

Возраст И перенесенный в 1991 году обширный инфаркт давали о себе знать. В декабре 1994 г., отчитавшись перед собранием акционеров о проделанной работе, я ушел на заслуженный отдых.

Подводя итоги своей карьеры, должен сказать, что, несмотря на определенные трудности, я глубоко удовлетворен МОСКОВСКИМ периодом своей трудовой деятельности. Конечно, по сравнению с Сибирью здесь ощутимо более напряженный ритм работы (что, наверное, характерно для любого мегаполиса такого уровня), более высоко чувство ответственности за состояние развития МТБ чрезвычайно важной в социальном плане отрасли. Но это и возможность участия в различного рода международных конгрессах И симпозиумах по больничному строительству, многочисленные зарубежные командировки. Но это и ставшая за последние годы настоящей столицей европейского класса Москва с ее театрами, концертными залами, музеями, выставками. Наконец, это новые друзья, обретенные благодаря московскому землячеству томских политехников.

К моменту моего переезда в столицу двое сокурсников-обогавателей В.А.Малючков и В.Е.Зайденварг работали в Москве уже более десяти лет. Они-то и вовлекли меня в московское землячество томских политехников, которое возникло в 1966 году И бессменным президентом которого до апреля 1999 года был Владимир Алексеевич Малючков, окон-

чивший горный факультет в 139 году, Заслуженный шахтер РСФСР, полный кавалер орденов «Шахтерская слава». В годы войны Малючков работал на Сахалине, затем в Кузбассе, а в последние годы до ухода на пенсию - советником секретариата СЭВ по углю. В апреле 1999 года на 87-м году жизни В.А.Малючков скончался. В мае президентом московского землячества томских политехников избран выпускник ТПИ 1962 г. Валерий Евгеньевич Зайденварг - директор Госучреждения по вопросам реорганизации и ликвидации нерентабельных шахт и разрезов (ГУРШ) при Минтопэнерго РФ; вице-президентами землячества избраны Б.Ф.Шубин и Д.Т.Горбачев.

С периодичностью один раз в два года проводятся встречи томских политехников, на которых собирается от 80 до 120 выпускников.

Землячество постоянно поддерживает связь с институтом. Во многих случаях на наши встречи приезжали представители руководства института, в том числе ректоры И.П.Чучалин, Ю.П.Похолков, проректор П.Е.Богданов, научные работники Лукьянов В.Г., Куцепаленко В.Ф. и другие.

Родной физикотехнический факультет томского политехнического университета будет по-прежнему вручать своим питомцам удочку, с помощью которой они будут в состоянии поймать достаточно рыбы для безбедного существования.

# Memories of physicist

B.F.Shubin

Fifty years have passed, but our first-year lecturers Muller (higher mathematics), Kuznetsov (analytical geometry), Skripov (descriptive geometry), and Alabuzhev (theoretical mechanics) still appear before my eyes. We were surprised at Alabuzhev's ability of holding examinations three students at a time (the first two solved

examples at the blackboard, the third one answered the teacher's questions).

The life of the first-year students was passing in a 2-storey wooden building, with rooms containing 6-8 beds, without conveniences, but with a big wood-firing stove on the ground floor where students fried potatoes. I remember the spring of '50 when we



## Memories of physicist

pulled the church down – its brickwork made with the mortar with the white could not be broken with a crowbar, the brick crumbled and our efforts were all in vain. The University Academic Board took the lead in building the shrine on the territory of the destroyed church in memory of first Tomsk professors. The ceremony of opening a shrine took place during the celebration of TPU's centenary. Who knows the God's ways!

In autumn of '50 we were transferred from electrical physicists to physical engineers – the new Faculty was instituted and three disciplines were introduced, namely: physics, chemistry, and mechanics.

Physics is the body of the Faculty. Electrical physicists of all courses lived in the same residential building. 'Old' residents A. Vlasov, V. Moskalev, G. Dimov, D. Noskov, Y. Petrov, G. Sanin, A. Skorikov, B. Solntsev, S. Khoroshilov, I. Chuchalin; fourth-year students V. Gorbunov, N. Goloshapov, V. Glukhikh, I. Mozin; third-year students N. Afonsky, B. Kononov, V. Labazin, L. Sokolov, L. Soldatov; second-year students Y. Kamashev, V. Kochegurov, V. Kudryavchenko, V. Kuzmin, A. Chumakov, B. Shubin. Freshman year students also lived there.

Half a century is a considerable period. Many names are forgotten, but I remember that friendly atmosphere which prevailed in our small hostel. It was a real student world which allowed entering any room quite informally to borrow some potatoes or an onion, tell a story and have a cup of tea.

