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DEAR READERS!

In the latest issue of the journal "Engineering Education" we would like to present you various articles in which the authors share their views on current problems and challenges in engineering education and try to find ways to solve them. The topic of this issue "Engineering Education in Russia: Challenges, Problems and Solutions" is outlined in the sections, titled Problems and Challenges, Solutions, Modernization of engineering programs and disciplines, Scientific discussions. However, the layout of papers by category is rather nominal, and you can find a description of the problems, theoretical and practical recommendations concerning the improvement of engineering education in different articles throughout all sections.

This issue of the journal "Engineering Education in Russia: Challenges, Problems and Solutions" covers an undoubtedly relevant topic. Over the last year the problems in this field have drawn attention not only of those who are directly involved in this area, but also government, institutional and public structures representatives at all levels, such as the Russian State Duma, the Council of Federation, the Russian Union of Industrialists and Entrepreneurs (RSPP), the Chamber of Commerce and Industry of the Russian Federation, the Association of Technical Universities, the Association for Engineering Education of Russia (AEER) and others. In recent years, a number of parliament and public hearings, conferences and seminars on issues in engineering education were held in our country; an analysis of the causes of underdevelopment of engineering education, specific recommendations to remedy the situation in the field of education were made.

In this regard, the most important becomes the fact that the problems in engineering education attracted the attention of the President of Russia D. Medvedev, who took quite concrete and effective measures to deal with them. A few years ago Vladimir Putin during his presidency also focused his attention on these problems "...there are a lot of people with higher education degree, but we are sorely lacking in real modern professionals. Today, large companies pay a lot of money attracting professionals from abroad."

And yet, engineering education in Russia still faces difficulties. To some extent, the hope for positive changes is connected with the establishment of federal and research universities in the country. However, most specialists in the field of engineering and technology are prepared in higher education institutions that are not rained down by financial prosperity. And even after gaining additional investments in the development of leading universities it is often quite difficult to use them for solving problems in engineering education because of bureaucratic constraints. Moreover, to solve the problems in engineering education we need to take holistic measures that will impact not only on higher education system but beyond it as well.

The experts of the Association for Engineering Education of Russia conducted a research study to get to the root of the current problems in engineering education within several training seminars. Such seminars were held during the 2010/2011 academic year in Moscow, St. Petersburg, Rostov-on-Don, Novosibirsk, and Tomsk. The list of experts consists of rectors, vice rectors, deans, department chairs, professors, associate professors, teachers of technical universities - those who are directly involved in the training process of specialists in the field of engineering and technology in Russia. Unfortunately, according to the opinion of the vast majority of AEER experts Russian engineering education today is going through systemic crisis, critical stage or stagnation.

The key characteristics of the crisis are: a notable decline of public prestige of the engineering profession, employers' dissatisfaction with the poor quality of training, lack of competitiveness of Russian engineering developments on the world markets, outdated facilities of universities and industrial enterprises, where practical training of future engineers takes place. At the same time with the ever-changing world of technology come new challenges in engineering education and only joint efforts of government, business, scientific and educational community can help to respond them. I hope that articles presented in our journal will contribute to overcome the crisis in engineering education in Russia.

Sincerely,
Editor-in-Chief,
Prof. Yuri Pokholkov

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