



Illustration of a gas/water separator module in the foreground and the reactor container in the background.
(Paques Lavalin)

Among the companies that concentrate research and development in this area, of particular interest are P. Lane and Associates of Halifax, Nova Scotia, and ADI Ltd. of Fredericton, New Brunswick. P. Lane is mainly concerned with the microbial degradation of aromatic polycyclic hydrocarbons that contaminate the soil and water, and with the accumulation of heavy metals in aquatic macrophytes. The company orients much of its research toward the needs of developing countries. ADI is the only small business in Canada involved in biotechnology projects at the international level. Anaerobic waste-water treatment for warm, strong organic waste water coming from a wide range of sources is of particular interest to ADI.

Heavy metals and toxic products: Bacteria that can control them

One of the most promising applications of biotechnology in the environmental protection area is the biological degradation of toxic waste through microorganisms. Toxic waste often causes great damage before it is detected.

To address this problem, CBR International Biotechnologies Corporation of Sidney, British Columbia, has developed and is



Sample of horsetail grass (*Equisetum fluviatile*). This semi-aquatic plant can concentrate arsenic in its tissues and is used to determine the level of arsenic concentration in laboratory and pilot studies.
(P. Lane and Associates Ltd.)