

You are opening the first pages of a document that summarises all that was important for and regarding our Agency in 2016. It was a year of many changes that led to the reinforcement of the role of the agency as the key body for supporting applied research in the Czech Republic.

The TA CR has a wonderful team that showed great dedication and commitment. In particular, this was in the area of administering programs supporting applied research as their proper operation is crucial to us. All the calls for proposals steered by the TA CR went without a hitch and we received positive feedback from many of our partners.

Our team also did a great job in the preparation of new programmes. At the beginning of the year we succeeded with the BETA2 programme. In April, the government approved another programme, entitled "ZETA". It focuses on young professionals in research and development and leads to project with applied outcomes. The programme also helps ensure equal opportunities and remove barriers in research.

In the second half of the year we finalised two more important programmes. It was the brand new energy research programme entitled "THETA" and the programme aimed at applied research in social sciences and humanities entitled "ETA". The Czech government approved both of them.

Naturally, new programmes cannot exist without an adequate budget. After two thinner years, we worked together with the Government Council for Research, Development and Innovation to increase the budget of the Agency for supporting projects in applied research by nearly € 22,2 million, i.e. by roughly 20 percent, for 2017.

31 %
supported
projects

713
projects under
implementation
in 2016

5
programmes
under preparation

7
administered
programmes

3
calls for proposals
announced

2
(change)
members of
the Presidium
of the TA CR

2
(change) members
of the Research
Board of the TA CR

59
functional
positions

€ **103,7** million
paid to beneficiaries
in 2016



The Presidium of the TA CR is the Agency's executive body. It relies on the Research Board, which is the policy-making body of the TA CR, and the Control Board, i.e. the control body of the Agency. By Resolution of the Government of 9 March 2016, Ing. Petr Očko, Ph.D was appointed new Chairman of the TA CR. The new Chairman took up his office on 22 March 2016, replacing Ing. Rut Bízková after her four years in office. Ing. Pavel Komárek, CSc. was appointed member of the Presidium for his second term.

The organisational and administrative activities of the Agency are carried out by the Office of the TA CR. In particular, it supports the bodies of the TA CR and performs the tasks specified by law. For 2016, the TA CR had a total of 59 functional positions including all the five members of the Board of Directors.

PROGRAMMES OF THE TA CR IN 2016

In 2016 the Technology Agency of the Czech Republic administered a total of 7 programmes: ALFA, BETA, OMEGA, Centres of Competence, DELTA, GAMA, and EPSILON. Another 5 programmes were under preparation in the course of the year. Three of them (BETA2, ZETA, and THETA) were subsequently approved by the government.

A total of 1,878 projects were supported under all the programmes in the period 2010 - 2016, with 713 projects under implementation in 2016. The share of the supported projects with regard to all the project applications is 31%. Four new calls for proposals were issued in 2016, leading to support for 9 new projects under the GAMA programme, 6 new projects under the DELTA programme, 263 projects under the EPSILON projects, and a rolling call under the BETA2 programme was announced.

EARMARKED SUPPORT

The total budget of earmarked support approved for 2016 was € 105 648 556. A total of 95.2 %, i.e. € 100 396 526,4, of the modified budget of € 105 456 304,1 was used. In comparison, the amount paid in 2015 was € 111 665 205,44, meaning that the amount paid in 2016 was 11.22 %, i.e. € 11 268 679, lower. The reason for the lower level of use was, firstly, the lower number of applications under Call No. 2 under the EPSILON programme and, secondly, the amount forecast for earmarked support for 2015 was € 101 944 852, i.e. € 3 703 703,7, lower during the preparation of the calls, which takes place a year in advance. The overall level of use of the funds was also affected by the funds returned by the beneficiaries at the end of the year with the request of carrying the unused funds forward to the next implementation year.

INTERNATIONAL COOPERATION

In 2016 the TA CR strengthened its position of an active member of the TAFTIE network of European innovation agencies, participated in all the meetings of the Taftie Executive Working Group & Expert Session, Taftie Board, Taftie Annual Conference, and all the relevant events organised by the Taftie Academy.

The Agency was preparing for its presidency of the TAFTIE in 2017 and the project team and project steering committee were set up and were regularly updated on the progress in the preparation for the presidency. In the first half of 2016, the project team aimed at the organisational support for the presidency, in particular, on preparing the presidency events that were to take place in the first half of 2017. In the second half of 2016, more detailed preparatory work was performed regarding the individual presidency events - the topics were determined, the dates and locations were set, and coordination meetings were held with the German agency VDI/VDE-IT, which presided TAFTIE in 2015, the French agency BPI France, which presided TAFTIE in 2016, and the TAFTIE Secretary with a view to ensuring the smooth transition of the presidency at the end of 2016. The TA CR formally took over the TAFTIE presidency at the TAFTIE Board meeting held in Brussels in December.

