

## THE RELATIONSHIP BETWEEN ENVIROMENT AND HUMAN HEALTH

Prof.chem **Gh.Coman** PhD<sup>1</sup>,  
Assoc prof. chem **Camelia Drăghici** PhD<sup>2</sup>,  
Assoc prof. chem **Dana Perniu** PhD<sup>2</sup>,  
Lecturer chem **Mihaela Șica** PhD<sup>2</sup>,  
lecturer **Mihaela Badea** PhD<sup>1</sup>,  
Prof. **S.Ungurean** PhD<sup>3</sup>

<sup>1</sup>University Transilvania Brasov, Faculty of Medicine

<sup>2</sup>University Transilvania din Brașov, Faculty SIM

<sup>3</sup> University Transilvania din Brașov, Faculty of Law

All living organisms are chemically dynamic systems, functioning as living entities as a result of interdependent chemical reactions. The interdependent chemical reactions in continuous high flow are maintained in a state of balance. The presence of xenobiotic substances (foreign molecules) in a living system can easily disrupt this balance by inhibiting, enhancing or interacting with one or more of the components or chemical reactions on which its situation depends. The biological effects of the pollutants and their metabolites are governed by several factors: ability to penetrate the organism and to translocate to its site of action; ability to bind, store and to interact with some biological receptors; ability to resist the action of degradative enzymes.

The health hazard of pollutants is the result of pollutant exposure, followed by the interaction of the pollutant with the human body, tissues or organs, causing injuries and illnesses when the body defence systems are overcome, by-passed, or broken down.

---