

Questions for candidates for the position of Rector for the period 2024-2027 and answers by Prof. Milan Pospíšil

1/ Please perform a subjective SWOT analysis about UCT Prague, listing a maximum of 5 attributes for each SWOT component.

Within the framework of a basic SWOT analysis for UCT Prague operations, I consider 3 attributes for strengths (S) as being:

- we are an internationally-recognized technology research university capable of educating students who are sought after on the labour market and who can carry out high-quality basic and applied research,
- we employ well-known researchers who, thanks to their extensive knowledge, experience, and professionalism, are able to prepare and execute excellent research grants as well as to establish connections and cooperation with leading international universities,
- our university has the largest percentage of doctoral students from the total enrolled student body in the Czech Republic, and this gives us the ability to significantly expand our capacity for implementing and developing many research activities.

for weaknesses (W), that:

- renewing the educational and research infrastructure and ensuring operations in chemistry disciplines are financially demanding activities; the necessary development of our university is limited by a long-term lack of investment funds,
- the lack of laboratory space corresponding to current standards for the implementation of top chemistry and biochemistry research limits our university's capacity to obtain prestigious research grants and negatively affects the attractiveness of UCT Prague in recruiting top scientists,
- the high requirements placed—especially on Bachelor students—at our university are a cause for concern, meaning some potential students are deterred by the fear of failure,

for opportunities (O), that:

- we can offer society a wide portfolio of research activities that touch on solving many of the contemporary world's challenges (sustainable technologies, renewable energy sources, new materials, food security, healthy society). Thanks to this, we have the chance to become more intensively involved in international grants and to increase the intensity of our collaborations with commercial partners, thus obtaining significant additional funding,
- our attractive research projects and activities can capture the attention of Czech and international students interested in Master and doctoral studies; we have a chance to increase the number of high-quality students who pay tuition and who would significantly strengthen internationalization at UCT Prague,
- the widely supported trend towards retraining and continuing education (including in industrial chemistry and the food industry) offers good opportunities for leveraging the current teaching capacities across all UCT Prague units,

for threats (T), that:

- due to the ongoing financial crisis, the government will not be able to provide universities with sufficient

funds for ensuring educational activities and R&D. Due to economic stagnation, possibilities for obtaining funding from the commercial sector will also be limited,

- as a result of young people's continuing limited interest in STEM higher education, interest in studying at our university will stagnate or decline, since the government/industry is unable to sufficiently motivate high school graduates for the demands of a STEM education,
- our university would be significantly affected by the departure of top scientists and researchers to more financially lucrative jobs outside academia; this would especially affect retaining young, talented researchers who are facing decisions about the future direction of their careers.

2/ What would be your vision for UCT Prague's development? Name 3 specific goals for the next term and 3 main goals that you think the university should focus on in the medium term.

I think that there is a general consensus about the vision for further development of UCT Prague across the university and faculties; namely, that we all want to be a leading educational and research institution with internationally-competitive basic and applied research and high-quality collaborations with commercial partners. If I gain the Academic Senate's trust, I would like to build on the good results achieved to date and use the current economic stability of our university to initiate systemic and organizational changes that will address the needs of today and lead to further strengthening of UCT Prague's position as a modern, respected technology research university.

Three key priorities for the next Rector's term:

- 1) We must focus on attracting high-quality students, both Czech and international, with an interest in chemistry, who can bring with themselves a higher rate of study success. We must be able to offer them attractive study programs reflecting current European and world trends. Across the faculties, it will be necessary to start an internal discussion, without delay, on a possible modification of study programs so that they are attractive both to those who prefer an academic path and to those who see their professional career in the commercial sector. For this purpose, we should use financial resources within the framework of OP JAK and NPO Ministry of Education, Youth, and Sports funding. I also consider it effective to actively invest, in cooperation with our commercial partners, and in the professionalization of our outreach programs to primary and secondary schools.
- 2) We must motivate employees to perform well and strengthen their ties with UCT Prague. Across the university and at the faculty level, we should start an internal discussion as soon as possible regarding the optimal conditions for motivating financial (i.e. salary) and non-financial rewards for quality work, with a deadline for creating proposals about this by the end of the 2024 summer semester. Each academic staff member should be given the opportunity to choose areas of work-tasks that they are good at and where they feel that they can contribute most, though freedom for self-realization must be balanced by adequate work performance control. Excellence and quality must be supported not only in R&D but also in instruction. Performance evaluations must be based on data available in an employee's personal employment profile. High-quality performance must be valued in financial terms.
- 3) We need to ensure sufficient financial UCT Prague budget stability, not only to enable standard university operations and to maintain high quality instructional and research activities, but also to get funding for personnel costs to such an extent that it would be possible to eliminate at least part of the negative effects of inflation. The current situation with the Czech economy does not look very optimistic; we will have to agree by consensus on what activities we shall be able to support and we will probably not have enough funds for all development initiatives. It will be necessary to pay maximum attention to high-quality preparation of the grant proposals for the governmental OP JAK and NPO calls, which are still some of the few remaining options for strengthening the budget in the coming years. As a funding priority, I will certainly

prefer the support of excellent scientists, instructors, and students.

In the medium term up to 2030, our main areas of focus should be:

- 1) Completion of the general reconstruction in our historic buildings and the construction of new buildings (administrative building, technological building) on the Dejvice campus, also associated with the due upgrade and purchase of equipment. For this, it will be key to ensure sufficient investment resources (i.e. public subsidies).
- 2) Creation of a comprehensive international environment at UCT Prague, which must also include quality administrative support, as a basic prerequisite for increasing the number of top international researchers and educators. Only an “internationally open” higher education institution will be able to obtain sufficient funds for excellence support in the future; national resources will not be sufficient to fully cover our needs. I would like to add that UCT Prague’s involvement in international university consortia would also be instrumental to our efforts towards reaching this goal.
- 3) Diversification of funding sources in our university budget. The share of funding beyond national public sources will need to increase substantially. We must therefore create appropriate conditions and introduce much more effective support to increase our chances in obtaining prestigious international grants as well to increase the share of non-public funding from cooperation with the commercial sector. In the future, lifelong education courses, in which learners pay tuition, may become a significant source of university funding; thus, such programs must become a permanent part of our palette of educational opportunities offered.