

# Faculty of Science

## Annual Activity Report 2000

	<i>till 31. 1. 2000</i>	<i>from 1. 2. 2000</i>
<b>Dean:</b>	<b>Prof. RNDr. Rostislav Brzobohatý, CSc.</b>	<b>Assoc. Prof. RNDr. Jan Slovák, DrSc.</b>
<b>Vice-deans:</b>	<b>Assoc. Prof. RNDr. Jan Celý, CSc.</b> <b>Prof. RNDr. Jiří Gaisler, DrSc.</b> <b>Prof. RNDr. Jaroslav Jonas, CSc.</b>	<b>Prof. RNDr. Rostislav Brzobohatý, CSc.</b> <b>Assoc. Prof. RNDr. Viktor Kanický, CSc.</b> <b>Assoc. Prof. RNDr. Jana Musilová, CSc.</b> <b>Prof. RNDr. Jiřina Relichová, CSc.</b>
<b>Chairman of the AS:</b>	<b>Assoc. Prof. RNDr. Pavel Kubáček, CSc.</b>	<b>Assoc. Prof. RNDr. Pavel Kubáček, CSc.</b>
<b>Secretary:</b>	<b>Ing. Hana Michlíčková</b>	<b>Ing. Hana Michlíčková</b>

The Faculty of Science (FS) comprises of Physics, Chemistry, Biology, Earth Sciences and Mathematics. These sciences differ in methodological approaches, methods of work and levels of development. This is then reflected in differences in their research and activities, as well as in different levels of formalisation of knowledge and its integration into universal viewpoints.

Faculty of Science organized seven programmes in the 5-year Master's courses of study, and four in the 3-year Bachelor's courses of study.

Last year the number of successfully completed final state examinations in the Master's programme was 271 and 33 in the Bachelor's programme.

Special attention of the faculty population is focused on post-graduate studies. The present post-graduate programme offers courses in 35 areas to graduates of Master's studies. There are 510 students in the post-graduate programme; 278 in its regular form and 232 in combined studies. The basic prerequisite for participating in Ph.D. courses are intensive research work and presentation of its results at scientific conferences, in high-quality dissertations or papers published in reputable foreign journals. Post-graduates are also asked to provide teaching assistance in particular fields. Their study stays abroad in places such as Germany, France, the USA, Austria, Great Britain and Russia, or within various international programmes, such as SOCRATES/ERASMUS, as well as visits to particular specialised institutions through personal contacts with foreign partners are of a great importance.

Full-time post-graduate students have a preferential status in housing at MU halls of residences, and are granted monthly scholarships.

In 2000, fifty-one students successfully completed the Ph.D. programme and received Ph.D. degree; two of them were international students.

For academic achievements and exceptional results in research, publication and organisational activities and noteworthy athletic achievements, the dean conferred a total of five awards to students and individual sections conferred another 23. Three students were awarded a prize for exceptionally good

academic achievements (they averaged 1.0 throughout their study). The Rector's Prize for the best student in the Master's programme was awarded to Jan Strejček for outstanding academic performance, research and development and the original diploma work. The Rector's Prize for the best post-graduate student went to Jiří Czernek (M.Sc.), a student of physical chemistry, and Robert Hakl (M.Sc.), a student of mathematical analysis.

In 2000, more than half of all the projects worked on by Faculty of Science teachers were MU grant projects. The overall financial value of the grants was divided similarly. An important role in this respect was played by 11 Ministry of Education research projects awarded to the Faculty of Science. Our Faculty was the only one that received funds from foreign grants that the Ministry of Education takes into consideration in the preparation of the budget for the following calendar year.

A detailed summary of Czech and foreign grants, including their financial value, is listed in the first part of Masaryk University Annual Report, the chapter Research and Development.

One of the greatest achievements were the results of the Ministry of Education competition of project that enabled the establishment of the National Centre for Biomolecular Research at the Faculty of Science (prof. Koča).

The botanical garden conservatory of the was the venue of the 4th Garden Party, which was held in conjunction with a book launching and exhibition opening entitled "Sculptures of Wood and Metal", and it was also the opening night of an exhibition of sculptures and art objects by Zdeněk Macháček and Milan Michna. The importance of this garden party was highlighted by the fact that it was organised not only under the auspices of the Rector but also the Mayor of Brno. The Garden Parties are becoming an annual cultural tradition.

Other events organized by the Botanical Garden include the activities of the Friends of the Botanical Garden Association (established in 1996), which provides a basis for a broad-based cooperation with the public.

