

PAVOL JOZEF ŠAFÁRIK UNIVERSITY IN KOŠICE
FACULTY OF SCIENCE



BIANNUAL
REPORT 2011-2012

KOŠICE



Košice is the center of culture and education. It belongs to students. You will find them everywhere in the theatre, museums, galleries, Philharmonic, libraries or parks. You can meet them in their dormitories, sport arenas, swimming pools, but also on the restaurant's terrace. Students give a soul to everything around us.



Population of Košice (more than 240 000) grows during fall and spring semester by thousands of future professionals in medical, scientific, law, and philosophical disciplines, experts in public administration. Thanks to the students, the University buildings wake to life. Many of them are the architectural jewels of the city centre. Košice is just the right place for the development of spirit and intellect.



PAVOL JOZEF ŠAFÁRIK UNIVERSITY IN KOŠICE

FACULTY OF SCIENCE

Faculty of Science of Pavol Jozef Šafárik University in Košice was founded in 1963, and since then educated more than 5 000 graduates in all branches of Natural Science, Mathematics and Informatics. In the academic year 2011/2012, the Faculty carried on 37 undergraduate, 43 graduate and 18 doctoral study programmes in Biology, Ecology, Chemistry, Geography, Informatics, Mathematics and Physics. By introduction of the credit-based educational system, and by applying the highest quality standards, the Faculty is able to produce very well prepared graduates for the Slovak and European labour market.

Besides educational activities, the teachers and researchers of the Faculty also developed original research in many principal subjects.

It is remarkable that according to an independent ranking of the ARRA agency, the Faculty of Science gained in 2011 the first place, and in 2012 the third place among all 109 faculties in Slovakia. Faculty of Science of P. J. Šafárik University in Košice was also successful in developing international educational activities, particularly, within the Lifelong Learning Programme/Erasmus. The development of international research collaborations continued preferably on the basis of bilateral research agreements between the Faculty and foreign partners.

Finally, one should mention that the Faculty was also very successful in building new advanced research laboratories that were mainly financed from European Structural Funds.

Dean:

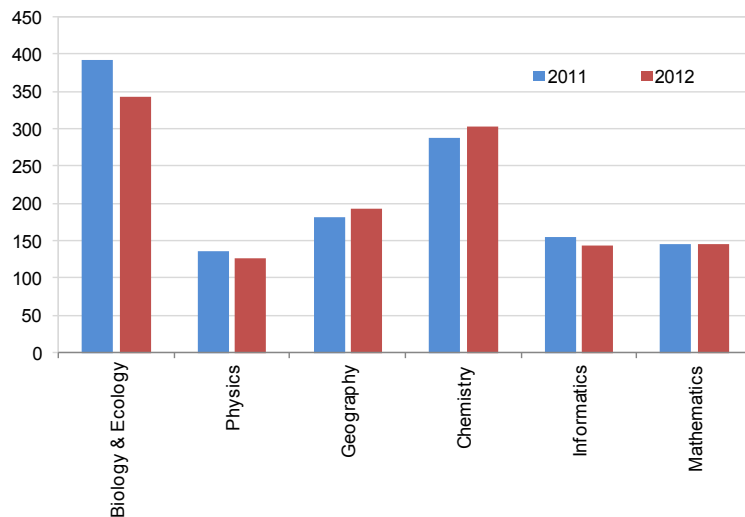
Assoc. Prof. Gabriel Semanišin, PhD.
Term of office: 01/07/2011 – 30/06/2015



