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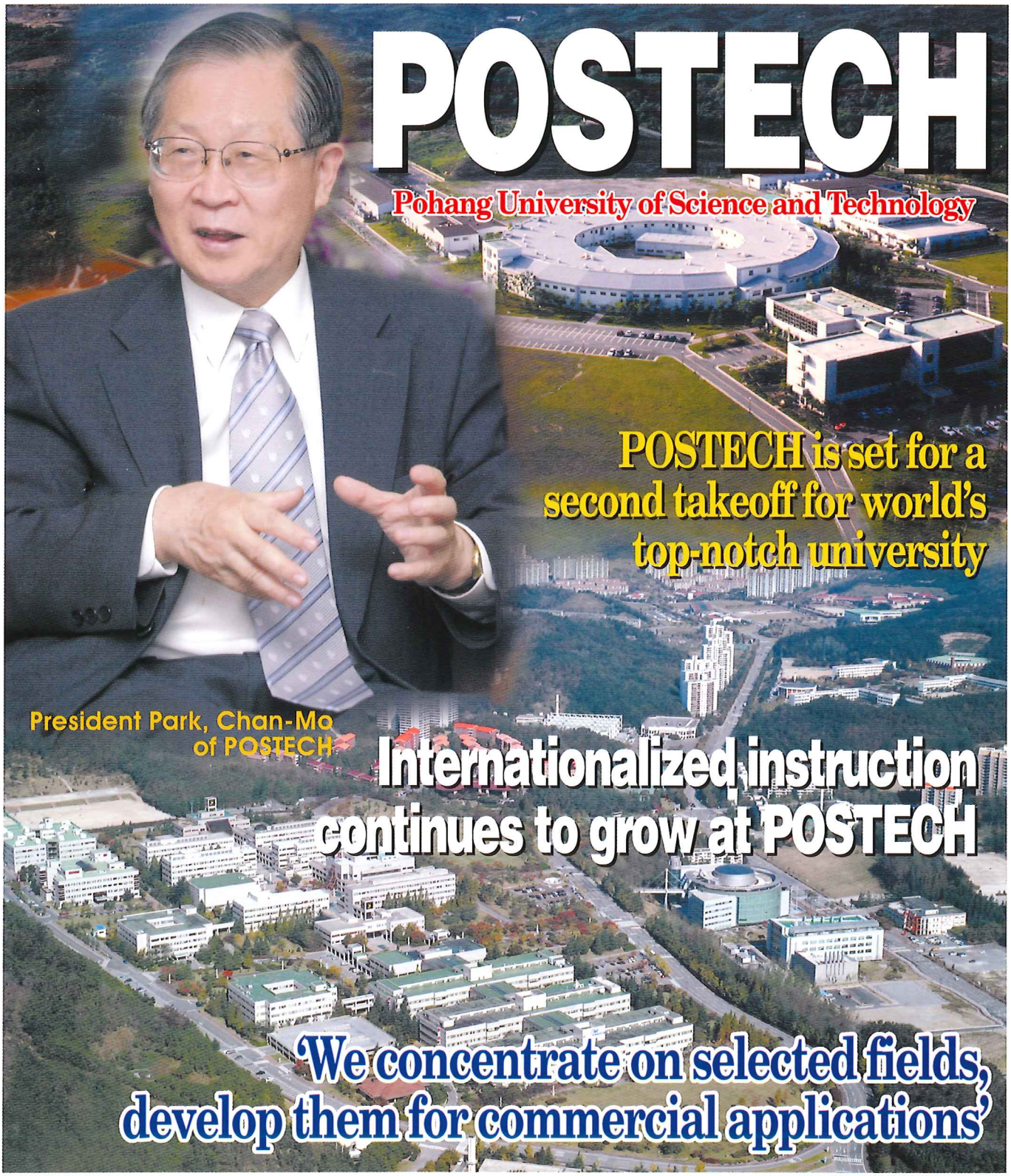

POSTECH

Pohang University of Science and Technology

POSTECH is set for a second takeoff for world's top-notch university

President Park, Chan-Mo of POSTECH

Internationalized instruction continues to grow at POSTECH

'We concentrate on selected fields, develop them for commercial applications'

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A second leap forward to become a top-notch university of the world

POSTECH spreads its wings in real earnest

As Pohang University of Science and Technology greets its new president, its plans to foster a climate of advanced research in select fields and develop them into commercial applications are being realized.

