

SUSTAINABLE DEVELOPMENT – HISTORY, METRICS AND LEGISLATION

Course of lectures for doctoral studies

Duration: 15 academic hours

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Abstract

The main goal of the course is to present the idea of the sustainable development and the respective sustainability models in an original and non-traditional way. It will be demonstrated that the long road to sustainability is marked by historical, scientific and social conditions, which have to be constantly on the agenda of the society. Some historical events will be presented as an important pre-requisite for the philosophy of the sustainable development (the role of the environmental development of the twentieth century). Further, the scientific aspects of the sustainability will be stressed, especially necessity of specific metrics for sustainable development (the role of environmetrics and chemometrics for interpretation of pollution data, for modeling of environmental systems, for determination of development trends etc.) not only in the field of risk and pollution assessment but also in assessing industrial metabolism (the role of ecological indicators) and social reaction to technological novelties. Finally, some information will be presented for the European ecological legislation as a specific civilization response to the whole concept of sustainable development.