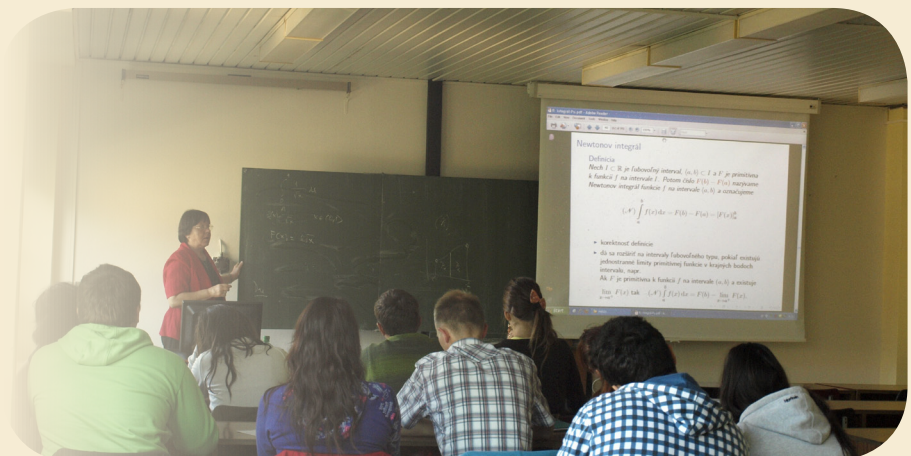
EDUCATION

For many years, the Faculty of Science belongs to top educational institutions in Slovakia in the fields of Natural Sciences, Informatics and Mathematics. In order to reach the highest educational standards and compatibility with universities abroad, the Faculty pioneered implementation of credit-based system of study in Slovakia.

To ensure a perfect training in all study programmes, the Faculty teachers apply strictly and continuously high-quality standards.



Distribution of students according to field of study





Accredited study programmes in Biology, Geography, Chemistry, Physics, Informatics and Mathematics offered at the Faculty of Science in 2011:

- 37 bachelor study programmes (bachelor degree)
- 43 master study programmes (magister degree)
- 18 doctoral (graduate) study programmes (PhD. degree)

Average number of full-time students enrolled in 2011/2012: 1275

- 727 bachelor students
- 345 master students
- 203 doctoral (graduate) student

Graduates from the Faculty of Science are well prepared to enter, both Slovak and European, labour market.



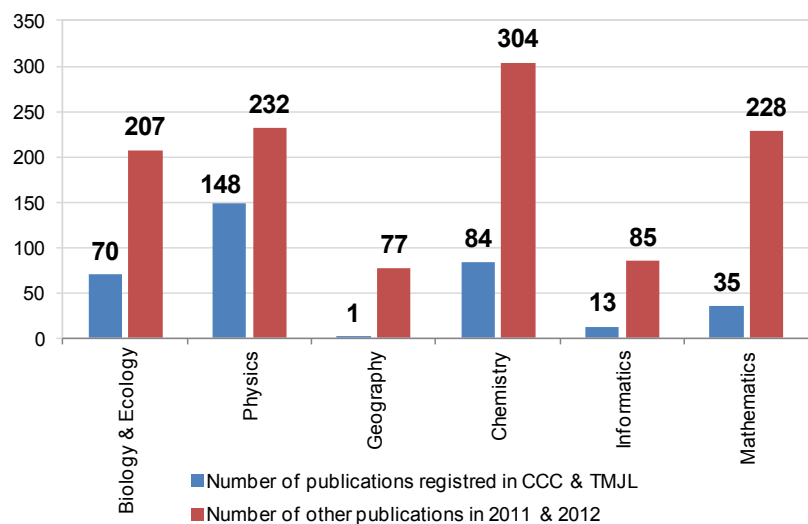
SCIENCE AND RESEARCH

In the years of 2011 and 2012, the Faculty of Science continued to conduct a high-quality and competitive research in diverse areas of Biology, Geography, Chemistry, Physics, Informatics and Mathematics. Faculty reconfirmed its position among leading research institution in Slovakia. It is remarkable that according to an independent ranking of the ARRA agency, the Faculty of Science gained the first place in 2011, and the third place in 2012 among all 109 faculties in Slovakia. These excellent results represent an independent confirmation of the scientific quality at the Faculty of Science.

The research results obtained during last two years were mainly published in internationally recognized scientific journals listed in the Current Contents Connect database (CCC) and Thomson Master Journal List database (TMJL).

The principal quantitative research indicators of the Faculty of Science to be noticed in 2011 and 2012:

- the total of 1484 publications (4,16 publications annually per one creative employee),
- 351 publications in CCC and TMJL databases (0,98 publications annually per one creative employee),
- 3629 citations registered in Science Citation Index (10,18 citations annually per one creative employee).



Distribution of publications in 2011 & 2012 according to institutes / fields of study

The research at Faculty of Science exhibits interdisciplinary features, and it is usually performed in collaboration with foreign universities and research institutions. In 2011 and 2012, the active research collaboration was performed with 44 foreign countries. The absolute majority of funding for principal research activities was obtained from national and international grant funds.

