

Among the companies that con-
tains research and develop-
ment in the area of particu-
lar interest are P. Lane and Assoc.
sites of Halifax, Nova Scotia, and
ADI Ltd. of Fredericton, New
Brunswick. P. Lane is mainly con-
cerned with the microbial degre-
dation of chronic toxicologic
hydrocarbons that contaminate
the soil and water, and with the
accumulation of heavy metals in
aquatic macrophytes. The com-
pany spends much of its resources
toward the needs of developing
countries. ADI is the only small
business in Canada involved in

now marketing an "Environmental Monitor" test that can be used to measure environmental stress in living organisms, especially micro-organisms. There is a great need for tools that can predict, detect and diagnose environmental deterioration.

The environment is constantly attacked by a wide variety of toxic compounds of the organochlorine family. However, a recent discovery indicates that certain strains of *Pseudomonas*

bacteria can decompose some polychlorinated compounds. These micro-organisms produce enzymes that destroy the nucleus of molecules of polychlorinated hydrocarbons and release the chlorides that render the molecule toxic. This approach can also be used with polychlorinated biphenyls (PCBs).

In collaboration with the Biotechnology Research Institute in Montreal and the National Scientific Research Institute-Health

(INRS-Santé), the Sanivan Group of Anjou, Quebec, is developing a PCB biodegradation process. This initiative will require extensive effort and rigorous research protocol, but tests have already been carried out in the field and the Sanivan Group expects that a biological decontamination process could be available at the beginning of the 1990s.



Class 100 Clean Room for the determination of trace levels of environmental contaminants.

(CBR International Biotechnologies Corporation)

The level of particulate concentration
in laboratory and clean rooms
is measured by means of a

instrument in the laboratory
shown above.