



Tempus158989-Tempus-1-2009-1-BE-Tempus-JPHES
Creation of university-enterprise cooperation networks for education on
sustainable technologies

EU expert's report RS

July 2010



Visit to Leskovac, SerbiaDate: July 5th, 2010**Western Participants:**

Prof. Dr. Wilhelm Hoeflinger, Vienna University of Technology, Faculty of Technical Chemistry, Austria
 Philipp Rosenthal, Institute for Applied Material Flow Management (IfaS), Environmental Campus Birkenfeld, Germany

Local Participants:

Ms. Vesna Djordjevic, Manager Business Information Centre, Regional Chamber of Commerce and Industry Leskovac, Serbia

Prof. Dr. Jovan Stepanovic, Dean of Faculty of Technology Leskovac, Serbia

Prof. Dr. Milorad Cacic, Faculty of Technology Leskovac, Serbia

Prof. Dr. Vlada Veljkovic, Faculty of Technology Leskovac, Serbia

Dr. Goran Nikolic, Associate Professor, Faculty of Technology Leskovac, Serbia

Dr. Olivera Stamenkovic, Faculty of Technology Leskovac, Serbia

Dr. Valentina Marinkovic, Zdravlje Actavis Company, Serbia

Slobodan Glisic, Student

Dipl. Inf. Igor Denic, DCP Hemigal, Leskovac, Serbia

Dipl. Ing. Miljan Potic, DCP Hemigal, Leskovac, Serbia

Mr. Dragisa Djokic, Biohem, Leskovac, Serbia

Representatives of MABO Leskovac, Serbia

Representatives of regional newspapers, radio and TV stations

Workshop and Conference of Dissemination (Agenda):

ACTIVITIES	CARRIER OF ACTIVITIES	TIME
Press conference	Mis Vesna Djordjevic , Regional Chamber of Commerce and Industry Leskovac Prof. Dr. Jovan Stepanovic, Prof. Dr. Milorad Cacic, Prof Dr Vlada Veljkovic , Faculty of Technology Leskovac, EU Experts	09 ⁰⁰ – 09 ¹⁵
Collection and registration of participants, Words of Welcome to the guests	Dr. Olivera Stamenkovic , Assistant Professor Dr. Goran Nikolic, Associate Professor Faculty of Technology, Leskovac	09 ¹⁵ - 09 ³⁰
Further Words of Welcome	Prof. Dr. Jovan Stepanovic , Dean of Faculty of Technology, Leskovac Ms Vesna Djordjevic , Regional Chamber of Commerce and Industry Leskovac	09 ³⁰ – 09 ⁴⁰
Presentation of Faculty of Technical Chemistry, Vienna	Prof. Dr. Wilhelm Hoeflinger , Vienna University of Technology, Faculty of Technical Chemistry	09 ⁴⁰ to 09 ⁵⁵
Presentation of Institute of Applied Material Flow Management	Philip Rosenthal , Institute for Applied Material Flow Management (IfaS), Environmental Campus Bergenfeld Germany	09 ⁵⁵ to 10 ¹⁰

