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> Cover: The ability to accelerate uranium (and other heavy ions) to relativistic energies opens a new realm in nuclear physics. Here four U⁶⁰* ions enter a detector (from bottom of picture). Three of them fission (possibly the fourth, too), one with a spray of very light fragments. See p. 106. (Photo courtesy of Lawrence Berkeley Laboratory)



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Letters

Nightmare alternatives

Your hypothetical wetlands nightmare scenario (SN: 7/24/82, p. 56) has alternatives in spite of the unfortunate changes enacted in section 404.

Commercial and residential development constructed on sand-filled marsh will, for a 25year economic investment, destroy that marsh. If the development is genuinely in the public interest, increasing job opportunities etc., and the preservation of the marsh, our future, then both should be possible.

Technically, as are pole structure villages in southeast Asia built high above river flood planes, a shopping mall or condominium can be built above a marsh, much like seashore architecture.

Economically, a cooperative agreement between developer and government (the public interest) should be possible, subsidizing an environmentally sensitive solution in order to maintain the project's economic viability. It has all been done before in different situations

How do we care to proceed? The future survival of our ecosystems demands that we make a higher first cost investment in all of our development projects. That doesn't automatically mean a go-no-go struggle between profit seekers and environmentalists. The aims of both can and should be accepted as legitimate. We need new ways of doing business to make the systems work.

> R.J. Reynolds AIA Woodbury, N.J.

Animal experimentation

The statement "...the question of whether it is ethical to use animals in biomedical research boils down, essentially, to whether animals are morally equal to humans" (SN: 7/24/82, p. 59) is not only vague in the extreme but fallacious. I won't waste time delineating what morally equal could mean because no matter what it means it is senseless.

I am not an antivivisectionist. I have recently spent months exploring the subject for a special report on ABC's "Nightline" and visited laboratories and scientists all over the country, as I have been for years as an ABC special correspondent.

The pros and cons have nothing whatever to do with moral equality but moral responsibility, on our part, obviously. No one, scientist or not, has any right to inflict any more pain or fear than is absolutely essential. That goes for people as well as animals. No doctor has the right to be careless or callous when working on any patient whether that patient lives on Park Avenue, Rodeo Drive or in a slum. No researcher has a right to skip anesthesia or analgesics as long as they won't negate his or her findings. Whatever in the world has that to do with moral equality? That concept is one of those angels-on-pinheads that give philosophers games to play but have nothing to do with real morality.

Real morality dictates, demands, mandates minimum suffering of any kind. We don't try to conserve wildlife species, or plant species, or habitats, or scenic splendors because a waterfall, an orchid or a blackfooted ferret is our moral equal, again, whatever that means.

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