The premises of the Botanical Garden played host to three specialized exhibitions: an exhibition of carnivorous plants, bulbs and succulents and of colourful canary species and European and exotic birds.

The Ministry of the Environment authorised the Faculty of Science botanical garden with the housing of plants confiscated by the custom officers at the Preservation Centre. These include plants subject to the Washington Agreement.

The Small Centre bookstore located on the premises of the Dean's office at the Faculty of Science organised the 5th EARTH, LIFE & PHYSICAL SCIENCES 2000 trade fair of foreign specialised literature.

The "PF Galerie" also located in the building organised three exhibitions in 2000: "Papua New Guinea", a photography exhibition by Dr. Rostislav Melichar, MU Faculty of Science Department of Geology and Palaeontology staff member; "Metamorphoses of Nature", a photography exhibition by Ondřej Slabý, an MU Faculty of Science student; and "Mongolia 2000", a photo documentary from a student geological field trip, which also included staff of the Department of Mineralogy, Petrography and Geochemistry of the MU Faculty of Science.

MU Faculty of Science management organised two "Concerts on the Staircase". One was "Spring Concert – Songs from Musicals" performed by 4th year JAMU students majoring in Musical Performance (Jana Janěková Studio) and "Christmas Concert", where carols and songs from musicals (sung by Jana Frostová accompanied by MU Faculty of Education students) were heard in the Faculty of Science Dean's Office building.

On the premises of the Faculty of Science there is a Central Library, operating centralized lending services and featuring a study room.

The MU Faculty of Science welcomed many outstanding foreign guests. The main objectives of their visits were lecturing and teaching, as well as co-operation between the various institutions in the field of research and development.

MU Faculty of Science concluded new agreements on co-operation with foreign universities and organisations (Patras University, Greece; Cordoba University, Spain; Szegéd University, Hungary; and Weizman Institute of Science, Israel).

The most important MU Faculty of Science guests included Dr. Dominique Sotteau, Attaché for Science and Technology at the French Embassy in the Czech Republic; Dr. Alfred Bader of the United States, important industrialist and patron of artistic and chemical projects; Prof. Hans Joachim Breunig from the University in Bremen; and Prof. Jiří Teichmann of the University of Montreal, Canada.

The departments of the Faculty of Science organised a number of conferences, seminars and symposia, often with foreign participants. Among the most significant were:

- the regular meeting of Czech and foreign geologists on the “Moravian and Silesian Palaeozoic”;
- the plenary session of the European Forum for Information Society the “I.S. Forum EC”;
- the 9th Czech and Slovak Helminthological Days, a seminar with foreign participants and lectures on the latest findings in the field of parasitic helminths;
- the international Workshop of Modern Biotechnology for Public Administration;
- the Brno Colloquium of Differential and Differentiating Equations;
- and the 15th Seminar of Czech and Slovak Dipterologists, with foreign participation.

*The following is a short list of some other highlights of the Faculty life:*

In the year 2000, the title of professor was conferred to the following members of the Faculty of Science: Miroslav Bartušek, Mathematical Analysis and Miroslav Holík, Physical Chemistry.

MU awarded the title of Doctor Honoris Causa to Alfred Bader (USA).

Prof. Dr. Jiří Teichmann, Ph.D., University of Montreal, Canada was awarded the Silver Medal.

*Other major acknowledgements:*

- The Faculty of Science awarded 11 titles of Professor Emeritus,
- Jakub Častulík (Ph.D. student): an award for Pharmacy conferred by the French Embassy in the Czech Republic,
- Luboš Trantírek (Ph.D. student): Prof. Ernst Award given by a German Chemical Society,
- Zbyněk Prokop (Ph.D. student): 1st Prize for poster presentation at the conference on Environmental Contamination in Eastern Europe,
- Jan Kmuníček (Ph.D. student): 3rd Prize for poster presentation at the conference on Environmental Contamination in Eastern Europe,
- Andrea Jesenská (Ph.D. student): the Young Czechoslovak Microbiologist of the Year 2000 Award given by the Czechoslovak Society for Microbiology,
- Assoc. Prof. RNDr. Ondřej Došlý, DrSc.: Academy of Sciences of the Czech Republic Mathematical Institute Award for the most valuable paper by MI researcher in the Czech Mathematics Journal,
- Prof. RNDr. Jan Gloser, CSc.: Special award of the Živa Journal for a series popular science articles,
- RNDr. Jiří Fajkus, CSc.: A Research Award from the Ministry of Education, Youth and Sport of the Czech Republic.