

I. Risk assessment and environmental impact

Land degradation processes (soil pollution, erosion & salinization)

Pollution of the Aquatic ecosystems (water column, sediments & eutrophication)

Air Pollution (Mobile, fixed industrial & Landfill sources)

Global climate change, C and N cycling

II. Wastewater & solid waste management, treatment and reuse

Domestic & industrial wastewater

Municipal, animal, agro-food and hazardous wastes

Sewage sludge

Treatment technologies

Physicochemical & membrane processes

Aerobic & anaerobic processes, wetlands

Integration of biological & physicochemical processes

Nutrient removal (N and P)

Emerging pollutants (endocrine disruptors, micropollutants, etc)

Agronomic valorization



III. Strategies for the protection and remediation of natural environments

Soil & aquatic environments including sediments

Appropriate remediation technologies

Phytoremediation, bioremediation, bioaugmentation,

biowaste addition, Electrokinetics, other techniques

Ecological processes and biocontrol

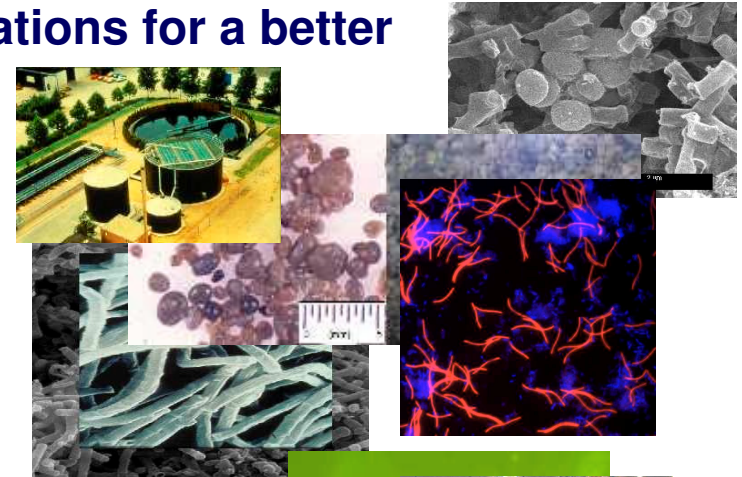
Sustainable agriculture

Control and modelling of environmental processes



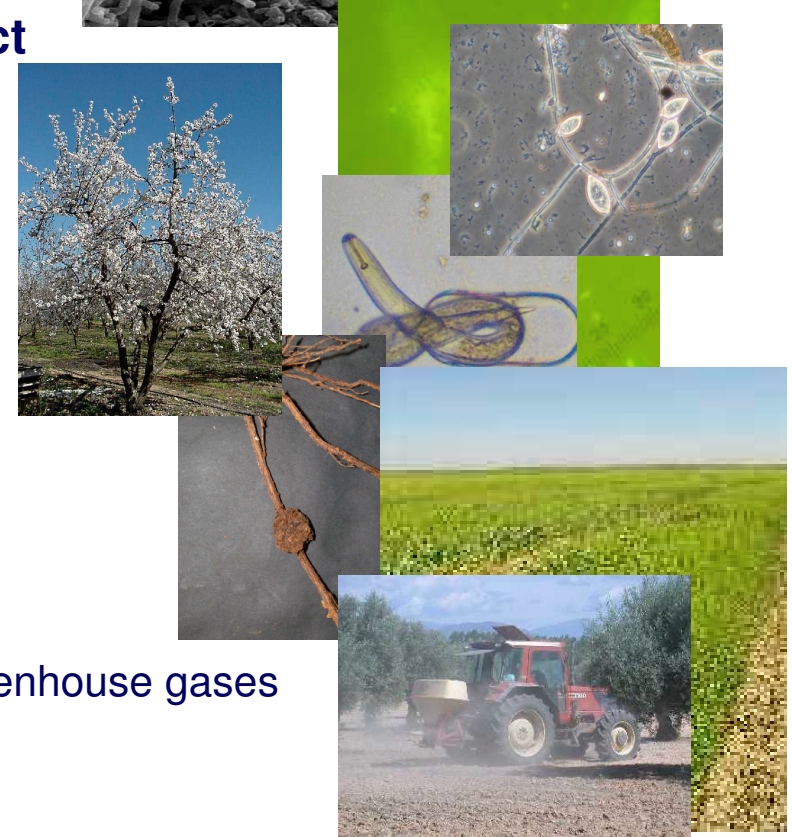
IV. Microbial ecology and molecular biology applications for a better environmental control

Ecology of the natural and man made environments
Interactions between microorganisms
Interactions between microorganisms and plants
Functional and structural diversity of bacteria
Environmental enzymes



V. Environmental education and legislative aspect

Ecosystems and education
Way of life and sustainable environment
Health risks
Legislative aspect for environmental protection
Water & organic waste treatment
Soil conservation



VI. New perspectives

Renewable energy production from waste & wastewater
High value products from wastes other than biofuels
Agriculture & forest management for a better control of greenhouse gases
Technology needs in the developing world
Etc

** The different items included under each topics are only indicative and not exclusive. The submission of works on another subjects within these topics are encouraged by the organizers, particularly new aspects*