

THE LA PAZ EChemTest® TEST CENTRE ON THE GO

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INTRODUCTION

The EChemTest Test Centre (TC) of the Chemical Industrial Career of Faculty of Technology of the Universidad Mayor de San Andrés (UMSA), of La Paz, Bolivia, is a registered Member of ECTN since the year 2016 and is managed by Franz Velasco (FV) on behalf of the UMSA Rector, Dr. Waldo Albarracín Sánchez, and of the Dean of the Faculty, MSc. Víctor Hugo Herrera Cusicanqui).

PREAMBLE

1.UMSA has paid regularly its ECTN membership fees since the year 2016 (see Table 1)

Year	Invoice, N°	Amount, Euros	Certificate date
2016	2016/010	175	Sept-2016 (half year)
2017	2017/106	350	5-Jun-2017
2018	2018/106	350	2-Oct-2018
2019	2019/104	350	25-Jun-2019

Table 1 – Paid ECTN membership fees

2.ECTN has shared with the UMSA the following documents: Chemistry Eurobachelor Documents (Euro brand), Euromaster Chemistry Documents (Euro brand), Chemistry Doctorate Eurolabel Documents (Euro brand), A Guidebook of Good Practice for the Pre-Service Training of Chemistry Teachers, Educating tomorrow's chemists, Education and careers of European analytical chemists, Implementing Outcomes-Based Education in Chemistry and Chemical Engineering, List of Learning Objectives of Core Chemistry, EChemTest®: the standard European Union Chemistry tests, The ECTN Virtual Education Community prosumer model for promoting and assessing chemical knowledge, Employment and Careers of European Chemists (ESEC2), Online course to improve university laboratory teaching practice, Tuning Chemistry Subject Area Brochure. (Tuning Educational Structures in Europe)

3.UMSA personnel has been trained remotely by the ECTN Agency Master-UP and on November 16, 2017, an International Agreement between ECTN (represented by Prof. Antonio Laganà – Chair of the ECTN-VEC Committee) and the UMSA TC (represented by Dr. Waldo Albarracín Sánchez – Rector and MSc. Víctor Hugo Herrera Cusicanqui – Dean of Faculty) was signed in which ECTN authorized the UMSA TC to:

- administer the running of EChemTest® Self-Evaluation Sessions (SES)s for the

purpose of assessing (for internal (Academic) and external (image, life-long, professional, etc.) purposes) the extent of Chemistry competences using Q&A libraries, criteria and procedures as defined by ECTN.

- contribute through its own activities to create, correct and translate Q&A libraries.
- undertake initiatives aimed at disseminating the use of EChemTest[®] within and outside Europe in all possible contexts.
- fill the proper forms to plan and report its activities and get the VEC Committee approval in order to set the TC Credits/Debits balance as from the rules given in Annex 1.

PLANNED 2019 ACTIVITIES

UMSA TC plans for the remainder of the present year to:

- administer the running of 60 General Chemistry (30 GC1 and 30 GC2) EChemTest[®] Self-Evaluation Sessions (SES)s for the purpose of assessing for internal (Academic) purposes (see Q1 debits as in Annex1) the Chemistry competences of the students of the Chemical industrial Career and to experiment for the first time the adoption of the GC Q&A Library for the students of the Biochemistry and Pharmacy Career;
- devote 50 man hours of Franz Velasco Quintanilla to the translation and/or modification of existing Q&A Spanish versions of the GC2 Library (20 hours) and of the Analytical Chemistry (AC3) Library (30 hours) in coordination with the NTC team of the Complutense University of Madrid (see credits Q7 in Annex 1);
- devote further 30 hours to EChemTest[®] dissemination activities addressed mainly to the Institutions and Careers indicated below (see credits Q8 in Annex 1). In this respect a participation of UMSA to the September 3 event to be held as a parallel activity at the Computational and Theoretical Chemistry Conference has been planned. Dissemination activities will involve the participation of the Institutions given in Table 2.

Nº	Career	Academic Degree	Estimated population of students
7	Chemical Engineering	Bachelor	1800
6	Biochemistry and Pharmacy	Bachelor	2000
4	Industrial Chemistry	Bachelor and Higher Technician	1200
3	Chemistry	Bachelor	600

Table 2 – Chemistry related degrees and students

- leverage its NTC role to address specific actions to the Universities belonging to the Executive Committee of Bolivian University (CEUB) that is the main group of universities (including the oldest ones) granting the Doctorate, Master, Bachelor and Higher Technician academic degrees and offering exams for all chemistry subjects. This activity will be implemented before the end of the year 2020, in order to adopt an improvement plan for university chemistry education.

