Academic

UMPSA strengthens Malaysia-Germany engagement in talent, technology and sustainable innovation

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PEKAN, 6 August 2026 - Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) continues to strengthen international engagement in engineering, technology, talent development and sustainable innovation through its growing relationship with German partners.

UMPSA Vice-Chancellor, Professor Ts. Dr. Yatimah Alias, shared the university's perspectives on future talent, technological capability and academia-industry collaboration during an interview conducted by Senior Manager, Digital & Communications, Malaysian-German Chamber of Commerce and Industry (MGCC), Anna Fein on 6 August 2026.

The interview followed the official visit of Her Excellency Silke Riecken-Daerr, Ambassador of the Federal Republic of Germany to Malaysia, and a delegation from MGCC to UMPSA on 5 August 2026.

The visit provided an opportunity for UMPSA, the German Embassy and MGCC to exchange perspectives on areas of mutual interest, including engineering education, research, talent development, industry engagement and potential future collaboration.

Also contributing expert perspectives during the interview were Associate Senior Director, Centre for Rare Earth & Critical Mineral, UMPSA, Professor Ts. Dr. Mohd Yusri Mohd Yunus and Director, Centre for Sustainability of Mineral and Resource Recovery Technology (SMaRRT), UMPSA, Associate Professor Dr. Mohd Yuhyi Mohd Tadza.

As part of a broader discussion on emerging technologies and strategic materials, the interview touched on academic and technological developments related to critical minerals and rare earth elements (REE), with particular emphasis on talent development, research capability, sustainability and responsible innovation.

Professor Ts. Dr. Yatimah said the changing technological landscape requires future engineers and scientists to develop broader multidisciplinary capabilities.

In addition to technical knowledge in areas such as mineral processing, separation technologies and advanced materials, graduates would increasingly need competencies in digitalisation, artificial intelligence, automation, sustainability and the circular economy.

“As a technical university, we place a strong emphasis on applied and industry-based learning.

“We want our students to experience real engineering challenges through laboratories, pilot-scale facilities, industry projects, internships and applied research,” she said.

UMPSA’s expertise in related areas spans mineral processing, hydrometallurgy, separation science, process modelling and simulation, digitalisation, automation, life-cycle assessment and circular economy approaches.

According to Professor Ts. Dr. Yatimah, the university’s focus is to ensure that graduates are equipped not only with technical knowledge, but also with the practical capabilities required to address increasingly complex technological and industrial challenges.

The interview also explored opportunities for Malaysia and Germany to build on their respective strengths in engineering, advanced manufacturing, sustainable technologies and human capital development.

Areas with potential for knowledge exchange and collaboration include advanced processing technologies, automation, digitalisation, recycling, environmental monitoring, specialised training and workforce development.

Professor Ts. Dr. Yatimah said, meaningful international collaboration should go beyond access to technology and contribute towards strengthening research capability, technical expertise and talent development.

“Ultimately, I think the real opportunity is to combine German technology and engineering know-how with Malaysia’s resources, talent and regional position,” she said.

From an academic perspective, the discussion also highlighted that long-term capability in emerging strategic sectors depends on sustained investment in knowledge, research, technology and skilled human capital.

Rather than focusing solely on the availability of natural resources, Professor Ts. Dr. Yatimah said greater emphasis should be placed on building technological capabilities, developing expertise and creating value through responsible and sustainable approaches.

She added that universities have an important role in supporting this development through education, research, innovation and specialised expertise.

Through its strengths in engineering, technology and applied research, UMPSA will continue to contribute to talent development, responsible innovation and knowledge creation in areas relevant to Malaysia’s future technological development.

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