

Salaries of Scientists up Modestly

Salary gains have been modest over the past 2 years for scientists and engineers—up between 3 and 4 percent per year—slightly ahead of inflation. However, the job market, particularly for new graduates in technical fields was extremely tight with offers down about 30 percent over the past year, according to a new report by the Commission on Professionals in Science and Technology. *Salaries of Scientists, Engineers, and Technicians* outlines changes primarily from 1985–1987, to provide a broad range of information on starting and advanced salaries. Some of the findings include:

1) Demand down precipitously—slight salary increases for new graduates.

■ The volume of offers to new graduates at the bachelor's level dropped about 25 percent from 1986 to 1987, with graduates in technical disciplines facing an extremely tight job market. Salary offers rose only slightly, if at all, to engineering graduates. Petroleum engineering, the discipline that has consistently garnered the highest salary average, showed a 6.6 percent drop in average salary to \$30,816, and a resounding 82 percent decrease in the number of job offers.

■ Biological science graduates, who traditionally received the lowest dollar offers in the science category, recorded salary increases of 14 percent to \$21,816, and were replaced at the

bottom of the salary schedule by graduates in agriculture.

■ Doctoral scientists and engineers working in industry received the highest median salary—\$52,000—while those working in elementary/secondary schools earned the least. Teaching, the dominant work activity of doctoral scientists and engineers, continues to provide the lowest annual salary while those doctoral scientists and engineers working in management or administration of R&D earn the most.

2) Faculty salaries outpacing inflation.

■ Faculty salaries are up nearly 6 percent in 1986–1987, to an average \$35,470. After accounting for inflation, the increase is about 4 percent—the biggest rise in 15 years. However, faculty salaries vary considerably by discipline. Newly hired assistant professors in fields where academe is competing for talent with private industry, such as accounting, engineering, and computer science, earn substantially more than the average for all newly hired assistant professors.

■ Engineering professors earn the highest salaries among the science and engineering disciplines, both at public and private institutions. Overall, faculty members earn less, on the average, working in public institutions than in independent private ones.

3) Salary differences between sexes still evident.

■ Although beginning salary offers to women in engineering and accounting were comparable to those made to men, offers in other fields were lower for women. One of the widest salary gaps between men and women was in the biological sciences, where women received average starting salaries 11.2 percent lower than men.

■ Men are paid more than women faculty regardless of discipline, type of institution, years of experience, or rank. However, the salary gap is somewhat less than in earlier years.

The report uses 247 tables of salary data from more than 50 salary surveys to provide information by field, experience level, degree level, and type of employer. Differentials by sex, type of job, and geographic area are indicated. *Salaries of Scientists, Engineers, and Technicians—Summary of Salary Surveys* by Eleanor L. Babco, Commission on Professionals in Science and Technology (Washington, D.C., 224 pp., 13th edition, October 1987) is available for \$45 from the Commission on Professionals in Science and Technology, 1500 Massachusetts Avenue, NW, Suite 831, Washington, D.C. 20005.

ELEANOR L. BABCO
Commission on Professionals in Science and Technology

Grants for Foreign Graduate Students to Attend AAAS Annual Meeting

The Office of International Science invites applications from self-sponsored foreign graduate students for assistance in attending the 11 to 15 February 1988 Annual Meeting in Boston. Awards of up to \$300 each will be made from a grant to AAAS under the Short-Term Enrichment Program (STEP) of the U.S. Information Agency administered by the Institute of International Education.

Applicants should submit (i) curriculum vitae including tele-

phone number; (ii) statement affirming self-sponsorship, that is applicant cannot receive any U.S. government funds or full assistance from any organization, corporation, foundation, or foreign government while studying in the United States; (iii) estimated budget, including travel to and from the Meeting and living expenses; and (iv) a 200- to 300-word statement describing the subject area of current study and/or research, career plans, and benefit in attending the Annual Meeting.

Applications should be sent to Carolina Carter, Office of International Science, at the AAAS address. Deadline for receipt of applications is 4 January 1988.

Communications Workshops

Three workshops designed to sharpen the communication skills of scientists and engineers will be held as part of the AAAS Annual Meeting in Boston in February. The three are "Testifying with Impact," "So You Want to Be on TV," and "Writing Strategies." Each of them is open to meeting registrants at no additional charge.

