DISCUSSION from 23/04/2012 Proposal Long-Term Strategy of the MTF STU FOR THE PERIOD 2012 - 2017 Submitted by: Prof. Dr. Ing. Oliver Moravčík, Dean Prepared by: Prof. Dr. Ing. Jozef Peterka, vice-dean Approved by: VF on 11.04.2012 KD on 04/17/2012 Conclusion: AS MTF STU approves / disapproves

Draft of Long-term plan of the MTF STU for the period of 2012-2017 Long-Term Strategy of the MTF STU for the period 2012 - 2017

Introduction

The proposed Long-Term Strategy of the Faculty of Materials Science and Technology in Trnava (MTF) is a strategic document for the next six-year period of 2012-2017. The long-term plan is based on the following strategic documents:

- MTF Long-Term Strategy 2007 - 2010,

- Long-Term Strategy - STU Strategic Development Plan 2012 - 2017 as well as

- Vision and Mission of the MTF STU as defined in the period 2006 - 2011.

The identity of the STU

The Slovak University of Technology in Bratislava continues with its roots being connected with the progressive famous Mining Academy in Banská Štiavnica, which was founded in 1762 and ran in the territory of today's Slovakia for 150 years. The Slovak Technical University in Bratislava, publicly known as "Slovenská vysoká škola technická (SVŠT) v Bratislava", was formally established by the law in 1937. For 75 years its activity has raised nearly 120,000 engineers and has become the flagship of Slovak tertiary technical education. It contributed to the economic and social development of Slovakia, to the development of world science, the development of industrial enterprises and institutions.

# The identity of the MTF STU

The Faculty of Materials Science and Technology in Trnava is fully identified as an equal part of the Slovak University of Technology in Bratislava.

The Faculty of Materials Science and Technology of the Slovak University of Technology was established by decree of the CSSR government- no. 94 from 10.10.1985, with effect from 1.1.1986 under the original name of "Faculty of Machining Technology, Slovak Technical University in Trnava", although its creation date and its history are much older. The foundations were closely related to the activities of technological disciplines of engineering production and were laid on the former Department of Mechanical and Electrical Engineering (OSEI) back in 1939. The OSEI, after 1950, was renamed as the Faculty of Mechanical and Electrical Engineering, which in 1951 split into two separate faculties – The Faculty of Mechanical Engineering and The Faculty of Electrical Engineering.

The start of the Technical disciplines at the SVST will remain forever linked to the name of the Nestor of mechanical technologies- Prof. Jozef Čabelka (1910 - 1987), a leading expert in the field of welding technology and the founder of the Welding Research Institute in Bratislava (1949). The development of these technologies was supervised by Professors J. Nebesky and J. Ondra.

The late seventies and early eighties gave way to disaggregated study fields at the Faculty of Mechanical Engineering of the, then named, Slovak Technical University in Bratislava which included construction fields and others which belonged to Machining technology, Materials Engineering, Economics and Management of Machining Production, Automated Systems of Management of Production Systems, Production Systems with industrial robots and manipulators. These study branches in 1986 became the basis for the formation of The Faculty of Machining Technology in Trnava.

In 1991 it was renamed as The Faculty of Materials Science and Technology of the Slovak University of Technology with its residence in Trnava. From this period the faculty was lead by the following Deans: Prof. Ing. Jozef Adamka, CSc., Prof. Ing. Karol Polack, DrSc., Prof. Ing. Milan Turna, PhD. IWE, Prof. Ing. Jozef Sablik , CSc. and Professor. Dr. Ing. Oliver Moravčík.

The Faculty is focused on University graduate education for a wide range of industrial production. From its beginning until today it has trained 18,074 graduates at all levels of study (6124 in the first stage, 11 576 in the second stage and 374 in the third stage). In 2008 the Faculty was awarded as a finalist of the National SR award Prize for quality in the category of organizing the public sector. In September 2009, the faculty was in the process of a complex accreditation of SR universities and was accredited as a university faculty. In the ranking of university evaluation during 2011, it moved up ten points on the bases of reached results.

#### Vision of the STU

The Slovak University of Technology in Bratislava wants to be internationally recognized as a research-oriented technical university of international importance. The focus is to provide high quality and internationally comparable education to the broad masses of young people in promising areas, based on research, critical thinking, entrepreneurship and creative industries, with regard to a practical application in life and with respect to the human dimension of education and technological progress. The university wants to contribute to economic and social development of the region.

