

# **UNIVERSITY CAMPUS BOHUNICE**

Masaryk University Development Programme



# The Development of the Material and Technical Base for Masaryk University

Masaryk University is going through a period of dynamic development accompanied by the building of substantial infrastructure. The programme of the infrastructure development for the years 2002–2008 includes not only many complex reconstructions at Masaryk University historical sites in the centre of Brno, but also a project that is unique in Czech higher education: the construction of a new, modern teaching and research area at the university campus in Brno-Bohunice. The aim of the project was outlined at the foundation stone laying ceremony in November 2004 by the Masaryk University Rector, Petr Fiala: "The construction of the campus fully meets the requirements of the university and the substantial development it is experiencing today. We believe that a high-quality technological base, modern infrastructure and a close link between research and teaching will help Masaryk University attain a distinguished place amongst the top European teaching and research institutes."

# Masaryk University Campus in Brno-Bohunice

The Masaryk University Campus in Brno-Bohunice, occupying almost 90,000 m² of utilizable floor space for teaching and research on a built-up area of 20 hectares, will, upon completion, become a new, modern, educational and research development base for Masaryk University. It will provide a base for the Faculty of Medicine and in part for the Faculty of Science as well as for the Faculty of Sports Studies. The new



European Commisioner for Science and Research Janez Potocnik at the launching of the first stage of the campus in October 2005, where he stated that the Masaryk University Campus would serve as a model for other universities in Europe



campus is designed to cater to 5,000 students and 1,000 university faculty members and research scientists.

#### The campus comprises two distinct components:

- □ ILBIT (Integrated Laboratories for Biomedical Technologies)
- AVVA (Academic Teaching and Research Complex).

The programme for the construction of the new university campus includes the reconstruction and modernization of the Morphology Centre site, finished in 2004. The development of teaching and in particular biomedical research will support the surrounding areas and campus link with the Faculty Hospital in Brno, one of the largest hospitals in the Czech Republic. The new botanical garden at the Faculty of Science will provide an esthetic dimension to the area.

The entire investment in the construction of the university campus from 2002 to 2008 will amount to 5.1 bil. CZK.

Approximately 16 hectares of development property in the near surroundings of the site for the new university campus are intended to create a new urban setting between 2006 and 2015, including supporting infrastructure for student residences, canteens, sports facilities, conference centres and space for leisure activities, as well as facilities related to business and commercial activities, particularly those of a developmental and innovative character.

# **Programme for Reconstruction and Modernization**

Concurrently with the project for the construction of the new campus, Masaryk University has implemented an extensive program of reconstruction and modernization of university sites in the historical centre of Brno. Extensive renovation of parts of buildings and their technological infrastructure, the reconstruction of interior teaching locales, laboratories and other premises, as well as the modernization of laboratory equipment, information and audiovisual technologies is underway. The total investment in the reconstruction and modernization programme from 2002 to 2008 amounts to 1.3 bil. CZK.

## Financing of the Development Programme at MU

The total amount of financing for the Development Programme at MU from 2002 to 2008 is 6.425 bil. CZK. Of this total, funding provided by the Ministry of Education, Youth and Sports came to 2.198 bil. CZK. The city of Brno is also contributing to the financing of the project with 297 mil. CZK. An important source for the financing of the project has also been a loan from the European Investment Bank in the amount



08/2004 The Bohunice site before construction began



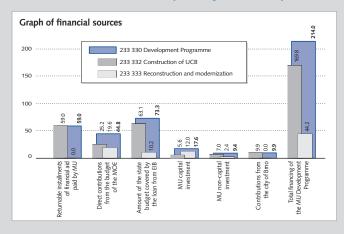
03/2005 The ILBIT pavilions six months later



05/2005 ILBIT shortly after completion



The model used in financing the MU Development Programme is unique, and the Czech government encourages other Czech universities to consider it when planning their development.



of 3.120 bil. CZK (95 mil. EUR) over a period of 25 years, a loan backed by the Czech government and intended to finance the project from the state budget.

Masaryk University is also contributing to the financing of the project from its own sources, a total which comes to 2.584 bil. CZK, covering 40% of the project expenses – 809 mil. from diverse investment funds, and 1.175 bil. CZK in the form of instalments of returnable financial assistance, distributed over 20 years after the completion of the building and reconstruction.

# Integrated Laboratories for Biomedical Technologies (ILBIT)

The construction of the university campus was launched in September 2004 with the building of the first four pavilions: A2, A3, A4, and A6 designated as ILBIT, the Integrated Laboratories for Biomedical Technologies. The laboratories provide a technological base for research and development for the Faculty of Medicine and the Faculty of Science in the fields of biology, molecular biology, NMR spectroscopy, genomics, proteomics, cellular immunotherapy, stem cells, and tissue regeneration.

The construction of the Integrated Laboratories for Biomedical Technologies amounted 730 mil. CZK and was completed and opened in September 2005. Thus, Masaryk University attained a new location with a total floor space of 12,000 m² intended primarily for research. The construction was completed with the joint cooperation of IMOS a.s. Brno and Metrostav a.s. Prague. Today, ILBIT employs 150 staff members and provides 600 students with academic training, 100 of them doctoral students.

