Pollution control: too often like shutting the door after the horse has fled.

$1 500 and take several weeks because scientists are looking for such minute quantities of material. One part per trillion is already cause for concern.

Stress Probe, on the other hand, allows researchers to measure an organism's physiological response to a toxin. Such a response may be dramatic and readily detectable even when the amount of contaminant is tiny. As a result, Stress Probe promises to be easy to use, and its developers are currently working on a field kit that will test samples at a cost of $5 to $10 each. To identify the source of the problem, however, it will still be necessary to employ the chemists' sophisticated arsenal. ''But this way,'' says Bryan Imber, a CBR International spokesperson, ''we direct their efforts where we know they are needed.''

With an inexpensive, new monitoring device at hand, researchers may soon be able to conduct regular environmental checkups. Moreover, as Bill Welch, a cell biologist and consultant to CBR International's American affiliate points out, people at risk from pollution, such as workers in a chemical factory, could also be monitored. Blood samples could be routinely taken, and a sudden increase in the stress response of workers' white blood cells might indicate exposure to a toxic compound. In the not-too-distant future, stress-level counts may be as much a part of visiting the doctor as blood-pressure readings are now.

World's Most Powerful Parallel Computer Unveiled

The world's most powerful parallel computer — using ''off-the-shelf'' microprocessors — was recently unveiled in Edmonton, Alberta. A critically important breakthrough, the technology was designed, developed and built by Myrias Research Corporation in Canada.

Parallel computers are supercomputers that work at awesome speeds by dividing up a complex job and having several different processors work on different parts of a problem simultaneously. In the jargon, it's called ''parallel processing.''

''Industry experts now agree that parallel computers harnessing the power of hundreds of thousands of microprocessors to work on a single computer problem will be the high performance computing standard for the twenty-first century,'' says the company's president, Peter Gregory. ''Myrias has made it reality in 1990.''

Unlike other massively parallel systems designed to use custom processors that operate on only one to four bits of information at a time, the Myrias system is based on full 32-bit processors. This provides a much more broadly applicable system, a higher level of compatibility with industry standards, and higher sustainable program throughput rates.

The Myrias system harnesses 1 044 commercial processors and includes 4.2 billion bytes of memory — which is believed to be the world's record memory capacity. The system executes 3 670 million instructions per second (MIPS) and 630 MFlops (million floating point operations per second). As a point of comparison, large mainframe computers are typically capable of less than 100 MIPS.

Gregory describes the system's potential uses and its value to science, commerce and technology: ''We are particularly proud that a Canadian company, using technology conceived, designed and manufactured in Alberta, is providing the next generation of high performance computing to the world.''

For Gregory there are many practical applications of the new technology: ''There is weather prediction and climate modelling, designing new industrial materials, designing drugs, medical imaging and diagnostics. Understanding environmental changes and events, natural resource exploration, designing vehicles for earth, sea and space exploration. Designing new semiconductors, designing and controlling telecommunications and energy distribution networks. And there are also commercial uses such as econometric modelling, world-wide arbitrage, and realtime business analysis.''