Part I : Sustainable technology and focus problems of education		
Presentation of the Project, "Creation of university-enterprise cooperation networks for education on sustainable technologies"	Prof. Dr. Milorad Cacic, Faculty of Technology Leskovac	10 ¹⁰ to 10 ²⁵
Life Long Learning in the field of sustainable technologies	Dr. Goran Nikolic, Associate Professor, Faculty of Technology, Leskovac	10 ²⁵ to 10 ⁴⁰
Cafe break		10 ⁴⁰ to 11 ⁰⁰
Integrated Management Systems in the Pharmaceutical Company Zdravlje-Actavis	Dr. Valentina Marinkovic, Assistant Professor, Zdravlje –Actavis,	11 ⁰⁰ to 11 ¹⁵
Situational analysis and the need for education in sustainable technologies in Region of South Serbia	Ms Vesna Djordjevic, Regional Chamber of Commerce and Industry Leskovac	11 ¹⁵ to 11 ³⁰
Results of realized questionnaire	Prof. Dr. Milorad Cacic, Faculty of Technology Leskovac	11 ³⁰ to 11 ⁴⁵
Discussion of participants, defining training needs, vision and strategic objectives in the field of education	All Participants, Moderator M. Cacic Philipp Rosenthal, Prof. Dr. Wilhelm Hoeflinger	11 ⁴⁵ to 12 ¹⁵
Coffee break and snack		12 ¹⁵ to 12 ³⁰
Conclusions of workshop and evaluation of dissemination. Required education Defining the course scheme t	All Participants, Moderators: Prof. Dr. Milorad Cacic and Prof. Dr. Vlada Veljkovic	12 ³⁰ to 13 ⁰⁰
Visit to DCP Hemigal	Prof. Dr. Milorad Cacic Prof Dr Vlada Veljkovic Participants: a) Guests from EU universities b) Chamber of Commerce	14 ²⁰ to 14 ⁵⁰
Lunch		15 ⁰⁰ to 16 ³⁰

Visit to DCP Hemigal:

Western Participants:

Prof. Dr. Wilhelm Hoeflinger, Vienna University of Technology, Faculty of Technical Chemistry, Austria
Philipp Rosenthal, Institute for Applied Material Flow Management (IfaS), Environmental Campus Birkenfeld, Germany

Local Participants:

Prof. Dr. Milorad Cacic, Faculty of Technology Leskovac, Serbia
Prof. Dr. Vlada Veljkovic, Faculty of Technology Leskovac, Serbia
Dipl. Inf. Igor Denic, DCP Hemigal, Leskovac, Serbia
Dipl. Ing. Miljan Potic, DCP Hemigal, Leskovac, Serbia
Ms. Vesna Djordjevic, Manager Business Information Centre, Regional Chamber of Commerce and Industry Leskovac, Serbia

DCP Hemigal is located in the industrial zone of Leskovac, Serbia. Founder and owner Živorad Denić started the production in Leskovac on March 22nd, 1995 with its prime activity being the development and the production of cosmetics. Until June 2006, the company performed its activities in rented locations in Leskovac. Nowadays, the entire production line, the development and quality control laboratories along with the stock moved to the current location in the industrial zone of Leskovac.

The company has high quality and environmental standards enforced, which could be observed during the company visit. The management systems that have been certified according to ISO 9001 and ISO 14001 have led to continuous improvement in recent years. Also, the 92 employees out of which 75 are regular workers have been included in the overall management goals.

During the discussions with the executive manager Igor Denić, interest in energy and carbon management has been signalled, wherefore additional material has been provided. Here, further University-Enterprise Cooperation could yield in increasing energy efficiency as well as decreasing product-specific Greenhouse Gas Emissions. This could be communicated via a Carbon Footprint for e.g. Baby Care Products so that responsible production may increase sales and thereby improve the competitiveness of DCP Hemigal.

Visit to Alltech Serbia AD Senta, Serbia:

Date: July 6th, 2010

Western Participants:

Prof. Dr. Wilhelm Hoeflinger, Vienna University of Technology, Faculty of Technical Chemistry, Austria
Philipp Rosenthal, Institute for Applied Material Flow Management (IfaS), Environmental Campus Birkenfeld, Germany

Local Participants:

Prof. Dr. Zoltan Zavargo, Faculty of Technology, University of Novi Sad, Serbia
Prof. Dr. Milorad Cakic, Faculty of Technology Leskovac, Serbia
Tibor Ujvari, General Manager and Chairman of the Management Board, Alltech Serbia AD Senta
Maria Djurdjev, Production Manager, Alltech Serbia AD Senta
Petar Terzic, Quality Manager, Alltech Serbia AD Senta
Vladimir Erdelji, Development Engineer, Alltech Serbia AD Senta

