

A small, but telling example came to light last month when the popular online newspaper *gazeta.ru* published an interview with Yuri Osipov, president of the Russian Academy of Sciences in Moscow. Pressed by the reporter about the very low citation rate for articles published in Russian-language science journals, Osipov dismissed the relevance of citation indices, questioned the need for Russian scientists to publish in foreign journals and said that any top-level specialist “will also study Russian and read papers in Russian”.

From anyone else, such a response might be dismissed as an off-hand comment, perhaps reflecting a bit of stung national pride. But Osipov is head of the largest and most powerful research organization in Russia, the employer of around 50,000 scientists in more than 400 research institutes, and the publisher of some 150 Russian-language research journals. What he says and thinks has a big effect on Russian science. Moreover, the undercurrent of scientific nationalism in his remarks is widely shared by other senior members of the academic establishment — many of whom are products of Soviet times, when Russian science was pretty much an all-Russian affair (see *Nature* **449**, 524–527, 528–529; 2007).

Such parochialism is hopelessly at odds with any dreams of a knowledge-based economy. The knowledge in question flows from basic research and technological innovation, which have long since moved beyond being just national endeavours. If nothing else, international scrutiny and feedback are essential for winnowing the good ideas from the dead ends. And, as Osipov himself acknowledged

in the interview, English, not Russian, is the international language of science.

Russian science is already lagging behind that of other nations. According to an analysis published in January by Thomson Reuters, Russia produced just 2.6% of the research papers published between 2004 and 2008 and indexed by the firm — fewer than China (8.4%) and India (2.9%) and only slightly more than the Netherlands (2.5%). Moreover, Russia's publication output has remained almost flat since 1981, even as the output of nations such as India, Brazil and China was exploding. The situation is so bleak that in October last year, 185 Russian expatriate scientists signed an open letter to Medvedev and Prime Minister Vladimir Putin warning of an imminent collapse of Russian science unless something was done to improve the inadequate funding, strategic planning and teaching of science.

Self-imposed scientific isolationism can only make matters worse — and accelerate the already large emigration of Russian scientists seeking better opportunities in the West. And those who remain in Russia are also starting to recognize the danger. Many young researchers now eagerly collaborate with Western groups. And many older Russian professors continue to produce excellent science under often difficult conditions. They know very well what a grave disservice they would do to their students by asking them to publish in low-profile journals for the supposed sake of national pride. The answer isn't to close Russia in, but to open it up. ■

## Europe's research future

The region's member states must follow through on their political and scientific commitments.

It is hard to believe on a first reading of the European Commission's 3 March proposal for 'Europe 2020' — the new ten-year economic strategy for the European Union (EU) — that it is important for scientists. In bland-yet-grandiose prose that invites the eye to slide right off the page, it defines a strategy for Europe to survive the current financial crisis and “emerge stronger”. It pompously pledges to reform research and development and innovation systems “to foster excellence and smart specialisation”.

But this draft is indeed important for scientists. It endorses research as the basis of an economically and socially strong Europe. It maintains the EU's goal of raising research expenditure to 3% of its gross domestic product. It re-commits EU member states to the concept of the European Research Area, which seeks to remove legal hindrances to the free movement of researchers across the region. It endorses the concept of a single, European-wide patent system, which is badly needed as an alternative to the current costly system that requires patents to be registered in individual countries. And it explicitly reiterates the EU commitment to achieve a significant reduction in greenhouse-gas emissions, while promoting the development of clean and efficient energy sources.

These targets are worthy indeed. But then, they were worthy when they were outlined in the Lisbon Strategy, the ten-year economic plan that was adopted by the EU in 2000. Today that strategy is widely regarded as a failure, largely because the EU member states seemed content to bask in the warmth of their good ideas rather than implementing them.

The European Council, which comprises the 27 EU member states, will meet on 25–26 March to start turning the draft proposal into detailed policy. Only at this point will it become clear exactly to what extent the council members — whose loyalty to the interests of their own country can sometimes conflict with their allegiances to the EU — will allow themselves to be pinned down.

**“Politics is a dicey business and EU research is highly political.”**

The commission will then have to write a second draft proposal that reflects those details. This final document must be approved by the European Council in June. The consequences will then begin to unfold for researchers on the ground — for example, through the design of the Eighth Framework Programme for Research and Technological Development, a multibillion-euro grant scheme that is due to launch in 2014.

Politics is a dicey business and EU research is highly political. There are still many ways in which things could go wrong for research as a consequence of Europe 2020 strategy. But this time, at least, this draft makes it possible to imagine that things could go right. ■