

Eleven countries sign Framework deal

Munich Eleven central and eastern European countries scheduled to become full members of the European Union (EU) last week signed agreements with the European Commission that give them access to the union's fifth Framework Programme of research (FP5), on the basis of a financial contribution.

Researchers from these countries can now apply for funds from the 14.96 billion euro (US\$16 billion) programme, which runs from 1999 to 2002. In return, the eleven countries have agreed that researchers from EU member states can participate in the parts of their own research programmes which overlap with FP5's thematic programmes (see *Nature* **396**, 294; 1998).

Japan declines help for nuclear accident site

Munich Japan told the International Atomic Energy Agency (IAEA) last week that it would not be necessary "at this stage" for the agency to send an expert team to the nuclear accident site in Tokaimura, as the IAEA had offered.

Japanese nuclear authorities had informed the IAEA of the critical accident at the uranium-processing facility during the organization's general conference in Vienna,

which was attended by governmental delegates from 111 countries. But all information provided by Japan was "voluntary", according to the IAEA, rather than pursuant to the International Convention on Early Notification of a Nuclear Accident.

High-energy physics gets funding reprieve

Washington The US Congress has withdrawn, for the time being, its threat to withhold funding for research into future high-energy physics facilities, such as the Next Linear Collider, although it notes "serious concerns about the early cost projections of this planned facility".

A conference between the House of Representatives and the Senate to determine next year's funding for energy and water programmes rejected the Senate's plan to scale back support for the research (see *Nature* **400**, 390; 1999).

The conference also agreed to provide \$100 million for the construction of the Advanced Neutron Spallation Source at Oak Ridge Laboratory, Tennessee — half the amount requested by the Clinton administration — and boosted spending on fusion research by \$25 million to \$250 million.

Encyclopedic launch

The Nature Publishing Group and its sister publisher Macmillan Reference Ltd this week announced the online launch of the world's largest life-science reference work: *The Encyclopedia of Life Sciences*. Available in embryonic form, it can be accessed for a one-off fee of £125.

Subscribers can provide feedback as the encyclopedia evolves to the full 4,000 or more signed articles that will be available in print and online in 2001. The online publication will be regularly updated after completion.

Written by more than 2,000 leading scientists, it includes articles designed variously for students, postgraduates and fully fledged scientists. The scope of the encyclopedia ranges from biochemistry to evolution, and from bioinformatics to bioethics. Details of the publication, its advisory panel and authors, and ways of subscribing to the online embryonic form, can be found at www.els.net.

Correction.

Michael A'Hearn did not "head a recent review of the NOAO [National Optical Astronomy Observatories]", as we reported in our recent item on the Kitt Peak National Observatory (see *Nature* **401**, 199; 1999), but was a member of the committee to examine future directions for the NOAO.

Cuts force telescope closures at Kitt Peak

Washington

The Kitt Peak National Observatory in Arizona plans to shut down two of its five remaining night-time telescopes in a cost-cutting move that managers say is essential but which critics say will not solve the observatory's fundamental problems.

Operation of the two small telescopes — a 0.9-metre instrument and a Coudé feed telescope used primarily for high-resolution spectroscopy of bright objects — will be phased out over the course of a year.

Scrapping the two telescopes will save about \$300,000 a year in operations costs, says Sidney Wolff, director of the National Optical Astronomy Observatories (NOAO) in Tucson, which includes Kitt Peak as well as the Cerro Tololo Inter-American Observatory, in Chile and the National Solar Observatory, also based on Kitt Peak.

More importantly, she says, the closures will allow observatory staff to focus more effectively on the mountain's three remaining telescopes: the 4-metre-class Mayall and WIYN instruments and a 2.1-metre telescope.

Although the Coudé feed telescope is lightly used, the 0.9-metre telescope is oversubscribed by a factor of five, and has been particularly popular when used with NOAO's MOSAIC wide-field CCD array.

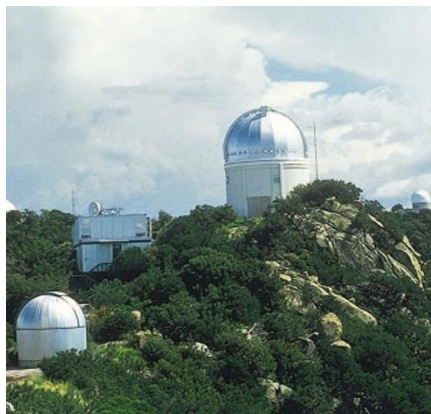
The closure of the 0.9-metre telescope is "a great shame", says John Bally, a University of Colorado astronomer who serves on the Kitt Peak users committee. The MOSAIC array can be moved to another telescope, but its availability will inevitably drop.