# HISTORY OF THE UNIVERSITY CAMPUS

Masaryk University was after its foundation in 1919 dependant on makeshift constructions due to a lack of proper facilities in Brno. Laws for the establishment of permanent buildings were meant to resolve this shortcoming by the 1930s.

#### 1921-1933

The original plan for the buildings designated Žlutý Kopec as the site for the building of Masaryk University, as well as land on the slopes of Kraví Hora and surrounding flat areas between Veveři and Kounicova streets. The second location was intended for the creation of the Academic Quarter, which would contain an Academic Square encompassing the university headquarters, Faculty of Arts, Faculty of Law and the central library. In the end, the development focused only on the area of the future Academic Quarter, where in 1928 under the supervision of President T. G. Masaryk the foundation stone for the Faculty of Law was laid, the construction of which would later be finished in 1933. However, the depression and later the Second World War halted any further construction.

### 1945-1976

By 1945 a decision had been made concerning the construction of a regional clinical hospital in Brno-Bohunice. For this reason, the Ministry of Education recommended that land be obtained for the future university location in Bohunice. However, only in 1975 was a new, urban, architectural tender for the construction of the university site in Brno-Bohunice announced. Nevertheless, after the announcement of the results (1976), project preparation was put on hold.

#### 1990-2002

The idea for the construction of the university campus in Bohunice was revived once again at the beginning of the 1990s. In 2000, support for the preparation and financing of the project was attained from the Ministry of Education. This was followed by the announcement of an international urban architectural tender for the construction of the campus (2001). In 2002, the government issued a ruling concerning the fulfilment of the MU Development Programme 2002–2006. A tripartite agreement was signed by the Ministry of Finance, Masaryk University and the European Investment Bank outlining the terms of a loan for the partial financing of the Development Programme. By a governmental decree in 2005, the Development Programme









09/2007 Blue Stage - Pavilion Z



# **Academic Teaching and Research Centre**

After the construction of ILBIT, the expansion of the university campus continues with the building of the AVVA (Academic Teaching and Research Complex). The construction of the latter has been divided into three stages, commonly known as the Blue, Yellow and Green Stages. In addition to this, an engineering network and technical infrastructure is under construction, which Masaryk University is carrying out for the city of Brno on the campus and in the surrounding areas. For the construction of this stage, designated as stage Red, the city of Brno provided funding of 297 mil. CZK.

# **Construction of the Blue Stage**

The construction of the AVVA at the university campus was launched in December 2006 with the start of work on additional pavilions and academic department facilities for the Faculty of Medicine and the Faculty of Science, as well as an informatics centre, all within the framework of the Blue Stage. This stage followed closely upon the completion of the already functioning pavilions of ILBIT. The Blue Stage comprises the following twelve sites:

- Three pavilions for the Faculty of Medicine (biology A7, biochemistry A16, pathological physiology A18) and four pavilions for the Faculty of Science (chemistry A5, A8, A10, A12)
- A pavilion for the university campus central library (A9)
- ☐ A pavilion for bio-models (Pavilion Z)
- ☐ Technical equipment and operational facilities (including the VH1 building serving as entrance to the university campus and linking to the Morphology Centre, the power plant, skyways and a passageway leading to the Faculty Hospital Brno)

The Blue Stage came to a total of 1.560 bil. CZK and was completed and opened in September 2007. With it, Masaryk University gained new premises with a total floor space of 28,000  $\rm m^2$ , of which 17,000  $\rm m^2$  are intended for teaching and research pavilions. Construction was completed with the cooperation of OHL ŽS Brno and Obrascon Huarte Lain, Madrid.

#### **University Campus Library**

Stage Blue also included the construction of pavilion A9, in which the university campus library is located. Thanks to its location, Pavilion 9 serves as the central site of the future university campus; the library is its symbolic heart. The university campus library will provide the students, the teachers and the researchers from both the Faculty of Science



and the Faculty of Medicine with standard librarian, information and additional academic services, and upon completion will also provide services to the Faculty of Sports Studies and the public. In the first stage, the library's collection will mainly offer material for the medical, chemical and biological fields with over 80,000 items. The total capacity including the underground storage areas is projected to hold over 500,000 items. The library also provides electronic title-searching and information services including access to the most important electronic academic databases and over 600 periodicals. With an area of over 5,000 m², the library has more than 500 places for students situated in several different quiet locales and computer rooms. In the first stage over 100 of these have been equipped with computers.

On the university campus – at present comprising the Morphology Centre, the Integrated Laboratories for Biomedical Technology and sites forming part of the Blue Stage – more than 500 staff members are employed and 2,000 Masaryk University students are carrying out their studies.

