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# 1. INTRODUCTION

The National report on the results of fundamental space research (FSR) in Russia (further the Report) covers the period from 2002 to 2005 and includes scientific results received in the course of FSR by the scientists from the RAS institutes, Russian higher educational institutions and scientific organizations of the Russian executive bodies. Scientific results were received and submitted by the scientists of the RAS Space Research Institute, V.N. Pushkov Institute of Terrestrial Magnetism, Ionosphaera and Radiowaves Propagation of the RAS, A.F. Ioffe Physical-Technical Institute of the RAS, the RAS Institute of Radio Engineering and Electronics, Institute for Bio-Medical Problems of the RAS, A.V. Shubnikov Institute of Crystallography, RAS; the RAS Institute for Chemical Problems of Microelectronics, A.A. Baykov Institute of Metallurgy and Material Science of the RAS; M.V. Keldysh Institute of Applied Mathematics of the RAS; as well as V.P. Barmin General Engineering Design Bureau of the Federal Space Agency (Roscosmos); Institute for Applied Geophysics after academician E.K. Fedorov of the Federal Service of Russia on Hydrometeorology and Environment Monitoring (Roshydromet) and the State Scientific Center of the Russian Federation “Physical-Energetic Institute”.

The Report includes the results of processing of space data received by Russian specialists in the course of realization of flight scientific programmes of experiments and observation with the use of scientific instruments installed on board the Russian and foreign automatic spacecraft and the International space station. The flight scientific programmes were realized within the space projects of the Federal space programme of Russia for 2001-2005, the European Space Agency and NASA. The coordination of works in the field of FSR in Russia are accomplished by the RAS Space Council.

## RAS Space Council

The Space Council of the Russian Academy of Sciences (RAS) was established in February 1992 with the purpose to coordinate the activity of Russian scientific institutes and organizations in the field of fundamental space research (FSR).

The Council consists of prominent scientists and experts in the field of FSR, responsible representatives of RAS institutes, higher educational institutions, Roscosmos, Roshydromet and other interested organizations of Russia.



Chairman of the Council – RAS Vice-president,  
academician *Andreev A.V.*



Vice-chairman of the Council,  
chairman of the Section  
“Extra Atmospheric Astronomy”  
academician *Boyarchuk A.A.*



Vice-chairman of the Council,  
chairman of the Section  
“Earth Observation”  
academician *Laverov N.P.*

## Members of the RAS Space Council Bureau



Chairman of the Section  
“Space Biology and Physiology”  
academician *Grigoryev A.I.*



Chairman of the Section  
“Materials Processing in Space”  
academician *Ossipyan Yu.A.*



Chairman of the Section  
“Solar System”  
RAS corresponding-member *Zelenyi L.M.*



Chairman of the Section  
“Space Ray Physics”  
professor *Panasyuk M.I.*



Scientific secretary,  
candidate of economics *Alferov A.V.*

**The main goals of the Space Council are as following:**

- forecasting of the development of this field of research;
- forming, together the Federal Space Agency (Roscosmos), of the project and plans of the Russian Federal Space Programme realization;
- conducting of the examination of investigation programmes and plans, scientific level and state of works;
- estimation of the efficiency of the results received;
- determination of scientific-technical policy, arrangement and coordination of international cooperation;
- coordination of the activity of institutes and organizations on public informing about plans and results of the works in the field of FSR.

**The RAS Space Council structure includes:**

1. Section “Space Biology and Physiology”  
(chairman — academician *Grigoryev A.I.*)
2. Section “Materials Processing in Space”  
(chairman — academician *Ossipyan Yu.A.*)
3. Section “Earth Observation”  
(chairman — academician *Laverov N.P.*, first vice-chairman – doctor of technics *Armand N.A.*, RAS Institute of Radio Engineering and Electronics)
4. Section “Solar System”  
(chairman — RAS corresponding-member *Zelenyi L.M.*)
5. Section “Extra Atmospheric Astronomy”  
(chairman — academician *Boyarchuk A.A.*)
6. Section “Space Ray Physics”  
(chairman — doctor of Physics *Panasyuk M.I.*)
7. Coordinating Committee on interactions with COSPAR and IAF  
(“Intercosmos” Council, chairman — academician *Boyarchuk A.A.*)
8. Expert Working Commission “Fundamental Problems of Space Flights Realization”  
(chairman — RAS corresponding-member *Popov G.A.*)
9. Expert Working Commission “Legal and Social-Economical Problems of Space Research”  
(chairman — professor *Komkov N.I.*)
10. Expert Working Group on the Problem of “Space Debris”  
(chairman — professor *Akim E.L.*)

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