With decreasing budget allocations from the US National Science Foundation (NSF), NOAO managers have warned for several years of the need to shut down working facilities (see *Nature* 379, 569; 1996). A few smaller telescopes on Kitt Peak have already been retired. But opinions are divided as to whether this latest move is warranted.

Michael A'Hearn, a University of Maryland astronomer who headed a recent review of NOAO, says his committee "pretty much endorsed" the closure of the two smaller telescopes, although individual panel members opposed it. A'Hearn says the question of whether enough money is saved to make the closure worth it is a "debatable point" best left to NOAO managers to decide.

Wolff says she intends to "draw a line in the sand" after shutting down the two telescopes and would oppose closing Kitt Peak's three remaining night-time telescopes. But she wrote in the NOAO newsletter earlier this summer that the closure amounts to little more than a "temporary bandaid". There is broad agreement that the organization needs to change or face extinction.

With an annual budget of \$27 million, the NOAO consumes about a quarter of NSF's



Scope for savings: closing two of Kitt Peak's five night-time telescopes will save \$300,000 a year.

yearly spending for astronomy. Its traditional role has been to provide observing time for all US astronomers, particularly the estimated 50 per cent who do not have access to private telescopes such as those owned by the University of California.

As well as running Kitt Peak and Cerro Tololo, the NOAO is building a solar telescope for the National Solar Observatory and will handle community-wide proposals for the Gemini and other telescopes. But critics charge that the NOAO has not given the community any new, cutting-edge telescopes.

Bally thinks that the NOAO Tucson office is top-heavy with tenured scientists, and he would support a staff restructuring to rely more on interns and postdocs. The total NOAO staff for night-time programmes has

dropped from 200 in 1984 to 125 today, with many of the cuts in lower-paid positions.

A'Hearn says that Wolff is trying to make changes. A long-range plan, for example, includes several visionary projects, including the construction of very large (aperture of 30 to 100 metres) telescopes, large survey instruments such as the proposed Dark Matter Telescope, and a 'national virtual observatory' — a vast database of astronomical observations that would be made available to the whole community.

The committee led by A'Hearn endorsed this plan. Wolff says her staff are mostly behind the new thrusts, but "it's not 100 per cent, because it is a major change in direction".

The NOAO is facing an identity crisis, with some critics even questioning the continuing need for a national observatory. Wolff concedes that "there has never been a clear agreement on the mission of the NOAO", but believes there is more need than ever now for a national observatory.

Bally agrees that the NOAO is still needed, but would like to see it return to its "original service function" — building new instruments and providing telescope time to the wider community — rather than building up its own scientific capability.

The NSF, meanwhile, has asked Wolff and her staff to talk to managers of space-based observatories, such as the recently launched Chandra X-ray telescope and the upcoming Space Infrared Telescope Facility, to plan possible coordinated observations with NOAO's 4-metre telescopes. **Tony Reichhardt**

Iranian visit fosters links with US

San Diego

A group of Iranian scientific leaders last week visited the US National Academy of Sciences in Washington DC in the first scientific exchange since the two nations broke diplomatic relations 20 years ago.

After the visit, academy officials said they plan to send a delegation of leading US scientists to Iran next spring.

"Following many years without significant contact with our scientific counterparts in Iran, we heartily welcome this opportunity to explore future areas of cooperation," said Bruce Alberts, president of the US academy.

Academy leaders held a reception for the Iranian delegation, which included the president of Iran's Academy of Sciences, Reza Davari Ardakani, a philosophy professor from Tehran University, and the academy's vice-president, Mehdi Nejad Bahadori, a mechanical engineering

professor at the Sharif University of Technology.

The visit was arranged by the Washington-based Federation of American Scientists, which fosters international scientific cooperation, with the assistance of Ali Mansoori, a professor at the University of Chicago. Jeremy Stone, president of the federation, led a group to Iran last December as a prelude to the visit.

"Scientific exchange is a natural precursor to improved relations between nations without diplomatic relations," says Stone, who took part in similar scientific visits to China in 1972 and Vietnam in 1989.

Although there were no formal discussions at the meeting, officials say the talks laid the groundwork for future exchanges. Areas of discussion reportedly included renewable energy, education, earthquake hazards, the environment and public-health concerns. **Rex Dalton**