On the eve of 1952 we moved to the well-appointed hostel. The room contained 3-4 beds, a built-in wardrobe. Kitchens were equipped with electric furnaces; there were lavatories and shower-rooms on the floors. That was a pleasure for us, the post-war generation of students who arrived from the vast Siberian region and were not spoiled by a comfortable dwelling.

In spring of '53 there was another new hostel we moved to, the hostel for the Faculty of Applied Physics and Engineering. There were halls with small lecture-rooms on each floor of the hostel where we took a number of specialist courses. Reading lectures within the walls of the hostel played the important part in the student life. However, the student life exercises a great influence on a future engineer, to my mind, because it is the hostel when young people make their first independent steps without parents' care.

Returning to the educational process I would like to recollect our proficient lecturers, associate professors Pukhov, Kuleshov, Suslov. G. Pukhov who read the course on theoretical basics of electrical engineering has made the most striking impression. First of all I remember perfect knowledge of the subject G. Pukhov displayed, the skill to easily explain the most difficult formulas and also the unique ability to relax the audience. ...It lasts the second hour of the lecture. Georgy Evgenievich draws a sine curve on the blackboard and says, 'Let's take a sine curve...' Having finished to draw he says, 'No, the sine curve is not perhaps, necessary', and wipes the blackboard. Then G. Pukhov reflects for a moment and gives himself up the recollection about how he was used to attend lectures of Prof. Krug (the author of the text-book 'Theoretical Basics of Electrical Engineering').

Senior years are famous for lectures delivered by a/professors M. Filippov, V. Titov, and B. Rodimov and also junior assistant lecturers I. Kalyatsky and L. Ananiev.

The practical experience at industrial enterprises is the substantial element of the world outlook of a future engineer. The month-and-a-half practicals, which we have taken at Novosibirsk Radio Manufacturing Plant, remained in my memory because we were awaiting the admission to that plant for a month. Every day we were going to the human resources department to find out whether the admission was executed or not. For my friend and I were the native citizens of Novosibirsk we were not depressed much about the delay. Two weeks remained for our practical training was quite enough to acquaint us with soldering technology and to make reports.

It would be more correct to call that practicals 'research-and-production' training. The acquaintance with non-destructive testing of metals and a betatron was combined with theoretical and practical knowledge we obtained in a well-disposed atmosphere of the academic institution.

Taking practicals in the largest cities of the country improved our cultural level as well. We were deeply impressed by Ekaterinburg (Sverdlovsk) with its theatres (Opera and Ballet Theatre, Musical Comedy Theatre), comfortable student dwelling, six restaurants with descent jazz-bands, and the Hotel 'Bolshoy Ural' with its wonderful malachite columned hall. Thank God, our scholarship allowed us at least once a week



to visit a restaurant, have a substantial meal, a bottle of beer or something else, and listen to the music and dance.

In spring of '54 the six of us did practical work at the Research Institute for Electrophysical Apparatus in Kolpino (Leningrad region). Our alumnus V.A. Glukhikh, the academician of the Russian Academy of Sciences is at the head of this Institute today. Although it was a serious practical experience I remember first of all white nights of the city, Petergoff's fountains, Hermitage, Bolshoy Drama Theater, Summer Garden, Nevsky Avenue, Isaac Cathedral, and many other masterpieces of Northern Palmer. Taking into account our going by train, staying in Moscow for two days (visited Metro, the Red Square, Stalin's Gifts Museum) one can realize what cultural potential we have obtained during the two-month practicals.

In fact, my diploma papers defined my future occupation. The case was that the diploma papers were common for the entire group. It was called 'Synchrotron of 30 MeV'. Each of 17 students who were engaged on degree thesis had to develop one of the elements of the accelerator, namely: a magnet, a vacuum chamber, an electron gun, etc. I had to arrange the accelerator in the laboratory and identify its auxiliary equipment.

In March 1959 I set about working in the follow-on group for building of 'Akademgorodok' in Novosibirsk. Novosibirsk Division 'GIPRONII' has been founded in a month in conformity with the Decree of the Council of Ministers of the USSR. Almost 30 years I devoted to the work at Novosibirsk Division 'GIPRONII'.

My work at the follow-on group helped me to integrally realize the construction process as a whole.

Research centers of the Russian Academy of Sciences in Magadan; the unique Research Institute for Volcano in Petropavlovsk-Kamchatsky, the experimental geothermal freon station on the river Paratunka have been designed and built with my direct participation and leadership. The first domestic phytotron, the Siberian Research Institute for Terrestrial Magnetism, Ionosphere and Wave Propagation, Research Institute for Geography of Siberia and Far East were

built in Irkutsk. The high-altitude solar station was built near Irkutsk-city; in Buryatia — the unique solar radiotelescope.

But, perhaps, the most important object of my creative resources was the project of the Siberian Division Research Complex near Novosibirsk. Being appointed a director of Novosibirsk Division of 'GIPRONII' (1971) I was also working as a chief engineer of that large town-planning complex.

