Creation of International cooperation networks to facilitate the development of mathematics studies in LUA

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The 7rd IOSTE Symposium for Central and Eastern Europe marked that added to the greater integration of EU, there is need for the exploration, discussion and exchange of education ideas, analysis of common problems, implementations of European dimension in initial science education (Nezvalova et al, 2009). It has been reported in the previous international conference "Teaching mathematics: retrospective and perspectives" (Kučinskaite, Vintere, 2009) on networking between Latvia University of Agriculture (LUA) and Šiauliai University to promote integration of mathematics study in the socio-economic development of the region. At present the development of the international cooperation in agrometrics and engineering mathematics field is topical for LUA.

In 1997–1998 arose idea of cooperation between the Nordic and Baltic mathematicians working in national agriculture universities (Raskiniene et al, 2008). The purpose of this cooperation was the necessity to understand what kind of mathematics and what amount of it agriculture specialists need, to achieve common standards in higher agriculture education as well as to improve the teaching quality by means of exchanging teachers' experience. Under this initiative, there have been several international conferences, including in 2010, organized by LUA. The original idea was very important, but for financial reasons, it has proven to be not quite viable. Currently, a crucial issue is a single organizational structure and leadership to restore and to coordinate this institution. It should be noted that LUA is interested in the reconstruction and coordination of this cooperation.

At present the latest findings in teaching mathematics outlines the directions for future development of mathematics studies' at LUA: development of directions of engineering mathematics and mathematical modelling. Several international organizations in engineering education (e.g., IEEE, IGIP, SEFI, etc.) to promote the engineering education offer according to the human development trends emphasizes the importance of the direct application of mathematics and its role in solving engineering problems. Thus, a crucial issue is the development of international cooperation network, whose remit would be to create the scientific methodological grounds to support engineering mathematics; the consolidation of potential - engineering education, scientific and intellectual – to cooperate in the fields of mathematics and mathematical modelling (cross-study program; use of applied mathematical programming packages; development a common database for studies, etc.), as well as research and consulting.

In the conference report, these ideas will be presented more widely to find out the views from colleagues in other countries for cooperation and its possible directions and by identifying potential partners.

- **1.** Kučinskaite, R., Vintere, A. (2009) "CROSS-BORDER COOPERATION IN DEVELOPMENT OF THE MTHEMATICS STUDY PROCESS", 10th International conference "Teaching Mathematics: retrospective and perspectives", Abstracts, Tallinn, p.43-44.;
- 2. Nezvalova D., Lamanauskas V., Raidova Z., Valanides N., Pekel F. (2009) The Training Modules for Improving Quality of Science Teacher Preparation: Methodological, Procedural and Didactical Issues. Proceedings of the VIIth IOSTE Symposium for Central and Eastern Europe "Development of Science and Technology Education in the Central and Eastern Europe", Šiauliai, Lithuania, 104-111.;
- **3.** Raskiniene, D., Kaminskiene, J., Rupsys, P. (2008) Ten years of cooperation. "Sixth Nordic Baltic Agrometrics conference" proceedings, Akademija, p. 46-48.