MODERNIZATION OF ENVIRONMENTAL ECOLOGY TRAINING PROGRAM IN AZERBAIJAN: A CHALLENGE FOR THE EUROPEAN ENGINEERING EDUCATIONAL PROGRAMS

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ECO-NANO project is a contribution to the modernization of curricula on Ecology Engineering (EE) in higher education system of Azerbaijan (AZ) by means of a larger use of achievements of nanotechnology. Harmonization of the new curricula with respect to those in EU is attempted through this project. Great attention is devoted to the partnership. The involved AZ universities, Baku State University (BSU), Azerbaijan University of Architecture and Construction (AZUAC) and Qafqaz University (QU) are among the top Universities in AZ. The first two are public institutions and the third one is private. The EU universities participating in this project are European leaders for education and research in nanotechnology and its environmental applications (membrane processes, photocatalysis). The European partnership involves Sapienza University of Rome (Italy), University of Patras (Greece) and University of Paris 13 (France). methodology to validate the new advanced courses to modernize the actual curricula is proposed: the implementation and realization of an one year Advanced Course on Ecology Engineering (ACEE) addressed to AZ graduates, to test the new modules to be introduced in European curricula, and to share teaching experience among teachers from AZ and EU. This will allow to evaluate the new education system impact on the countryside students. During the collaboration for ACEE the reform of the European curricula is developed and continuously discussed. An important AZ company of environmental monitoring (AZECOLAB) contributes to design curricula for enhancing entrance of graduates in the job market. Partnership also includes the Azerbaijan Ministry of Education, which has the role to examine the possibilities and the conditions necessary for the accreditation of the new curricula. The education in EE provided at the AZ universities will be performed in collaboration with EU universities, which have already developed new courses on EE based on their experiences in nanotechnology and the support of nanotechnology research centers. In order to enhance and prolong the collaboration between the universities, the establishment of double/joint degrees among the university partners is planned. Throughout the project an "external" institution, i.e. CSI, will supervise the quality of the project and the achievement of the targets using suitable progress indicators. Dissemination of the project results is supervised by BSU.