#### **Construction of Stages Yellow and Green**

The construction of the university campus will continue with the building of an additional nineteen sites within the framework of stages Yellow and Green, which will cover 55,000 m² of total utilizable floor space. Thirteen pavilions for the Faculty of Science and the Faculty of Medicine will be built, as well as a pavilion for the Faculty of Sports Studies. Additionally, the work will include a teaching centre with large-capacity lecture halls and classrooms, two gymnasiums for the Faculty of Sports Studies, an extension of the information centre, Dean's Offices and administrative facilities.

The site will provide a central location for teaching and research for the Faculty of Medicine in the fields of physiology, preventive medicine, pharmacology, and social medicine, as well as for the Faculty of Science in the fields of theoretical, physical, analytical, inorganic, organic and environmental chemistry, biochemistry, botany, zoology, genetics, anthropology, and molecular biology, and also for teaching activities for the Faculty of Sports Studies.

#### **Incubator for Biomedical Technologies (INBIT)**

A further addition to the development plans in the area of the university campus is the preparation of the construction of the INBIT pavilion, the Incubator for Biomedical Technologies, designated for start-up companies in the fields of medical, biotechnological and bio-informatics technologies in the South Moravian Region. In the campus surroundings there will be space for the operation of entrepreneurial activities, designed to take full advantage of the proximity to the university campus and its facilities.



08/2007 Connecting bridge and power plant towers



08/2007 Blue Stage pavilions



09/2007 Interior of the campus library



# The campus today

The teaching and research pavilions are linked through an entrance hall with the Morphology Centre and by covered skyways with the Faculty Hospital Bohunice and the future northern part of the campus.

- □ A2-A4, A6 Integrated Laboratories of Biomedical Technologies (Faculties of Medicine and Science)
- **A5** Department of Biochemistry (Faculty of Science)
- □ A7 Department of Biology (Faculty of Medicine)
- A8 Organic Chemistry (Faculty of Science)
- A9 University campus library
- A10 Shared teaching laboratories (Faculty of Science)
- A12 Inorganic Chemistry and Physical and Theoretical Chemistry (Faculty of Science)

- ☐ A16 Department of Biochemistry (Faculty of Medicine)
- A18 Department of Pathological Physiology (Faculty of Medicine)

The university campus also includes:

- □ **Z Pavilion Z** Bio-model Pavilion
- M Morphology Centre Faculty of Medicine
- □ E power plant an integrated centre for the operation and monitoring of energy sources
- □ K café and fast food outlet

## The Campus and its Surroundings after Completion

The following will be added to the sites which have already been completed:

- ☐ Green Stage the main entrance to the university campus, pavilions for primarily the Faculty of Medicine, a training centre, the Dean's Offices for the Faculty of Medicine and Faculty of Science and administrative sites
- Yellow Stage pavilion for the Faculty of Sports Studies, two gymnasiums, and pavilions for the Faculty of Science
- ☐ A new traffic terminal for public transport at the main entrance of the university campus
- ☐ A large-capacity parking area near the road entrance
- □ Campus park commercial space including administrative buildings and food outlets (to the west of the main entrance to the university campus)

## **Orientation System for People with Special Needs**

Masaryk University campus-wide applies the principle of open access and support for those with special needs. Therefore the campus includes a well-designed system of support for the orientation of people with hearing and sight impairments and built-in access ramps for the physically impaired. Services for the hearing-impaired include standard visual and text navigation. Services for the visually-impaired come in a combination of three elements: leading lines (in the middle of central passageways), sound navigation with voice instructions (at the main entrance, in central passageways towards every building, and in the lifts) and finally tactile navigation (on information panels at the entrance to the buildings, in the lifts and on every door). Wheelchair access is enabled by a series of ramps, which connect the parking area with the main entrances, by lifts of sufficiently wide access, as well as by the necessary sanitation facilities. Entrance into the closed parts of the campus is enabled with the use of student and staff cards.

# **Masaryk University**

Masaryk University is the second largest university in the Czech Republic and the largest in Moravia. It is also an important social and cultural stakeholder in the South Moravian Region. Today it consists of nine faculties with more than 200 departments, institutes and clinics, with 40,000 students enrolled in a very wide range of degree programmes. 17,000 students participate in the lifelong-learning programme at MU.

Since 1990, the number of students has tripled and the university continues to maintain its high selectivity standards: in 2007 there were almost 62,000 applicants and just under 15,000 were accepted.

Masaryk University has been equally successful in such areas as research and development and knowledge transfer in the sciences,

medicine and informatics as well as in the humanities. The funding available for research and development amounted to more than 782 mil. CZK in 2006.

Masaryk University manages assets worth over 6.2 bil. CZK. It employs 4,100 staff, of whom 2,700 are academics and researchers. The total budget of the university is 3.5 bil. CZK in non-capital expenditures and 2.5 bil. CZK in capital expenditures (2007).

The total financial resources earmarked for investment in the development of MU infrastructure in the years 2002–2008 total 6.4 bil. CZK, backed by a government loan at the European Investment Bank in the amount of 3.2 bil. CZK (95 mil. EUR).







Project Manager

www.kampus-brno.cz

General Planner