TECHNICAL UNIVERSITY OF LIBEREC

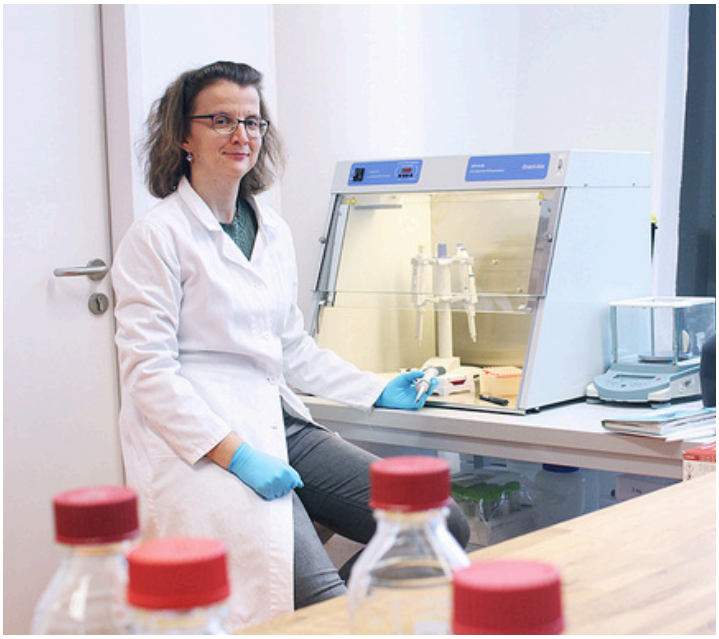
EDITION 1/2026

INTERNATIONAL NEWSLETTER

ALEŠ KOCOUREK INAUGURATED AS NEW RECTOR OF TECHNICAL UNIVERSITY OF LIBEREC

On March 6, Aleš Kocourek officially assumed the role of rector at TUL, marking the start of a new chapter in the university's history. The inauguration highlighted the importance of teamwork, with Kocourek emphasizing collaboration among faculty, staff, and students as key to future success. Emeritus rector Miroslav Brzezina reflected on past challenges, including the pandemic and geopolitical crises, and wished the new leadership resilience and determination. Kocourek introduced his prorector team and outlined a vision for an internationally recognized, open, and innovative university that nurtures student talent. The ceremony concluded with regional and spiritual leaders' support, reinforcing the university's commitment to education, responsibility, and community engagement.

TECHNOLOGY FOR THE RAPID DETECTION OF PATHOGENS IN WATER



Researchers at our university have developed a qPCR-based method that detects and identifies DNA of pathogenic microorganisms in water within five hours, compared to several days with traditional culturing techniques. This rapid analysis enables water system operators to take immediate action to protect public health, such as adjusting operations or performing disinfection before problems spread.

The method, developed at the CXI Laboratory at TUL, is currently the only accredited service in the Liberec region and across the Czech Republic capable of analyzing a full range of microbiological organisms in drinking, recreational, and warm waters. Beyond speed, qPCR also detects pathogens in biofilms and forms overlooked by standard methods, providing a more accurate picture of water safety. This innovation represents a major step forward in modernizing water monitoring and ensuring public health protection.