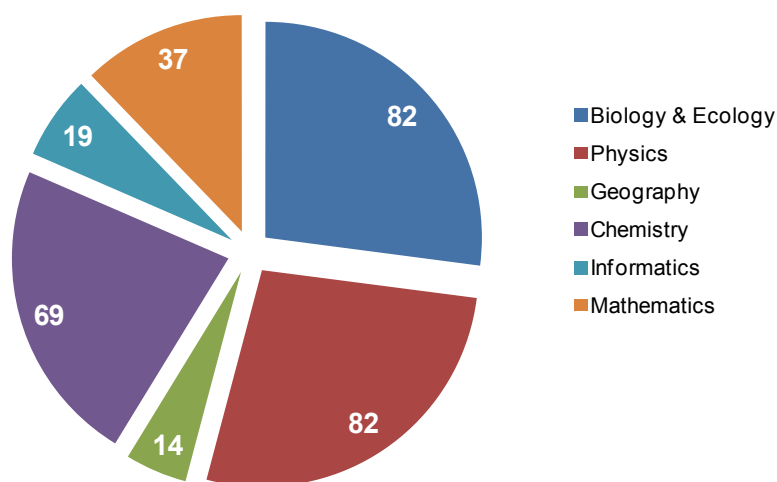
In the years of 2011/2012 the Faculty of Science obtained 7 international research projects, and 147 national research projects with the total funding exceeding 2 555 000 €.

The Faculty was also successful in applications within the calls of the European Structural Funds resulting in the financial support exceeding amount of 3 000 000 € in 2011/2012.

Faculty of Science systematically supports young people, particularly high schools students in developing their interests and skills within principal research fields in natural sciences, mathematics and computer science.

In the year 2011/2012, the support of the Faculty was focused on:

- Organization of Olympiads and other forms of competition in Biology, Physics, Geography, Chemistry, Informatics and Mathematics for grammar school scholars.
- Financial support of students' participation at domestic and international Students Research Conferences.
- Organization of the research conference "Week of Doctoral Studies" in Nový Smokovec, Slovakia - for doctoral students of the Faculty.
- Support of young researchers of the Faculty by the internal grant system encompassing total amount of 20 400 €.



Total number of project in 2011 & 2012



INTERNATIONAL RELATIONS



International relations are traditionally developed in conjunction with educational and research activities at the Faculty, and their development is one of the main priorities.

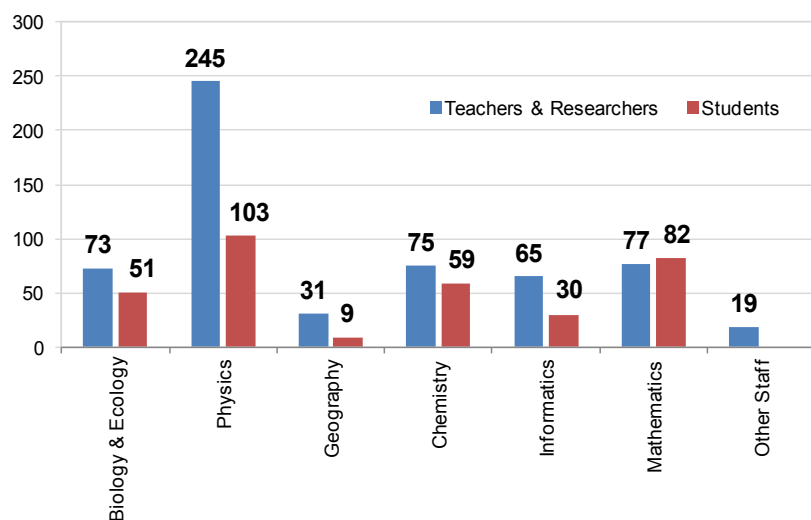
In the years of 2011 and 2012, the employees and students of the Faculty of Science carried out 585 and 334 research and educational stays, respectively, in 38 foreign countries.

On the other hand, 147 foreign teachers and researchers from 25 different countries visited our Faculty in 2011 & 2012.

