

## EXPLORING LINKS BETWEEN BUSINESS AND THE ENVIRONMENT

### INTRODUCTORY REMARK

#### [Professor Constantinos E. Sekeris](#)

Director Biological Research Center,  
National Hellenic Research Foundation  
Greece

Biotechnology is the application of biological organisms or processes to manufacturing and service industries and has two main lines of action, one through microbiology, fermentation and enzyme technology and one through molecular biology and recombinant DNA technology. The applications of biotechnology, as we have heard from Dr. Arvanitis, are tremendous and include, among others, health (prevention, diagnosis and therapy), production of useful substances (drugs, antibodies, hormones, vaccines, chemicals, foods), plant breeding, host-pathogen and host-pest interactions, pollution, waste treatment and biomass.

Biotechnology has confronted us with a series of problems, which have nothing to do with the "technology" of biotechnology but with the "bios" part, and which we have to consider and attempt to solve. Such problems are the academic-industrial relationship, faculty members as corporate officers, the role of Government in the support of biotechnology, Government and self-imposed regulations, concern (or fading concern) on risks, eugenics or playing God.

These are problems which humanity, particularly scientists, have faced in the past, especially during periods of spectacular and fundamental scientific achievements. This time, the potential "menace" is biotechnology. As before, whatever the threat, humanity's eternal moral values will surely lead to the right solutions.

Prometheus' ordeal periodically recurs throughout Homo Sapiens' life history, testing humanity's ethics and moral values. It has surfaced again - a result of molecular biology's uniquely marvellous progress - in the form of biotechnology, the manipulation of the genetic material, with its tremendous possibilities to improve and heal or harm and destroy. Once more, we are faced with the dilemma, either to sacrifice progress, as an antidote to potential self-destruction, or to boldly advance, confiding in our innate moral code.

---

Professor **Constantinos Sekeris**, a specialist in biochemistry, cell and molecular biology, is currently Director of the Biological Research Center, Professor of Biochemistry at the University of Athens and Honorary Professor of Heidelberg. He has published extensively in the fields of hormone action, eukaryotic, molecular and cell biology, and insect developmental biology. He is a member of several professional societies and organisations, some of which are: the Hellenic Bio-Chemical and Biophysical Society, the German Society of Biological Chemistry, the Biochemical Society of the UK, EMBO, and the Hellenic Society of Biological Research.