Without false modesty I would like to note that the sixteen-year period of my directorship has fostered the reorganization of the narrow departmental design institution in the institute which successfully provided large-scale town planning. The Institute's infrastructure and facilities were improved, social problems were settled, employees were provided with accommodations.

Holding a post of a director I became a member of the Union of Architects of the USSR. In 1985 I was conferred the title of Laureate of the State Prize of the USSR for architecture of the Siberian Division Research Complex. In 1986 I defended thesis «The design of investment programs on forming and developing regional research centers (in Siberia)».

By the beginning of 1987 when 'perestroyka and glasnost' began to cumulate momentum, my business activity was at its top. All problems related to vital conditions were decided at top level. A five-room villa in the Gold Valley, the best place of Akademgorodok, in 50 meters of M.A. Lavrentiev's villa, the chief founder of Akademgorodok; the preliminary-orders department with the twice-a-week delivery of food products; medical care with the annual compulsory prophylactic system.

Against the official and domestic prosperity some factors which promoted a sharp turn in my career were accumulating little by little. Frequent reorganizations of the Clinical Centre of the Siberian Division of the Academy of Sciences where my wife headed the laboratory of neuro-surgery, replacement of heads of the Centre, its moving to different structures irritated me. My son left to Astrakhan after graduation, my daughter stated that after her graduation from Novosibirsk Medical



## Memories of physicist

Institute she would not going to freeze in Siberia.

'The Medical Paper' published information about the All-Russia competition announced by the Department of Health for the filling of a vacancy of 'GIPRONIIZDRAV' director. After the acquaintance with the terms of the competition I decided it would be a suitable candidate of mine. It turned out that out of 14 candidates the commission elected four candidates: three from Moscow, and me.

In June 30, 1987 I was appointed a director of the State Design and Research Institute, the leading institute in the country on the development of standards for hospitals and preventive institutions.

Overall 2000 employees worked at the Institute, including 700 people engaged in Moscow. Such powerful organization was a prominent element in the structure of the Department of Health. Its significance has been strengthened more after academician E.I. Chazov headed the Department of Health. Thanks to Chazov's efforts in 1987-88 the Central Committee authorized the improvement of the material and technical base of health services. Capital investments in construction of hospitals and clinics would be increased by a factor of 2-2,5 which would improve conveniences and rise the share of expenses for medical equipment.

The problem of human resources was one of the important problems in design activities of health services, because no one educational institution prepared medical designers or architects with a medical bias. In January-March, 1989 the refresher courses for designers of specialized institutions were organized. Later the Department of Developing the Material and Technical Base was instituted where chief doctors and their deputies could improve their qualifications.

Under economic conditions of those days the equipment of preventive institutions must be prevailed, which allowed the Institute to hold its ground for some time after organizational reconstruction and creating marketing services.

In July of '94 the Institute was reorganized in the public corporation. The

majority of shares were handed to the retired veterans of the Institute.

The age and massive heart attack in 1991 have taken their toll on my health. In December 1994 I retired.

It's should be noted that in spite of the known difficulties I am fully satisfied with my labour activity in Moscow. Of course, in comparison with Siberia the work in Moscow is more intensive and strenuous. But there is the possibility of participating in related international congresses and symposia, foreign business trips and so on. Also Moscow, the capital of Russia, makes it possible to visit its theatres, concert halls, museums and exhibitions. And, finally, Moscow give the opportunity to find out new friends through the Community of Tomsk Polytechnicians.

When I moved into Moscow two my fellow students V.A. Maluchkov and V.E. Zeidenwarg have been working there for almost 10 years. They involved me in the Moscow Community of Tomsk Polytechnicians, which was established in 1966. V.A. Maluchkov was its permanent President till April 1999. In 1939 he graduated in mining; he was Honoured Miner of Russia, holder of the order 'Miner's Glory'. During the World War II he worked in Sakhalin, then in Kuzbass, and during the last years he was the Counsellor of the CMEA Secretariat for coal. In April 1999 V. A. Maluchkov died in the age of 87. In 1962 V.E. Zeidenwarg, the director of the Department of reorganisation and liquidation of unprofitable mines and layers became the President of the Moscow Community of Tomsk Polytechnicians; B.F. Shubin and D.T. Gorbachev are its Vice Presidents.

At biennial meetings of Tomsk Polytechnicians arrive some 120 alumni. The Community constantly maintains relations with the University. Former Rector I.P. Chuchalin, Vice Rector P.E. Bogdanov, Rector Y. P. Pokholkov visited our meetings and also researchers V.G. Lukjanov, V.F. Kutzepalenko and others.

The Faculty of Applied Physics and Engineering will always hand the rod to its alumni with the help of which they can fish enough for their prosperity.