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Advances in Environmental Development, Geomatics Engineering and Tourism

- Proceedings of the 12<sup>th</sup> International Conference on Environment, Ecosystems and Development (EED '14)
- Proceedings of the 3<sup>rd</sup> International Conference on Sustainable Tourism and Cultural Heritage (STACH '14)
- Proceedings of the 2<sup>nd</sup> European Conference of Geodesy & Geomatics Engineering (GENG '14)





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> Brasov, Romania June 26-28, 2014

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#### **Keynote Lecture**

#### Contribution to Sustainable Development Education in an Engineering High School: Design of Small Scale "Green House" and Example of Experiments



Professor Philippe Dondon ENSEIRB MATMECA - IPB Domaine Universitaire TALENCE, FRANCE

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Abstract: Since Rio de Janeiro conference (1992), Kyoto protocol and agenda 21 definitions, the necessity of a harmonious development is now admitted by a majority of scientific and political personalities. Even if sustainable development is a complex concept, which concerns a wide range of social, scientific, economical and environmental issues, each of us is able to do something for humanity evolution, in particular in the education field. Thus, our project started through an individual questioning of a few teachers, two years ago: What can we include in our research field and/or pedagogical thematic to have a concrete action in sustainable development, while respecting the mains scientific fields of our engineering school? The "small scale green house" project was born. In this talk, we present the main steps of the model design; According to technical standards, a scaled hand made "green" house was first built with genuine and scaled power plants, others accessories like hydrogen fuel stack, solar tracking system, solar tower were added to make the model realistic and functional for experiments.

Once finished, some concrete and various didactical experiments were performed. We give here example of thermal losses investigations, carbon assessment, and solar tracking system electronic design. The transdisciplinary aspects of this work are highlighted and finally, some future evolutions are suggested.

**Brief Biography of the Speaker:** Ph. Dondon was born in 1960. He is a graduate from the High School of Electronic Engineers ENSEIRB Bordeaux, France. After his electronic engineer diploma in 1983, he worked 5 years as product manager and computer aided manufacturing (C.A.M) in the French radio-communication systems company T.R.T. Back to the IMS Microelectronic Laboratory of Bordeaux, he received his Ph D in microelectronic analogue design in 1992. He is now teaching electronic at ENSEIRB- MATMECA and has several interests in electronic circuits and electronic for sustainable development fields of research.

#### **Plenary Lecture 1**

#### **Aspects Regarding Environment Conditions Improvement in Industrial Zones**



Associate Professor Niculae Boteanu University of Craiova Romania E-mail: boteanu.niculae@gmail.com

Abstract: Environmental pollution may be of natural and artificial. Artificial pollution was caused by the development of urban settlements, under the influence of anthropogenic factor. Initially there were fewer polluting products, by organic nature and easily degradable by micro-organisms in the environment (bacteria and fungi). As industrial development, population growth and modernization of technology, pollution had expanded, pollutants have increased and occurred readily biodegradable waste (detergents, synthetic pesticides, radioactive waste). When the amount of pollutants exceeds the capacity of neutralizing of the environment, ecosystems undergoes alteration to their destruction, resulting in the emergence of zones without life. The Kyoto Convention (2002) had established rules and terms of supervision of the determining the greenhouse gases (carbon dioxide, methane, nitrogen oxides, sulphur dioxide, ozone and chlorofluorocarbons). The strategy provided for Atmospheric Protection, according to United Nations Economic Commission for Europe, Geneva (2004) and Commission of the European Communities, Brussels (2005), is focus also on the reduction of emissions of nitrogen dioxide, sulphur dioxide and other air pollutants that lead to environmental acidification. Reducing emissions from combustion plants can be achieved through: primary measures, which are integrated measures to reduce emissions at source or during combustion, including fuel feed measures and measures of combustion changes; secondary measures (as final ones), which controlling the emissions to air, water and soil.

**Brief Biography of the Speaker:** Niculae Boteanu is currently an Associate Professor in Mekatronics, Transportation Systems and Environment in the Electrical Engineering Faculty of the University of Craiova, Romania. He is graduate from the Electrotechnics Faculty of Craiova and he received the Ph.D degree from the University of Petrosani. In Publishing House he is author of four books in mekatronics, transportation systems and environmental engineering areas. Research work is focused on improved solutions for control and optimization of transportation systems and command of meckatronics structures. He has extensive experience in both experimental and theoretical research work, certified by over 40 journal and conference research papers and 20 research projects from industry. He had participated in 4 WSEAS International Conferences, presenting papers and attending the scientific meetings. He has also 2 papers published by NAUN International Journals.

#### **Plenary Lecture 2**

### Cultural Village - A Form of Exploitation of Spiritual and Cultural Wealth of the Romanian Village



Professor Mirela Stoican
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Bioterra University of Bucharest
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**Abstract:** Under the impact of intense urbanization processes occurring in the second half of the twentieth century, rural areas experienced large structural changes. Expansion of urban areas, migration to the city of villagers, the introduction of new techniques and technologies in the processing of land, infrastructure development are all key elements in the transformation of traditional rural values.

Romanian rural tourism is represented by a multitude of symbols: crafts, dance, music and costumes, gourmet products, ancestral customs and traditions. By combining these symbols and recovery in tourism, the Romanian village can become a cultural village with real meanings of medium and long term development. This paper aims to highlight the relevance of cultural tourism in rural areas, and how to exploit the intangible heritage of Bucovina Cultural Village Ciocănești.

**Brief Biography of the Speaker:** I have a Bachelor Degree, obtained at Petre Andrei University of Iasi, Faculty of Economics. I have obtained Master's Degree in Performance Management in Alimentation, Tourism and Consumer Protection otBioterra University of Bucharest and I obtained the doctorate in 2012 in the General Economic Theory field, major in Political Economy and Economic Doctrines.

Currently I am an associate lecturer phd. of Transilvania University of Brasov, and the Faculty of Alimentation and Tourism, at Bioterra University of Bucharest, at Focsani Studies Center, at the Faculty of Agroturistic Management. I attended in numerous international conferences as chairmen, including a WSEAS conference in 2011, plenary speaker in 2013. In the WSEAS, since 2012, I am a Review.

The fields of research are the theory of human capital, investment in human capital, innovational economy, quality management in tourism, and rural tourism. I am the author of over 35 papers in the field of human capital theory, quality management in tourism and published in international and national spacialized journals.

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