master program (separated request from the student).

If a visiting student fails an examination at the host university, the following conditions hold:

- A timely re-examination shall be arranged. The date needs not to be restricted to regular examination periods.
- Re-examinations have to be performed under identical rules as the first examination regardless of the current student's location.
- If a student decides not to extend his stay at the host university for repeating the examination, individual regulations for the re-examination have to be found. Preferably, the re-examination will be repeated at the home university whereat the host institution determines the examination's content. Remote re-examination (e.g. via a video-conferencing service meeting German/European information security standards) may be used.

### ARTICLE VII - TUITION AND FINANCIAL MATTERS

UR and HUST shall follow their national policies and regulations regarding tuition fees. During the exchange semester the tuition fees are waved in their home and host institution. Registration fees will be paid at both the home and the host institution when required by the institution regulations. At UR, international students will, like all German students, pay the registration fee (not equivalent to a tuition fee!), which includes a contribution to the student parliament and a semester ticket for public transportation in Rostock. The amount of registration fees to be confirmed every year.

Visiting students are responsible for obtaining sufficient health insurance, including medical evacuation and repatriation. Furthermore, students should take out a personal accident and liability insurance. The host institution may require the visiting student to present insurance papers covering individual responsibility and medical insurance.

### ARTICLE VIII: VALIDATION OF STUDIES BY THE HOST INSTITUTION

At the end of the course of study undertaken by the visiting student, the host institution will send to the home institution details of the grades obtained by the student and will indicate if the student has satisfactorily completed all of the requirements. Students who validate all their study semesters in the host institution obtain the double diploma. The form and procedure for providing information about grades are specified in Annex I.

### ARTICLE IX - GRADUATION AND AWARD OF DEGREE

A student who fulfils the following conditions for the double Master degree described in this agreement will receive a diploma from each of the two institutions (see Article II).

In order to obtain the double Master degree from HUST and UR, students have to successfully complete four semesters. Students from HUST must achieve at least 30 HUST credits at their home institution and 60 ECTS at the host institution. Students from UR have to complete at least 60 ECTS at their home institution and 30 HUST credits at the host institution. The workload to complete at the host institutions will be defined in advance to get the full recognition from the corresponding home institutions. The structure and content of the double degree Program offered by the Parties are specified in Annex II.

The master thesis shall be supervised jointly by lecturers of both institutions.

# ARTICLE X - CONTINUATION, WITHDRAWAL, TERMINATION OF CANDIDATURE

Students of a master programme are required to follow the rules and regulations of both HUST and UR master candidates, including the conditions for continuation, withdrawal and termination of master studies. If a student wishes to leave the master double degree programme he/she will be free to pursue a regular degree at either university, provided that existing regulations permit it.

### ARTICLE XI - GOVERNING LAW

This Cooperation Agreement shall be governed by and construed in accordance with the laws of Germany and Vietnam.

The Agreement is to be implemented by the Parties within the legal requirements in accordance with the national educational legislation and other relevant educational laws and regulation. The autonomous position of the universities shall not be diminished. No constraints shall be imposed by either Party upon the other Party when implementing the present Agreement.

UR and HUST shall appoint a Coordinator for the double degree program. In case of a dispute, arising out of or in connection with the present Agreement, the two coordinators at UR and HUST shall endeavour to settle it on a collegiate basis, if necessary by involving the existing study program

boards at each university. If the dispute cannot be solved this way, the matter shall be submitted to the Rectors of the two universities.

### ARTICLE XII - EFFECTIVE DATE AND TERMINATION

This Cooperation Agreement will become effective upon signing and shall remain in effect for a period of five years from the date of the last signature. Both partner universities may at any time review this Cooperation Agreement and the actions taken under it. Modifications to this Cooperation Agreement may be made by mutual agreement and confirmed through an exchange of letters. The Cooperation Agreement may be extended by mutual consent by the two parties.

Both parties agree that in the event of any party wishing to terminate the Cooperation Agreement, the student enrolled under the double program will be allowed to proceed and graduate under the program.

The termination notice period is one year.

Signature Ido Vicyl

For Hanoi University of Science and Technology For University of Rostock President of the Rector of Hanoi University of Science and Technology University of Rostock Name Prof. Dr. Wolfgang Schareck Name: Prof. Dr. Hoang Minh Son Date 5.6 2019 Date....5.6.2019. Dean of the Dean School of Chemical Engineering Mathematisch-Naturwissenschaftliche Fakultät Name: Prof. Dr. Huynh Dang Chinh Name: Prof. Dr. Klaus Neymeyr Master Coordinator Master Program Coordinator School of Chemical Engineering Institute of Chemistry Name: Prof. Dr. Udo Kragl Name: Prof. Dr. Le Minh Thang

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### ANNEX 1

# ARTICLE I - CONDITIONS TO OBTAIN THE MASTER DEGREE DIPLOMA FROM HUST AND UR

The MSc. in Chemistry at HUST is organized in four semesters, the first and third (Autumn term) start in September while the second and fourth (Spring term) start in February. The corresponding examination periods are in January and June, respectively. In July, re-examinations can be attended. Regular students obtain the Master degree diploma if at least 60 credits in courses in accordance to the established itineraries including the obligatory modules comprising the Master Thesis with a workload of in total 15 HUST credits are fulfilled.

