

Hard Times in the Promised Land

For some refugee scientists from the former Soviet Union, life in the United States has meant accepting less than ideal jobs. But don't feel sorry for them—they're the lucky ones

NEW YORK CITY—While everyone's been worrying over how to help the scientists living in the former Soviet Union, the plight of Soviets in this country—a big topic only 20 months ago or so—has largely disappeared from the front pages of U.S. newspapers. Last week at the New York Academy of Sciences, a conference took place that was supposed to do something about the plight of refugee Soviet scientists. And it was timely because, in light of the news from overseas these past 20 months, the number of refugee scientists can only grow.

But the results of that meeting show just how tough the problem is going to be to solve. Although it was intended to be a showcase for the refugees, allowing them to display their scientific prowess before an audience of U.S. scientists and business executives who are potential employers, few of the latter showed up. The former Soviet scientists had been encouraged to speak English for the expected guests, but in their absence, almost all the presentations—mostly in physics and math—were in Russian.

Why did so few U.S. scientists or employers turn up? "The American scientific community is unaware of the accomplishments of these Soviet scientists," says Peyrets Goldmacher, a mechanical engineer and president of the Association of Engineers & Scientists for New Americans (AES). The AES, which organized the meeting of 85 refugee scientists, is a Queens-based nonprofit organization that puts Soviet refugees in contact with potential employers. That group isn't alone in the field; two other organizations are the Program for Refugee Scientists (PRS), based in the Bronx and geared toward helping researchers in the basic sciences, and the Manhattan-based Scientific Career Transitions, a seminar series for refugees. But although representatives from all three were present at the recent meeting, none could claim overwhelming success in helping the roughly 8000 Soviet refugee scientists who have arrived in New York City in the past 2 years.

For the refugees, many of whom are jobless and on welfare, it's a bitter irony that the United States and the European Community separately have pledged a total of \$170 million to fund scientists who remain in the

Special News Sections

The long-running NIH investigation of AIDS researcher Robert C. Gallo is finally drawing to a close. *Science* has obtained the final report of the investigation and a critique of that report by a panel of outside scientists. For readers who have been following this saga, we provide excerpts and analysis of these documents in a special section beginning on page 735. In addition, a special news report on biotechnology begins on page 766. For readers who would prefer first to read other news, we provide the following combined News & Comment and Research News section.

former Soviet Union (*Science*, 24 April, p. 436; 27 March, p. 1632). "I haven't heard about anything from the U.S. government about help for immigrant scientists," says Eugene Chudnovsky, a physicist at Lehman College and director of PRS. The program, formed in late 1989 and jointly sponsored by the New York Academy of Sciences and the Committee of Concerned Scientists, so far has sent 76 refugee scientists as "unpaid visitors" to more than 20 universities willing to lend them offices for a year, where they network with U.S. scientists and learn the ways of U.S. academia. So far, 47 refugees in the program have found jobs in their fields, ranging from temporary research associates to permanent faculty. However, only one of four scientists who apply to PRS gets placed; the rest are on a waiting list due to lack of funding. "Maybe it's not fair, but this is the way it goes," says Chudnovsky, who says he's seeking more funding to expand the program.

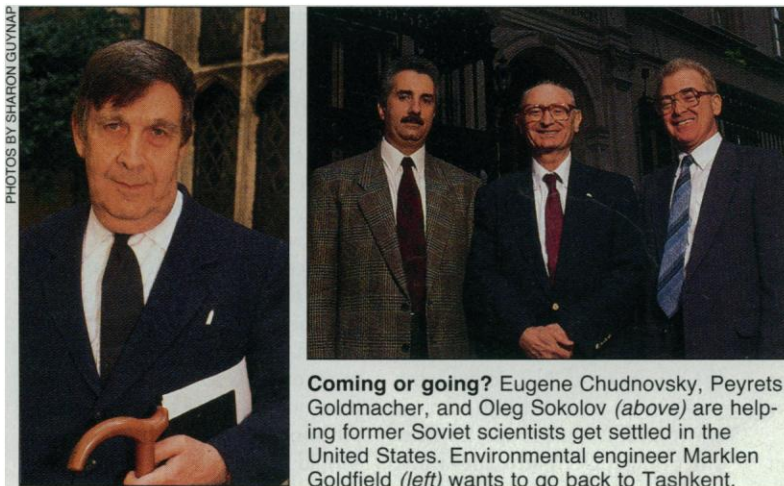
Even for the lucky 47, however, many of whom headed laboratories or had faculty po-