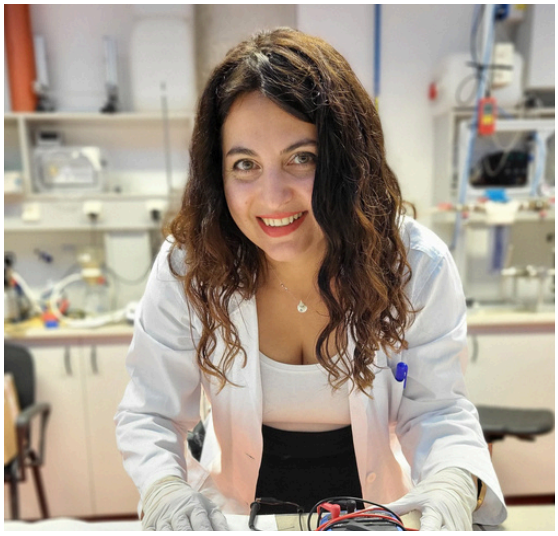
RESEARCHERS DEVELOP BIODEGRADABLE VASCULAR BANDAGE

A team led by Eva Kuželová Košťáková at TUL has helped develop a unique biodegradable composite that reinforces damaged blood vessels and gradually dissolves in the body. The four-year project involved multiple Czech institutions, combining nanofiber engineering, collagen integration, and in-vivo testing on animal models to ensure mechanical stability and biocompatibility. The new bandage supports vessel healing for about eight weeks and fully degrades within six months into water and carbon dioxide, eliminating the need for surgical removal. The research was recognized with the 2025 Honorary Award from the Czech Minister of Health for medical research and development. This achievement marks an important milestone for TUL's bioengineering team and demonstrates the real-world impact of their work for students and medical innovation.

STUDENTS AND RESEARCHERS EXPLORE CIRCULAR ECONOMY INNOVATIONS ABROAD

Our colleagues took part in the three-day "Circular Society Event: Innovation Meets Regions 2026" at NHL Stenden University in Leeuwarden. The event, organized within the RUN-EU alliance, connected researchers, students, and industry partners to share ideas and explore collaboration opportunities.
Discussions focused on key challenges and innovations in the circular economy, particularly in waste, water, and plastics. The RUN-EU alliance also offers students short-term, flexible mobility programs, providing a valuable chance to gain international experience and develop future-oriented skills without long-term stays abroad.

PEE POWER®: TURNING WASTE INTO CLEAN ENERGY



Researchers are helping transform urine into electricity through the innovative Pee Power® project. Led by Fatma Yalçınkaya at the CXI institute, the technology uses microbial fuel cells where bacteria feed on carbon compounds in urine, producing electrons that generate power. The system can charge phones, light LEDs, and operate sensors, making it ideal for areas without access to electricity.

TUL scientists are also developing advanced membranes and electrodes to improve efficiency, reduce costs, and eliminate harmful materials, increasing the sustainability and practicality of the technology. Beyond energy production, Pee Power® cleans wastewater and produces valuable fertilizer as a by-product. Already tested at sites such as Nairobi's Brainhouse School and the Glastonbury Festival, the project demonstrates that even everyday waste can provide renewable energy with real-world environmental and social impact.

NEW HORIZONS IN INTERNATIONAL EDUCATION

Students at the TUL can now explore short-term international study opportunities through the RUN-EU alliance. These week-long programs offer valuable global experience without interrupting regular studies and cover topics ranging from entrepreneurship to emerging technologies.

With destinations across Europe and options open to all faculties, participants can gain both academic credits and international exposure. Applications are currently open, giving students a timely chance to expand their horizons or join virtual collaborations from home.

KMUTNB HOSTS OUR DELEGATION

FITM at King Mongkut's University of Technology North Bangkok Prachinburi welcomed Dr. Martin Boruvka from the TUL to discuss academic collaboration and student exchange opportunities. The meeting, chaired by Assoc. Prof. Dr. Thanya Parameshthanuwat, also included faculty members and staff, fostering direct interaction and guidance for future international experiences. A souvenir exchange highlighted the friendship and partnership between the two institutions. This visit underscores FITM's commitment to expanding global learning and enhancing international student mobility.

INTERNATIONAL DELEGATIONS FROM THAILAND AND GERMANY

On the first Friday in March, we welcomed two international delegations, creating a day full of activity and collaboration. Partners from Rajamangala University of Technology Thanyaburi toured local institutions, attended the rector's inauguration, and experienced the TUL University Ball. Simultaneously, representatives from the German Centre for Astrophysics met with faculty to discuss upcoming cooperation, soon to be formalized with a Memorandum of Understanding. Both delegations highlighted TUL's commitment to international partnerships and academic exchange. The visits underscored the university's dedication to fostering global collaboration and networking opportunities for students and researchers.