President Park Chan-Mo, the university's fourth president, was inaugurated on Sept. 4 after serving as acting president for the past year. President Park's "Second Leap" motto emphasizes a wholesale erasure of the stagnation and crisis mentality that have gripped the university for some time.

In his inaugural address, the president said that unless the university leaps beyond its current circumstances it cannot expect a bright future. By merely rolling along with the force of momentum,

President Park Chan- Mo of Pohang University of Science and Technology.

Embarking on a second leap forward for a top-notch science and technology university in the world, he stresses, "By merely rolling along with the force of momentum, content with its past, the university can never become a world-class institution."

An overall view of Pohang University of Science and Technology in Pohang, Korea, where one of the world's largest steel companies, POSCO, is located.

Pohang Accelerator Laboratory at POSTECH is the only synchrotron radiation facility in Korea.

being content with its past, the university can never become a world-class institution, he said.

Granted, the university has contributed a great deal to the domestic educational field and its rapid growth has served as a model and impetus for other Korean universities. On the flip side several universities now experiencing rapid growth are posing a challenge to POSTECH' s status.

Much the way a frontrunner in a race must exert every bit of his energy to hold onto the lead, POSTECH must be innovative and creative in coping with the changing higher education environment in Korea to maintain its superiority, the president said.

Time to prepare for a bright tomorrow

During his inauguration, President Park highlighted five projects that must be carried out for POSTECH to create a brighter future. One item worthy of mention is the necessity for reform measures to match the atmosphere of the times. To this end, the president said that the university must strive to attain the highest possible rankings by 2010 in 10 items that measure such conditions as research and technology. To attain this goal, the president stressed the need for more interdisciplinary research.

In its 2002-2010 master plan, entitled "New Adventures in Science and Technology, " POSTECH aims to integrate its capacities to produce graduates who are at the forefront of science. It will secure an unrivaled position in technology and the sciences not only through new interdisciplinary research but by pioneering new fields, and having the nation' s leading experts in their respective specialty.

The president garnered healthy applause during his speech by stressing harmony and unity, administrative efficiency, a push toward globalization and assurance of financial solvency.

Nobel Garden of POSTECH. The University is a symbol of top-quality science and technology education in Korea.

A foreign member of the faculty (left) and students at POSTECH. It is obvious that language barrier does not exist between them.

POSTECH once again was in the spotlight by winning first prize in the all-around university competitiveness category from the *Joong-Ang Ilbo*, one of Korea's most widely circulated and respected newspapers.

In the 2003 survey of universities nationwide, POSTECH also won first prize in the natural science and engineering categories. The latest accolades build on past first-place awards in general competitiveness, in 1996, 1997 and 2002 from *Joong-Ang Ilbo* surveys. The university has shown a conspicuous improvement in terms of expenditures on professors' research, student educational expenses and research paper production among the leading four-year universities.

Recognition has come from abroad, too. In 1998 *Asiaweek* magazine out of Hong Kong ranked POSTECH the top science and technology university in Asia among a field of 95 universities and 41 science and technology institutions, including several in Australia and New Zealand. The magazine compared such factors as selectivity, faculty quality, research performance, financing, faculty pay, student-faculty ratio, publishing in academic journals and Internet accessibility in reaching their decisions.

POSTECH boasted an undergraduate student-faculty ratio no greater than 5.8:1 as of September 2003, and 7.7:1 at the graduate level. The University expends 45 percent of its 130.4 billion-won budget on research, 22 percent on personnel and 7 percent on the BK21 project. In 2002, individual faculty produced an average of 5.6 papers and had 308 million won of research funds at their disposal.

An empty podium for a distinguished scientist of Korea. Students are all smiles over the prospect of their becoming one.

