

November in a memorandum of understanding in high-energy and nuclear physics.

Also while at OSTP, Flatten initiated and oversaw all aspects—from fundraising to recruiting and directing international agencies' participation—of the annual Global Science and Technology Week, intended to stimulate schoolchildren's interest in math and science. In addition, she provided policy recommendations and analysis for the president's science adviser and worked on S&T issues with the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Organisation for Economic Co-operation and Development (OECD), and other international organizations.

It was Flatten's immediate boss at OSTP who told her about the opening at APS. "During a meeting one day," says Flatten, "she nudged me and handed me her BlackBerry™," which displayed an announcement of the position. "I wasn't chomping at the bit to find something outside of OSTP, but when this came along, it was a perfect fit. Promoting international scientific collaborations is a long-term career goal of mine. The opportunity to dig in and focus on that, and to launch initiatives and see them through, exactly meets my interests and objectives."

Lerch remains active in the international science policy arena. For now, he is planning an April workshop in Azerbaijan on science teaching and research in central Asia and the Caucasus. As a consultant for UNESCO and other organizations, he is involved in setting up a series of workshops on rebuilding the science base in Iraq. And he is keeping an eye on developments at home, where, he says, "there are a lot of forces impeding the free exchange of information and the circulation of scientists. We are creating a very viscous system for scientists coming to the US."

Toni Feder

Geoscience Job Market Good, but Perceived as Bad

The job market for recent PhDs in Earth and space sciences remained strong for the class of 2002: 88% are working in their field and describe their jobs as challenging and relevant, according to a recent report by the American Geological Institute, the American Geophysical Union, and the American Institute of Physics.

In 2002, 54% of new PhDs became

postdocs, a slight increase over 49% from the previous year. The job hunt took a median of two months for postdocs and four months for nonpostdocs.

For PhDs working in academia, listings in newsletters, magazines, and journals were the most effective job resource. Across all sectors, however, "informal channels" led to the most jobs, according to the report. Starting salaries ranged from less than \$35 000 for academic postdocs to \$75 000 for industry positions (see figure on page 34).

Among Earth and space scientists who entered the private sector in 1999–2002, the largest fraction (39%) were hired by the petroleum industry. The rest went to work in nongeoscience companies (20%), environmental consulting (16%), weather and logistics (5%), mining (3%), and other areas (17%).

Despite the robust rate of employment, perceptions of the market were bleaker than in the previous two years. About half of new Earth and space science PhDs said the market was neutral, a fifth said it was good, and a third described it as bad or hopeless.

Earth and space scientists earn their PhDs at an average age of 33, later than scientists in other fields. For comparison, PhD recipients in

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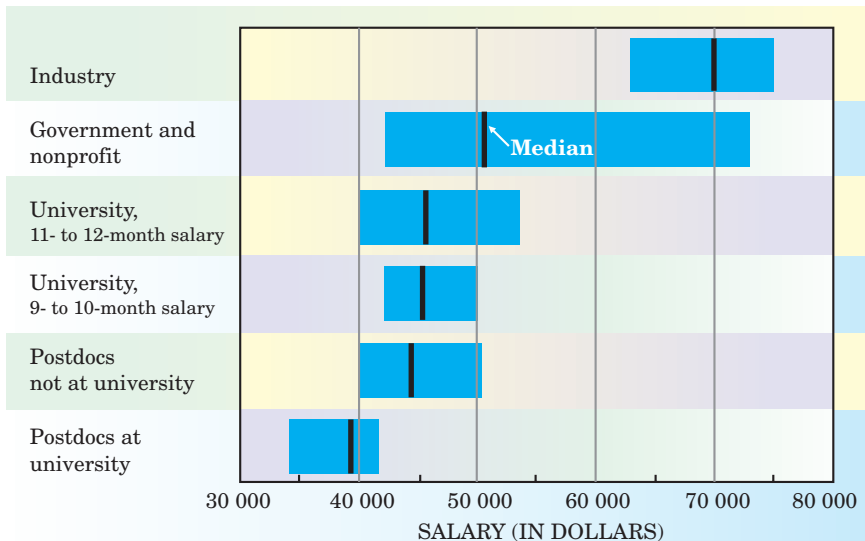


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Starting salaries for Earth and space science PhDs, classes of 2001 and 2002.

physics and astronomy are 30 years old on average. The delay is at least partly due to geoscientists' working both before they begin graduate studies and before they complete their PhD degrees, according to the report.

Over the past five years, about 8% of PhD recipients in Earth and space sciences "regularly or constantly" considered dropping out, the report says. The reasons cited most often by men were family responsibilities and concerns about the job market. By contrast, women attributed their doubts to loneliness, their advisers, and not feeling "up to par intellectually."

Although women continue to be underrepresented at the PhD level in Earth and space sciences, the only sciences doing better are chemistry and life sciences. Remarkably, in the sub-field of atmospheric science, the proportion of PhDs awarded to women (25%) in 2000 exceeded the proportion at the undergraduate level (23%).

The *Earth & Space Science PhDs, Class of 2002* report may be downloaded from the Web at <http://www.aip.org/statistics/trends/reports/agu02.pdf>. Single copies may be obtained free of charge from AIP, Statistical Research Center, One Physics Ellipse, College Park, MD 20740; e-mail stats@aip.org. **Toni Feder**

were narrowly voted in by the British government on 27 January. UK universities began charging tuition just a few years ago. The new hikes, of up to £3000 a year, will vary by campus and department.

"Physics is not the most popular subject," says Philip Diamond, IOP's assistant director for higher education and science. "We have a rather fragile undergraduate population. You need 40 to 50 undergraduates per year to be viable. A number of departments have been forced to close. The fee element is an enormous worry for our subject."

Over the past 20 years, the number of physics students in the UK has remained steady—and become a shrinking portion of the overall university population, which has swelled by 50%. Says IOP president David Wallace, "The institute hopes that by offering serious cash, it can help reverse this trend as well as ensure that the brightest students are able to study what they are good at, not just what they can afford."

The IOP is setting aside at least £800 000 for the grants and is talking about raising more. The grants will be handed out based on need as determined by the government. They—and the raised tuition—will commence in the 2006–07 academic year. **TF**

News Notes

Cash for UK students. In an attempt to counter a growing barrier to studying physics, the UK's Institute of Physics (IOP) plans to give £1000 (roughly \$1800) a year to needy undergrads.

The grants would partially defray across-the-board tuition hikes that

SPEAR3 pierces brightly. The latest incarnation of the Stanford Positron Electron Asymmetric Ring was unveiled on 29 January. A hefty beefing up of a machine that began life as a particle collider more than 30 years ago led to SPEAR3, a top-of-the-line x-ray radiation source for intermediate energies (500–15000 eV), says director Keith Hodgson.