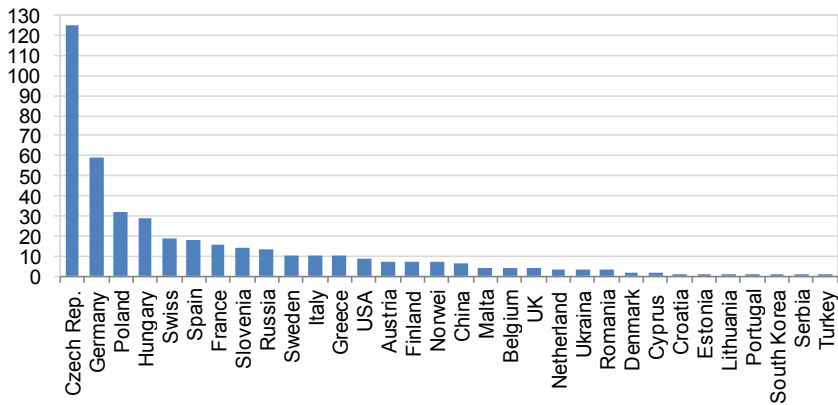
The most popular foreign destinations for the staff and students were Czech Republic, Germany, Poland and Hungary.

Within international activities during last two years, especially valuable were participations of the Faculty in collaborations with large international research centers:

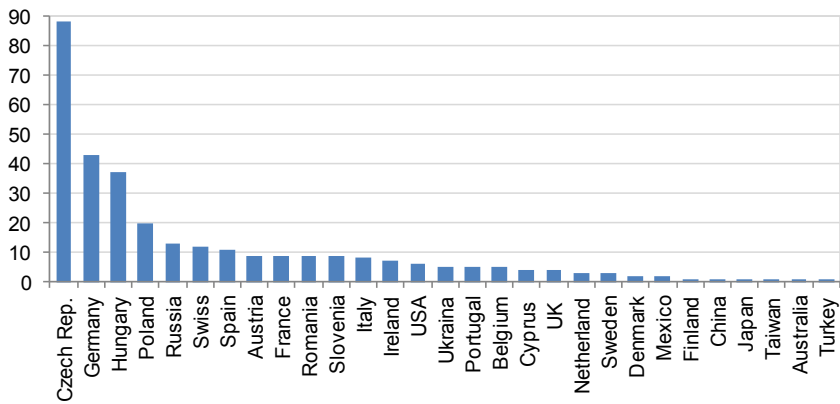
- DESY - Hamburg, Germany,
- XFEL - Hamburg, Germany,
- JINR - Dubna, Russia,
- LHC - Geneva, Swiss.



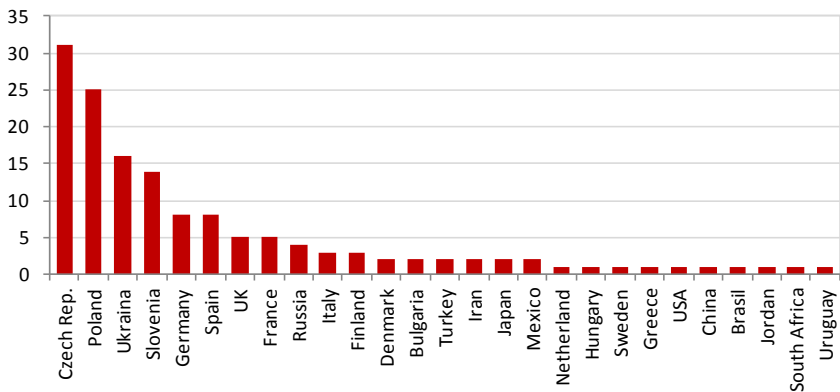
International stays/trips of employees and students of the Faculty in 2011 & 2012 - according to fields of study



Distribution of international stays/trips at of employees and students of the Faculty of Science in 2011 - according to countries



Distribution of international stays/trips at of employees and students of the Faculty of Science in 2012 - according to countries



Number of foreign visitors at the Faculty of Science in 2011 & 2012 - according to countries





LIFELONG LEARNING PROGRAMME/ERASMUS

The Lifelong Learning Programme/Erasmus represents the most important international educational mobility programme between the Faculty and its international partners. In the years of 2011/2012, students and employees of the Faculty of Science actively participated in Erasmus mobility:

- 23 students and 31 teachers of the Faculty developed their educational activities at universities in 12 foreign countries.
- At the same time, 16 foreign students and 14 teachers visited the Faculty within the Erasmus programme.

