## **Dear Teacher**

Agasi Melikov

Corresponding Member of the National Academy of Sciences of Azerbaijan, Doctor of Technical Sciences, Professor

I was lucky enough to be a student of Vladimir Semyonovich Korolyuk. I joined him in graduate school in the early 80-ies of the last century from a branch Institute with a ready-made task dedicated to the application of Queuing theory methods in oil products supply systems. At that time, I knew Vladimir Semyonovich in absentia as a world-class specialist in the field of probability theory and mathematical statistics. Therefore, I was afraid that it is unlikely that he will take the lead on this task of an applied nature.

However, he willingly agreed to the guidance and gave me very valuable advice during the work on the dissertation, carefully read the articles and read them. I later learned that Vladimir Semyonovich was one of the first programmers in the former Soviet Union and even was one of the authors of the first book on programming in Russian (co-authors were B. V. Gnedenko and E. L. Yushchenko). For this reason, he was very well versed in applied problems.



Forever A Disciple Of Vladimir Semyonovich Korolyuk

At that time, together with his probabilistic students, he intensively developed the basics of the theory of phase aggregation of States of stochastic systems and taught special courses at the Kiev State University. In the special course, he read very recent results in this area and even used his own manuscripts, which he noted in a common notebook of 96 pages. Me, too, sometimes took with him to these classes (he was a great driver, and he then had a smart car for those times GAZ 24-10). At the very beginning, 7 students attended special courses, then they became 5, then 3, and finally there were only 2 students (apparently the tasks were difficult for students to master). Then

Vladimir Semyonovich said literally the following: "By your behavior, you are discrediting the world-famous Ukrainian probability school. In 35 years of working at the University, I have never taken an exam, but I will take it from you" (I really don't know if he really took the exam or not). With this phrase, he once again (I have noticed this in private conversations before) emphasized his high assessment of the representatives of this school.

Along with theoretical problems, he highly valued the work of an applied nature and often in conversations agitated me to practically use the methods of the theory of phase aggregation of States of stochastic systems in the problems of calculation and optimization of Queuing systems. Fortunately, I and my colleague (also a student of Vladimir Semyonovich - Professor Leonid Ponomarenko) managed to realize this dream of Korolyuk. When we presented the first results in this direction, he was very happy, read them carefully, rechecked the results and submitted these works to the authoritative journal Cybernetics of the national Academy of Sciences of Ukraine (it should be noted that after us, other scientists from different countries have successfully applied this fruitful idea of phase aggregation of States of stochastic systems).

While working on his PhD and doctoral theses, Vladimir Semyonovich always read and discussed with me the results of the main works and contributed to their publication in reputable journals (fortunately, he was a member of the editorial Board of many reputable journals and in this regard, I was very lucky). Naturally, I always wanted to have a joint article with him. However, his high scientific rating and level scared me, and I could not summon the courage to ask him to be my co-author. Only a few years ago I gathered all my strength and asked him to be my co-author in articles in which he had a high share of participation. He agreed, and it was hard to describe my joy. As a result, today I have three articles co-authored with Korolyuk and I consider them my most valuable works.

He was an excellent scholar and an excellent conversationalist. After each personal meeting with him, I felt elated and happy. I wish I could see my great Teacher again. His scientific works will be a beacon for many years to come for applied scientists who use and will continue to use the methods of probability theory and mathematical statistics that he proposed.