In the area of the exchange of experience and know-how, the TA CR continued to be actively involved in the cooperation within the informal group of innovation and technology agencies of the V4 countries, which met during the International Engineering Fair in Brno.

In the area of international bilateral cooperation, the TA CR successfully completed the three years of negotiations by signing an MoU with the New Energy and Industrial Technology Development Organization (NEDO) of Japan. Cooperation was also established with the NISTEP (National Institute of Science and Technology Policy), which forms a part of the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) with a view to collaboration in the area of identifying future opportunities using the Technology Foresight method - predicting the future global technological development.

An important step in 2016 was establishing with the German Federal Ministry for Education and Research (BMBF) and with the DLR Project Management Agency (DLR). Call No. 4 under the DELTA programme, aimed at the Czech - German cooperation with a focus on Industry 4.0, was prepared together with the BMBF and DLR. This call is scheduled to be announced on 28 February 2017. In order to improve the quality of the activities promoting international cooperation, the TA CR also carried out the interim evaluation of the DELTA programme in the 4th quarter of 2016 and the main findings and recommendations will be presented to, and discussed by, the bodies of the TA CR in early 2017.

In 2016 the TA CR also conducted discussions with the representatives of the Fraunhofer Institut of Germany regarding cooperation in the development of the infrastructure for applied research in the Czech Republic.

In addition to the above-mentioned activities, the TA CR held in its premises the 4th Czech-Taiwan Technology Day as the platform for contact between Czech researchers and experts with their Taiwanese colleagues. The staff of the TA CR also participated in a number of international conferences, seminars and meetings to increase the quality of their work and adopt the best practices.

INTERESTING PROJECTS

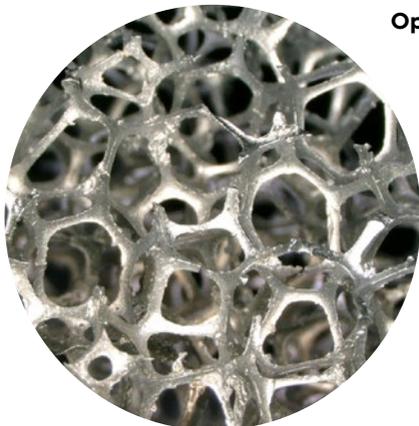
Every year the TA CR awards the best research and development projects supported by the Agency. The most successful projects of last year are listed below.



The physical and metallurgical aspects of the preparation of cast metal foams from iron and non-ferrous metals

- Technical University of Ostrava / Faculty of Metallurgy and Material Engineering
- Slévárna a modelárna Nové Ransko, s.r.o.

The objective of the project is to study the properties of foamy metals and the method of obtaining them simply and inexpensively by means of gravitational casting in sand or metal moulds. The basic physical and mechanical properties of the foamy metals prepared according to the project procedures will be determined. There is no prior history of research into metal foaming.



Optimisation of the Properties of UHMWPE

- BEZNOSKA, s.r.o.
- Charles University / 1st Medical Faculty
- Institute of Macromolecular Chemistry of the Czech Academy of Sciences

The objective of the project is the creation of modified UHMWPE with increased resistance to abrasion and oxidative degradation to be used for the manufacture of high-durability joint replacements. UHMWPE (Ultra-

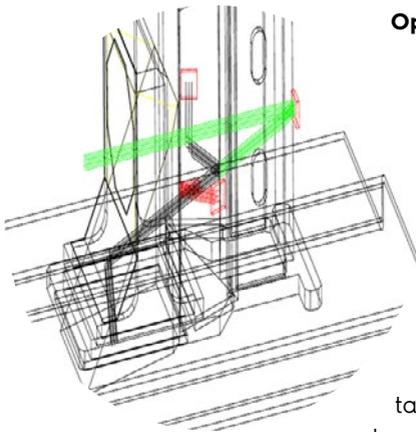
(high-molecular-weight polyethylene) has no odour or taste, is non-toxic and highly resistant to corrosion and chemicals except oxidising acids. It has extremely low moisture absorption and a very low friction coefficient. It is self-lubricating and highly abrasion resistant. In some forms, it is up to 15 times more abrasion resistant than carbon steel.



Speech processing technology for efficient human-computer communication

- Technical University in Brně / Faculty of Information Technology
- Lingea s.r.o.
- OptimSys, s.r.o.
- Phonexia s.r.o.

The objective of the project is to develop advanced speech recognition techniques and deploy them in practical applications: search in electronic dictionaries on mobile devices, dictation of translations, security and defence, dialogue systems, customer management systems (CRM, helpdesk, etc.), and audiovisual approach to teaching materials.



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