The MSc. program in Chemistry at UR is organized in four semesters and can be started in the winter as well as the summer term. The winter semester starts in October, the examination period covers February and March. The summer semester begins in April, the corresponding examination periods lasts from July to September. In the first two semesters, 60 credits have to be achieved. The final semester just contains the master thesis with a workload of 30 ECTS. In order to obtain the Master degree, regular students have to achieve 120 ECTS.

The difference in credit points results from a difference in Credits/per hour system. In principle 1 HUST credit represents 2 UR ECTS credits. The corresponding recognition of lectures is clarified in Annex 2.

The following exchange schedule is recommended. All students should start with the winter semester. The first and the second semester should be studied at the home institutions. The third and the fourth semester should be studied at the Host institutions. All students should finish with the Master defense at the guest university.

The Parties agree to the mutual recognition of credits for the in-coming students from the university participating in the double degree Program. Credit points recognition shall be based on the internal rules and regulations of the universities as well as the documents proving the correspondence with the content, ECTS credit points/HUST credit points and period of study, stated at Transcript of Records, provided by each university. The transcript is provided in two original copies. One copy is given to the student, and the second copy is transferred to the partner university.

HUST agrees to provide a transcript no later than two months after the end of term. UR agrees to provide a transcript no later than end of August for the summer term.

### ARTICLE II - APPLICATION AND ADMISSION

Admission procedure at each of the universities shall be held according to the procedure currently effective at the university and national legislation requirements.

Selection of applicants for the double degree Program is to be carried out on the basis of a personal application of a student by the commission of each partner university. For the University of Rostock, this commission will be the study program board which makes the decision based on a proposal of the coordinator for the double degree program.

After admission to the home university the copies of the students' papers are handed over to the host university within the predefined dates to approve of the potential students eligible for studies at the host university. Application documents of a student shall be stored at the university where he/she has applied for the double degree Program. The other Party may be granted the access to the documents under the double degree Program.

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HUST and UR recognize the following application deadlines, application documents, quotas for the number of students and admission procedures and criteria.

Eligibility criteria shall be as follows:

- (1) Bachelor degree in the area of Chemistry or Chemical Engineering or other relevant course of studies.
- (2) Knowledge of English language of the advanced level (B2) in accordance with the Common European Framework of Reference (CEFR).

The selection shall be based on the quality of the application documents.

Application deadline at HUST is 30.06.

Application deadline at the UR is 30.06.

Students will be enrolled in a university in the semester in which they are studying at this university.

Applicants who have passed through the selection shall be enrolled in the educational program on the basis of their personal applications and submission of this list of documents: UR students to be enrolled at HUST:

- 1. Training assignment or recommendation from the partner university's coordinator of the double degree program (English);
- 2. Personal application form signed and printed (English);
- 3. Copy of the national passport pages with the photo and full name with the notarized translation into German or Vietnamese;
- 4. Original or notarized copy of a document certifying higher education (diploma) and its supplement granting the right to study on the master's programs;
- 5. Document certifying the level of the foreign language proficiency (English for joint educational programs carried out in English)

### HUST students to be enrolled at UR:

- 1. HUST's Admission Board recommendation (English);
- 2. Personal application form signed and printed (English);
- 3. Copy of the international passport pages with the photo and full name with the notarized translation into German or English;
- 4. Certificate (authenticated copy) that qualifies for university admission in the home country together with a German or English translation of the document;
- 5. The Bachelor certificate in the national language and as German or English translation;
- 6. Document certifying the level of the foreign language proficiency (English for joint educational programs carried out in English) or the results of entrance examination

### ARTICLE III - FINAL EXAMINATION AND MASTER THESIS DEFENCE

State final examination and Master Thesis defense activities shall be carried out at joint sittings of the State Attestation Commission of HUST and the Master thesis examination commission at UR. Joint sittings may be held in the mode of online conferences.

Dates of state final examination and Master Thesis defense activities shall be mutually agreed by the Parties at least 2 (two) months prior to the specified activities.

Writing of master's thesis shall be carried out in accordance with the national legislation requirements and local regulations of the universities. Each student is to have two supervisors, one from each university. The master thesis may be written in English.

# ANNEX 2 CURRICULUM AND CATALOGUE OF MODULES

The structure of the double degree Program includes 4 semesters. In the first and second semester all students take 60 ECTS credits and/or 30 HUST credits in their home universities. In the third and fourth semester students visiting the partner universities and take courses for 60 ECTS credits and/or 30 HUST credits. In these semester students may be engaged in courses, research work and practice at the Host University. In the fourth semester all students prepare and defend master thesis under joint supervising.

The following catalogue defines the sets of modules visiting students typically can choose from. HUST and UR guarantee to accept the corresponding ECTS points /HUST credits achieved for modules from these lists. The catalogue is split into two parts: The first part contains pairs of modules from UR and HUST with equivalent content. The second part contains modules being offered exclusively from UR or HUST and can be selected independent of remaining choices.