APAIE 2026 IN HONG KONG

The Technical University of Liberec proudly participated in APAIE 2026, one of the Asia-Pacific region's key international higher education conferences. Representing TUL at the Czech national booth, the International Office team met with long-term partners and explored new collaboration opportunities. The conference highlighted the importance of networking, cultural exchange, and raising the global profile of Czech universities. TUL also held productive discussions with new RUN-EU partners, including NHL Stenden and Howest University of Applied Sciences. Thanks to the Dům zahraniční spolupráce (DZS) for their support, the university looks forward to continuing these connections at APAIE 2027 in Kuala Lumpur.

ITALIAN STUDENTS EXPLORE INNOVATIVE TEXTILES

A little taste of the Italian sun - that's what it was like during the visit by students and teachers from the "Tullio Buzzi" State Technical School in Prato, Italy, to the Faculty of Textile Engineering. Visitors toured textile studios, knitting, printing, and weaving labs, as well as the color measurement laboratory. A highlight of the visit was exploring thermochromic and photochromic materials (textiles that change color with temperature or light).
The visit sparked inspiring discussions and showcased the cutting-edge research shaping the future of textiles. Perhaps some of these curious students will return to Liberec as TUL students in the future.

TUL STUDENTS SHINE AT 2026 WINTER OLYMPICS

TUL was proudly represented at the 2026 Winter Olympics by student Jiří Konvalinka in Nordic combined, and alumni Barbora Antošová and Lucie Charvátová in cross-country skiing and biathlon. Lucie Charvátová had the honor of carrying the Czech flag during the opening ceremony in Cortina. Jiří, competing in his first Olympics, finished 20th in the individual event and praised the incredible atmosphere and nationwide support. TUL supports its athletes in balancing elite sports with studies, enabling them to pursue both academic and athletic excellence. Their achievements serve as an inspiration for current and future TUL students, showing that the university can be a pathway to the world's biggest sporting stage.

CELEBRATING EXCELLENCE: STUDENTS SUCCEED AT THE FRANTIŠEK EGERMAYER AWARD CEREMONY

Pure joy! That's how we could describe the students' outstanding achievements in the 2025 František Egermayer Award, organized by the Czech Society for Quality (ČSJ). Among the winners were Vojtěch Žmolík, recognized for his innovative work on user-friendly environments for seniors, and Matěj Augustin, honored for his research on workplace safety in evolving organizational conditions. Their success was guided by the expert mentorship of Ing. Věra Pelantová, Ph.D., whose support helped bring their projects to fruition. This prestigious award underscores the students' creativity, dedication, and ability to apply cutting-edge solutions to real-world challenges. We celebrate not only their individual accomplishments but also the faculty's commitment to fostering innovation, practical problem-solving, and academic excellence. Their recognition serves as an inspiring example of the university's role in developing future leaders in research and applied science.

DOCTOR FEATURED AMONG FORBES "RISING STARS" IN CZECH MEDICINE

Tomáš Pavlů, head of internal medicine at the Liberec Regional Hospital and lecturer at TUL's Faculty of Health Studies, has been recognized in Forbes' 2026 "Rising Stars" list for his innovative approach to medicine. He emphasizes the importance of preventive check-ups, highlighting that early detection of risk factors like high cholesterol or blood sugar can prevent serious health issues. Pavlů also warns against ignoring chronic fatigue and stresses the value of understanding family medical history. He advocates for stress management and prioritizing personal well-being in today's hectic life. His work inspires both patients and future medical professionals, underlining TUL's role in shaping the next generation of healthcare innovators.

FUA STUDENTS EXPLORE ICONIC TORONTO ARCHITECTURE

From January 26 to 30, 2026, our students from the Faculty of Architecture (FUA TUL) participated in an intensive study tour of Toronto, guided by faculty members Vladislav Bureš, Dagmar Vojtíšková, and Martin Patrman. The program included a visit to the renowned engineering firm Jablonsky, Ast and Partners Consulting Engineers, where students met with director Paul F. Ast and the company leadership. Highlights included
a detailed tour of the under-construction 1 Yonge Street Development, Canada's tallest residential building at 105 floors, with insights provided by Mr. Ast. Students also explored several other significant Toronto landmarks, gaining firsthand experience of cutting-edge architectural and structural design. The excursion offered a unique opportunity to connect classroom knowledge with real-world projects in an international context.