During the last two years the Faculty obtained several projects from European Structural Funds which enabled outstanding international teachers and researchers visiting the Faculty to educate students in diverse modern research fields.



SELECTION OF VENTURES ORGANIZED BY THE FACULTY OF SCIENCE IN 2011/2012 AT INTERNATIONAL LEVEL

- 3. Meeting of the European Committee for Future Accelerators (ECFA)
- 7th - International conference SSB 2011- Structure and Stability of Biomacromolecules
- ITAT 2011 – Workshop of Information Technologies Application and Theory
- NFA 2012 - Nanomaterials: Fundamentals and Applications
- 20th Workshop Cycles and Colourings 2011
- ITAT 2012 – Workshop of Information Technologies Application and Theory
- 21st International Conference on Subterranean Biology 2012
- XXXII-th Physics in Collision - PIC 2012
- 21th Workshop Cycles and Colourings 2012
- HEREDITARNIA 2012

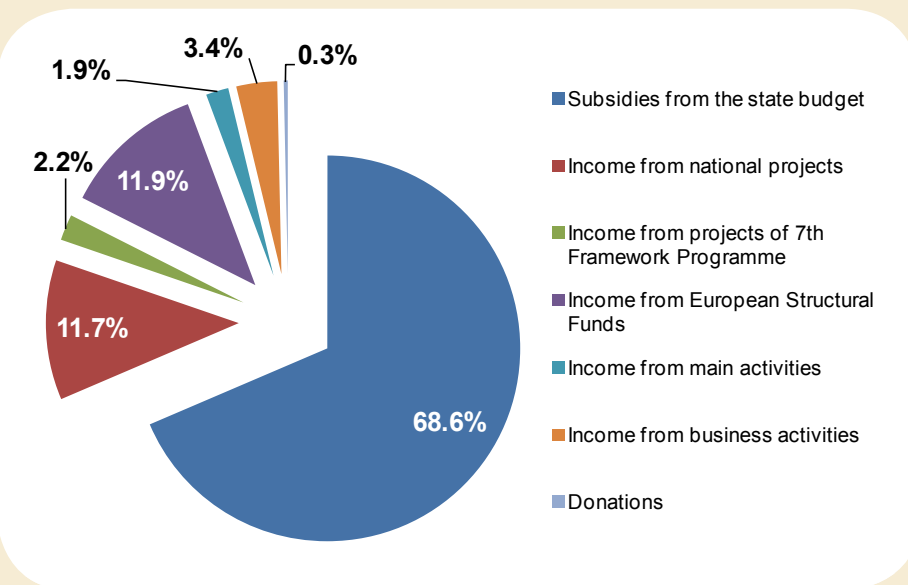




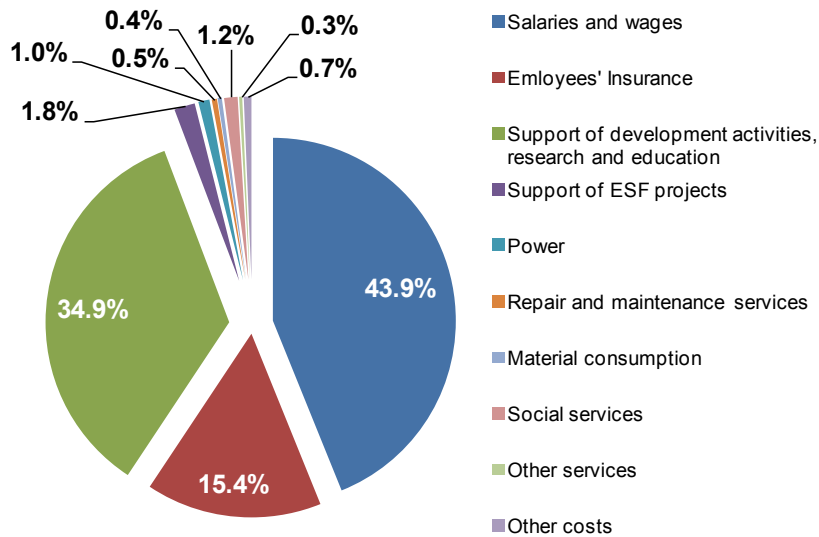
ECONOMIC MANAGEMENT AND DEVELOPMENT

The main funding resources of Faculty of Science in the years 2011/2012 were:

