

## Relaxation in the Institute of Muscle Research Marine Biological Lab, Woods Hole, MA

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Our boss, the Nobel Prize winner Dr. Albert Szent Gyorgyi, believed in working hard and playing hard. He expected dedication and esprit de corps to come from the intermingling of work and special moments of relaxation. Our respect and dedication to him and his philosophy was never more evident than on April Fool's Day.

The Institute consisted of 12 to 13 scientists, each working on some aspect of muscle structure or function. Its location in Woods Hole, MA, at the tip of Cape Cod was ideal. Dr. Szent Gyorgyi had gazed out the window of my laboratory on my first day saying, "if I ever walk in and see you staring out the window at the sailboats and fishing vessels I will know you are just recharging your battery." His warm friendly approach, the seashore and the visiting scientists from all over the world made me feel that this was as close to heaven as I would ever get. During the 9 winter months we would have tea from 4:00 to 4:30 PM. It was a time when we could relax and toss out new ideas for our research. There was a saying that we couldn't afford to miss tea because one remark from Dr. Szent Gyorgyi about our research plans might point out a flaw and save us a year's work in the laboratory.

We called Dr. Szent Gyorgyi "Prof", partly as a sign of respect and, as he would point out with a grin, we couldn't pronounce his name properly anyway. He had two rules which helped to glue our small community together. If anyone made a small discovery they had to take everyone to Captain Kidd's for a beer. If a major discovery was made, that person had to throw a turkey dinner.

The distinction between a minor and major discovery was interesting. It really only depended on how long it had been between discoveries. There was also a third, but very important rule. The experiment producing

the discovery could not be repeated until after the celebration. This prevented the turkey from "flying out the window", thus preventing the loss of a party. If the confirming research failed to establish the discovery, no one cared or dared to care. After all, we had enjoyed the party, eaten a turkey, drunk this person's booze and now would never dream of saying the work was poor. Besides, we would be in that person's shoes when our turn to toss a turkey party came.

April Fool's Day at the Institute was almost a national holiday. One year Prof learned that his assistant, Jane, had her watch in for repair. He convinced the jeweler to hold off the return of the watch until April 1st. When Jane picked it up, it was in a box with a note indicating it had been taken apart and cleaned as requested. Since she had not asked for it to be reassembled, each part was carefully wrapped. He wished her luck as he was now going on vacation.

About a week before April Fool's Day that same year, I called a friend of mine in New York City, some 270 miles from Woods Hole. He agreed to play his part. Early on the morning of April 1st, the telegraph office called Prof and read him the this message: "Please disregard first message. Signed: A.F."

Prof., of course, said he had not received the first telegram. The telegraph office assured him this was common. Telegrams often passed each other and they would call him the moment the first one arrived. He agreed to that arrangement and hung up. About 1en o'clock he began to worry and called back. Again they assured him they were looking for the first telegram and would call him the minute it arrived. The operator gave assurances that they knew him personally and were on the alert for his telegram because a telegram to a Nobel Prize Winner must be an important one. This calmed Prof down and he went back to work.

Two more hours passed without a call from the telegraph office. Again he called and even raised his voice a bit exclaiming that the first telegram had not arrived and what was wrong with the telegraph company anyway. The telegraph operator assured him that they were doing all that they could and were even trying as a personal favor to him to locate the person who had sent the first one. Mollified by this sincerity, he again hung up.

One o'clock lunch time approached and he began to pace back and forth worrying about the telegram. At last he put his brilliant mind to work and started to analyze the situation. Pacing back and forth he began to work on the initials A. and F. "Who," he muttered "could A. F. stand for? A. F., A.F.," he kept muttering. All of a sudden his eyes widened, he straightened up and in a slow loud voice said, "A.F. April Fool!" G-- Damn It! Then he rapidly look around to see if anyone was laughing. Anything that might give away the perpetrator. No one even looked up. There were a few things we scientists could do rather well.

Weeks later his wife confided in us that this had become Prof's favorite story for visitors, but couldn't quite understand why no one showed any sympathy for the victim.

