Faculty of Informatics

Annual Activity Report 1998

	until 31. 8. 1998	*from 1. 9. 1998*
Dean:	**Prof. RNDr Jiří Zlatuška, CSc.**	**Assoc. Prof. RNDr. Luděk Matyska, CSc.**
Vice-deans:	**Assoc. Prof. RNDr. Renata Ochranová, CSc.** **Assoc. Prof. Ing. Jan Staudek, CSc.** **Assoc. Prof. RNDr. Luboš Brim, CSc.**	**Assoc. Prof. Ing. Jan Staudek, CSc.** **Assoc. Prof. RNDr. Luboš Brim, CSc.** **Assoc. Prof. RNDr. Jan Slovák, CSc.**
Chairman of the Academic Senate:	**Assoc. Prof. RNDr. Luděk Matyska, CSc.**	**Assoc. Prof. PhDr. Karel Pala, CSc.**
Secretary:	**Ing. Jana Foukalová**	**Ing. Jana Foukalová**

The Faculty of Informatics offers university-type courses; these have a strong basis in the theoretical foundations of informatics and place a heavy emphasis on research. The system of study is as open as possible to students and enables them to choose the subjects according to their particular interests. The Faculty has continued to develop its own system of administration based on the Intranet. This system is going to be used as the basis for the design and development of the new University Information System. In 1998, the reconstruction of the faculty building at Botanická 68 was successfully finished with a total of CZK 80 million invested.

As of September 1998, the first Dean of the Faculty of Informatics, Prof. Dr. Jiří Zlatuška, became the Rector of Masaryk University. Assoc. Prof. Dr. Luděk Matyska was elected the new Dean. The academic staff of the Faculty of Informatics is actively involved in research covering areas successfully explored by projects funded by national grant agencies as well as those resulting from international co–operation. In 1998, the Scientific Council of the Faculty approved three long-term research projects: "Nonsequential Models of Computing", "Human–Computer Interaction, Dialogue Systems and Assistive Technologies", and "Application of Computer Image Analysis in Optical Microscopy". Further research areas in which members of the Faculty are particularly active include: theoretical computer science, specification-based systems, software engineering and the methodology of programming, computer networks, electronic typesetting and desktop publishing, scientific computing and data visualisation, information systems, and multimedia systems and the general social impact of IT. The Faculty of Informatics was a direct recipient of a grant from the Grant Agency of the Czech Republic for in-depth research in virtual reality and two long-term grants from the Ministry of Education focusing on applications connected to natural language and communication in this, and on the processing of three-dimensional patterns of genetic information in cells. In addition, the Faculty obtained five grants from the Grant Agency of the Czech Republic, two of which were joint grants, two grants from the Higher Education Development Fund, and five other grants including grants from abroad. The total value of grants received in 1998 was approximately CZK 11 million.

Academic research work at the Faculty intensified when five specialised research laboratories were established, funded mostly from research grants: Human–Computer Interaction Laboratory, Laboratory of High-Resolution Cytometry, Laboratory of Natural Language, Laboratory of Phonetics, and Laboratory of Acoustics. In addition to researchers and post-graduate students, the best undergraduate students are involved in research work in these laboratories.

In 1998, the Faculty of Informatics hosted the federated conference MFCS/CSL. This event was the result of combining two annual conferences: MFCS '98 (Mathematical Foundations of Computer Science) and CSL '98 (Computer Science Logic). At the same time, a dozen satellite workshops took place. In terms of the number of given talks (285) and the number of participants (375), the conference was recognised as the most significant scientific event in the history of European theoretical computer science. Jiří Srba, a student at the Faculty of Informatics, was awarded the prize for the Best Student Contribution. Another important scientific event held at the Faculty of Informatics was the international workshop TEXT, SPEECH and DIALOGUE – TSD '98. The workshop dealt with topics in the field of natural language processing, especially corpora, texts and transcription, speech analysis, recognition and synthesis and their intertwining within the natural language dialogue systems. 79 researchers from 24 countries attended the conference.

The Faculty organises the weekly Informatics Colloquium. Speakers from international institutions (eight speakers) and local institutions (eighteen speakers) reported on their research work. Members of the Faculty of Informatics also participated in fifteen significant international conferences and congresses held abroad and in fifteen similar events in the Czech Republic.

At present, the Faculty gives three courses of study, leading to bachelor's (Bc), master's (Mgr.) and doctoral (Dr.) degrees respectively. A number of academic programmes are organised in co-operation with the Faculty of Science (particularly mathematics) while the teacher education and combinations are inter-faculty courses. Students of specialised studies major in informatics and also subscribe to a minor subject. The Faculty provides courses in informatics as the major discipline in two programmes: either in the more practical bachelor's course, or in the more demanding and theoretical master's course. Basic courses of the two programmes overlap and students can easily switch between them. The master's course requires the completion of certain academic prerequisites at the end of the third year, at which time those students who continue with the master's course may obtain the bachelor's degree (which enables graduates to progress to higher forms of study at other institutes of higher education at home or abroad).

Special attention has been paid to post-graduate doctoral studies in Informatics, which the Faculty considers very important. With the continuously increasing number of students, the Faculty's priority is to provide the students with the best possible conditions for their research work. The faculty expects its post–graduate students to present high-quality academic standards in their dissertations and to publish their work in renowned journals abroad and in the proceedings of peer-reviewed international conferences.

The Faculty uses a credit system of study which comprises a combination of obligatory courses, specialised courses, and optional courses selected in accordance with the student's professional priorities.

Twenty-seven Faculty members are involved in work for various committees of international conferences, boards of international professional societies, and editorial boards. Nine members were invited for study trips and lecture series abroad, while three lecturers from abroad gave courses at the Faculty of Informatics.

Long-term co-operation in theoretical research continued last year with City University London (UK), the University of Namur (Belgium), and the Technical University Munich (Germany). Especially successful was the co-operation with RAL (Rutherford Appleton Laboratory, UK), in the last year of the joint work on the project HYPERMEDATA, funded under the COPERNICUS scheme. In the EU research project EuroWordNet 2 (EC Telematics), the Faculty co-operated with research teams at the Universities of Amsterdam, Pisa, Sheffield, and others. The Faculty actively co-operated with Oxford University (UK) and the University of Heidelberg (Germany), in research in the area of Image Analysis in Cytogenetics. During 1998, Faculty members went for 70 trips abroad, of which more than 50 % involved active participation at conferences. The Faculty played host to 23 visitors from abroad.

Members of the Faculty of Informatics are also board members of IFIP, IEEE CZ, TUG (TeX User Group), ACM Chapter CZ, and ERCIM.

Faculty members published 142 works, of which 60 were published abroad and 82 in the Czech Republic. Eight monographs were published (six of them abroad) and 62 articles appeared in important and reviewed journals or festschrifts. Other works included educational and popular articles and textbooks. Eight Faculty members edited proceedings of international conferences.

Honorary Doctoral Degrees, Medals, and Other Awards

Prof. Jozef Gruska was awarded the Prize of the Slovak Literary Foundation as well as the Masaryk University Rector's Prize for his monograph *Foundations of Computing*. Dr. Antonín Kučera received the Ministry of Education Prize for his research work on concurrent processes. The Masaryk University Rector's Prize was also awarded to Michal Kozubek for his doctoral dissertation and to Jiří Srba and Petr Konečný for excellent study results.