#### Vision of the MTF STU

The aim of the Faculty of Materials Science and Technology STU in Bratislava, located in Trnava, is in context with the vision of the STU, to be a research-oriented and internationally recognized faculty in of similar universities on a global scale, i.e. faculties which develop modern trends in research and manufacturing, with emphasis on advanced materials, sophisticated manufacturing technologies and industrial engineering, automation and computerization of production and technological processes and the quality, safety and environmental aspects of industrial production.

Mission of the STU

The mission of the University, as a research-oriented University of Technology is to acquire scientific research, engineering and other creative activities to apply and to disseminate new knowledge, to educate and nurture the young generation in the spirit of the principles of humanism and humanity.

Mission of the MTF STU

In accordance with the defined mission of the Slovak University of Technology, the Faculty of Materials Science STU wants the faculty to actively contribute to its fulfillment - with priority to material sciences and manufacturing technologies - accredited in the areas of teaching, research and development within the defined competencies:

to offer and implement a system of university education at all levels in accredited programs,

to spread, deepen and develop the knowledge by the tools of science research to ensure the transfer of science and research results in education,

to ensure the transfer of research results into business practice,

to protect their research results,

to integrate into the university system of lifelong learning,

to contribute to the sustainable development of all its activities, but especially the harmonious development of personality of students in the context of the ideals of humanism and democracy.

# Values:

The MTF STU recognizes and will promote the following values in all of its activities: academic freedom, equal opportunities, technological progress, honesty, humanity, ethics, corporate identity.

# General and strategic objectives

1. To focus faculty activities into the Bottova CAMPUS Bottova.

2. To improve the quality and effectiveness of the educational process at all levels of study.

3. To publish results of research and creative activites in an international environment, especially in renowned international scientific journals.

4. Empowering of the MTF STU in international cooperation projects.

5. Building a research infrastructure (control console), including qualified staff.

6. To strengthen cooperation with the practice from private industrial enterprises to public institutions and authorities.

7. To ensure smooth completion of the accredited study programs by teachers and

guarantors during its generational changes in core areas

8. To increase a sense of belonging and awareness of the faculty's graduates.

9. To focus research results and the freedom to explore outputs in the form of patents.

10. To strengthen the focus on other sources, such as subsidy from the state budget,

especially on foreign sources of grant agencies for business projects.

11. To strengthen and improve ICT technologies to meet the top European and world level.

#### Tools

The faculty uses a range of tools related to its running and functioning. This section provides selected tools to meet the above general and strategic objectives.

1. Preparation of development projects and applying for funding from EU sources.

2. Engaging students in creative, engineering and research activities.

3. A review of all study programs at the next comprehensive accreditation in order to optimize and increase efficiency.

4. Preparation and implementation of the project to gradually phase in the teaching of the English language.

5. The support of publication activities in the prestigiously renowned international scientific journals, registered in the WOS or Scopus.

6. Support for participation in the international offices of the University scientific and research cooperation in international projects, notably the EU Framework Programme.

7. Strengthening of tools for the creation of natural mechanisms of the MTF graduates-Alumni who will be regularly informed about the activities at the faculty.

8. The building of institutional support, cooperation with practice and the transfer of knowledge into practice.

9. Adjustment of internal rules and practices affecting the natural career progression in order to increase motivation.

10. Stepping up the introduction of new and developing existing quality management systems.

11. Support for raising funds from external sources, particularly from abroad.

12. We are constantly upgrading information and communication technologies.

# Indicators

In general the faculty monitors indicators of quantity and quality of education and research in accordance with the criteria of the Ministry of Education for grants, criteria rating agencies and accreditation criteria. This paper presents the selected indicators:

1. The proportion of students of the second and third level study in the total number of students.

2. The share of foreign students studying at the MTF in the total number of students.

3. The proportion of successful students at the first level of study during enrollment.

4. The proportion of the number of subjects to the total number of subjects in place for teaching in the English language.

5. The proportion of hours of research (capacity) of the total fund of research capacity.

6. The proportion of funding obtained by the faculty in the form of a contract and other

forms.

7. Number of research and other projects of international cooperation.

8. The volume of funds received for research projects abroad.

9. The volume of funds directed specifically to instrumentation.

10. The proportion of teachers with a scientific degree (PhD., DrSc.) to the total number of teachers.

11. The number of students per teacher with a scientific degree.

12. The share of researchers in the total number of teachers.

13. The proportion of graduates registered in the ALUMNI association in the total number of graduates of the faculty.

14. The volume of funds received from business activities.

15. Number of patents, granted licenses ...

16. Share of outside sources in the revenue budget of the faculty.

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