



Warm reception: environment ministers were shown the effects of global warming in Greenland.

Denmark breaks the ice over climate-change talks

With the future of the Kyoto Protocol increasingly being questioned, Scandinavian countries last week took the initiative to try to move discussions on climate change forward.

The Kyoto agreement expires in 2012, and nothing has yet been agreed about its successor. Talks will continue in November in Canada, where the countries participating in the Kyoto agreement will start negotiating new targets for cutting greenhouse-gas emissions.

As an early step, the Danish environment ministry last week organized the informal 'Greenland dialogue' in the remote town of Ilulissat. Environment ministers from 22 countries toured vanishing glaciers and ice fjords to see Arctic climate change for themselves.

No formal decisions were taken in Greenland, but organizers say that the meeting was a step forward in breaking the impasse between countries. "We have now agreed to look ahead and stop blaming each other for not solving climate problems," says Connie Hedegaard, the Danish environment minister.

Archaeologist shot dead by robbers in Brazil

Archaeologist James Petersen was shot and killed by robbers in Iranduba, Brazil, near where he was doing fieldwork, on 13 August.

Petersen, who was chair of the anthropology department at the University of Vermont, Burlington, was known for his theory that the rich black soil found in some parts of the Amazon was deliberately created by humans for farming. This idea stood in opposition to the reigning 'counterfeit paradise' theory, which held that amazonian soils could not support dense or advanced populations. Petersen's theory gradually won favour as he found pottery shards and

other evidence of civilization in the soils.

He was killed in a restaurant where the robbery took place; three people have been arrested. News reports say the suspects are in their teens and were high on cocaine and alcohol at the time.

Russian rocket set to give Europe's science a lift

Another agonizing delay to the space shuttle's flight schedule has led the European Space Agency (ESA) to turn to Russia for help with its research programme.

In a deal negotiated before the next shuttle flight was delayed until March 2006, ESA has reshuffled its plans for 12 of the 30 experiments that were due to be carried out by German astronaut Thomas Reiter. Reiter will fly on the next shuttle for a six-month stay at the International Space Station.

The experiments will be done instead by a Russian cosmonaut sent up on a Soyuz rocket in the first week of October. ESA will pay an undisclosed fee for the cosmonaut's time and will share the data from the mainly physiological experiments with the Institute for Biomedical Problems in Moscow.

ESA hopes the remaining experiments will simply be delayed by six months. The Russian rocket is not capable of lifting into orbit the stranded 13-tonne European science module Columbus, which must wait its turn for the shuttle.

Travel limits cause agency to halt aid to Myanmar

Public-health grants worth around US\$36 million are being withdrawn from Myanmar after the nation's authorities

imposed travel restrictions on aid officials.

The Global Fund to Fight AIDS, Tuberculosis and Malaria pulled out on 18 August after Myanmar's government restricted access to key areas. The southeast Asian nation, which is ruled by a strict military regime, was originally targeted by the fund because of its location between three countries with serious HIV problems: India, China and Thailand. Myanmar also has one of the highest rates of tuberculosis in the world, with almost 100,000 new cases detected every year.

The fund says that its programmes in Myanmar will be phased out by the end of the year and that a "large part" of the \$12 million that has already been granted will be recovered.

Supercomputer grid nets cash boost for expansion

TeraGrid, the world's largest distributed computing network for scientific research, has been awarded US\$150 million by the US National Science Foundation to keep it growing over the next five years.

The network, which was completed in September 2004, connects 16 supercomputers across the United States. It can run more than 50 trillion calculations per second and has been used in many different projects that require a lot of data-crunching. Scientists have used TeraGrid to simulate protein folding, model earthquakes, and forecast the weather, among other studies.

The cash will allow more scientists and engineers to access TeraGrid from their desktop computers through user-friendly software, says Charlie Catlett, the project's director.

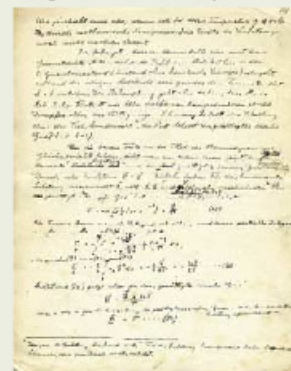
Student uncovers Einstein's long-lost manuscript

A Dutch graduate student has unearthed a handwritten version of a paper by Einstein.

The student stumbled across the 16-page German manuscript — Quantum Theory of the Monatomic Ideal Gas — while searching the Paul Ehrenfest archives at the University of Leiden's Lorentz Institute for Theoretical Physics. Einstein frequently stayed at Ehrenfest's house when he was invited to lecture at Leiden.

Einstein's notes on the manuscript (right), which predicts a state of matter now known as a Bose-Einstein condensate, suggest that he used it to correct proofs from the Prussian Academy of Sciences for a paper published in 1925.

Einstein later developed his idea — that atoms could form a superfluid phase at temperatures near absolute zero — with the Indian physicist Satyendra Bose. The first such condensate, in dilute gases of alkali atoms, was produced by Eric Cornell and Carl Wieman in 1995 at the University of Colorado, Boulder.



LENDING PHYSICS