

Another feature of the NRC's thorough examination of the doctoral population was that some young Ph.D.'s are already responding to the demand for jobs resulting from the nation's energy shortage. NRC's study of switching among fields showed that young earth scientists are doing more field switching than anybody else. Solomon speculates that this could be due to the increased demand for their know-how in all sorts of energy-related jobs. But the report's interpretation was more cautious: "An unusually large proportion of them [earth science doctorates] found employment in physics, engineering, and biosciences, which perhaps reflected the availability of new positions in these fields."

This finding for young earth scientists echoes a study reported by American

Geological Institute (AGI) manpower expert Bonnie Henderson in the January issue of *Geotimes*. Henderson quoted a spokesman for a giant petroleum company as saying, "We are sitting on the edge of a great boom market for earth scientists." Henderson said that new, top-level graduates in the geosciences are now receiving offers from eight to ten different companies or institutes.

#### Officials Gleeful

The findings of surveys by NRC, AGI, ACS, and other groups can be said to be luring some science spokesmen into a "Happy Days Are Here Again" syndrome. Examples of this optimism abound, but one that is noteworthy came from an official of the National Academy of Sciences who

was familiar with the NRC results. "These numbers are as good as anyone is ever going to get," he said. "We have a shortage, the engineer is in short supply [and demand is going up]. It's like the golden years again. . . ."

However, there are other features of the employment market that put the 1.2 percent unemployment figure—and the bounding optimism of some officials—into perspective. One is that, while the demand for skilled scientists and engineers in many fields has increased, graduate enrollments, on the whole, have been declining. Science manpower experts such as Betty Vetter of the Scientific Manpower Commission in Washington, D.C., has been warning that in a few years the manpower market will be lopsided in the direction of severe shortages. If

## Briefing

### NAS Membership Refused

Richard Levins, a population geneticist at the University of Chicago, has declined membership in the National Academy of Sciences (NAS), to which he was elected this April. In a letter to the NAS early this month Levins cites "the continuing participation of the Academy in military matters" as a principal reason for his decision.

Resignations from the academy are rare, but Levins is the fourth scientist in the last 3 years to have broken with the academy on the issue of military research. Two resigned (Richard C. Lewontin of Chicago and Bruce Wallace of Cornell) and another, George Field of Harvard, refused membership. Field's refusal was made in 1972 but has only now become known. It was made for "personal reasons which included the academy's military involvement," Field says, but he prefers not to be more specific.

The only specific military issue raised by Levins is the academy's recent report on the effects of herbicides in Vietnam, regarded by him as a compromise that undermines the academy's credibility. Levins refers in his letter to "the efforts of the Academy's president [Philip Handler] to weaken any criticism of the actions of the military, as he did in his covering letter [to the herbicide report] where among other things he dismisses the evidence of

damage to human health and of death caused by herbicides."

Lewontin, who is also a population geneticist, resigned over a specific issue, the academy's practice of putting out classified reports in the name of all its members, most of whom are not entitled to read classified materials. Steps taken by the academy to meet this objection were sufficient to make at least one member (Thomas Eisner of Cornell) withdraw his resignation. Levins, however, believes the academy's involvement with military research is inevitable, given its charter. "I cannot hope to remedy this situation," he writes, "by planning with other colleagues to replace Mr. Handler with a more liberal president or by maneuvering to restore the NAS to its true mission: it is performing its true mission, and I find that mission repugnant."

Levins also criticizes the NAS from a sociological standpoint. He describes the atmosphere of the academy as "stodgy, traditionalist, conservative. . . . There is something in the nature of the Academy as an elite honorary body linked to government which turns the creativity of its members into conformity or impotence and makes the NAS behave below the level of its individual members." He portrays the NAS as a victim of the "elitist myth that history is made by the important people who are in the know, which happens to include us."

Before coming to Chicago, Levins was in the biology department at the University of Puerto Rico. The would-be NAS member was denied tenure there on the grounds of incompetence; the true reason, he believes, was a visit to Cuba in 1965 and his political activities in Puerto Rico. A Marxist and active member of Science for the People, Levins has also traveled to North Vietnam. Asked about his criticism of the academy as an elitist institution, as are many scientific structures almost by definition, Levins says his objection is not so much to the elitism as such, but that "a small difference in scientific ability results in a big difference to the person's access to resources." His letter to the academy warns of the "narrow pragmatism [that] is dominating the horizons of our science." As an example he cites the fact that the Department of Agriculture conducts many studies of the individual pests of a crop but few which look at all the insects that inhabit a cornfield, say. "The general view is brushed aside in favor of mission-oriented research," he says.

Levins' refusal of membership poses no political threat to the academy since, short of dissolving itself, there is nothing it could do to meet his objections. Nonetheless, his refusal of one of the higher honors a scientist can receive is an act of conscience which, even if politically empty, is not necessarily worthless.—N.W.