STRENGTHENING GLOBAL CONNECTIONS: TUL & ESN

Every two weeks, Erasmus Student Network in cooperation with TUL organizes Country Presentations for international students. During these events, students from different countries have the opportunity to present their culture, traditions, mentality, and interesting aspects of their language, as well as share fun facts about their home country.

These presentations create a space for cultural exchange, helping students connect with each other and broaden their horizons. At the same time, they highlight how open and welcoming TUL is to students from all around the world.

TUL BALL 2026 BRINGS TOGETHER THE UNIVERSITY COMMUNITY

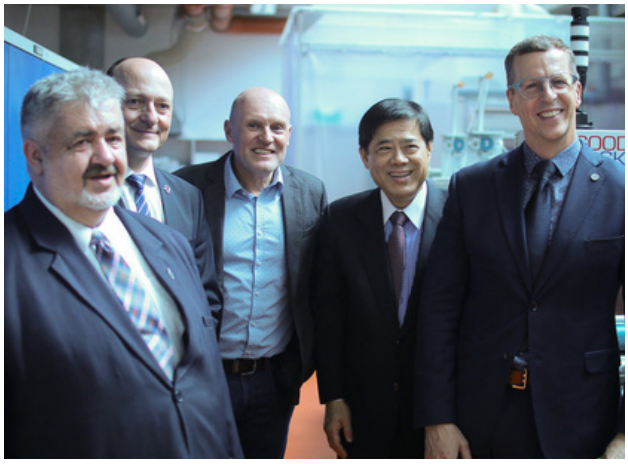
The 2026 TUL Ball filled the Liberec Culture House to capacity, offering an evening of continuous dancing and vibrant energy. The event was opened by the newly inaugurated rector, Aleš Kocourek. Musical performances by the Vladimír Janský Orchestra and TULBand kept the dance floor lively throughout the night. The program also featured dynamic dance performances.

A highlight of the evening was the midnight show combining dance, live violin, and striking light effects. Beyond entertainment, the ball once again proved to be an important social gathering that reinforces the sense of community at the Technical University of Liberec.

CZECH–TAIWAN RESEARCH TIES

Our university is expanding collaboration with Taiwanese partners in areas such as environmental technologies, advanced materials, and semiconductors. A recent visit by Ambassador Remus Li-Kuo Chen to the CXI, TUL research center confirmed strong interest in deepening both academic exchanges and joint research.

Current partnerships have already produced concrete results, including projects focused on water treatment, microplastics, and hydrogen storage. Both sides now aim to build on this momentum and turn shared expertise into impactful international innovations.



UPCOMING EVENTS:

INTERNATIONAL DAY & RUN-EU DAY

Thursday, 22 October 2026, 9:00–14:30

Students, staff, and the public are invited to International Day, focused on opportunities for studying, internships, and careers abroad. The event will also highlight the benefits of TUL's involvement in the RUN-EU alliance, including its activities and shared European values. Visitors can look forward to inspiring personal stories, networking opportunities, and meetings with international stakeholders.
Venue: Technical University of Liberec,
Building G, 3rd floor

3D PRINTING COMPETITION FINAL – SHOWCASING STUDENT INNOVATION

Monday, 8 June 2026, 9:00

The Faculty of Mechanical Engineering invites students and visitors to the final round of the 5th annual 3D Printing Competition. Fourteen teams from across the Czech Republic will compete for prizes totaling CZK 50,000, demonstrating technical skills, creativity, and teamwork. The event provides a platform for students to present their ideas and compare their projects in a competitive environment.
Venue: Technical University of Liberec campus, Building G, 3rd floor

JOBTUL DAYS 2026

Monday, 11 November 2026

The annual JobTUL Days career fair returns, bringing together an increasing number of companies and students each year. This event offers a wide range of career opportunities and networking possibilities, making it a key date for students and graduates seeking to connect with potential employers. Don't miss the chance to join and explore the latest professional prospects.
Venue: Technical University of Liberec,
Building G, 3rd floor