sitions in the Soviet Union, success often means starting over again as a postdoc—or even leaving laboratory research. PRS alumna Alla Novoselskaya spent 7 months as an unpaid visitor at Brooklyn Polytechnic Institute. She jumped at her first job offer in April 1990—a position in the scientific classification division of the American Institute of Physics, indexing journals. Novoselskaya, a radiophysicist at Kiev University until March 1989, concedes she misses laboratory work. But she says she feels lucky to have a job at all, and at 57 she says she's probably too old to start over again here as a researcher.

With few faculty positions available for U.S. scientists, let alone Soviet refugee scientists, PRS and the other organizations have had little recourse but to try and press the refugees into an ill-fitting American mold. For example, the AES, which began as a Jewish union of Russian immigrants a decade ago, funnels some Soviet technicians and engineers to the Manhattan-based Technical Career Institute, which retrains them as air-conditioning engineers and draftsmen. That might not sound so good to U.S. postdocs, but the refugee scientists are happy to work, even if the work is a comedown from their scientific resumes, says Henry Moss, president of TCI. "I had a high-level engineer who got a \$12 an hour job at Coca Cola doing quality control," he says. "He was thrilled." The fact is, "welding engineers stand much better chances than, say, molecular biologists," says Roald Hoffmann, a chemist at Cornell University who won the Nobel Prize in chemistry in 1981 and now sits on

the Science & Technology Advisory Board, a Manhattan-based nonprofit organization that runs Scientific Career Transitions.

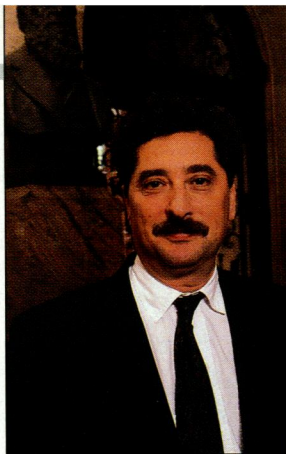
While the other programs try to put refugees in contact with potential employers, Scientific Career Transitions helps train them in the quintessential American skill of networking so that they can job hunt themselves. "Eighty percent of science jobs are found through networking," says Stephen Rosen, who runs the program of free 6-week



Coming or going? Eugene Chudnovsky, Peyrets Goldmacher, and Oleg Sokolov (above) are helping former Soviet scientists get settled in the United States. Environmental engineer Marklen Goldfield (left) wants to go back to Tashkent.

seminars. Roughly half of Rosen's 300 pupils have so far landed jobs "in or close" to their specialties, he says, from universities to companies such as Johnson & Johnson, one of several firms that donate money to the program.

Semeon Tspursky, formerly a senior researcher at Moscow's Academy of Sciences, is now a materials science postdoc at Arizona State University, partly as a result of the Transitions program. The seminars "helped familiarize me to the American system," says Tspursky. After 4 months sending well-crafted introductory letters to dozens of materials scientists, Tspursky says he reaped about 300 contacts, 10 job interviews, and 4 job offers.



Neil Kosiborod

At least one former Soviet scientist, who has seen that scientific "success" in the U.S. could mean starting over again as a postdoc, wants to go back. Born in the United States in 1928, Marklen Goldfield was brought 3 years later by his parents to Tashkent, Uzbekistan, where he spent 61 years before returning to the United States several months ago. Now, Goldfield, an environmental engineer, wants to return to Tashkent, where, he says, "I think I'll be more useful"—serving as a liaison between Western and Soviet environmental remediation firms.

That's not a typical reaction, though. In spite of tough times, most refugees want to stay—because the alternative, going back to

face turmoil and anti-Semitism, is worse. "In my city it's very dangerous to live if you are a Jew," says environmental scientist Neil Kosiborod, referring to Novosibirsk, Ukraine, which he fled in 1990. Now Kosiborod donates his time to New York City's Department of Environmental Protection, in hopes of a job there in the next fiscal year. Meanwhile, welfare pays the bills while his wife, a doctor, takes certification classes and his two sons go to school. But after spending 20 years at Novosibirsk's Research Institute of Hygiene documenting lung disease in Siberians in a futile attempt to persuade local factories to install pollution-control devices, and after being called a traitor when he expressed the desire to emigrate 15 years ago, Kosiborod says he doesn't mind waiting a little longer for a job in the New World.

