



NEURO-FUZZY MODEL FOR ENVIRONMENTAL IMPACT ASSESSMENT

Marius Pislaru¹, Alexandru Trandabăț^{1*}, Silvia Avasilcăi²

“Gheorghe Asachi” Technical University of Iasi, 51-53 Prof. Dr. Doc. Dimitrie Mangeron Street, 700050 Iasi, Romania

¹*Department of Electrical Measurements and Materials*

²*Department of Management and Engineering of Production Systems*

Abstract

To introduce with any costs and any risks in society objects, technologies or solutions that aim at improving everyday live is a method that cannot be accepted any longer in terms of environmental impact. If until recently, the only pursued benefits when introducing new technologies or technical solutions were of economic or social nature (increase in productivity, profitability, comfort etc.), recent studies and empirical methods have proven that the society had in some cases more to lose than to gain from an environmental point of view. Since the environment is all over, the cradle of life, where the society will be developing, a negative impact on environment will have a negative impact on further development of society as well. This paper introduces a system based on neuro-fuzzy models that can be implemented in the assessment of ecological systems, in order to determine appropriate methods of action for reducing adverse effects on environment and implicit the population. It is noted that this subject of research represent a high interest current in the world. It is worth noting that this topic of research represents nowadays a high interest in the scientific world.

Key words: environmental assessment, neuro-fuzzy, sustainability

Received: December, 2010; Revised final: February, 2011; Accepted: March, 2011

* Author to whom all correspondence should be addressed: e-mail: franda@yahoo.com, Phone: +40-232-278683 ext. 1240, Fax: +40-232-237627