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C.R.T. MEETS SEMATECH, AUSTIN COMMUNITY

Last June, a planned historic meeting between officers of Sematech and the Campaign for Responsible Technology (CRT) fell through when Robert Noyce, inventor of the chip and head of Sematech, died the day before the scheduled talks. (See *Global Electronics* No. 102 for a preview of that meeting.) Nearly a year later, on May 17, 1991, nineteen community, environmental, and labor representatives organized by CRT finally toured Sematech and presented a seven-point program to representatives of the semiconductor manufacturing technology consortium.

CRT seeks to redefine Sematech's role as a major agency of U.S. industrial policy. CRT contends that the Federally-sponsored research organization must be held accountable to the needs of high-tech workers and communities. "With over \$500 million from U.S. taxpayers, Sematech must do more than build a smaller, faster micro-chip," said Ted Smith, chair of CRT and Director of the Silicon Valley Toxics Coalition. "It must research new production techniques that make cleaner, safer chips as well."

Like last June, when CRT formulated its Sematech platform but was unable to carry out its meeting, CRT leaders from Boston, the San Francisco Bay Area, and Albuquerque flew in to Austin for the dialogue. This year, however, they scheduled a series of additional meetings: with the community around Sematech, environmental groups, labor leaders—including former Labor

Secretary Ray Marshall—and University of Texas students. When they met with Sematech, the delegation consisted primarily of Austin-area residents, from neighbors of the Sematech facility to union officials to a local representative of Computer Professionals for Social Responsibility.

It turns out that Sematech, lured to Texas with millions of dollars in state and local subsidies, has not fulfilled its promises. CRT organized a "speak-out" in the neighboring community of Montopolis, attended by about seventy people, before the meeting with Sematech. Local residents complained that Sematech had not hired enough local people; it had not provided construction work to minority contractors; and its emergency response plan was unavailable. A teacher from a preschool across the street from Sematech complained that the company had never told the community about its use of toxic materials.

Bolstered by a level of community support that surprised the somewhat insular managers of Sematech, CRT and its local allies took what they described as a "sterile" tour of the facilities, and then they presented their proposals. Sematech managers said that the facility is gradually reducing its use of hazardous materials, and they promised to provide written answers to CRT's proposals. That pledge was dutifully reported by the Austin print and broadcast press.

Many of those initial responses, however, are likely to be negative. At the meeting, Sematech executive Peter Mills repeatedly reminded his CRT guests that Sematech's mission statement is narrow. Sematech spokesman Miller Bonner told the press that Sematech could not dictate policies to its fourteen member companies.

Still, CRT members believe their influence is growing, not only in Austin, but nationally. To obtain Federal funding when its five-year initial funding package expires, it will need allies. The Right Wing opposes Sematech, considering it government interference in the private economy, so the consortium may need the backing of Congress members responsive to the environmentalist and labor constituencies that CRT is organizing.

The seven-point CRT program for Sematech is similar to the six proposals described in *Global Electronics* No. 102:

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Just in case you're one of those rare *Global Electronics* readers who wonders why this "monthly" newsletter appears on an irregular schedule, here's the situation. Subscriptions to *Global Electronics* only bring in enough income to pay for production and mailing. The research—the ongoing monitoring of the electronics industry and its impact—is not directly supported. So sometimes, we fall behind. But we've been doing it this way for eleven years, and we expect to continue indefinitely. That's why we don't use Volume numbers on our masthead, and that's why we promise twelve issues, rather than a year's worth, for each subscription.

- 1) Establish a toxic-use-reduction program for Sematech and its member companies for all carcinogens, reproductive hazards, and neurotoxins.
- 2) Develop new health and safety education programs that are sensitive to the diversity of the semiconductor workforce and create, for Sematech's member companies, a publicly available system for health monitoring and reporting.
- 3) Implement a Workers' Improvement Program similar to Sematech's Equipment Improvement Program. Also, develop model "Economic Impact Statements" for future semiconductor facility siting.
- 4) Develop a strategy with Sematech member companies to shift Sematech's financial support from the military to other sources of government support.
- 5) Create new hiring and training programs for Austin residents in the local Montopolis community area.
- 6) Agree to a "Good Neighbor" plan that includes emergency planning and worst case disaster scenarios.
- 7) Adopt CRT's "Bill of Rights" to ensure full oversight and participation in the implementation of the first six points.

