

Cambodia. Rancor against radical students by establishment figures such as Vice President Agnew has also increased. And although President Nixon, the day after the Kent State incident, tried to inject a conciliatory note by saying he approves of nonviolent protest, the bloody confrontation is bound to increase student discontent.

"These shootings are exactly what the New Left wants," says Dr. Feuer. "The overwhelming majority of students didn't take part, but this is bound to swing a large number of students in behind the radicals." He suggests that student dissent now will move from a localized problem to a possibly widespread student strike that could close down many universities.

And in this sense, violence on the part of police or troops plays into the hands of the radicals. At Michigan State, says Dr. Loomis, there is a high degree of police professionalism that has enabled student demonstrations to be handled with a minimum of force and emotion. "Our police in the United States generally haven't learned to handle civil disorder with restraint and as highly trained and respectable officers," he says.

Dr. Feuer points out that a high degree of hostility toward students on the part of police and troops who often have working-class origins exacerbates this problem. But Dr. Loomis suggests that with highly professional training this kind of hostility could be overcome—as he says it has been in Europe where there is a longer history of dealing with student uprisings.

The future of student activism in the United States is difficult to predict. Dr. Loomis points out that the increasing polarization between those who want the police to be less restrained and the students, who are increasingly identified by their long hair and outrageous costumes, is bound to grow. This, he suggests, is a very different situation from earlier radical movements where revolutionaries aimed at identifying themselves with broad segments of the population, Lenin with the workers and Mao with the peasants, for example.

The student radicals, although they collect more campus followers each time there is a violently repressive act, are thus bound to become more separated from the general processes of American life, and their sense of hopeless frustration is bound to grow. This in turn will cause more violence and provocation. There is little doubt the Kent State killings, whatever caused them, will have such an effect.

"The thing may become self-terminating when we have to close down large numbers of universities," says Dr. Feuer. "When they are reopened, maybe we can restore sanity." □

## Ferment among the physicists



National Bureau of Standards

*Establishment and nonestablishment types share the floor at APS meeting.*

The American Physical Society was founded in 1899. For 71 years it has functioned as a learned society, holding meetings at which physicists could tell each other about their work and publishing journals in which they could write about it.

In the years before World War II, when physicists formed a small and mostly academic group, and during the war and the flush years since, no need for any wider sphere of activity on the part of the APS was felt. In recent decades the physics community has been led by an establishment of elder statesmen, the people who persuaded the Government to support science during the war and guided the postwar development.

But when the society came to meet in Washington, D.C., last week, it was becoming clear that the establishment's cow has dried up. The leaders, who are not threatened as their younger colleagues are, found their credentials being re-examined, mainly by the younger and the less renowned.

The younger physicists feel a need for a vigorous furtherance of the professional status of physicists and for the enunciation of political stands on behalf of the physics community. And two new organizations—the American Physicists Association and Scientists, Engineers and Students for Political Action—have arisen to fill those needs.

"The establishment in physics has run the show and led us to this situation," says Dr. Richard Smith of Boulder, Colo., one of the organizers of the APA. "They're too high up and don't know what's with the lower level," where reduced budgets, lower salaries and unemployment are major problems.

Dr. Arnold A. Strassenburg, director of the American Institute of Physics Division of Education and Manpower,

reports a 2.5 percent unemployment rate among the Ph.D. classes of 1967, 1968 and 1969.

This is smaller than the general national unemployment rate of 4.4 percent, but very high compared to the total population with advanced degrees.

The APA sees an even bleaker picture. "Strassenburg," says Dr. Smith, "is bound to his questionnaires. Many of the unemployed are too embarrassed to advertise it by filling out questionnaires." The AIP reports that of 2,700 physicists to whom the employment questionnaires were addressed, 1,625 replied.

The current rate at which physics Ph.D.'s are graduated is about 1,400 a year, says Dr. Smith. This rate is expected to drop as universities cut graduate admissions, but in the next five years Dr. Smith figures there will be only about 650 openings created by death or retirement.

The APA intends to lobby for better professional status and higher salaries for physicists. It wants to persuade the Government to adopt long-range planning and budgets for science so that people entering scientific fields will know long in advance what can be expected.

The association also feels that some means of retraining specialists as social needs change should be built into the system. "A milkman can be quickly trained to deliver letters," says Dr. Stephan Ormonde of Quantum Systems, Inc. in Albuquerque, N.M. "A doctor cannot be made into an effective chemist overnight."

The APA does not intend to compete with the APS as a learned society, and its organizers recognize that if the APS became an aggressive lobby, it could lose its tax-exempt status. That would

hurt the publishing operation, for instance, by several hundred thousand dollars.

The APA was founded a few months ago at the University of Maryland. It now claims 500 members in 30 states.

While APA concentrates on bread and butter concerns, general social, philosophical and political interests are covered by SESPA. This group was founded at the APS meeting in New York in January 1969 (SN: 2/22/69, p. 185) when it became clear that the establishment had successfully beaten back a move to change the APS constitution so the society could take political stands.

