

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Enabling the Future - Developing the Space Workforce (5)

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STUDENT CONTEST "I AM PROFESSIONAL: SPACE EXPLORATION" AS A NEW HR  
INITIATIVE IN THE INTERESTS OF RUSSIAN SPACE INDUSTRY

**Abstract**

The space industry is one of the most science-intensive in modern industry. Researchers and engineers should have a high level of theoretical and practical knowledge, be aware of scientific achievements in related fields and use them for space exploration purposes. Creating a new body of specialists to implement large-scale projects that are currently announced by the leading space powers is a global challenge. The present report describes the new government project "I am a professional" in the "space exploration" field, which has already covered several thousands of Russian students. The project is led by the Bauman Moscow State Technical University. In 2020-2021, the project in the form of an olympiad will be implemented for the third time. The authors are the organizers of this involved educational project and present the results of its implementation. In Russia, currently there are about 100 different companies in the rocket and space industry. The space industry employs more than 250,000 people, and there is an acute shortage of highly qualified personnel. In this regard, the main goal of the competition is to bring students face-to-face with future employers as soon as possible, thereby reducing the gap between the university education and the requirements of the labor market. The contest consists of two stages. Tasks of the first round (20 tasks of varying complexity) can be performed remotely using any source. Students who have passed the second round can become participants of the "Key to start" winter workshop, where representatives of space companies make presentations of their companies and talk about the internships provided as a bonus for winners and prize-winners. Upon completion of the winter workshop, a second (face-to-face) round of the contest is held across the country at several sites. Here it is necessary to perform practice-oriented tasks in different areas of space engineer training: strength, flight dynamics, vibration, thermal processes, control theory, and composite materials. The "I am a professional" project is a new social lift for students and gives a powerful start to the careers of young professionals. This is an example of the Russian approach to cultivating current and future personnel for the space industry; this approach can also be used by other countries.