



Enhancing environmental engineering education in Europe

Enrica Caporali (1) and Atanasko Tuneski (2)

(1) University of Firenze, Civil and Environmental Engineering, Firenze, Italy (enrica.caporali@unifi.it, +39 055 4796494),

(2) Faculty of Mechanical Engineering, Ss. Cyril and Methodius University, Skopje 1000, FYR Macedonia

In the frame of knowledge triangle: education-innovation-research, the environmental engineering higher education is here discussed with reference to the TEMPUS-Trans European Mobility Programme for University Studies promoted by the European Commission. Among the focused aspects of TEMPUS are curricula harmonization and lifelong learning programme development in higher education. Two are the curricula, since the first TEMPUS project, coordinated in the period 2005-2008 by University of Firenze in cooperation with colleagues of the Ss Cyril and Methodius University, Skopje. The second three years TEMPUS Joint Project denominated DEREL-Development of Environment and Resources Engineering Learning, is active since October 2010. To the consortium activities participate 4 EU Universities (from Italy, Greece, Germany and Austria), 7 Partner Countries (PC) Universities (from FYR of Macedonia, Serbia and Albania), and 1 PC Ministry, 4 PC National Agencies, 1 PC non governmental organization and 1 PC enterprise. The same 4 EU Universities and the same Macedonian Institutions participated at the first TEMPUS JEP entitled DEREC-Development of Environmental and Resources Engineering Curriculum. Both the first and second cycle curriculum, developed through the co-operation, exchange of know-how and expertise between partners, are based on the European Credit Transfer System and are in accordance with the Bologna Process. Within DEREC a new three-years first cycle curriculum in Environmental and Resources Engineering was opened at the University Ss Cyril and Methodius, Skopje, and the necessary conditions for offering a Joint Degree Title, on the basis of an agreement between the Ss. Cyril and Methodius University and the University of Firenze, were fulfilled. The running DEREL project, as a continuation of DEREC, is aimed to introduce a new, up-to-date, postgraduate second cycle curriculum in Environment and Resources Engineering at the Ss Cyril and Methodius University in Skopje, FYR of Macedonia, University of Novi Sad, Serbia and Polytechnic University of Tirana, Albania, following the criteria and conditions for setting up a Joint Postgraduate Degree. The new second cycle degree curriculum has been just activated in the current academic year 2012/2013. In DEREL a second objective is to implement a sustainable regional network aimed to offer lifelong learning seminars for environment and resources engineering education and training of interested stakeholders and organize workshops focused on strengthening the links in the knowledge triangle: environment education-innovation-research, with participation of postgraduate students, public services, enterprises and NGO's.