For more information about CRT, contact Rand Wilson, CRT Coordinator, at 617/391-3866 or write CRT, 408 Highland Ave., Somerville, MA, 02144.

U.S.-OWNED CHIPMAKERS REBOUND

For the first time since 1979, U.S.-owned semiconductor manufacturers have gained market share on their Japanese-owned counterparts. The U.S. share rose from 34.9% in 1989 to 36.5% in 1990. This is a direct outgrowth of their strength in design-rich chips, such as microprocessors and programmable logic devices, which make up two thirds of the world chip market. (In-Stat, reported in *Fortune* (May 6, 1991))

Fortune writes, "Lo and behold, U.S. chip companies have found that they can compete—as long as they pick their ground carefully. Their virtual exodus from the most volatile segment of the business—dynamic random access memory chips, or DRAM's, used by the handful in computers—has freed many of them to concentrate on markets that are stabler, more profitable, or faster growing.

The new array of U.S. chip products draws on America's ability to design the world's most innovative and complex chips. That makes U.S. chip-makers less dependent on manufacturing strength and less vulnerable to price busting."

Last year Intel Corp. which designs and builds most of the microprocessors for IBM and IBM-compatible personal computers, surpassed Texas Instruments, moving into second place among American semiconductor sellers. TI, an industry pioneer, is still a major player in the DRAM market.

Fortune provides a Dataquest listing of the world's top ten chipmakers in 1990. Integrated Japanese electronics firms still dominate the list:

Company (Country of Ownership)	Sales (US\$ billion)
NEC (Japan)	4.95
Toshiba (Japan)	4.91
Hitachi (Japan)	3.93
Motorola (U.S.)	3.69
Intel (U.S.)	3.14
Fujitsu (Japan)	3.02
Texas Instruments (U.S.)	2.57
Mitsubishi (Japan)	2.48
Matsushita (Japan)	1.95
Philips (Netherlands)	1.93

CUTTING APPLE

Apple Computer has always been somewhat of an anomaly in the cutthroat world of Silicon Valley business. Despite recurring layoffs, a sharply stratified workforce, and other standard business practices, it has maintained a corporate culture in which its young professionals and technical employees have felt part of a social crusade, not a Fortune 500 company.

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The company's plan to pare 1,500 jobs, despite its remarkable recent sales growth, has shaken the tree, however. Apple employees are venting their disillusionment on the company's internal electronic mail/bulletin board system. One employee, reports the *San Jose Mercury News* (June 1, 1991), gave his or her interpretation of the message that top managers are transmitting to the workforce, "This place is a job. It's nothing to sell your soul to, work on weekends for, give up family time or personal time for, sell every idea to or even worship. It's a business, run by business people for stockholders. It's not for the 'betterment of mankind,' 'the power of the individual,' or any of that crap they've been feeding us for years. It's for money. Their money."

The dialogue points out the potentially revolutionary nature of open electronic communications systems in the workplace of the future. Though isolated in cubicles in numerous buildings and departments, most employees at Apple's Cupertino headquarters complex have Apple workstations plugged into the network. Unless the company installs software to control that network, unhappy employees can easily use the system to share ideas—anonously, if they wish—with thousands of fellow workers that they've never met.

Meanwhile, Apple has settled a race discrimination complaint with the U.S. Department of Labor, agreeing to pay nearly \$437,000 to fifteen black employees. When those fifteen, well qualified temporary employees at Apple's Fremont assembly plant—on the eastern edge of Silicon Valley—were not offered full-time positions, while other temps were upgraded, one filed a complaint. The Office of Federal Contract Compliance Programs investigated, substantiated the complaint, and cited Apple. Apple then agreed to pay back pay, vacation pay, and interest, and the firm hired all but one, who had left the area. (*San Jose Mercury News*, April 18, 1991).

NO ONE KNOWS WHERE ALL THE WASTE GOES

Despite the growing awareness in industry and the increased regulatory activity of government, officials do not know what happens in to a large share of the hazardous waste that California industry says its generation. In 1989, found the *San Jose Mercury News* (March 31, 1991) 19% of the 2.05 million tons of hazardous waste tracked by the State of California was recorded with no source or receiving facility identified. Ten percent registered no treatment method. In Silicon Valley,

14% of the 135,400 tons tracked showed no source or receiving facility, while 20% indicated no method of treatment.

