while students on many campuses have gained new rights by nondisruptive means, a kind of Gresham's Law of publicity seems to operate, with the news of disorder at some campuses driving from circulation the news of peaceful accommodation at others.

In Schwartz's view, the student movement for McCarthy gave student liberals, who still believe in the political process, a temporary advantage over student radicals, who do not. Accordingly, Schwartz thinks that any significant effort to encourage student participation in politics—whether it be lowering the voting age, enlisting students in local party organizations, or mounting student lobbying efforts—might absorb some student energies that otherwise would be released in disruptive behavior. However, the assassination of Robert Kennedy, the most politically potent figure opposing the war, can only have deepened the alienation of many students from the political process.

In sum, the conditions for avoiding more campus disturbances seem to be not yet at hand. The war continues, the racial crisis remains acute, and the restructuring of institutional government still has far to go. Vice President Humphrey, the likely Democratic nominee for President, is viewed by most students, Schwartz says, as an apologist for the war. Moreover, this year's graduating seniors are now being reclassified 1-A by their draft boards, and, by fall, many of them will either have been arrested as draft-resisters or inducted against their will. Thus, Schwartz predicts that the start of classes again next September will signal the opening of a new round of campus turmoil.—Luther J. Carter

NAS Presidency: Seitz's Resignation Stirs Speculation on Successor

Behind the decorous facade of the National Academy of Sciences (NAS), there is now a fair amount of motion related to the forthcoming vote for a successor to Academy president Frederick Seitz, who departs next year to become head of Rockefeller University (Science, 12 April).

Though nominations are yet to be made and balloting will not take place until near the end of the year, letters of endorsement for various candidates are beginning to circulate. More significant, the imminence of a change in leadership has raised interest in a reassessment of the role the Academy should seek in national affairs. The Academy is, of course, a conservative outfit where nothing happens fast, but with the scientific community currently feeling unloved and financially undernourished, there is widespread feeling that the self-assumed Olympus of American science might do more to ease some of the problems in the sciencegovernment relationship. Whether the Academy can do anything significant in this regard, even if it wanted to, is a separate matter, but there are those who think it should function as science's embassy in Washington, and they feel it has been laggard in playing this role.

Most prominently mentioned as possible successors to Seitz are Harrison Brown, who holds professorships in geochemistry and science and government

at Caltech, and who has been Foreign Secretary of the Academy for 7 years; Philip Handler, the Duke University biochemist who is chairman of the National Science Board, a one-time member of the President's Science Advisory Committee, and current chairman of the NAS Committee on Research in the Life Sciences; and, finally, among those most mentioned, Glenn T. Seaborg, the Nobel laureate chemist who has been chairman of the Atomic Energy Commission since 1961.

Also mentioned, though considered to be in the dark-horse category, are Marvin L. Goldberger, of Princeton; Roger Revelle and Harvey Brooks, of Harvard; Franklin A. Long, of Cornell; Kenneth S. Pitzer, of Rice; and Philip H. Abelson, of Carnegie Institution of Washington. Donald F. Hornig, the White House science adviser, is also mentioned, but is said not to be interested in the job.

Whether any of those mentioned as candidates is, in fact, interested is difficult to ascertain, for the governing protocol demands an appearance of aloofness from ambition. And in some instances, it is said, personal reasons or professional commitments stand as barriers to accepting the post. But there is no doubt that the Academy presidency, as it has evolved in recent years, is an extremely attractive position in terms of prestige, potential for influence, and re-

muneration. (In Seitz's case this has been \$45,000 a year, plus a residence that the Academy purchased and refurbished at a total cost of approximately \$250,000). Furthermore, the vocational alternative for those considered eligible for the presidency would most likely be a university presidency, which, as things go nowadays, stands a good chance of turning out to be a professional suicide mission. On the other hand, virtually unique among American institutions, NAS is yet to see its first picket.

Like the College of Cardinals, convened to select a Pope, NAS feels that its electoral proceedings are its own affair until the outcome is ready to be announced to the world. But since NAS is a quasi-governmental body, wields a good deal of influence on public affairs, and subsists on some \$20 million of federal money a year, its preference for privacy need not be taken too seriously.

To pick a candidate, the 17-member Council of the Academy has appointed a nominating committee. This is chaired by Harry Eagle, of Yeshiva University. Among the members are Frank Westheimer; Preston E. Cloud, Jr.; Frank Brink, Jr.; Chen Ning Yang; Charles Yanofsky; and Abraham A. Albert. There are several others whose names were not obtainable at this writing.

At a preliminary meeting, held in May, the committee decided that it would not limit itself to selecting a candidate but would—as a person close to the committee put it—"re-think the mission and objectives of the Academy and look for someone who would take the initiative in that direction."

