

Boston University. In the New York area, Brooklyn Polytech, Columbia, Fordham, New York University, Rockefeller University and Rutgers all were the sites of activities. In the midwest ad hoc committees at Dayton, Northwestern, Minnesota, Washington University and Wisconsin participated. Further west Cal Tech, Colorado, Stanford and Berkeley took part. Other schools in other areas participated.

Opposition. At least one counter-demonstration took place on the same day. Jack Uretsky, a physicist at Argonne National Laboratory, and the newly formed Federation of Responsible Scientists organized a 16-hour work-in.

The research stoppage ran into less dramatic opposition on other campuses as well. At MIT, where it all started, Jerrold R. Zacharias and 17 other faculty members had issued a statement explaining that while they supported critical examination of the political, military and social consequences of science, they objected to a research stoppage on three grounds:

- It can be interpreted as an "implied prejudice of the questions at issue."
- It encourages the inference that the research the organizers wanted to stop is itself antisocial, whereas very

little of it at MIT could possibly be so labeled.

• It misrepresents the character of research, which cannot be turned on and off again like a faucet . . . "its timescale is years and decades, not days."

A key theme of speakers at MIT was reconversion of science, along with a substantial part of the economy, to nonmilitary goals. Rep. George E. Brown Jr of California, who earned a BS in industrial physics at UCLA and is now a member of the House Committee on Science and Astronautics, warned that the battle of reconversion is being fought right now.

"You're going to have to learn to use power, in the political sense," Brown argued. "The power structure responds only to power, not to sweet reason." Scientists can win their reconversion goals by winning the battle for power. Scientists may well win the battle to scrap the ABM, he said, but unless they also win power, the Defense Department will just substitute some other program.

Who gets it? Many believe the time is right for reconversion. An end to fighting in Vietnam will produce in the next several years up to \$30 billion a year in a "fiscal dividend," federal revenue above that required for present programs. The fight concerns whether that money will go for new military programs or

nonmilitary spending. No one suggests shutting down defense industries: They employ one of every ten workers in the US. The trick is to convert them to other work.

This reconversion is the goal of the 4 March leaders. Their first effort was spectacular. Last November three physics graduate students at MIT (Alan Chodos, Joel Feigenbaum and Ira Rubenzahl) discussed over dinner what they could do; the Science Action Coordinating Committee was born and the nation-wide research stoppage resulted. The three admit that for them the research stoppage has lasted three months.

Sympathetic faculty members quickly formed the Union of Concerned Scientists and joined the 4 March movement. Both are now reorganized for further steps. SACC students are asking specific reforms at MIT. UCS plans a "concerted and continuing effort to influence public policy in areas where . . . scientific knowledge and skill can play a significant role. The issues that are of primary concern to us are 'survival problems'—where misapplication of technology literally threatens our continued existence."

SACC planned to reorganize on 17 March. UCS met to discuss goals on 8 March, planned an organizational meeting for the Boston area about 1 April, and considered a national conference in September.

Placement Figures Show Tight Physics Job Market

Placement service figures are in from the New York AAPT-APS meeting. They confirm the current conventional wisdom: The job market for physicists is tight and getting tighter.

The number of physicists using the

service during the meeting jumped 300 (30%) from a year ago; some—not all—of this rise is because more physicists are aware of and using the service. The numbers of employers present, specific jobs listed and inter-

views scheduled all fell substantially from the previous year.

Lewis Slack, associate director of the American Institute of Physics who oversees the education and manpower division, said that very few (less than 5%) of the physicists using the service were unemployed. But nearly 1300, some of them from schools which rarely before had appeared in the placement register, were looking.

The proportion of new PhD's using the register has jumped 50% in the last two years.

Among the new PhD's using the register in 1969, the proportions of those with given specialties seeking jobs corresponded almost exactly with the proportions of these specialties among all the new PhD's. The only exception is a slight variation among particle physicists. They represented a higher proportion of those using the register than their

Placement register trends, 1960-69

Year	New PhD's	Registrants		Employers	
		January	April	January	April
1960	533	333	179	211	96
1961	615	421	220	232	114
1962	699	356	214	231	117
1963	858	449	318	257	114
1964	792	567	413	210	86
1965	983	655	460	238	91
1966	948	677	415	257	107
1967	1233	895	545	272	69
1968	1200*	984	786	192	69
1969	1200**	1285	—	167	—