—Richard Stone

NATIONAL LABS

Watkins Signals Retreat on DOE Directives

Excessive regulation emanating from Washington: Who doesn't hate that? Especially scientists at the national laboratories like Burton Richter, director of the Stanford Linear Accelerator Center (SLAC), who points out that SLAC's indirect expenses have risen 40% in the past 3 years in response to Department of Energy (DOE) requirements. In the 11 weeks ending in March, the lab received 161 DOE communications, 43 of them requiring "major effort." Amazing, but what puts scientists at the national labs in a category of outrage all their own is that DOE has also been criticizing the labs for having excessive indirect costs! That double standard was one of the issues that Richter cited when directors of the national labs met for a gripe session recently in Washington with Secretary of Energy Admiral James Watkins. And to their surprise, Watkins may be taking the criticism seriously.

On 9 April, in what some observers see as a response to the 25-26 March meeting, Watkins sent a memo out to all field offices and lab directors with an offer to reconsider some of his directives. Optimists like Richter view the gesture as part of a new "dialogue" that began last fall. "We'll all be singing hosannahs in the street," says one California lab spokesman, if the memo signals a real change of policy. But skeptics think the memo may be intended to do little more than harmonize with an antiregulatory theme struck in January by President Bush.

In his memo, Admiral Watkins cites the president's campaign to trim regulations affecting industry, and then writes: "It is time to take the president's initiative one step further and reduce the burden on DOE facilities imposed by headquarters requirements." Watkins himself instituted these new requirements,

which range from orders to treat whistleblowers with more respect, to shipping toxic waste with meticulous care and limiting travel and foreign visitors to a minimum.

To learn whether the rule-making had gone too far, Watkins asked acting DOE Under Secretary Tom Hendrickson "to spearhead an effort to identify DOE orders and other requirements" that managers find unduly restrictive. "This is not intended to be a complete overhaul," Watkins warns in his memo, but a quick review to see if changes

"It is time to...reduce the burden on DOE facilities imposed by headquarters requirements."

—Admiral James Watkins

could be made to allow managers "to operate more efficiently and effectively."

Hendrickson followed up with a request to lab directors to identify "the one DOE requirement" they find "most restrictive." Responses were due by 17 April, and they have poured in to headquarters. Some labs objected, right off the bat, to the request that they limit themselves to only one complaint. Argonne National Laboratory, for example, artfully dodged the limit by listing about 10 items and noting that "any" of them would fit the bill. Included in its list were detailed rules on nuclear safety (Argonne would prefer general guidelines on risk), excessive reporting on maintenance, confusing record-keeping demands for environmental impact assessment, and a 20,000-item compliance check-

list for defense-related projects that's responsible for "literally truckloads of paper." In general, Argonne says, "the excessive number of orders, their general inflexibility in an atmosphere of enforced compliance, and the cascading to ever more prescriptive directions are seriously threatening the effectiveness of many of our programs."

Other labs collaborated on their responses, dividing up the targets. Brookhaven, for example, blasted the lack of a "risk-based standard" for regulating toxic waste. (The lab is so clogged with waste as a result of a moratorium on shipments earlier this year that it is now at risk of violating a different set of rules that limit the quantity of waste that may be held at a site not officially registered as a dump.) Oak Ridge went after rules on environmental impact statements, pointing out that even simple construction projects get tangled up in long, internal reviews. Lawrence Berkeley attacked the overwhelming number of audits on projects that are labeled "work for others," financed by agencies such as the National Institutes of Health. While DOE's rules treat such projects as free riders, lab managers say they help pay for DOE's infrastructure.

What will DOE do with all these comments after they've been collected? Hendrickson was not available for comment last week. But his executive assistant, Cheryl Fitzgerald, frankly concedes that she "doesn't know" what, if anything, will become of the initiative. Although Watkins set a deadline of 1 June for bringing the first phase of the review to a close, Fitzgerald says that it is too early to know whether DOE will meet its self-imposed objective. But there are plenty of lab executives who stand ready to remind the admiral if the project starts to slip out of sight. Presumably, they could always call another meeting in the nation's capital.

—Eliot Marshall