

Energy Colloquium

Current and Future of Space Device Engineering

Alexey A. Romanov

Deputy General Director of JSC "Russian Space Systems"

09 February 2016, 16:00

Skolkovo Innovation Center

Technopark, Building 3, Room 407

ABSTRACT:

JSC "Russian Space Systems" (RSS) is leading company of the Russian space industry, responsible for the research, development and production of the onboard and ground equipment for different space systems in follows areas of activity: communication, navigation and remote sensing of the Earth. The company made a lot of pioneer's designs for near Earth and deep space study with many results, which were received first time in the whole world. The most famous space system from RSS is global navigation satellite system (GLONASS). Inside the presentation will be discussed: GLONASS system status and future prospects, advantages of combined use of GLONASS and GPS signals and several examples of specific monitoring projects based on GNSS data in Russia. In last few years the new field of space activity is exploited – small satellite application for different purposes. In this paper we consider some lessons learned from the launch of first Russian nanosatellite TNS-0, developed in RSS, then status of the next generation nanosatellite TNS – 0 No2 and some proposed projects, relied on this satellite concept, including the realization of satellite radiotomography method. The latest project was made in RSS which has a main goal the development of basic elements of satellite system for global monitoring of moving objects on the Earth surface using Automatic Identification System (AIS) approach. Finally, will be presented a "radar" of space technologies trends in space device engineering and interaction with leading Russian universities with the analysis of RSS needs in the engineers for near future.

Non-Skoltech attendees should request access to the building in advance by sending their passport details to *energy.colloquium@skoltech.ru*

Colloquium schedule and information on how to get to the colloquium can be found at *http://www.skoltech.ru/en/energy-colloquium/*