Just what possibilities interest the committee is not certain, but, by and large, among those Academy members who care about their organization—a

group variously estimated at half to two-thirds of the approximately 800 members-there are two schools of thought. The first holds that the Academy should be closely linked to government and that, as a congressionally chartered scientific adviser to government, it should accept any assignment that comes its way. Under Seitz and his predecessor, Detlev W. Bronk, that is pretty much the way it has operated, with the result that NAS, and its operating arm, the National Research Council, now encompass about 400 committees and 750 full-time employees. In addition, Seitz and Bronk were both deep in the federal advisory apparatus, both holding posts on the President's Science Advisory Committee and on various other high-level bodies of the executive branch.

The alternative view of the Academy's role in Washington is often associated with NAS Vice President George B. Kistiakowsky (who, at age 68, is too close to the mandatory retirement age of 70 to be considered for the presidency, even if he wanted it). This view is that the Academy is both too close to government and too concerned with trivial odd jobs that might be handled

elsewhere to focus it attention on what should be its central role—the development and fruitful employment of the nation's scientific resources. Further, members of this camp hold, public confidence in the Academy's objectivity is eroded when the Academy is financially intimate with politically embattled federal agencies that seek its advice on controversial matters. In their view, the Academy should scale down its activities, call its shots, and develop independent financial resources.

It is difficult to perceive the extent of the politicking that is going on in behalf of various candidates, but it is reported, for example, that several Stanford scientists have been circulating letters in support of Harrison Brown, who would seem to be an extremely promising candidate, since, of all those mentioned, he has been most deeply and lengthily involved in NAS affairs and is well known to, and generally highly regarded by, the membership. Handler, who in the last few years has rapidly moved up in the ranks of science-policy statesmen, also appears to have the potential for attracting a good deal of support. Both are situated in the academic world, which is deemed an advantage, since academicians overwhelmingly predominate in NAS membership.

One seemingly far-out notion that has been conveyed to the nominating committee by a group of NAS members is the view that thought should be given to a thorough reconstitution of the Academy—even to the point of possibly having a nonmember serve as president. This is, of course, a pipe dream, but it gives some idea of the feeling some members have of a need for radical alterations.

The timetable for the election is as follows: the nominating committee will report to the Council by 15 October, voting (by mail) is to be completed by 15 December, and the new president will take office 1 July 1969. The bylaws specify that the nominating committee is not necessarily the sole source of candidates. Any 50 members may also nominate a candidate. But at this point it is too early to tell whether this procedure will be employed. And since the Academy, like any other organization, values harmony, there is hope among the leadership that the individual selected by the nominating committee will be the sole candidate.

—D. S. GREENBERG

Max Planck Society: Filling a Gap in German Research

Munich. The Max Planck Society (MPG)* for the Advancement of Science is the successor to the Kaiser Wilhelm Society and continues to serve one of the latter's original purposes—that of compensating for the shortcomings in research of a university system whose professors still operate in a sort of pre-Bismarckian confederation.

More than 50 research institutes throughout West Germany are financed through the MPG; most of them carry out fundamental research in the natural sciences. The institutes, from the beginning, have offered top researchers an alternative to the university professorship with its very heavy burden of

teaching and administration. The society also cultivates new and developing areas of research which might be excluded in the rigid university system.

During the Nazi era the work of the institutes was adversely affected by the flight of academics from the country and, of course, by the persecution of the Jews. The fact that most institutes were concerned with fundamental research seems to have protected them from direct interference from the regime. Nazi influence was, however, brought strongly to bear in fields such as psychiatry and aerodynamics.

A number of the institutes were in the Berlin area, and the war brought destruction of facilities and a scattering of staff. After the war the view ultimately prevailed among the Western allies that it would be advantageous to recognize the Kaiser Wilhelm Society and, incidentally, to attract society staff then in East Germany. In 1948, with a particular assist from the British in Göttingen, the society was reformed and renamed the Max Planck Society.

From the beginning, the society attracted scientists of the first rank. Between World Wars I and II the physics institute in Berlin, for example, had Einstein, von Laue, and Heisenberg as directors. A scientist was not forced to deal with a whole field, as he was in the university, and arrangements for obtaining equipment and personnel were usually better.

The original pattern was of one-man institutes, with a director and assistants who literally assisted him with his research. For some time the trend has been toward larger institutes with an intermediate group of academic members who have considerable scope in initiating research and who sometimes head departments within the institute. The latest development is the movement toward "centers" for research in a par-

^{*}Max-Planck-Gesellschaft zur Förderung der Wissenschaften