

# DISSEMINATION IN GREECE

- Website [www.envilab.gr](http://www.envilab.gr)
- Flyer
- Article in Greek Chemists Association Journal
- Facebook page
- ICCE Conference Barcelona June 2013



## Leonardo da Vinci CHEMLAB II



CHEMLAB Homepage: <http://eu-chemlab.eu>

### LIFELONG LEARNING PROGRAM LEONARDO DA VINCI

Action: Transfer of innovation

Duration: 24 months

#### DESCRIPTION

CHEMLAB II is a European collaborative project aiming to educate young working people, without a University degree in Analytical technologies and to improve their skills in Chemical Analysis and to raise their skills in Chemical Analysis.

The original concept of the program relies on the observation that recently, there has been a reduction in the number of experienced and qualified members of technical staff in analytical laboratories. This situation is partly due to the rapidly accelerating technological progress and increasing demands for knowledge, but also due to the



#### Αναζήτηση



#### Ο καιρός σήμερα

Thessaloniki, GR  
15 °C  
Mostly Cloudy  
at 06:50 PM  
[Click for Forecast](#)

#### Τελευταία Νέα

Pie cutting 2013  
Με ευχολόγια δεν πρόκειται ποτέ να φύγει η αειθαλήςχη Professor Fytianos and Dr. J. Engelmann and A. Schauer visit Wageningen

**Education in Environmental Analysis – Leonardo da Vinci CHEMLAB II project**

Christophoridis Christophoros<sup>1</sup>, Letzel Thomas<sup>2</sup>, Mitsika Elena<sup>1</sup> and Fytianos Konstantinos<sup>1</sup>

(1) Environmental Pollution Control Laboratory, Chemistry Department, Thessaloniki, Greece  
(2) Institute of Water Quality, Technical University of Munich, Germany, colfist@chem.lmu.th

#### Project description

CHEMLAB II is a European collaborative project aiming to educate young working people, without a University degree, in Analytical technologies and to improve their skills in Chemical Analysis. There has been a reduction in the number of experienced and qualified members of technical staff in analytical laboratories, due to:

- rapidly accelerating technological progress and increasing demands for knowledge
- the insufficient level of training for graduates of basic education.

Industries employ overqualified staff, which are capable of handling more efficient and less costly chemical analytical instruments in relation to technical staff. The CHEMLAB II – Transfer of innovation project aims at providing and fostering a "European Quality Standard in Chemical Vocational Education" for young apprentices in non-academic chemical training on-the-job.

#### Partners

Teaching Institutes  
Certification Institutes  
Legal Representatives  
Companies

- Germany
- Greece
- Turkey
- Poland
- Georgia

#### Training curriculum



#### EC-VET program

Week 1	Week 2	Week 3	Week 4
1.1. Introduction to environmental analysis	1.2. Environmental analysis	1.3. Environmental analysis	1.4. Environmental analysis
2.1. Environmental analysis	2.2. Environmental analysis	2.3. Environmental analysis	2.4. Environmental analysis
3.1. Environmental analysis	3.2. Environmental analysis	3.3. Environmental analysis	3.4. Environmental analysis
4.1. Environmental analysis	4.2. Environmental analysis	4.3. Environmental analysis	4.4. Environmental analysis

A 30-day laboratory training exercise with simultaneous mobility of the trainees

- ✓ Mobility
- ✓ Application and gain of knowledge
- ✓ Working environment exchange of knowledge
- ✓ Internship training with different instrumentation

ECVET PARTNERS - MOBILITIES

- Greece: Environmental technology
- Turkey: Water Analysis
- Germany: Food Analysis
- Poland: Cosmetic analysis
- Georgia: Biochemical analysis

#### Certification – Quality Assurance

- Intermediate exams
  - Questionnaires
  - External evaluators
  - German IHK (Chamber of Commerce)
  - Final Greek Exams using the German prototype
  - Education of Trainers with meetings
  - European Certification of Attendance
- Assuring:
- Relations in workplace
  - Suggestions and comments
  - Level of infrastructure
  - Use of new learned techniques in workplace

#### Learning facility (trainers)

#### Workplace (trainers)

#### FEEDBACK AND SUGGESTIONS

- Reduce curriculum to specifics
- Certification and connection to industry necessary
- More lab applications in the curriculum
- Continuation with state funding in professional schools for a complete 2-year training.
- E-learning platform up and running

**Ευρωπαϊκό πρόγραμμα περιεχόμενα**

Προς το παρόν μια βαθμίδα συμφωνίας με τη Γερμανική εκπαιδευτική νομοθεσία θα είχε επιτευχθεί. Στην πορεία του προγράμματος αυτού, διαφαίνεται η ίδρυση ενός Ευρωπαϊκού πιστοποιητικού εκπαίδευσης. Για το σκοπό αυτό, τα μέλη των εκπαιδευτικών συστημάτων κάθε χώρας που συμμετέχει πρέπει να χρησιμοποιούν, με στόχο την υλοποίηση μιας διαδικασίας κατάρτισης με πιστωτικό χαρακτήρα, στον τομέα της αναλυτικής χημείας, για ένα κοινό ευρωπαϊκό πλαίσιο.

Κατά τη διάρκεια του 2ου έτους διάφορες μονάδες ECVET θα πραγματοποιηθούν. Κάθε Πανεπιστήμιο εγγυάται συγκριτική ποιότητα και ενσωματωμένες απαιτήσεις. Για το σκοπό αυτό διαφορετικά αναλυτικά θέματα προσφέρονται: ανάλυση καλκωνιτών (Πολωνία), ανάλυση τροφίμων (Γερμανία), Φαρμακευτική Ανάλυση (Ελλάδα), ανάλυση νερού και αερίων (Γουαρίνα). Αντίστοιχα εκπαιδευτικά σεμινάρια θα οργανωθούν, με αμοιβαία φιλοξένηση. Επιπλέον, κατά τη διάρκεια της εκπαίδευσης οι συμμετέχοντες θα γνωρίσουν άλλες Ευρωπαϊκές χώρες και ιδιαίτερα επαγγελματίες προπονητές.

**Καθηγητής Κωνσταντίνος Φυτιανός**  
Εργαστήριο Δόσεων Ρυπαντών Περιβάλλοντος  
Τμήμα Χημείας  
Αριστοτέλειο Πανεπιστήμιο Θεσσαλονίκης  
54224  
Τηλ: +30 2109397873  
Mail: [fyti@chem.auth.gr](mailto:fyti@chem.auth.gr)

**Internet:** [www.envilab.gr](http://www.envilab.gr)

**„Ευρωπαϊκό πρόγραμμα κατάρτισης για Τεχνικούς Χημικών Εργαστηρίων“**

**Leonardo da Vinci Μεταφορά Τεχνολογίας Μέρος του προγράμματος για θύο Μέλη της Ευρωπαϊκής Ένωσης**

**Lifelong Learning Programme**

2011-2013

#### Project past meetings

- November 2011 – Freising, Munich, Germany (Kick-off meeting)
- April 2012 – Poznan, Poland (Certification meeting)
- February 2013 – Istanbul, Turkey (Intermediate meeting)
- June 2013 – Poznan, Poland (Certification meeting)

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CHEMLAB II is a European collaborative project aiming to educate young working people, without a University degree in Analytical technologies and to improve their skills in Chemical Analysis.

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