Applied Physics & Engineering Faculty is Fifty

V.I. Boiko

Firstly, it was necessary to train specialists for new industrial enterprises of atom industry. Secondly, Tomsk Polytechnic Institute possessed the appropriate scientific and educational base to train engineers in the field of atomic power engineering. The implementation of the first induction accelerator — betatron — in the USSR was the additional factor of the Faculty foundation. On September 1st 1950 the Faculty was founded. It included three Departments:

Electrophysical Installations;
Theoretical Physics;
Chemical engineering of rare and radioactive elements.

A/Professor V. Titov was appointed the Dean of Faculty. A/Professors M. Filippov, B. Rodimov, and N. Kurin were Heads of Departments. Four disciplines were offered: Electrophysical installations; Chemical engineering of rare and radioactive elements; Geology and prospecting of rare and radioactive elements; Mining of rare and radioactive elements. As early as 1951, the first output of physical engineers took place.

Principal tasks stated before the administrative staff of the Institute and the Dean of Faculty V. Titov required forming the faculty staff, developing curricula, and creating research laboratories. Such intensive style of work has become traditional at the Faculty.

The most experienced and competent teachers of TPI taught physical students. The workload was 48 hrs weekly. The admission to the Faculty was rather strict. Only young trained men with splendid health and much interested in their studies were admitted. All students of the Faculty must undergo the Mandate Commission and if somebody was not quite up to existing standards, he was expelled.
Besides their studies students conducted community activities — went in for sports or performed amateur artistic work.

In 1953 another three Departments were instituted at the Institute: The Department of Theoretical and Experimental Physics, the Department of Nuclear Power Engineering, and the Department of Electronics and Automatics. Since 1958 A/Professor I. Tikhomirov had become the Head of the Department of Nuclear Power Engineering. Today he is Professor and Honored Scientist.

The pilot reactor came into being on July 22nd 1967. In 1958 the Research Institute for Nuclear Physics, Electronic and Automatics was established at TPI, which has been called the Research Institute for Nuclear Physics since 1975. I.P. Chuchalin, graduated in physics became its director.

The Research Institute for Nondestructive Testing was founded in 1968 on the basis of two research laboratories for non-destructive testing and television. Our graduate V. Gorbunov headed the Institute that time.

Glorious is the labor biography of our graduates. Directors of many Russian enterprises draw attention to proficiency and competence of physical and chemical engineers.

Each faculty member supervises student research activities. In 1956 student research was included in the curriculum by the initiative of the Department of Electronics and Automatics. The Department of Theoretical Nuclear Physics carried out the same procedure next year. Later the Departments exchanged their experience, and other Faculties of the Institute applied it. Our Research Institutes became the basis for scientific and research centers, where already thousands of students have acquired initial research skills. Students of our Faculty are given practical training at the Research Institutes, and conduct researches on the nuclear reactor, unique boost installations, and other physical devices.

The R&D conducted at Departments of the Faculty resulted in awards and diplomas conferred on our students by All-Russia competitions and the Exhibition of Economic Achievements of the USSR.

The Faculty of Applied Physics and Engineering is closely connected with
large manufacturing outfits. It also actively collaborates not only with research institutes of TPU, but also with the advanced enterprises and research institutions of the Ministry of Atom Industry. Our students acquire their practical experience at the largest combines of the country: Siberian Chemical Combine (Seversk); Electrical Chemistry Combine (Angarsk); Electrical Chemistry Plant (Zelenogorsk); and many others. For over 50 years our Faculty has trained almost 6500 engineers for atom industry.

Our graduates work practically at all Russian enterprises of atom industry. The Faculty of Applied Physics and Engineering is proud of its alumni:

R. Bikbyav, Director General of Centrsibneprovod Corporation (Tomsk);
V. Glukhikh, Academician of the Russian Academy of Science, Director of Research Institute (St.-Petersburg);
G. Gering, Rector of Omsk State University;
A. Yeperin, Director of Leningrad Power Station;
V. Yevesigneev, Rector of Altai State University (Barnaul);
V. Zhidkov, Director general of Krasnogorsk Combine;
V. Zhukovsky, Chief Engineer of Kirgz Mining Combine (KaraBalka);
L. Zabelin, Director General of Technical Chemistry Corporation (Moscow);
B. Kuznetsov, Executive Director of Ulbinsk Metallurgical Plant (Ust-Kamenogorsk);
P. Lavrenuk, Vice President of TVEL Corporation (Ministry of Atom Industry);
A. Margunov, Deputy Director of Electrochemical Plant (Zelenogorsk);
V. Petrushenko, Chief Engineer of National Engineering Works ‘Zvezdochka’ (Severodvinsk);
V. Pronnikov, First Deputy Director of the joint-stock Company ‘Polygon-Taimyr’;
G. Solodov, Director General of ‘Progress’ Company (Kemerovo);
G. Khandorin, Director General of Siberian Chemical Combine (Seversk);
I. Chuechalin, Professor of TPU;
V. Shemansky, First Vice Premier of Kazhatomprom (Kazakhstan);
B. Shubin, Deputy Chairman of Tomsk Community of Polytechnicians (Moscow).

Since its opening, the organization of the Faculty has been changed insuf-ficiently. Today the Faculty includes five Departments. The faculty staff is made up of about 120 members, including 14 professors, 2 honoured scientists, 40 associate professors, 5 doctors, and 25 postgraduates.

The students of today follow the old traditions of the Faculty. Recently it took first place in the anniversary competition among TPU Faculties and Departments.

Our sponsors G. Khandorin, E. Adamov, P. Lavrenuk, Y. Kopiev, A. Shubin, V. Shopen, B. Kuznetsov made valuable contribution to the development and renewal of the Faculty. Many thanks to our graduates and enterprises and organizations who also contributed much to our Faculty!

On June 5-10, 2000 we celebrated the 50th anniversary of our Faculty. More than 1200 alumni arrived to Tomsk to celebrate this date. The meeting began on June 6 near Building 10 of TPU where our alumni have had their pictures taken as a memento.

Our Rector Y. Poholiov, Dean of Faculty V. Boiko, Deputy Chairman of regional Duma Y. Kovalev, Tomsk Mayor A. Makarov, Director General G. Khandorin, and directors of many other industrial enterprises addressed the meeting. Our officers received awards from TPU, the Ministry of Atom Industry, and regional and city administration.

The Association of Faculty Graduates was instituted on June 7. Its aim is to support the Faculty and maintain relationships between alumni. At the inaugural meeting V. Boiko, O. Permyakov (Chairman of the Association), and G. Solodov, Director General of ‘Progress’ Company made speeches.

The International Conference on ‘Problems of Physical Engineering Education and Atom Industry’ was held during the celebration. The results of research, production and education have been stated at the Conference and also discussed outlooks of the development of nuclear power engineering and related industrial, scientific, and educational activities.

In the concert, which was held at the Drama theatre of Tomsk our graduates of all years had another possibility of meeting and congratulating each other. One can say with confidence that the holiday have had a great success.