The presence of SESPA agitators is now an expected feature of APS meetings. At the Washington meeting technical sessions were invaded by pickets when members of military laboratories were scheduled to speak, and there was a march on the Pentagon though only a few dozen participated.

One of SESPA's aims is a kind of research worker's teetotalism. It sponsors a pledge not to participate in military research, and its ultimate hope is to persuade all the people covered by its title to subscribe. It was gaining adherents at the Washington meeting, but not at any landslide rate. □

#### DRUG RECALL

### Making identification easier

In the long-standing debate among politicians, drug manufacturers and physicians over generic versus brand-name drugs, the latter two groups have so far managed to defeat proposals that the Government finance the purchase of only low-cost generics under assistance programs. But the proponents of generic drugs may be making a small inroad as an offshoot of an effort to make the Food and Drug Administration's job easier.

Both Sen. Gaylord Nelson (D-Wis.) and Sen. Peter Dominick (R-Colo.) have proposed legislation to alter the current regulations for drug-labeling. Hearings before the Senate Health Subcommittee have been held, and a formal subcommittee version, combining features of each bill, is expected by the end of summer, drawing support—or at least the absence of active opposition—from all sides.

The immediate intent of the legislation is to deal with the problems the Food and Drug Administration has in recalling batches of drugs from the market when manufacturing imperfections are detected, or in removing a drug because it is judged to constitute a health hazard.

In 1969, the FDA had 700 drug-recall campaigns. Those drugs that are manufactured, packaged and distributed by

the same company are relatively easy to track down on pharmacists' shelves. But often at least one of those three steps in drug marketing is handled by a second company, which may be the only one identified on the drug label seen by pharmacists. This complicates the recall process considerably.

To eliminate confusion and delay, the subcommittee will propose that each tablet or capsule be marked with a code identifying manufacturer, drug and dosage. Neither the Pharmaceutical Manufacturer Association nor the American Medical Association has voiced opposition to the idea, though there is concern over the cost small drug houses will have to face in purchasing coding machines. A member of Nelson's staff predicts, on the basis of discussions with industry representatives, that this will not be an insuperable problem.

The Nixon Administration supports the idea. Testifying before the subcommittee, Dr. Roger O. Egeberg, Assistant Secretary for Health and Scientific Affairs in the Department of Health, Education and Welfare said, "This critical process (of drug recall) could be both speeded and made more thorough if it were possible for the FDA to know at once by means of a code the exact source of a drug found on inspection to be substandard, misbranded or adulterated."

If the legislation passes, an index to the code stamped on capsules and tablets will be distributed to hospitals, pharmacists and to poison-control centers that need to know the exact identity of drugs in cases of overdosing.

The second aspect of drug identification comes up against the question of generic versus brand. It involves information that will go directly on the prescription label. Nelson's bill would require pharmacists to place the generic name of each drug on the prescription label; it makes no reference to brand names. Dominick wants the product's brand name included unless the prescribing physician specifically indicates it should be left off. In all likelihood, the new legislation will require generic identification and make brand-name labeling optional. Again, PMA and AMA representatives testifying before the subcommittee voiced no strong objections to the plan.

It is unlikely that these changes in drug-labeling will have any immediate impact on the question of whether patients, and the Government buying drugs for indigents, should purchase low-cost generics instead of more costly brand-name drugs. However, their long-range impact could be significant as individuals become more aware of their ability to compare products and prices by careful reading of the labels. □

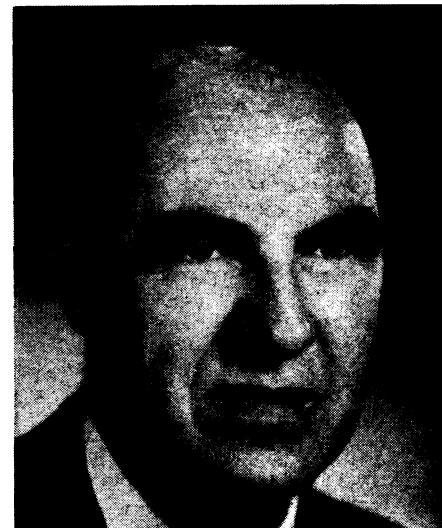
NAS

### Confronting change



NAS/Paul Conklin

*Handler: A need to restructure.*



Cornell

*Long: Create four sub-academies.*

The National Academy of Sciences is an honorary association of 870 of the nation's most eminent scientists. Despite its statutory function as adviser to the Government, its annual business meetings are not noted for rising above routine internal housekeeping. One of their more important functions is the election of new members.

During the last four years, it is true, there has been a painful need to cope sensitively with the resolutions of Dr. William Shockley on race and intelligence, but that controversy has hardly penetrated to the heart of what the Academy is and what it does.

This year, though, members found themselves debating something more basic to the nature of the institution: a proposal for the most fundamental reorganization of the Academy since