Photo shows the Tae-Joon Park Digital Library at POSTECH, which was named after the founder of POSCO.

308 million won annual support per professor

Attaining the post of Asia' s leading science and technology university was the fruit of a unified effort by school personnel over many years, President Park noted.

To evolve into one of the world' s leading universities and become a central place for education and research, he continued, POSTECH must gain greater recognition abroad. To that end, the university launched a task force for that purpose recently which encourages faculty, students and personnel to create a synergistic environment where everyone helps one another to achieve their highest ambitions and, ideally, gain recognition on the world stage.

Of course, university leaders realize that a project as significant as internationalization cannot be executed without adequate funding and POSTECH allocated roughly 2.1 billion won in 2000 and 3.2 billion won in 2001 to this project.

Looking at this endeavor in sections, the university first of all seeks to lift its research capacity and faculty research activities to a world-class level through such means as recruiting the best manpower from overseas and developing joint research programs with overseas institutions.

Administrators also want to develop an adequate number of international-caliber education programs to make a study-abroad experience unnecessary. However, POSTECH will continue to offer students the opportunity to indulge in the research atmosphere and cultures of advanced foreign universities through such programs as AEARU (Association of East Asian Research Universities) camps at sister schools, international symposiums at the doctorate level and the BK21 overseas research dispatch. The president stressed the importance of internationalizing basic campus infrastructure, such as providing comfortable residence halls for foreigners.

Students at a chemical laboratory

Sister university agreements with 50 institutions

POSTECH has forged sister-university agreements with 50 institutions in 13 countries to encourage collaboration among researchers and greater exchange between scholars and students. These agreements include bilateral exchange of information as well as of personnel, students, faculty and research staff. Mutual tuition waivers exist with some institutions. Going forward, POSTECH plans to beef up exchange further by arranging agreements with more prominent foreign universities. The president conceded that POSTECH still has a long way to go when compared with America' s Caltech, MIT and other top-ranked science research-oriented universities

For POSTECH to become a towering symbol of Korean educational strength in the world, the president explained, it must acknowledge the changing world educational environment and adapt to such trends as interdisciplinary education, a consumer-oriented campus and the increased presence of digitalization. In addition, as POSCO, the economic engine of the region, pursues privatization, the university should consider partnering with it on various projects on a give-and-take basis. To tackle such impending tasks, POSTECH must analyze its weaknesses and strengths carefully and isolate areas in need of attention, the president said. He outlined the tasks as follows:

1) How can POSTECH create a model of an innovative university of science and technology to prepare for a knowledge-based society?
2) How will POSTECH take advantage of its crisis of consciousness to become a top-notch university of technology?
3)What strategy must it pursue to enter the digitalized, and globalized age?
4) What role could POSTECH play in POSCO' s future that assures it of continuing financial support?
5) How will POSTECH deal with what the community demands of it?

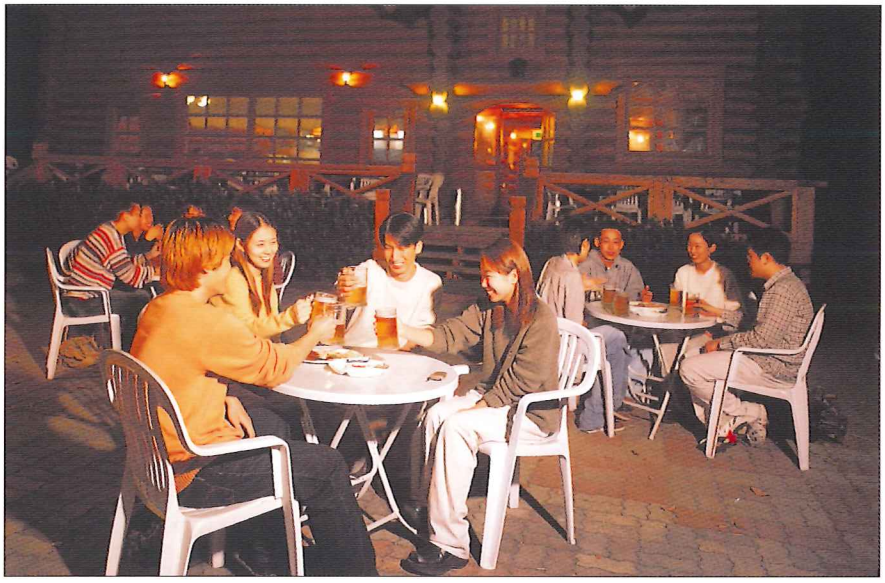
In the process of solving such pressing tasks, the president summarized the University's strengths, weaknesses, opportunities and threats.