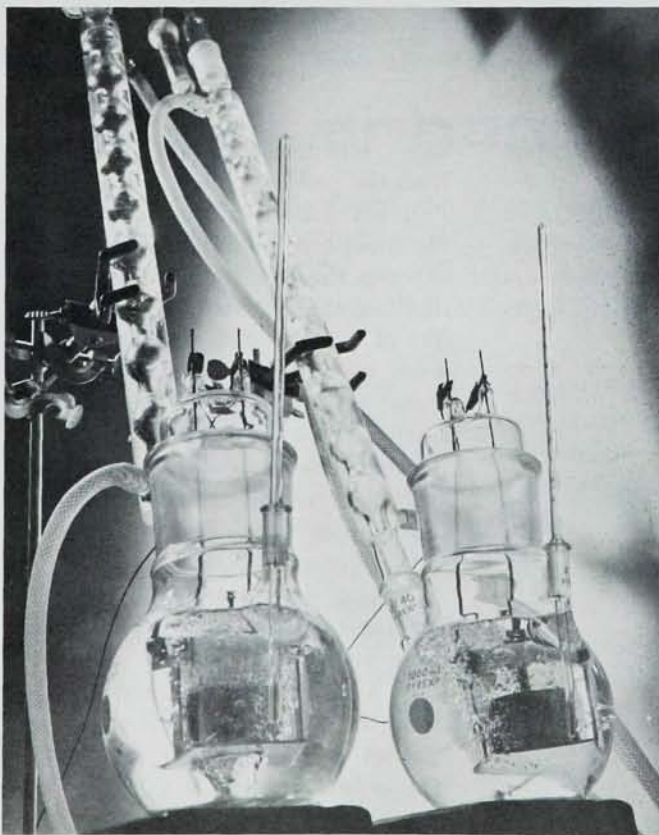
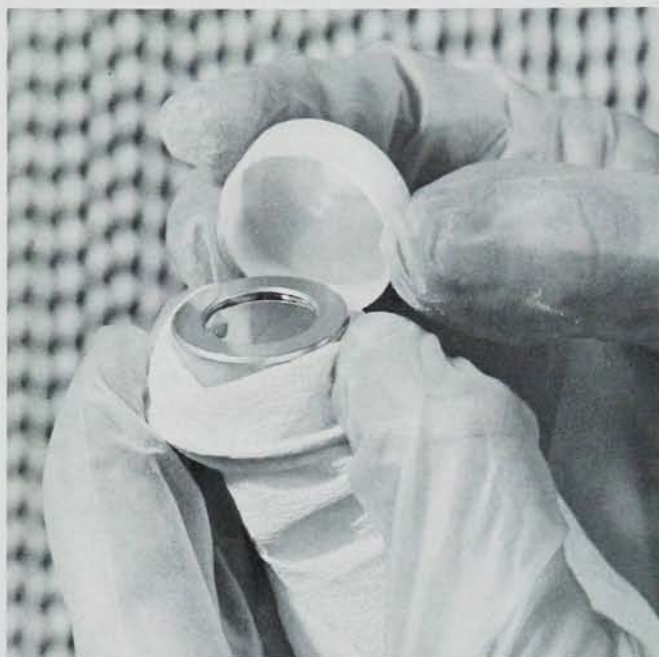
*Estimate based on incomplete figures. **Estimate based on projections.



Solid State Nuclear Particle Detectors

VISIT OUR BOOTHS 62 and 63 — WASHINGTON SPRING PHYSICS SHOW

Announcement



Manager of the Semiconductor Group of SECO's ACQUIDATA Division (a group assembled for research and development as well as production) is Max C. Kennison, formerly with RCA, MicroState Electronics Corporation, ORTEC, Harshaw Chemical Company, and consultant to Tennelec Instrument Company. Kennison's bailiwick is home for the nuclear particle detectors, most recent additions to the SECO product line-up. Working with Kennison is Joseph Frank Thiel, staff engineer, who has been senior scientist for Geoscience Instruments Corporation, senior engineer on a NASA contract, physicist for Harshaw Chemical Company, and test engineer for Reuter-Stokes Electronic Components, Inc. Dr. Werner A. Schuler, special consultant to the Semiconductor Group and manager of ACQUIDATA's Applications Group (and holder of a Ph.D. in Nuclear Physics and Mathematics from The University of Vienna, Austria), has worked as an electronics engineer with Wandel & Goltermann, in West Germany, as research associate and head of the Electronics Department at the Institut für Radiumforschung at The University of Vienna; as senior semiconductor R and D physicist with ORTEC at Oak Ridge, Tennessee; with Texas Nuclear Corporation, in Austin; and most recently was an independent consultant to Mechtronics Nuclear Corporation, of Melrose Park, Illinois, operating from his own laboratory in this area.

PRODUCTS

Solid State Detectors

- GeLi Planers
- GeLi Coaxials
- SiLi X-Ray Systems
- SiLi Particle Detectors
- Silicon Surface Barriers
- Silicon Diffused Detectors
- Silicon Diffused Photo-Detectors



total numbers would warrant. No one knows yet whether the difference is significant: Last year the proportion was lower. This field will be closely watched at this month's Washington meeting.

The proportion of foreign nationals using the service has risen substantially. Of the 895 registrants in 1967, 19% were not US citizens. Of the 1285 registrants in 1969, 26% were not US citizens.

On the employer side, the numbers were down. The total number of employers present dropped from 192 last year to 167 this year. The breakdown by type of employer was aca-

demic, 127, down 21; industrial, 23, down 9 (but down 47 from two years ago); government, 5, up 1; and nonprofit, 12, up 4.

