trained many crystallographers who have gone to other laboratories and universities to become valued members of the profession. To his students, his colleagues and scientists throughout the world he was known and loved for his personal charm, his rich sense of humor and firm integrity. Some part of this is felt in rereading his "Experi-

Dr. Patterson's obituary was contributed by some of his friends and colleagues.

ences . . ." in Fifty Years of X-ray

Diffraction.

Isaak Ya. Pomeranchuk, Soviet High Energy Theorist

The Soviet physicist Isaak Ya. Pomeranchuk, professor at the Moscow Physics and Engineering-Physics Institute, died recently at the age of 53. He made substantial contributions to the theory of neutron scattering in crystals, the theory of heat conductivity of dielectrics and the interaction of cosmic ray electrons with the earth's magnetic field. For the last two decades, however, his primary concern was high energy physics. His name has been given to the Pomeranchuk theorem which states that particle and antiparticle scattering cross sections will become identical at high enough energies. The Regge trajectory which satisfying this theorem is also commonly referred to as the Pomeranchuk trajectory.

Pomeranchuk graduated from the Leningrad Polytechnic Institute in 1936 and worked in various departments of the USSR Academy of Sciences until 1946 when he joined the faculty of the Moscow Physics and Engineering-Physics Institute. In 1953 he became a corresponding member of the USSR Academy of Sciences, and two years later he became a full member. He was the recipient of a Stalin prize.

George Christos Dousmanis Solid State Physicist at RCA

George Christos Dousmanis died recently of a heart attack. He was 37 years old. A graduate of Columbia University where he obtained his BA in 1951, MA in 1953 and PhD in 1956, he had been a member of the technical staff of the solid-state research laboratories of the Radio Corporation of America since 1956. In 1962 he took a year's leave to be visiting professor at the Democritus Nuclear Research Center in his native Greece. His research interests in solid state physics were concerned with cyclotron resonance studies and more recently with injection lasers.

Dousmanis's life was a success story that started on a simple farm in the Peloponnesus of Greece. When he was ready for college, he left Greece for Columbia University carrying \$50 for his expenses. Arriving in New York with \$49.50 left, he soon realized that the remainder would not see him through a college career and immediately looked for a job. Limited by inadequate knowledge of English, he took one as a dishwasher at Tavern on the Green, a restaurant in New York's Central Park. While he progressed at Columbia through undergraduate and graduate studies leading to his PhD in physics, he progressed at the restaurant from dishwasher to busboy to waiter to head waiter.

He is survived by his widow, two sons and a daughter.

John H. Wadell III, Was Solar Physicist

On 14 Nov. John Henry Waddell III was killed in an automobile collision. Mechanical malfunction was believed to have caused the accident.

Waddell, a Kitt Peak Observatory astronomer, was born in Harrisburg, Pa., in 1928. He received his PhD from the University of Michigan in 1957 and then joined the staff of the Smithsonian Astrophysical Observatory. Before joining Kitt Peak in 1961, he was solar astronomer at Sacramento Peak Observatory.

A leading solar astronomer with special interests in observations of the photosphere and chromosphere, Waddell had recently delivered a paper at an international meeting in Moscow and had just completed a postdoctoral fellowship at the institute of advanced studies of the School of Theoretical Physics in Dublin. He was a member of the American Astronomical Society and a fellow of the Royal Astronomical Society.

Ge(Li) beans

SOMETHING TO CHEW ON.

Optimum vs. "ideal"

Sometimes a Ge(Li) detector should be planar, sometimes cylindrical, sometimes five-sided. Sometimes small active volume is better than large, sometimes large is mandatory.

For instance. One researcher was doing proton-gamma coincidence studies, using a 3 cm³ planar Princeton Gamma-Tech Ge(Li) detector. We're delighted to report that he achieved a time resolution of 3 nanoseconds (FWHM).

The same researcher then increased his counting rate by using a 26 cm³ five-sided Princeton Gamma-Tech detector. Time resolution wasn't quite as good as with the small planar detector, but we're still delighted with the performance: 6 nanoseconds (FWHM).

When you need more counting rate than a small planar detector can provide, you have to go to a larger one, possibly of another configuration. Point is, the experimental situation will determine what kind of detector will give optimum performance.

A few guidelines, among others:

- For easiest efficiency calculations, a planar detector is frequently the choice. We make them to 15 cm³.
- For ease in making solid angle corrections, a planar or cylindrical detector may be chosen. We make cylindrical detectors to 20 cm³.
- For maximum active volume, a five-sided detector must be chosen.
 We make them to 40 cm³.

Energy resolution of all our detectors is better than 3 keV (FWHM) at Co⁶⁰ (detector contribution).

There is no such thing as an "ideal" Ge(Li) detector. If there were, that's all we'd make. To help choose the optimum detector for your experimental situation, send for a copy of our GUIDE TO THE USE OF Ge(Li) DETECTORS. Or just telephone us.

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