

II INTERNATIONAL CONFERENCE
KRASNOYARSK, RUSSIA
16-18 April 2020



MIP: Engineering-2020
Modernization, Innovations, Progress:
Advanced Technologies in Material Science,
Mechanical and Automation Engineering

Science and Technology City Hall
KRASNOYARSK, RUSSIA

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**«MIP: Engineering-2020: Modernization, Innovations,
Progress: Advanced Technologies in Material Science,
Mechanical and Automation Engineering»**
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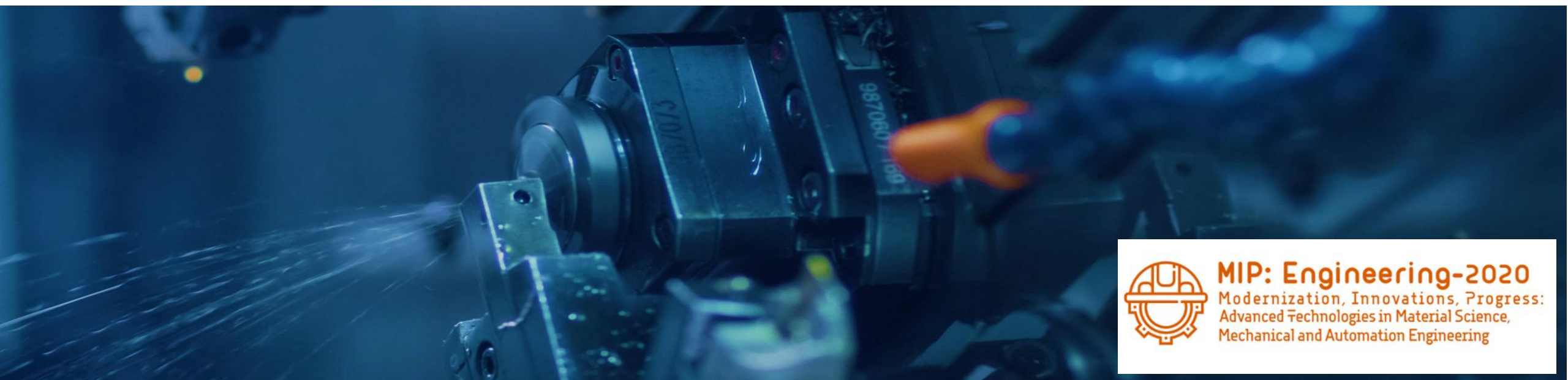
«Radio links from low-orbit satellites»

A G Samoylov, S A Samoylov, S A Nasir and I A Al Tahar

Problem statement

Research of low-orbit satellite radio channels

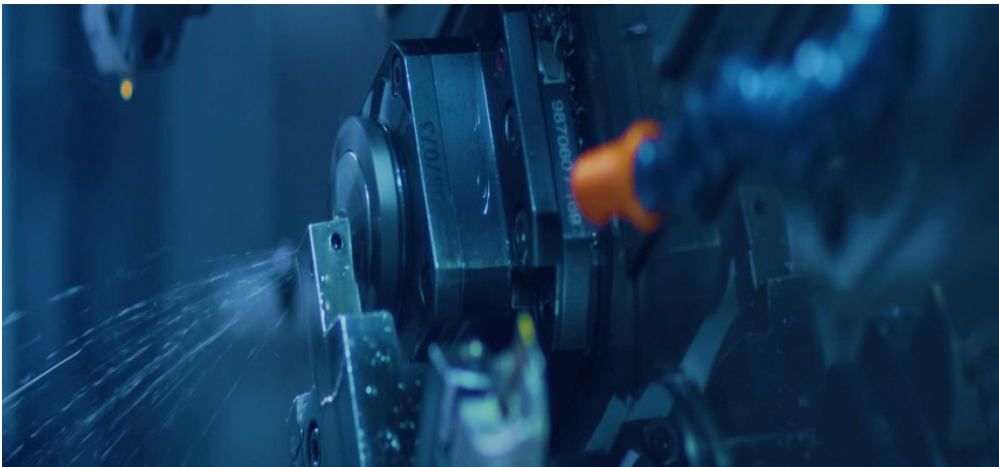
- Task 1. Explore methods for transmitting information from low-orbit satellites.
- Task 2. Determine the energy potential of the lines from the low-orbit satellite to the geostationary satellite.