Some employers list a specific number of jobs open; the number of such employers fell by 20 to 234 this year. An additional 33 employers posted openings without listing a specific number.

Placement-service activity at this month's meeting will supply new data. The numbers are always smaller than those for the annual meeting; last year 786 physicists and 69 employers registered. If the trends revealed in New York are valid, more than 1000 can be expected to register in Washington.

Dissidents Force a Vote On 1970 Chicago Meeting

Now that every member of both the American Physical Society and the American Association of Physics Teachers has had his say on whether the 1970 joint meeting should be held in Chicago, the matter may finally be closed.

Bringing the question to a vote was a triumph of perseverance if nothing else for those who wanted to move the meeting. The drive developed swiftly after the Democratic convention last August (PHYSICS TODAY, November, page 9); by February, 706 APS members (about 2.5%) had signed letters or petitions asking that the meeting be moved.

The APS executive committee and later its council issued a series of statements explaining their decision to stay in Chicago. They cited the difficulty of moving such a large meeting at so late a date, the prospect of paying heavy penalties for breaking the hotel contract and the possibility of being blacklisted and the argument that moving would be a political act, something the Schwartz amendment vote had shown the members did not want.

Activists packed the annual business meeting, repeatedly interrupting John Bardeen as he conducted the routine portion of the meeting. Incoming president Luis W. Alvarez said he had proposed last fall that a vote of the membership be taken, but that the council had rejected the idea by a "narrow margin." He offered to propose it again at the council meeting the following morning.

By previous agreement, Jay Orear spoke from the chair against keeping

the meeting in Chicago. In addition to his arguments, he raised the threat of a boycott. He said the Particles and Fields Division would completely pull out of the Chicago meeting. He warned that many Cornell faculty members would not attend.

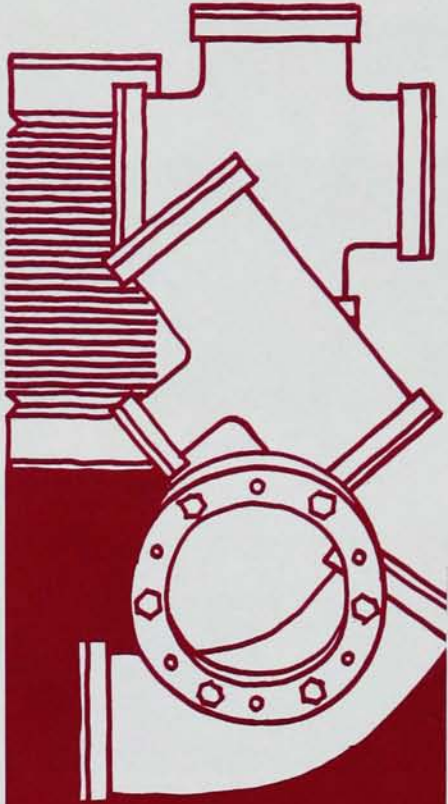
The chairman of the particles and fields division during its annual meeting, Wolfgang Panofsky of SLAC, contradicted Orear. He told PHYSICS TODAY that the division had decided to make the Washington meeting its own annual meeting for reasons that had nothing to do with a Chicago protest. But, he added, the division is continuing to organize sessions for the Chicago meeting.

The threat of a Cornell boycott appears less ambiguous. 45 faculty members (of 61) signed a statement saying they would not attend the meeting if it is held in Chicago.

Marc Ross of the University of Michigan argued that while he was sure Mayor Richard J. Daley was not trembling at the thought of losing the physics meeting, "it is important to us to take some symbolic step to show we are capable of conducting our own affairs in good conscience."

Jack L. Uretsky of Argonne National Laboratory said that while he could feel only pity for anyone who could not distinguish the Chicago of the 1960's from the Berlin of the 1930's, he felt that the fact that a large group wanted action was enough for the council to reconsider and put the matter to a vote.

William W. Havens Jr, APS executive secretary, got up in the middle of the debate with some background on the council decision. He



Avoid The Vicious Vacuum.

The vicious vacuum is the one that costs twice as much as it should (that's right - twice as much), because it has heavy-jointed plumbing you'll never need. Our stainless steel plumbing and valves with Dependex® couplings and O-rings or metal seals are ideal for all applications except when high temperature bake-outs are a necessity.

Ask yourself whether you really need bake-outs. If not, take advantage of plumbing that is lighter, stainless, sexless, easy to change, and less expensive by far. Fast delivery of 2-inch and 4-inch plumbing because it's always in stock.

Start by sending \$24.95 for an evaluation kit, which contains an O-ring, a metal seal, and 5 basic vacuum components.

HY HIGH VOLTAGE ENGINEERING

EQUIPMENT DIVISION, Burlington, Mass. 01803 □ Suppliers of accelerator accessories: scattering chambers, beam profile monitors, electrostatic steerers, NMR flux-meters, beam line plumbing, radiation-resistant metal seals, Mossbauer cryostats and furnaces, targets, complete beam-handling systems, standard and custom electromagnets, sources.