	2011	2012
Subsidies from the state budget	6 480 342 €	7 185 493 €
Income from national projects	1 041 420 €	1 294 528 €
Income from projects of 7th FP	170 296 €	261,185 €
Income from European Structural Funds	1 853 383 €	515 463 €
Income from main activities	212 164 €	167 360 €
Income from business activities	376 455 €	307,188 €
Donations	43 523 €	24 119 €



Incomes of the Faculty of Science in 2011 & 2012



Costs of the Faculty of Science in 2011 & 2012

Total amount of money used in 2011/2012 to improve educational and research infrastructure of the Faculty exceeded 3 598 000 €.

- Principal investment of the Faculty into innovation of study programmes and educational infrastructure in the academic year 2011/2012 mainly originated from ESF projects entitled “DOKTORAND” and “MODERN AND INTERACTIVE EDUCATION AT UPJŠ”.
- Main investments into research development were accommodated from several ESF projects in 2011/2012, with the aim to build excellent research centers and outstanding laboratories.

In the years of 2011/2012, the Faculty of Science was successful in developing original computational software and technologies:

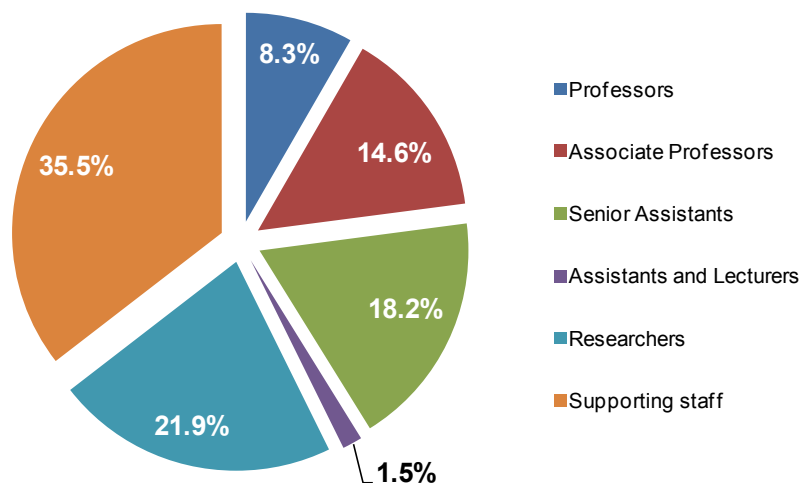
- Continued the development of Academic Information System, which is implemented at 15 universities in Slovakia.
- In collaboration with Californian Institute of Technology, the Faculty continued development of EVO System (Enabling Virtual Organization System).



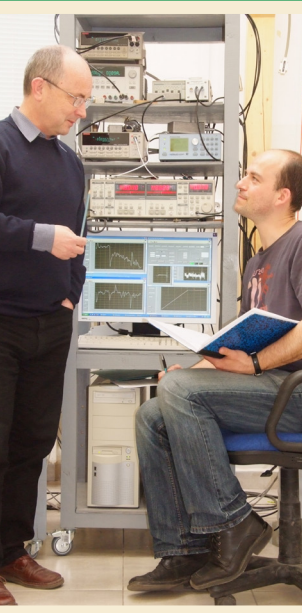
HUMAN RESOURCES

In the year 2011, the Faculty of Science employed 297 employees - among them 181 creative employees i.e., teachers and researchers.

In the year 2012, the number of creative employees increased to 186, and the total number of employees was 310.



Structure of employees of the Faculty in 2011 & 2012





The Faculty actively supported qualification progress of teachers and researchers, and made available computer facilities and information resources for all employees to enable them to work with high efficiency. Employees of the Faculty have had opportunity to participate in trainings and courses aimed to improve their professional competences and capabilities.

The teachers and researchers of the Faculty were directly supported in developing their educational and research activities, including international mobility – total amount of financial support in 2011/2012 exceeded 20 000 €.





BIANNUAL REPORT 2011-2012



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