## Л.В.Зворыгин

ными и государственными премиями. Михаил Владимирович награжден почетным знаком «Шахтерская слава» всех трех степеней (1982,1987, 1991 гг.); медалями «Ветеран труда» (1985 г.), «За доблестный труд» (1970 г.), ВДНХ (1977 г.); орденом «Знак почета» (1982 г.). Он удостоен премий (в соавторстве):

- премии АН СССР и Болгарской академии наук за получение высоких результатов по совместной работе «Создание высокопроизводительных горных машин» (1981 г.);
- премии конкурса фундаментальных исследований СО АН СССР за монографию «Теоретические основы определения напряжений в горных породах» (1983 г.);

- премии Совета Министров СССР за разработку и широкое использование анкерной крепи на шахтах Западной Сибири и Эстонской ССР, а также на рудниках цветной металлургии (1984 г.);
- Государственной премии СССР за создание и внедрение методов управления горным давлением при подземной разработке рудных месторождений на основе исследований напряженного состояния массива горных пород (1989 г.).

Михаил Владимирович Курленя и сейчас полон энергии, занят новыми идеями, в частности, проблемой более эффективного использования нефтяных запасов Сибирского региона. Будем надеяться, что, и эта проблема будет им решена.

## Mikhail L.V. Zvorygin Vladimirovich Kurlenya, Academician

M.V. Kurlenya was born in Siberia in 1931 in Bolotnoe, near Novosibirskcity. After finishing school in 1948 he decided to apply for Tomsk Polytechnic Institute, the Geological Faculty. Living in the large family (four sisters and a brother) Kurlenya could not go far away from home, because his father was disabled soldier and mother was a housewife. Besides, the scholarship gave the possibility of gaining

independence. In comprehension of mining M.V. Kurlenya was lucky twice. To begin with his teachers, prominent scientists who knew their job, Professors and Associate Professors D.A. Sterlnikov, A.A. Vorobiev, V.V. Proskurin, S.D. Osnovin, A.P. Kazachek, G.E. Bokanov, and others. They paid attention to Kurlenya's persistence in mastering basics of mining. As a result he was conferred the honours degree after graduation in 1953 and admitted to postgraduate training. He started to work as the assistant lecturer at the Department of Layer Deposits Extraction and perform deputy dean' work at a time.

In 1960 M.V. Kurlenya was suggested the job at the Research Mining Institute of the Siberian Division of the Russian Academy of Sciences. It was the new laboratory for mountain pressure. At that Institute M.V. Kurlenya has built a career for himself: junior teacher; head of the laboratory for rock mechanics; deputy director of the Institute (1979-1987) and the director (since 1987). His service record includes Ph.D. thesis (1962) and D.Sc. thesis (1974); the title of Professor (1986); correspondent member of the Academy of Sciences (1987); Academician (1991); Fellow of the Academy of Exact Sciences of Russia (1994).

The correspondent member of the Academy of Sciences T.F. Gorbachev, TPU alumni, correspondent member and TPU Professor N.A. Chinkal and other professors taught Kurlenya. They showed him the way to real science and that was his second piece of luck.

Geomechanics and mineral mining technology were the most important scientific trends Kurlenya has investigated. The findings obtained by Kurlenya are the valuable contribution to the research of stressed conditions of rock fields of the earth's crust, natural fields of stress in rock fields in Siberia and the Far East. Those findings fostered also the investigation of non-uniformity of stress fields around geological breakings and mining, exploration of depth minerals, and likewise. In coauthorship with M.V. Kurlenya our scientists developed methods of checking stressed conditions and properties of rocks. Under the auspices of M.V. Kurlenya measuring systems YK-Tenzor and YK-Hydrozond were invented to investigate stressed conditions. These systems as well as many others invented by our scientists are applied in Russia and abroad.

As a result of the experimental research M.V. Kurlenya and his colleagues discovered new geomechanical effects: zonal disintegration of rocks around underground extractions and plusminus reaction of rocks to explosions. In fact, M.V. Kurlenya has founded the Siberian geomechanical school and continued the work which T.F. Gorbachev began.

The results of Kurlenya's research activities are reflected in many publications (about 250), including 13 monographs. The following works are most important:

- Methods of experimental detection of stress in deposits (co-authors V. Aksenov, A. Leontiev, M. Ustugov);

- Theoretical basics of detecting stresses in rocks (co-author S. Popov);
- Shield support technology of coal fields (co-authors L. Zvorygin, A. Lebedev);
- Methods of mathematical simulation of underground edifices (co-author V. Mirenkov);
- Technological development of underground mining (co-authors V. Shtele, V. Shalaurov);
- Basics of mathematical simulation of destruction (co-authors V. Mirenkov, V. Shutov);
- Geomechanical processes of rock and fields interactions upon extraction of

ore deposits (co-authorship V. Oparin, A. Tapsiev, V. Arshavsky);

- Geophysical methods of checking stressed conditions of rocks (coauthor V. Oparin).

The community activity of M.V. Kurlenya was very fruitful. He is the member of Presidium of the Siberian Division of the Russian Academy of Sciences; chief editor of the journal 'Physical and technical problems of mineral exploration', member of the publishing house of Moscow State University; member of the Awarding Board on science and technology; chairman of 'Geology and Mining' section; member of scientific boards for the National Scientific Program 'Deposits of Russia', regional Program 'Siberia', united scientific board on investigations of Arctic and Antarctic; chairman of academic boards on theses defense; chairman of the Regional Board for scientific and engineering organizations (Novosibirsk); member of the coordination board of the Russian Union of Scientific and Engineering Organizations (Moscow).

M.V. Kurlenya is also the member of New-York Academy of Sciences and the International Bureau for Rock Mechanics.

To Kurlenya's services to mining and mining industry testify honoured badges, diplomas, medals, and orders. M.V.Kurlenya is awarded the honoured badge 'Miner's Glory' (1985); for «Valiant Labor» (1970); from the Exhibition of Economic Achievements of the USSR (1977); Order 'Sign of Honour' (1982).

In co-authorship with his colleagues M.V. Kurlenya was awarded with prizes from the Russian Academy of Science and Bulgarian Academy of Science for 'Creation of high-productive machines' (1981); from the competition on basic research for the monograph 'Theoretical basics of detecting stresses in rocks' (1983); form the Council of Ministers of the USSR for exploration and wide use of anchor set in mines of West Siberia and Estonia, and also non-ferrous metallurgy (1984); State Prize for elaboration and implementation of control methods of mounting pressure in extracting ores (1989).

M.V. Kurlenya is full of energy up to now. He develops new ideas, for example, the problem of the effective use of oil fields in Siberia. We hope he will settle this and many other geological problems.