Indeed, the decade at the Institute in Woods Hole from 1952 to 1963 was the brightest time of my life. But then, how often can you combine the seaside location of the M.B.L. and a man like "Prof". ■

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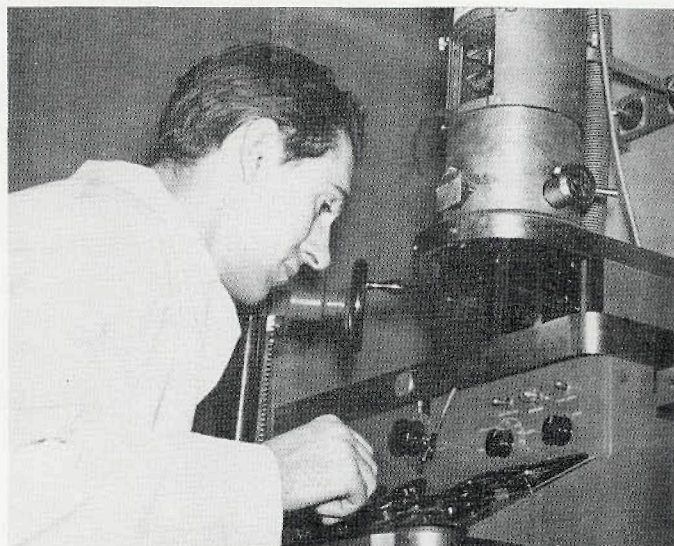
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Woods Hole. Author operating early RCA EMU-2 Electron Microscope



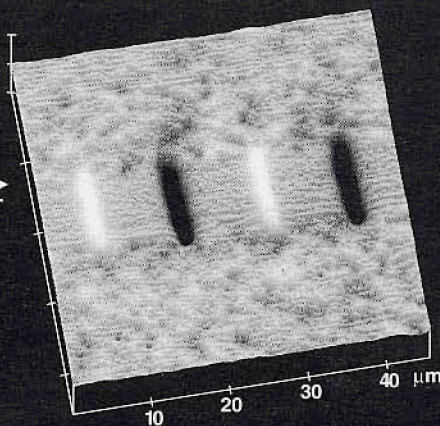
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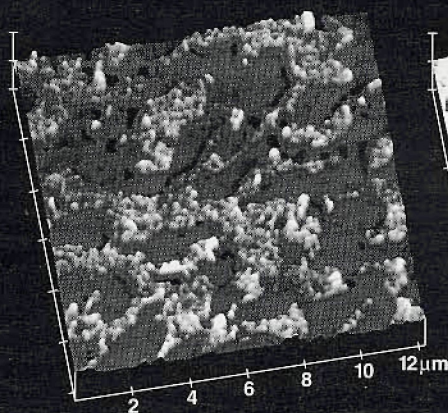
### Magnetic Force Gradients ▶

These hard disk bits were written with alternating polarity and a slight skew. The speckle above and below the recorded track is due to the disordered magnetic domains in the virgin media.



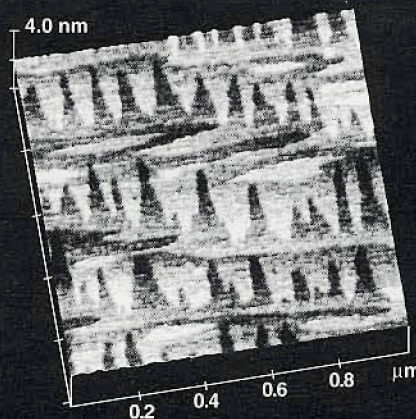
### Lateral Force (Friction) ▶

A mixture of EPDM and natural rubber scanned with a  $\text{Si}_3\text{N}_4$  tip shows regions of higher friction (lighter color) and lower friction (darker color). These regions probably correspond to the two different types of rubber.



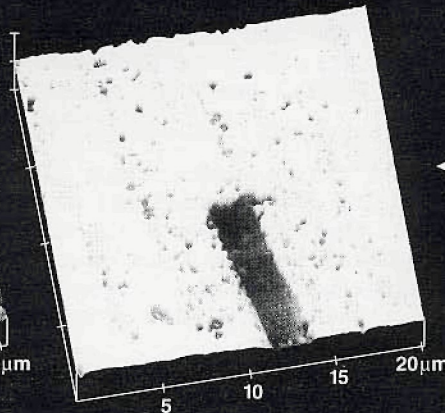
### ◀ TappingMode™ AFM Topography

These 1.6Å-high terraces of epitaxially-grown silicon were imaged using the NanoScope Large Sample Stage. Only the AFM probe touched the top surface of the intact 8in wafer.



### ◀ Electric Force Gradients

A voltage applied to a broken metallization line on a GaAs test structure is shown. The image clearly indicates that the line is open at the break. This capability is another example of Digital Instruments innovation.



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