It's not just a matter of record-keeping. The records suggest the wholesale illegal dumping of hazardous substances. Even waste that is legally recycled often pollutes the environment. Contaminated motor oil, for example, is blended into maritime fuel that is burned outside the jurisdiction of air quality regulators.

The *Mercury News* tabulated records covering the shipment of waste oil, solvents, organic solids, contaminated soil, asbestos-containing waste, metal sludge, and a variety of liquid solutions to come up with the following list of the top fifteen recipients of Silicon Valley-area waste in 1989.

Company	City	Tons Received
Unknown	—	19,207
Chemical Waste Management	Kettleman City	18,268
Romic Chemical	East Palo Alto	10,606
Systech Environmental	Lebec	9,761
U.S. Pollution Control	Lakepoint, UT	8,119
Refineries Service	Patterson	7,744
Solvent Service	San Jose	5,487
Casmalia Disposal (closed Nov. '89)	Santa Barbara	5,225
Evergreen Oil	Newark	4,849
Demunno/Kerdoon Transportation	Compton	4,568
Alviso Independent Oil	San Jose,	4,014
H & H Ship Service	San Francisco	3,706
International Technology	Bakersfield	3,330
Forward Inc.	Manteca	3,184
Southern California Chemical	Santa Fe Springs	3,071

ENVIRONMENTAL SHUTDOWN

We've often suggested that the best way to make a list of subcontractors that fabricate printed circuit boards for the computer industry is to look at lists of firms that violate Clean Water Act rules on the discharge of heavy metals from electroplating processes. Silicon Valley regulators have found the operations of one such firm, Amtronics, to be so unhealthy that they have forced it to shut down.

Amtronics has had problems with wastewater discharge and hazardous waste storage rules since it opened in 1969. The San Jose City Attorney's office recently found sixty separate environmental infractions at Amtronics' north San Jose plant, and it wants the courts to jail the firm's president for violating the company's three-year probation.

Amtronics declared bankruptcy in February, 1990, limiting its exposure to a more than two hundred thousand dollars in fines. But that didn't stop a Superior Court judge from issuing, this

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March, a permanent injunction halting all Amtronics manufacturing. The firm, which employed forty people, could restart production if it first proved that it could comply with all environmental rules. (*San Jose Business Journal*, April 1, 1991)

WORKERS SPEAK OUT IN PRINT

The men who run the electronics industry each pay thousands of dollars each year to keep track of global trends from the top down, and the trade press devotes thousands of pages each year to documenting industry's point-of-view. Rarely, however, does one find, expressed in print, the bottom-up perspective of the women upon whose hands the industry is built. Two recent books, *Common Interests* and *The Global Factory*, provide such an alternative.

Common Interests, just published by London-based Women Working Worldwide, assembles the most comprehensive picture ever drawn by the women who work in the global electronics industry. It not only expresses their point of view clearly and accurately, but as it is circulated, from Boston to Bombay, *Common Interests* will surely overcome the isolation long felt by high-tech industry's modern toilers.

One might expect, as in the famous essay about six blind men and the elephant, that the country-by-country testimony of women electronics workers would portray radically different sides to a complex industry. Instead, their common experiences—lack of power on or off the job, sexual harassment, health and safety hazards—dominate.

The Global Factory, published by the U.S.-based American Friends Service Committee, provides a more systematic analysis. Focusing on U.S.-owned plants—in other industries as well as electronics—in Mexico and the Philippines, it directly relates the problems of American workers, notably plant closings, to the plight of workers abroad.

Now in its second printing, *The Global Factory* is as topical as ever, for the Bush and Salinas administrations are negotiating a "free trade" agreement designed to increase the economic power and flexibility of transnational corporations. Though *The Global Factory* also gives voice to the workers on the global assembly line, it is designed more as a study guide for North Americans interested in starting discussion-action projects.

Readers of *Global Electronics* are familiar with many of the themes in both books. We hope, that as these books are circulated among wider audiences, that those concerned about social progress, not just international competition, will begin to recognize the impact that high-tech transnational corporations are having on the lives of all of us.

The Global Factory is available from AFSC, Maquiladora Project/Community Relations Division, 1501 Cherry St., Philadelphia, PA, 19102 for US\$7.50 each (payable to AFSC).

Common Interests is available from Women Working Worldwide, Box 92, 190 Upper St., London N1 1RQ, England for £8.00 (payable to Women Working Worldwide). Add £2.50 for airmail orders outside the European Community.



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