Alltech Serbia AD Senta employs 242 people and its core activity is the production of yeast and other foodstuffs, including fresh baker's yeast, instant dry baker's yeast, special active yeast for frozen dough, special active dry yeast, yeast extract in a variety of forms, and dietary products for human consumption. During the company presentation, the representatives introduced some of the investments made in recent years that have led to increased capacity and a significant increase in the quality of the products produced. Furthermore, numerous certifications indicate the well-managed operation of the company. Parts of the lately installed state-of-the-art wastewater treatment, however, have been introduced as not functional due to problems with the anaerobic fermentation unit. Here, further process optimisation could be the topic for a close University-Enterprise Cooperation. Furthermore, a Material Flow Analysis for the entire region could yield in substantial energy potentials due to the close range to the neighbouring sugar factory.

Visit to Akcionarsko Društvo Fabrika Šećera TE-TO Senta, Serbia:

Date: July 6th, 2010

Western Participants:

Prof. Dr. Wilhelm Hoeflinger, Vienna University of Technology, Faculty of Technical Chemistry, Austria

Philipp Rosenthal, Institute for Applied Material Flow Management (IfaS), Environmental Campus Birkenfeld, Germany

Local Participants:

Prof. Dr. Zoltan Zavargo, Faculty of Technology, University of Novi Sad, Serbia

Prof. Dr. Milorad Cakic, Faculty of Technology Leskovac, Serbia

Ljubiša Radenković, General Director of Akcionarsko Društvo Fabrika Šećera TE-TO Senta, Serbia

Further company representatives of Akcionarsko Društvo Fabrika Šećera TE-TO Senta, Serbia

Akcionarsko Društvo Fabrika Šećera TE-TO Senta is the local sugar company, which is in direct neighbourhood to Alltech Serbia AD Senta. The company can process a maximum of 7.000 t sugar beet per day. The average production capacity, however, is 5.859 t per day. Due to the production, about 25.000 t of Molasses result every year. During the meeting with the General Director and further employees anaerobic fermentation has been mentioned as a promising alternative for the treatment of the molasses. However, a lack of information has been mentioned, wherefore a University-Enterprise Cooperation should be envisaged in the field of Material Flow Analysis as well as regenerative anaerobic fermentation and process integration.

Visit to Chamber of Economy of Vojvodina, Serbia:

Date: July 7th, 2010

Western Participants:

Prof. Dr. Wilhelm Hoeflinger, Vienna University of Technology, Faculty of Technical Chemistry, Austria

Philipp Rosenthal, Institute for Applied Material Flow Management (IfaS), Environmental Campus Birkenfeld, Germany

Katrin Moens, Coordinator of Environmental Management Unit, VOKA-Chamber of Commerce East-Flanders, Belgium

Local Participants:

Prof. Dr. Zoltan Zavargo, Faculty of Technology, University of Novi Sad, Serbia

Prof. Dr. Slobodan Sokolovic, Faculty of Technology, University of Novi Sad, Serbia

Prof. Dr. Milorad Cakic, Faculty of Technology Leskovac, Serbia

Jovan Vujcic, Special Adviser of the President, Chamber of Economy of Vojvodina, Serbia

Representatives of Chamber of Economy of Vojvodina, Serbia

Representatives of different companies and institutions from Serbia

The participants of the Workshop and Dissemination Conference were informed about the general outline of the project "Creation of University-Enterprise Cooperation Networks for education on sustainable technologies". Furthermore, they could get an impression what is meant by the Zero Emission Concepts as practiced in Germany, Clean Air technologies for Dust and Aerosol Emission Control as well as activities of the Chamber of Commerce East-Flanders in the field of Learning Networks and Seminars for Energy and Environment. Moreover, the review and the analysis of the existing knowledge of the staff from industry on sustainability issue has been presented as well as the first course scheme and the Professors that will go on retraining sessions. Afterwards, several discussions have indicated the high awareness of the participants concerning sustainability, wherefore the suitability of the Tempus project can be underlined.