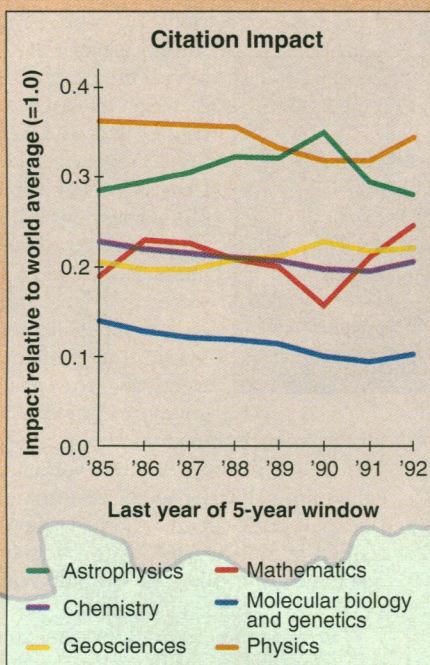


# Russian Science Seen From the West

**S**tatistics on the state of science in the countries of the former Soviet Union are unreliable. So *Science* asked three Western organizations for soundings on the state of research in the region. The bar chart below, based on data from the European Union's INTAS program and George Soros' International Science Foundation (ISF), and the table of leading recipients of ISF grants opposite show how Russia dominates the ex-Soviet states in science. Both INTAS and ISF grants are awarded on the basis of extensive peer review by scientists around the world. Data from the Philadelphia-based Institute for Scientific Information (center) show the relative strengths of selected fields within the former Soviet Union.



**Power centers.** The International Science Foundation received more than 9000 requests for its first round of long-term research grants, which was reviewed by some 50,000 scientists. A total of 2611 grants was awarded, with an average value of \$15,000 over 18 months. Institutions awarded at least 10 grants are shown in the table to the right.



**Paper power.** Papers by researchers in the former Soviet Union generally receive fewer citations per paper than the world average. The chart above shows the relative citation impact of papers in various fields. [Data from ISI's National Science Indicators database, which includes papers published in international journals, English translations of Russian-language journals, and some Russian-language journals themselves.]

**Russian dominance.** ISF offered grants to researchers in all countries of the former Soviet Union; the INTAS program did not include Estonia, Latvia, or Lithuania because they are covered by another European Union program. Tadjikistan, Kyrgyzstan, and Turkmenistan did not win any ISF long-term research grants.

### ISF's Top Awardees

Institution	City	Country	No. of Grants
Moscow State University, Chem. Dept.	Moscow	Russia	66
Ioffe Physico-Technical Inst.	St. Petersburg	Russia	44
Semenov Inst. of Chemical Physics	Moscow	Russia	41
Lebedev Inst. of Physics	Moscow	Russia	40
Institute of General Physics	Moscow	Russia	36
Moscow State University, Physics Dept.	Moscow	Russia	33
Institute of Organoelement Compounds	Moscow	Russia	31
Institute of Applied Physics	Nizhnii Novgorod	Russia	28
Moscow State, Inst. Physico-Chem Biol.	Moscow	Russia	27
Zelinskii Institute of Organic Chem.	Moscow	Russia	27
Institute of Catalysis	Novosibirsk	Russia	25
Institute of Radioengineering & Electronics	Moscow	Russia	25
Shirshov Institute of Oceanology	Moscow	Russia	24
Russian Res. Ctr.—Kurchatov Inst.	Moscow	Russia	23
Institute of Space Research	Moscow	Russia	23
Institute of Low-Temp. Physics and Eng.	Kharkov	Ukraine	20
Institute of Evol. Animal Morphol. & Ecol.	Moscow	Russia	20
Moscow State, Biol. Faculty	Moscow	Russia	20
Joint Institute for Nuclear Research	Dubna	Russia	19
Institute of Theoret. & Exptl. Physics	Moscow	Russia	19
Institute of Chem. Physics	Chernogolovka	Russia	19
Institute of Geochem. and Analytic Chem.	Moscow	Russia	18
Steklov Institute of Mathematics	Moscow	Russia	18
Institute of Solid-State Phys.	Chernogolovka	Russia	17
Center for Cardiol. Research	Moscow	Russia	17
Engelhardt Institute of Mol. Biol.	Moscow	Russia	16
Institute of Physics of the Earth	Moscow	Russia	16
Institute of Cytology and Genetics	Novosibirsk	Russia	16
Institute of Protein Research	Pushchino	Russia	15
Institute of Nuclear Physics	Novosibirsk	Russia	15
Institute of Nuclear Safety	Novosibirsk	Russia	15
Institute of Metal Physics	Ekaterinburg	Russia	15
Moscow State, Mechanics & Math. Dept.	Moscow	Russia	13
Institute of Crystallography	Moscow	Russia	13
Institute of Physical Chemistry	Moscow	Russia	13
Center for Cancer Research	Moscow	Russia	12
Shemyakin Institute of Bioorganic Chem.	Moscow	Russia	12
Institute of Cytology	St. Petersburg	Russia	12
St. Petersburg Univ., Physics Dept.	St. Petersburg	Russia	12
Institute of Gen. and Inorganic Chem.	Moscow	Russia	12
Institute of Chem. Kinetics & Combustion	Novosibirsk	Russia	11
Institute of Physics	Kiev	Ukraine	11
Institute of Geology	Moscow	Russia	10
Landau Institute of Theoretical Physics	Moscow	Russia	10
Nuclear Physics Institute	St. Petersburg	Russia	10
Institute of Exptl. and Clinical Medicine	Riga	Latvia	10
Institute of Mathematics	Novosibirsk	Russia	10
Institute of Geol. of Ore Deposits, Petrography, Mineralogy & Geochem.	Moscow	Russia	10
Institute of Spectroscopy	Troitsk	Russia	10