Some of the strengths he identified are: being a young university, with a fresh image and a solid reputation; having a flexible structure due to a relatively modest scale; outstanding faculty and student quality; a supportive research environment, and partnership opportunities with POSCO and RIST.

Among the weaknesses are the university' s relatively short history, regional boundaries, the difficulty of developing diverse financial resources, a limited critical mass and limited sympathy from outside.

Numerous opportunities serve to motivate both faculty and staff. They include: an increasing demand for knowledge from society; globalization; the decreasing disparity with advanced universities thanks to new technology; a 'We can do' spirit propelled by a crisis of consciousness and the possibility of new sources of financial support.

Finally, several threats loom for the university, such as the danger of reduced comparative superiority against other rising universities, increasing competition for the best professors and students, rapid societal change and a diminishing sense of unity among school personnel about their mission.



Top photo shows the Log Cabin at POSTECH.
Bottom photo shows students enjoying a glass jug of beer at the Log Cabin after a hard day's work.

New Adventures in Science and Technology

Student Dormitories and Apartments for married Graduate Students

On the basis of such an analysis of strengths, weaknesses, opportunities and threats, the president said POSTECH would continue to execute its vision, entitled "New Adventures in Science and Technology, " by such means as transcending disciplinary boundaries, acquiring expertise in select fields, nurturing an adventurous spirit and gaining the trust of the educational community.

By attracting a small group of highly qualified students and providing them with a first-rate education, POSTECH has managed to produce graduates who go on to be leaders in the workforce. The university was established in 1986 with an eye to pursuing in-depth theories and a wide range of science and technology applications that are necessary for the growth of the nation and society in general.

President Park underlined that POSTECH also seeks to serve the community by transferring its research results to society through active cooperation with the private sector and research institutes. The institution has always emphasized cutting-edge research in each of the basic science and engineering fields through close collaboration with prestigious foreign universities.

Under the nine-year-long administration of its former president, Professor Kim Hogil, POSTECH laid the foundation to become a leader among Korean universities. It has provided the Korean educational community with several firsts:

-Korea' s first research-oriented university: A trailblazer of Korean higher education that began the trend of shifting emphasis from research quantity to quality;

