

Random Samples:

Engineers Choice

Where will today's engineering students work tomorrow? Given a choice, IBM.

Big Blue tops an employer preference survey of 1942 senior and graduate-level engineering students at 274 schools nationwide. It is the clear preference of the overall sample (20%), and the favorite of electrical/electronic (26%), electrical (25%), computer science/engineering (47%), and industrial (23%) and electronic (30%) engineering students. Apple computers—with their fancy graphics and mouse interface—may have made inroads on IBM sales, but computer engineering students rank Apple 11th (4%) on their top 25 employer choices.

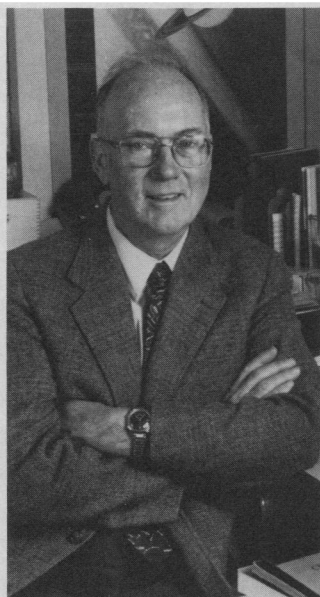
The survey is the fourth annual one conducted by *Graduating Engineer* magazine.

The Laser Turns 30

The laser age began 30 years ago on 15 December 1958, when *Physical Review* published a paper by Arthur L. Schawlow and Charles H. Townes entitled "Infrared and optical masers." The product of 8 months of work at AT&T Bell Labs, the paper pointed the way for development of devices that could make use of infrared and optical light in the way masers used microwaves.

The two men received a patent for the device in 1960, the same year the first working laser was built at Hughes Aircraft Co. Both men received Nobel Prizes—Townes in 1964 and Schawlow in 1981—in part for their contribution to the laser. The pair were also honored in April at the Conference on Lasers and Electro-Optics (CLEO 88).

Today, of course, lasers are used in everything from manufacturing to weaponry to compact disc players. But Townes recently said in an interview



Charles H. Townes

taped for television that "it's the medical things which affect me most emotionally. And while I'm very pleased to see all the technical applications, [when] somebody comes to me and says, 'Well, you know, you saved my eyes . . . ' Gee, that makes me shudder."

Go West, Young Profs

Attention faculty members: feel like you're not getting any richer? If you need objective confirmation of that feeling, look no further than the American Association of University Professors' latest annual review of academic pay.

The AAUP study of 1,900 institutions and more than 300,000 full-time faculty finds the average faculty salary increased only 4.9% in 1987–88 compared with 5.9% the year before. Adjusted for inflation, that amounts to a boost of only 0.9%, AAUP says. Moreover, that's the third consecutive year that average increases have fallen below those of the previous year.

Faculty in private institutions did rather better than did state or church-related ones, the report says.

The average salaries nationwide are \$47,400 for full pro-

fessors, \$35,300 for associate professors, \$29,200 for assistant professors, and \$22,090 for instructors.

But when Horace Greeley said "Go west, young man" (read "person") he knew whereof he spoke: the average pay for all faculty levels in the Pacific Northwest was \$43,590, nearly \$4,200 more than the closest competitor, the New England region. The lowest average salary, \$32,270, was found in the area comprising the states of Alabama, Kentucky, Mississippi, and Tennessee.

Copies of the full report (available from AAUP, Suite 500, 1012 14th Street, NW, Washington, DC 20005) cost \$25. Does that seem a bit steep at your salary?

Lady Bugs Squash Killer Cockroaches

Well, not actually killers, but flying Asian cockroaches that invaded Florida 2 years ago and have spread alarmingly ever since. They have an unsavory reputation for flying from their daytime hideouts in lawns to swarm in any well-lit area, including windows, doors, and television screens. This state-of-the-art pest already has spread over the southern two-thirds of the state,

but thankfully shows no sign of northern or western migration.

An all-woman outfit called Lady Bugs Pest Control in Tampa has been working with U.S. Department of Agriculture entomologists Richard Brenner and Richard Patterson to wage war on the unwelcome visitors. The USDA crew has modified a toxic granular bait used on mole crickets to zap the offensive creatures. The Lady Bugs helped by setting traps in the wild to get accurate counts of the critters and then to bait the area with various types of pesticides.

Unlike the familiar stay-at-home German cockroach, the Asian invaders dwell in fields, said Patterson, and there have been reports of the insects destroying rose bushes, perhaps in search of nectar. Brenner and Patterson recently mounted an expedition to Asia to encounter the cockroaches in their native habitat.

The Asian cockroaches have even spawned a kind of twisted entrepreneurship. Lady Bug co-owner Judy Gibson said she'd heard of a New Jersey exterminator who came to south Florida looking for a field full of the flying pests. "He wanted to bring them back home so he could drum up some new business there," she said in amazement.

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