Education process of the double degree Program is to be carried out based on the individual curriculum approved by both universities, in accordance with their rules. Individual curriculum is based on the standard curriculum (Annex 3), approved by both universities. Some courses of UR students with a research focus may be recognized as a research work.

The following table translates the grading systems of UR and HUST for single modules.

UR (numerical grades)	German names of UR grades	HUST (numerical grades)	Vietnamese names of the HUST grades
1,0 - 1,3	Sohr out (oxacillant)	9.5-10	A+(4)
1,0 – 1,3	Sehr gut (excellent)	8.5-9.4	A(4)
17 22	Cut (and)	8.0 - 8.4	B+(3.5)
1,7-2,3	Gut (good)	7.0 - 7.9	B(3)
27 22	Before diamed (actions are	6.5 - 6.9	C+(2.5)
2,7 – 3,3	Befriedigend (satisfactory)	5.5 - 6.4	C(2.0)
27 40	Association of (sufficient)	4.9 - 5.4	D+(1.5)
3,7-4,0	Ausreichend (sufficient)	4.0 - 4.9	D(1)
4,3 - 5,0	Ungenügend (not sufficient)	< 4.0	F(0)

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# Catalogue of equivalent modules

University of Rostock	Modul No	ECTS credits	HUST University	Modul No	HUST credits
Physikalische Chemie 6: Molekulare Snektroskonie – Exneriment			Advanced Physical Chemistry Courses:		
und Theorie	2550060	σ	Advanced Spectrochemical Analysis	CH6705	2
Physical Chemistry VI: Molecular Spectroscopy - Experiment and Theory	000000	D.	Chenical Kinetics and Catalysis	CH6031	2
Analytische Chemie 3 und Technische Chemie 2: Instrumentelle			Analytic Chemistry and Technical Chemistry Courses:		
Analyting China Diotechnicogle	2550070	O	Surface Chemistry and Colloids	CH6021	2
Ariatytical Chemistry III and Industrial Chemistry II: Instrumental Analytics and Biotechnology			Speciation analysis in Analytical Chemistry	CH6707	2
Anorganische Chemie 6: Materialdesign			Advanced Inorganic Chemistry Courses:		
Inorganic Chemistry VI: Materials Design	2550080	6	Advanced Inorganic Chemistry	CH6051	2
			Synthesis of Materials	CH6341	2
Organische Chemie 6: Organische Moleküle - Synthese und Nutzung			Advanced Organic Chemistry Courses:		
Programme and the second secon	2550090	6	Advanced Chemistry of Natural Products	CH6700	2
Organic Chemistry VI: Organic Molecules - Synthesis, Theoretical Background and Application			Organic Synthesis	CH6271	2
Methodenpraktikum / Method Course	2550230	9	Chemometric Environmental analytical chemistry	CH6061 CH6071	2
Literaturpraktikum: Beiträge und Trends der aktuellen chemischen			Literature survey: Trends in Chemistry/Research		
Forschung	2550100	9	Literature seminar	CH6702	က
Literature survey: Trends in Chemistry/Research					
Forschungspraktikum	00000	ç	Research Praktika:	new	
Research Praktika	2000240	<u>o</u>	Research Practice 1 Research Practice 2	new new	4 4
Masterarbeit Master thesis	2550000	30	Master thesis	CH6001	15
Wahlpflichtkurse Nachhaltige Chemie– Total 12 ECTS See below Mandatory/ Compulsory courses (4 lectures a 3 ECTS credits)		12	Mandatory/ Compulsory courses Sustainable Chemistry - Total 8 HUST credits (4 lectures a 2 HUST credits) (see below)		80
Wahlbereich /Elective courses		12	Philosopy	SS6011	3
			Elective Course		3
		Σ 120			Σ 60

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# Wahlpflichtbereich Double-Degree Nachhaltige Chemie (Englisch) Total 12 ECTS or 8 HUST credits

University of Rostock	Modul No	ECTS credits
Anorganische Chemie 8: Struktur und Bindung in der modemen Nichtmetall und Metallchemie	2550280	9
Inorganic Chemistry 8: Structure and Bonding in Modern Non-metal and Metal Chemistry		•
Analytische Chemie 4: Ökologische Chemie	2550180	œ
Analytic Chemistry 4: Environmental Chemistry and Analytics	2000 100	Þ
Einführung in die nachhaltige Chemie	22070	6
Introduction to Sustainable Chemistry	25010	ò
Organische Chemie 7: Natur- und Wirkstoffe	2550130	ç
Organic Chemistry 7: Natural Compounds and Drugs		<b>)</b>
Technische Chemie 3: Chemische Umwelttechnologie	2550170	Œ
Industrial Chemistry III: Chemical Environmental Technology	0.110007	>
Technische Chemie 5: (Chemische) Energiekonversion Technical Chemistry V: (Chemical) Energy conversion	19420	9
HUST University	No	HUST credits
Introduction to Sustainable Chemistry	New	2
Physical Chemistry Methods of waste water	CH6241	2
Treatment Catalytic reactions in the new technology and protection of the environment	CH6251	2
Seminar	CH 6701	2
Analysis structure of organic compounds	CH6301	2