Seabed hearings

The dispute between Greece and Turkey over the Aegean seabed is due to receive a hearing at the International Court of Justice at The Hague this week. Greece is seeking to prevent the Turkish oceanographic research ship Sismik I from continuing its oil exploration, and wants a ruling on the limits of the continental shelf. In New York at the latest round of the Law of the Sea Conference, meanwhile, Dr Kissinger is reportedly threatening unilateral action by the US over exploitation of deep-sea minerals, on the regulation of which the conference has been deadlocked.

Pesticide dumping

In what Federal prosecutors in the US have described as the largest environ-

mental case ever brought, the Allied Chemical Corporation last week pleaded nolo contendere on 940 counts connected with the dumping of the pesticide Kepone in the James River. Fish in the river and in Lower Chesapeake Bay (where an Allied Chemical barge containing 250,000 tons of sulphuric acid capsized last week) were found to contain Kepone. The corporation could now face fines of about \$13 million.

Coal gasification 'option'

On the basis of a report it published last week, the UK National Coal Board (NCB) has decided not to resume, at least for the moment, applied research into underground coal gasification—the direct extraction of gases from coal seams burnt underground. The NCB identifies underground gasification as

a realistic energy option, however, and will continue monitoring international research efforts until costs—now put at 7–24 pence a therm—can be reduced to something nearer those associated with conventional mining techniques.

Cooperation in an international pilot scheme costing £10-15 millions could, the NCB feels, become worthwhile within five years or so. Outstanding problems of underground gasification include the poor quality of the gases produced, the lack of control over supplies, and the danger of seepage to the surface or into mineshafts and groundwater. During the 1950s Britain was among the pioneers of underground gasification research, which is now led by Belgium, Canada, the USA and West Germany. The Soviet Union operates a small-scale commercial facility.

YEARS ago, as a young father, I was often asked by my infant children for a bedtime story. On one such occasion, I gave a partially true account of a camping trip to a lonely spot where I was suddenly confronted, at dusk, by a ferocious animal, yelloweyed and snarling. It was a wildcat! At this point in the narrative, the children screamed and hid beneath the covers. Soon they were sleeping soundly. Next evening, I asked what they wanted to hear in the way of a soporific monologue. The answer, to my surprise, was: The Wildcat Storv. It was a best-seller for weeks. People love tales that make their flesh creep.

As time went by, I recognised many versions of the wildcat story in scientific writings. Whether or not these are true, their common property is that they are entrancing because they are "scary". One of the most fascinating is the recombinant DNA story. My grandchildren are too ecologically sophisticated to be terrified by wildcats. Perhaps I can startle them with an imaginary account of meeting up with a genetically-engineered E. colicell.

According to a recent news report, many inhabitants of Cambridge, Massachusetts, are greatly worried by the possibility that "hot" E. coli cultures might escape into the sewers, nowadays called "the environment". Carelessness in the laboratories of Harvard University and the Massachusetts Institute of Techonology was named as a cause that might lead to this disaster, which could be accentuated by the decrepitude of the facilities at Harvard. It was said that George Wald has explained the

danger to the Mayor of Cambridge, Massachusetts, Mr Vellucci, who has been an advocate of converting Harvard Yard into a parking lot. The

Wildcat story



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mayor was apparently a ready listener, this being a rare case of a progressive public official giving ear to erudite eloquence. Perhaps, with the Mayor's attention diverted by colon bacilli, Harvard Yard may be saved.

The incident is somehow typical of a shift in attitudes towards scientific discoveries. Once we were eager to try new things, and none would say us nay. Today, dangers are recognised even before they have been shown to exist. If penicillin had been discovered in the 1970s instead of the 1930s, it would probably have been kept out of the hospitals after preliminary tests had shown it to be potentially allergenic, and the testers had been sued for medical malpractice.

Somehow I have a feeling that anything E. coli could do to us has already been done during the millions of years that this organism has lived in countless numbers within the intestinal tracts of vertebrates. It has a set of genes that code for transfer RNA molecules. But these molecules have different base sequences from those in human tRNAs, although both sets of tRNAs function similarly. The differences indicate that the sets have evolved separately for hundreds of millions of years. Why has there been no mixing? Are all the transformations phenotypic? Would the new, human-tailored bugs take over the sewers? Or would they stand about as much chance as a hothouse orchid in a patch of good healthy ragweeds?

If Mr Vellucci prevails, we are not likely to find out. I would be a bit peeved if I were a young bacteriologist, being held back by the old guard who have made it to the top. However, many young scientists seem quite satisfied to join, or even to excel, the elderly prophets of doom.

Now that Viking has landed, we can brace ourselves for an airing of the greatest of all wildcat stories. It seems that a capsule of unsterilized Martian soil came back to Earth, swarming with weird organisms that gobbled up atmospheric nitrogen. The first news we heard was that millions of people were dying east of the Urals. . . .