Belong to this group the following 15 universities:

9 public universities operating in the capital cities of the 9 departments of the country: Sucre, La Paz, Cochabamba, Santa Cruz de la Sierra, Potosí, Oruro, Tarija, Trinidad and Cobija;

2 public universities operating in the cities of El Alto and Llallagua;

2 private universities with academic units in the cities of La Paz, Cochabamba and Santa Cruz de la Sierra;

1 private university of Army of Bolivia, with academic units in the cities of La Paz, Cochabamba and Santa Cruz de la Sierra;

1 private university of the Bolivian Police.

The academic structure of all these universities is made up of faculties and these in turn have specific careers according to the area of knowledge of the faculty to which they belong.

- UMSA will also address its action to the University Careers distributed throughout the country not belonging to CEUB. This group is made up of about 30 private universities granting the Master's and Bachelor's academic degrees (4 of these universities have academic units in the cities of La Paz, Cochabamba y Santa Cruz, 2 have Careers in Biochemistry and Pharmacy with about 500 students and none have an academic offer of Chemical Engineering, Industrial Chemistry and Chemistry).

Table 3 shows the summary of planned activities for year 2019.

Activity	n
Q1 Number of own sessions planned for UMSA	60 SES
Q2 Number of sessions planned on behalf of other ECTN Members	0 SES
Q3 Number of sessions planned on behalf of ECTN	0 SES
Q4 Number of sessions planned on behalf of an external institution	0 SES
Q5 Number of sessions planned by an other ECTN Member on my behalf	0 SES
Q6 Number of hours planned for creating a new library's question	0 h
Q7 Number of hours planned for correcting an existing library's question	50 h
Q8 Number of hours planned for dissemination activities of EChemTest®	30 h

Table 3. Activities planned for year 2019.

UMSA TC plans also at the end the present year to publish on VIRT&L-COMM the outcomes of the planned activities.

ANNEX 1

DEBITS AND CREDITS FOR VEC ACTIVITIES (from VEC minutes of April 12, 2019)

==A ACADEMIC debits/credits offsetting:

-DEBIT: when a TC runs Q1 SESs for its own institution. Due to the key role played by the TC in providing this service the contracted debit per SES is 0€ for Q1 up to 100, of 10€ for Q1 varying from 101 to 150, of 5€ for Q1 varying from 151 to 200, of 3.5€ for Q1 above 200 (instead of the official value 120€).

-DEBIT: when a TC runs a SES for ECTN (Q3), for another TC or an ECTN agency or an ECTN member (Q2) (related requests have to be either specifically planned and approved in advance by the VEC or be part of an already approved VEC project) it contracts no debit. A 10€ debit per SES is instead contracted by the applicant (Q5);

-CREDIT: when a TC runs a SES for ECTN (Q3), for another TC or an ECTN agency or an ECTN member (Q2) (related requests have to be either specifically planned and approved in advance by the VEC or be part of an already approved VEC project) it earns a credit of 3.5€/3 per SES;

-CREDIT: when a member institution provides services to be used to offset debits (to be either specifically planned and approved in advance by the VEC or be part of an already approved VEC project) it earns a Credit of 3.5€/3 per hour (Q6, Q7 and Q8).

-DEBITS>CREDITS: After offsetting Debits through Credits Excess Debit can be offset either by paying the corresponding amount, or by compensating it with net gains (if any), or by spending a corresponding amount for ECTN activities (like traveling to General Assembly, participating to work group meeting, etc.) after specifically planning and agreeing it in advance with the VEC or having included it in an already approved VEC project.

-DEBITS<CREDITS: After offsetting Debits through Credits, Excess Credits can be set aside for the next year only for offsetting future Debits after agreement with VEC.

==B PAID SERVICES income/price rules

-INCOME: 2/3 of the net gain (income minus technical and commercial costs) generated by any paid service (like IPCs or SESs) provided by the Agency are transferred to ECTN in order to be evenly shared with the involved TC (Q4) and can be used for funding EChemTest related activities (e.g. Library maintenance, LOs elaboration, Multimedia and Open Journals (like Virt&l-comm) publishing, etc.).

-PRICE for paid services may differ from the official one depending on market considerations (e.g. the nature of the customer, the volume of the request, the sustainability of the price, etc.) of the Agency. Accordingly, the

price of a training event is confirmed to be 800€ (plus travel reimbursement for the trainers), the price of IPCs up to level 3 is set at 40€. As to SESs provided to external institutions the official price (120€) can be reduced case by case (e.g. the offer made to EuChemS of annual blocks of SESs for a period of at least 3 years in the year 2018 varied from **CASE 1: (100 SES a year for 3 years) at 6500€/year** (discount 5.5k€) to **CASE 2: (1000 SES a year for 3 years) 25000€/year** (discount 55k€) in which costs for using ECTN TCs infrastructures are not included).