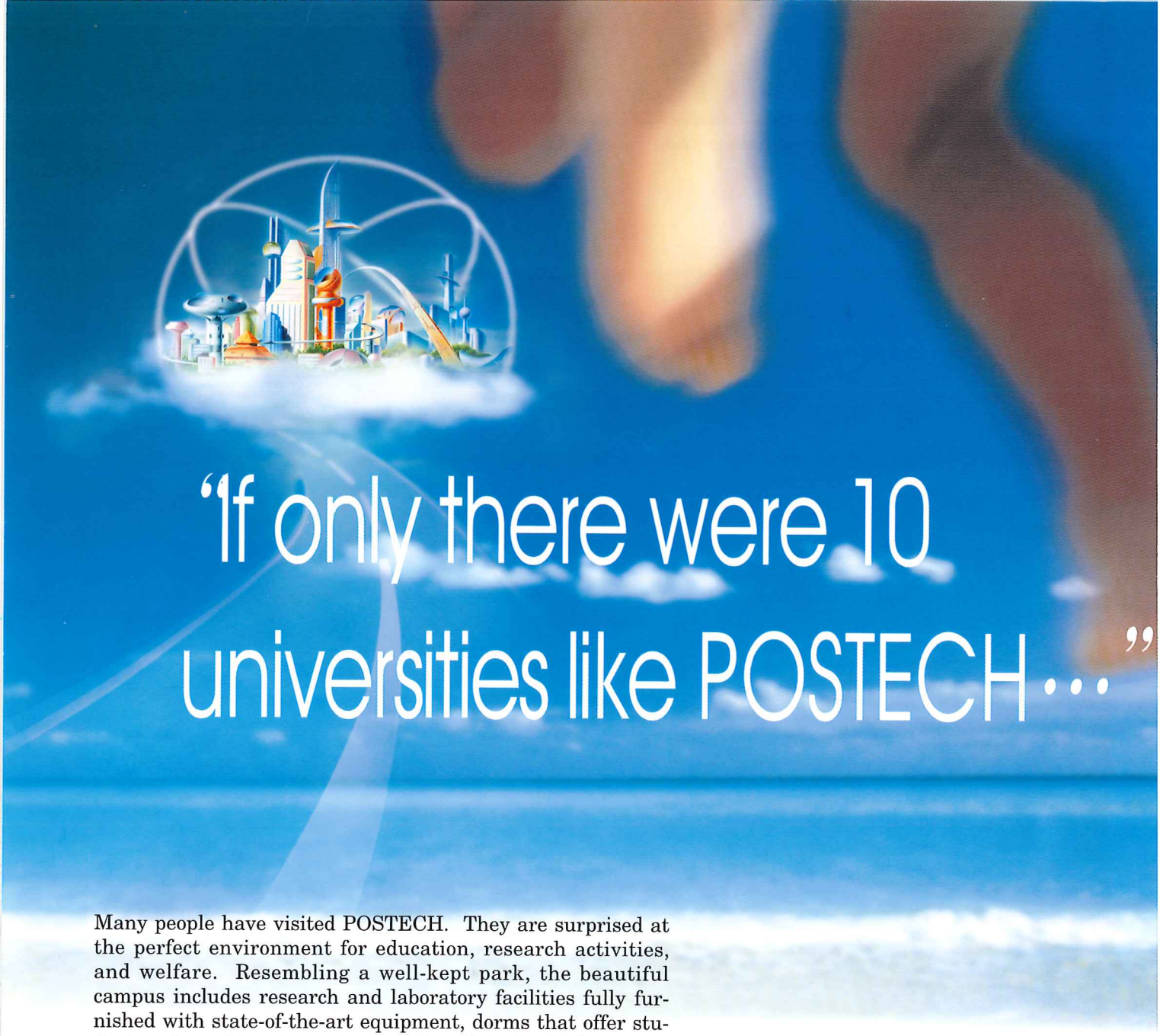
-Revolutionizing Korea' s college entrance examination system: In 1993, POSTECH made making multiple college applications possible for all graduating high school seniors;

-Providing Korea with its first synchrotron radiation source, the PAL or Pohang Accelerator Laboratory, in 1994;

-POSTECH' s founding goals of providing a quality education, fostering advanced research, and applying scientific research results to industry set the benchmark for other universities to follow.☆

For more information visit www.postech.ac.kr/e

Photo shows Jigok Community Center of the University.



"If only there were 10 universities like POSTECH…"

Many people have visited POSTECH. They are surprised at the perfect environment for education, research activities, and welfare. Resembling a well-kept park, the beautiful campus includes research and laboratory facilities fully furnished with state-of-the-art equipment, dorms that offer students a homelike atmosphere, and a digitalized library envied by even the leading universities in the world.

Visitors are amazed by the fact that POSTECH is not just a simple university that only provides the state and society with knowledge and supplies well-trained and talented graduates.

POSTECH makes substantial contributions to improve the international competitiveness of the enterprises and state through not only basic scientific research, but also industrial-academic cooperation, transfer of technology, business incubation, and various activities of its technopark.

As said by many visitors to POSTECH,

"If only there were 10 universities like POSTECH…"

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POHANG UNIVERSITY OF SCIENCE AND TECHNOLOGY

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