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## Supervisors' assessment of the cooperation with PhD candidate – Michal Krbeček, MSc

The cooperation with Michal Krbeček MSc. started already during his diploma project "Creation of multimedia interactive aid with exploitation of remote experiment", when he, for the first time, met with the branch of remote experimentation. After successful defence and finishing his undergraduate studies of Engineering Informatics at FAI TBU in Zlin in 2012 the cooperation continued in his post gradual PhD program studies. Then he was already an experienced programmer and the branch of remote experimentation was highly acute, he continued in this direction also in his PhD study program.

Then, the state of art of e-laboratories at the world and EU level developed already very intensive, but in form of individual, not compatible with each other systems, without any standardization. This was the reason for his orientation in first two years on unified interface for e-experiments on the basis of Internet School Experimental system (ISES) built on the principle of final state machine with Measureserver and .psc controlling file.

Due to the complexity of the e-laboratories and their management system, the scientific cooperation was organized within the group of PhD students of FAI TBU in Zlin and MFF ChU in Prague organized by prof. dr. F. Schauer, DSc., of then created Consortium for e-experimentation.

In this period M. Krbeček, MSc compiled the expert environment for creation of controlling programs for e-experiments - Easy Remote ISES (ER ISES) and using this he has built several e-experiments for the Consortium in Zlin, Trnava and Prague. Consecutively, the activities of M. Krbeček, MSc. attracted the EU and world community of remote experimentation, resulting in the invitation for the scientific stay at the Technical University in Sydney (prof. David Lowe) in 2013, where his system and e-experiments were presented. Then he became the head of the group of PhD students at FAI, working in the branch of remote experimentation and then he delivered a series of lectures on the topic to the students of FAI.

During his stay in Sydney he was acquainted with the new trend of unification and providing e-laboratories via Remote Laboratory Management System (RLMS). This system efficiently removed all obstacles in connection of interfacing various interface solutions of e-experiments in the world. After return

he started to build the RLMS REMLABNET at FAI TBU in Zlin, where he gradually placed and made accessible as many as 20 e-laboratories of Consortium from physics, chemistry and environment. The activities and results of RLMS solutions, hitherto new and unique, resulted in invitation for the scientific stay at the University of Lausanne (Dr. Denis Gillet, head of the technical group of EU FP 7 project Go-Lab) for the integration and federalization of REMLABNET with the project of Go-Lab. Subsequently, the project SCOPES of Swiss National Science Foundation was granted to prof. F. Schauer and Consortium, with the goal of federalization with EU activities. The project is still running and corresponding activities of M. Krbeček, MSc. continue.

To look at the cooperation with M. Krbeček, MSc. during his PhD program fulfilment, the partnership with him was excellent, sticking to the terms and all agreed. He continuously discussed and accepted incentives from prof. F. Schauer during individual exchanges and regular meetings of all doctoral students group, whose unnamed head he was during all his studies.

M. Krbeček, MSc. during his PhD studies turned out to be efficient, self-supporting and active student of PhD study program. His approach reflected in participation at international world conferences and more then 20 paper publications in international journals. The achieved results of his extensive activities testify the fact M. Krbeček, MSc. grew into all round specialist of both hw and sw of a new and acute branch of remote laboratories and their effective exploitation. The recognition of achieved results of M. Krbeček, MSc. by international community contributes also a great deal to the reputation and recognition of FAI TBU in international context. The quality of his achievements, summarized in his doctoral thesis rests now with the board of referees.

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Assoc. Prof. Dr. Miroslava Ožvoldová, PhD.

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