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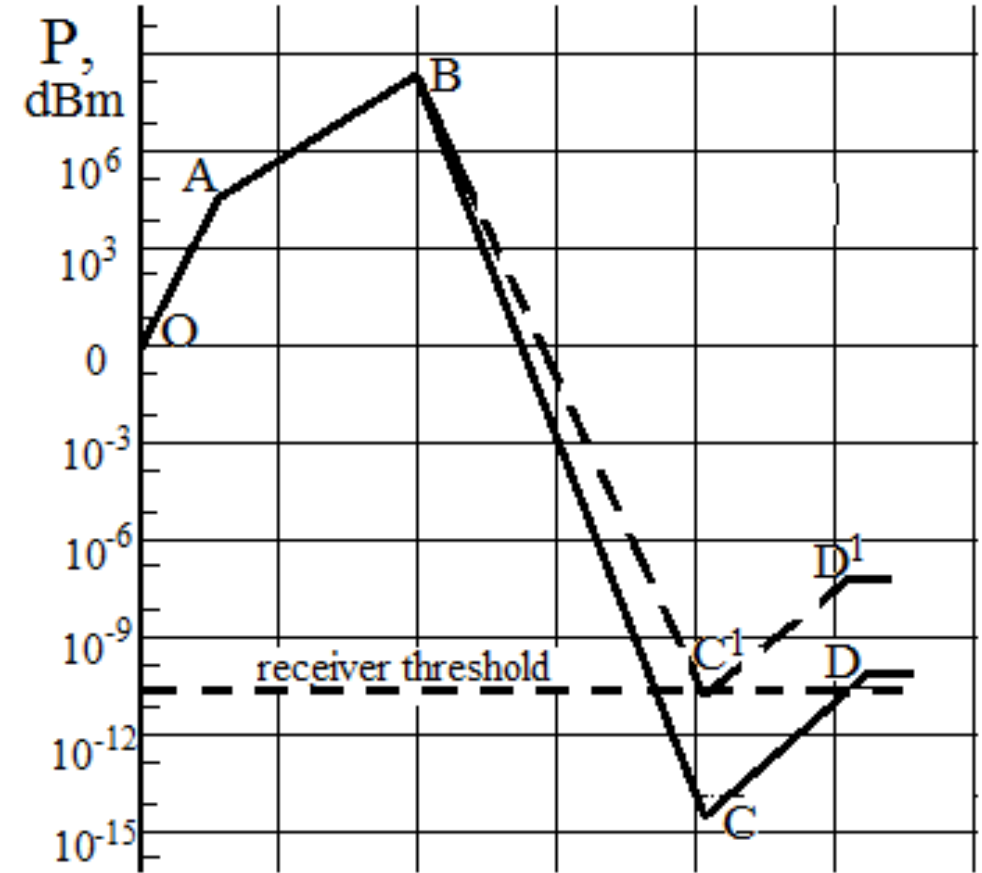
Solution methods

- Method for transmitting information from low-orbit satellites to geostationary satellites
- Calculation of the energy potential of radio links between low-orbit and geostationary satellites



Conclusions

The use of MMR frequencies will reduce the weight and dimensions of the antenna devices, and at the same time improve the noise immunity of the radio link. When using on such radio links small-sized antenna arrays of 512 or 1024 micro strip antennas of the PATCH type, the transmitter power on the board of low-orbit spacecraft will not exceed 1-2 W.



The energy potential of the radio link between low-orbit and geostationary satellites

Contacts

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