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www.tf.uns.ac.rs/CEFSERweb/CEFSERindex.html

After the 2nd year: CEFSEK in 2010



CEFSER team celebrated the second anniversary of the project

The second year of implementation of the FP7-REGPOT-2008-1 project CEFSEK (GA 229629) was ended on February 01, 2011. It was very dynamic year for the CEFSEK team members, being fully involved in the development of methods on the instruments acquired through the project and the intensive knowledge transfer activities. The summary of the CEFSEK activities in the second project year is given hereafter.

WIDENING OF RESEARCH ACTIVITIES IN THE CEFSEK LAB

Two outstanding instruments arrived at the Faculty of Technology, University of Novi Sad, in the beginning of 2010; delivery of the third instrument on Feb 01, 2011, has come as a birthday present for the successful project implementation in the second year. The procurement of the instruments was performed in line to the suggestions of the CEFSEK Advisory Committee (AC) that gathers the key personnel of four supporting institutions from EU and it considered the CEFSEK sustainability and attractiveness for the future international research activities.



The reinforcement of the material resources in the Laboratory for Chemical Contaminants (Lab CHEMCONT) at the Faculty of Technology, University of Novi Sad, through the CEFSEK project was completed during the project second year of implementation. The CEFSEK Lab now possesses two outstanding instruments: ultra high performance liquid chromatograph (UHPLC Accela, Thermo Fisher Scientific) coupled to triple quadrupole mass spectrometer (TSQ Vantage MS/MS Thermo Fisher Scientific) and UHPLC with

high resolution mass spectrometer with Orbitrap technology (Exactive, Thermo Fisher Scientific). These two instruments are unique for the whole Western Balkan Countries (WBCs) region and even wider for now, particularly due to their mass spectrometers with features that separated them from the similar instruments available in the region. The project coordinator, Prof. Biljana Škrbić, clarified the extended research scope of the CEFSEK Lab: "Laboratory with such systems, together with the instruments pre-

viously used is equipped for wide range of targeted analysis of organic and inorganic contaminants, as well for the screening of unknowns, both very important aspects in the food safety analysis. However," she added further "these are not enough for the analysis of polychlorinated biphenyls (PCBs) and some other priority organochlorine compounds, representing important issues for the protection of consumers. Thus, in consultation with the representatives of the CEFSEK supporting partners (CHIRON AS, Norway; Institute for Environmental Studies at Vrije University (VU), the Netherlands; Institute of Environmental Assessment and Water Research, Spain, and Institute of Chemical Technology (ICT), Czech Republic) it was decided to purchase GC with electron capture detector (GC/ECD), specific system for the halogenated contaminants analysis."

*GC/ECD
Agilent
7890*



"With all these systems, the research agenda of the CEFSEK lab has been broadened, and the team has started to tackle with new analytical challenges in food safety area, such as screening of multicomponent mixture of mycotoxins and pesticides by high resolution MS, development of the advanced method (UHPLC-APPI-MS/MS) for analysis of PAHs in sub-ppb levels; etc. Such issues are new and have never been investigated in Serbia or even wider in the WBC region" concluded Prof. Biljana Škrbić.

SPREADING EXCELLENCE

"In 2010, three open-access CEFSEr training courses and the first CEFSEr workshop, gathering over 120 participants, primarily from the Western Balkan Countries (WBCs) were organized at the Faculty of Technology" explained Prof. Škrbić. The key contributions to the courses were given by the representatives of the CEFSEr supporting partners.

After being trained on new analytical systems, the CEFSEr team members organized following training sessions, transferring the knowledge on the advanced food safety analysis to the WBC researchers:

- the 1st CEFSEr Training Course "Capabilities of UPLC-MS/MS in Analysis of Contaminants and Pharmaceutical Compounds in Food and the Environment", April 6-8, 2010; the 2nd CEFSEr Training Course "Quality Assurance (QA) and Quality Control (QC) Procedures in Analysis of Contaminants and Pharmaceutical Compounds in Food and the Environment", April 9, 2010; the 3rd CEFSEr Training Course "High resolution mass spectrometry in quantitative analysis and screening of organic contaminants in food and environment", September 16-17, 2010.

The 4th CEFSEr Training Course "Persistent organic pollutants in food and environment", is planned to be organized on September 8-10, 2011; more details are available on the project web site.



Practical sessions at the CEFSEr Lab for Mass Spectrometry that sparked a great interest among the participants of the CEFSEr courses, were held by Dr. Michal Godula, European Food Safety Specialist, Thermo Fisher Scientific, Prague, Czech Republic

FIRST IMPACTS

CEFSEr Lab has become an attractive partner for the joint research and collaboration, what might be seen from the number of **new projects started in 2010** (1 project funded under Hungary-Serbia IPA Cross-Border Cooperation program co-financed by EU (HU-SRB/0901/214/150, 2010-2011), 1 bilateral project with Geological Survey of Slovenia, 1 bilateral project with Hungarian Academy of Sciences, and 1 bilateral project with Croatian Geological Survey), and the number of the **multipartner project proposals** submitted during the first two years of the project lifetime (2 proposals for FP7-KBBE-2010-4 call, 2 proposals for FP7-REGPOT calls with outstanding partnering organisations, 4 proposals of bilateral collaboration with Greece, Portugal and Spain).

There have been several **presentations of the scientific results** prepared jointly with the well known researchers from the supporting institutions (the whole list could be found at the project web site) with the latest one published in *Food Control*: Fusarium mycotoxins in wheat samples harvested in Serbia: A preliminary survey by B.Škrbić, A. Malachova, J. Živančev, Z. Veprikova, J. Hajšlová (doi:10.1016/j.foodcont.2011.01.027).

Announcement of **one open position** at the CEFSEr Lab has attracted great interest and many letters with CVs have been received from several countries. However, it has not been occupied yet, waiting for the Serbian born, living abroad and willing to move back to Serbia.



First CEFSEr Workshop "Regional perspectives in food safety" was organized on September 14-15, 2010 with the main aim to gather regional scientists involved in various fields of food, environmental and health research and to know each other's achievements, to reveal the common interests and complementary, and in this way to contribute to the regional networking and exploration of the full regional R&D capabilities. It was organized jointly with the 12th Danube-Kris-Mures-Tisa Euroregion (DKMT) Conference on Food, Environment and Health that has been traditionally held in Romania, Hungary and Serbia since 1999 gathering scientists from the neighbouring counties in the DKMT region involved in research of various influences that food and the environment have on health. Prof. Biljana Škrbić explained: "It was a perfect chance and time to make connection of already traditional gathering of the regional researchers in the DKMT Euroregion with the CEFSEr activities planned. In that way, CEFSEr Workshop add an extra EU dimension to the DKMT Conference, informing the colleagues from the DKMT Euroregion about FP7 opportunities and trends in main research streams within the enlarged Europe."



More about CEFSEr events and other PROJECT outcomes could be found in the reports published at the CEFSEr web site.

CEFSEr IN FCI

During 2010, the CEFSEr members participated in two meetings of **FOOD CLUSTER Initiative (FCI)** of EC, held in Thessaloniki, Greece, and in Ghent, Belgium.

The CEFSEr team with Dr. Keith Harrop, one of the FCI coordinators during the 1st CEFSEr Workshop



The web site of FCI was launched in 2010, and CEFSEr with other projects included in FCI have obtained the own web page. See more on: www.foodclusterinitiative.eu/participating-projects

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