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Letters

Point to consider

Your article on the shape of raindrops ("Rain-
drop Oscillations," SN: 3/2/85, p. 136) intrigued
me. As a skydiver who has encountered rain-
drops in freefall, I always thought the stinging
sensation on my face was caused by hitting
them on their pointy ends.

Don Wright
Erwinna, Pa.

Breaking down bacterial DNA

"Do kinks and twists denote DNA damage?"
(SN: 3/16/85, p. 166) is of great interest. The
quinolone antibacterial agents, used often in
urinary tract infections, affect susceptible bacte-
ria by inhibiting DNA synthesis. This is ac-
complished by inhibiting the adenosine
triphosphate-dependent DNA supercoiling
reaction catalyzed by DNA gyrase, by inhibiting
the relaxation of supercoiled DNA and by pro-
moting double-stranded DNA breakage. Thus

This Week

- 244 Powerful Climb Toward Fusion Power
- 245 Examining the world of obsessive teens
- 245 Monkeys possible source of human AIDS
- 246 Bind-and-snip search for Z-DNA
- 246 Radiation therapy for arthritic joints
- 247 The trouble with technical data
- 247 Dirty tricks: Plant defense backfires

Research Notes

- 248 Behavior
- 248 Biomedicine
- 249 Chemistry
- 249 Earth Sciences

Articles

250 Source Terms: The New Reactor Safety Debate

Cover: Five years after a catastrophic accident crippled the Three Mile Island-2 reactor, its cooling towers, shown here, still stand idle. Among the more important lessons learned in that accident was how poorly reactor-accident analysts had predicted radioactive releases. Attempts to understand why the original estimates were so wrong have ushered in a major reevaluation of one of the more fundamental risk factors underpinning nuclear regulations. (Photo: GPU Nuclear Corp.)



Departments

- 243 Letters
- 255 Books

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are changes in DNA structure of therapeutic importance. New quinolones, such as ofloxacin, which work by the same mechanisms as older drugs but are 100-fold more active, look promising to medical clinicians.

Z.L.G. Stein
Robert L. Barkin
Assistant Directors of Pharmacy
Faculty, Dept. of Pharmacology
Rush-Presbyterian-St. Luke's Medical Center
Chicago, Ill.

Impromptu bounces

The article on the Soviet planetary plans was fascinating, but I must nitpick a small item it contained about the U.S. Surveyor program ("Ambitious Soviet planetary plans presented at U.S. meeting," SN: 3/23/85, p. 182).

Surveyor 3 did no deliberate hopping. Its venier descent engines failed to shut down as

scheduled immediately prior to lunar touchdown, with the result that it took a couple of long bounces down the inner slopes of the crater later visited by Apollo 12. It was Surveyor 6 that was relaunched for a 2.5-meter flight, after returning nearly 13,000 close-up pictures of the lunar surface. The spacecraft systems continued to function perfectly afterwards, and more than 17,000 post-hop pictures were returned.

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Please limit letters to 250 words.

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243