

Preface

It is a tradition of SUAI to hold the great scientific conference for undergraduate and post-graduate students every year in April. The first in the world space flight was performed by Yuri Gagarin at 12th April, 1961 and this date is celebrated in many countries as the World Day of Aviation and Astronautics. Our university was created in 1941 and many its graduates actively participated in the first space launches and space aerospace vehicles development.

Presently SUAI became the great educational and scientific centre with thirteen faculties, 47 chairs, over fifty directions of training, postgraduate and doctor's degree courses.

The Chair of Aerospace Instruments and Measuring-Computing Complexes (Chair N11) is still the leader department in SUAI defining the basic direction of aerospace students training in the university.

The aviation, space vehicles, orbital stations, interplanetary probes and other artificial flying objects are considered to be the highest technologic achievements of a terrestrial civilization. Many countries develop the advanced aerospace technologies, but Russia is still among the leaders.

From rigid rivalry in space area we are going to internationalization of projects. We are trying to develop the international cooperation, the world market of aerospace vehicles and services. The volume of this market increases rapidly.

Qualified aerospace experts are necessary everywhere. They cost dearly at any continent. We are able to educate such experts. Many applicants from different countries come to our university for training and graduate degrees. During last years the chair consolidates the educational resources with the International Institute for Advanced Aerospace Technologies (IIAAT of SUAI <http://iaat.guap.ru/>) created in 1998 and having an excellent reputation due to a number of very successful projects. It gives the opportunity to study in English medium and to participate in real R&D.

This Volume IV involves 15 papers from the regular session of the conference. All papers were presented in English by the foreign students from different countries. Most of them belong to the master students from Nigeria which were supported by the National Space Research and Development Agency (NASRDA), Abuja, Nigeria. The efforts of all contributing authors in studying and investigation of the problems related with aerospace technologies development are very commendable. For the majority of students the tasks under consideration are new. That is why the statement of the problems and the possible methods for their solution take the essential part of each paper.

We hope the knowledge and experience obtained during the investigation of real problems of aerospace technologies will be useful for the future successful scientific career of all students which prepared papers for this volume.

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