■ "Testifying with Impact" will use role-playing and videotaping to: show participants how to communicate ideas, not just words; learn the basics of good oral communication; convert testimony into their own particular style so they can "talk the text;" and sell their point of view. Conducted by Arch Lustberg of Arch Lustberg Communications, the half-day session will be especially useful to those who are called upon to testify before the Congress or before other local, state, and federal bodies. Lustberg calls testifying "public speaking with a special twist." Persons planning to attend the workshop who would like to take part in the role-playing are asked to submit by 31 December 1987 a copy of an actual testimony that he/she has given or plans to give. The testimony should be sent to the at-

tention of Carol L. Rogers, Office of Communications, at the AAAS address. The workshop is scheduled for Sunday morning, 14 February, beginning at 8:30 a.m.

■ "So You Want to Be on TV? Scientists Face the Cameras" will present the ABC's of how to appear on television, and will give the audience an opportunity to participate in an actual videotaping of an "interview" with a scientist attending the Annual Meeting. Producers will discuss what they look for in a television guest, and will provide examples of good and bad science news reports. The workshop, led by independent radio/television producer Ira Flatow, is scheduled for Sunday afternoon, 14 February, beginning at 2:30 p.m.

■ "Writing Strategies for Scientists and Engineers" will get under way with a discussion of writing strategies that enhance reader understanding of technical information. Participants will discuss ways of packaging information with nonscientists in mind and will get some actual practice at writing a newspaper science story. They will receive feedback on their efforts in small group settings, each group under the tutelage of an experienced mass media science writer. The workshop, led by Sharon

Dunwoody of the University of Wisconsin, Madison, is scheduled for Monday morning, 15 February, beginning at 8:30 a.m.

1987 Board Election Results

The successful candidates in the 1987 Board of Directors election are listed below. Their terms of office begin on 16 February 1988, immediately following the Association's Annual Meeting in Boston, 11 to 15 February.

President-Elect: Richard C. Atkinson, chancellor, University of California, San Diego (13,241 votes), over Herman Feshbach, Institute Professor, Massachusetts Institute of Technology (10,498 votes).

Elected to the Board of Directors: Harold Amos, chairperson, Division of Medical Sciences, and Maude and Lillian Presley Professor of Microbiology and Molecular Genetics, Harvard Medical School (14,526 votes), and Eugene H. Cota-Robles, assistant vice president, Academic Affairs, University of California, Berkeley (12,659 votes), over Evelyn Fox Keller, professor, mathematics and humanities, Northeastern University (12,360 votes), and William J.

Wilson, chair, Department of Sociology, University of Chicago (5,359 votes).

Complete results of the 1987 AAAS general and electorate elections will be announced in the 1 January 1988 issue of *Science*.

New Exhibit Features Chemical Painting

Dyography (TM), or chemical painting was created by artist Donald Leavitt in 1978. He paints colorless chemicals onto large sheets of Polacolor film negatives to create vibrant images. Leavitt uses approximately 60 different chemicals and times their reactions to get the desired effects. He calls his art form "high-tech expressionism."

Levitt's work will be on display at the AAAS headquarters from 4 December to 15 January. AAAS members are encouraged to stop by Association headquarters while in Washington and enjoy the exhibits mounted by AAAS Science and Art Program.

The Dyography exhibit will be at the AAAS through the courtesy of the artist and the American Chemical Society which brought the paintings to

Washington as part of its National Chemistry Day celebration.

Request for AAAS Travelers in Australia

AAAS has been invited to send a representative to the 1988 Centenary Congress of the Australian and New Zealand Association for the Advancement of Science (ANZAAS) which will take place 16 to 20 May 1988 on the campus of the University of Sydney where the inaugural Congress was held in August 1888. The 1988 Centenary Congress is also expected to be one of the most significant and prestigious events of the Australian Bicentennial year, attracting a wide range of eminent national and international speakers.

AAAS members who plan to be in the area at the time and/or who know of colleagues on sabbatical in the region who might be able to attend should contact Sandra M. Burns, Office of International Science, at the AAAS address before 31 January 1988. Please include a curriculum vitae. While no travel funds are available, a modest per diem will be provided.

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Communications Workshops

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