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Selected Topics in Energy, Environment, Sustainable Development and Landscaping

**6th WSEAS International Conference on
Energy, Environment, Ecosystems
& Sustainable Development (EEESD '10)**

**3rd WSEAS International Conference on
Landscape Architecture (LA '10)**

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Preface

This year the 6th WSEAS International Conference on ENERGY, ENVIRONMENT, ECOSYSTEMS and SUSTAINABLE DEVELOPMENT (EEESD '10) and the 3rd WSEAS International Conference on LANDSCAPE ARCHITECTURE (LA '10) were held at the Politehnica University of Timisoara, Romania, October 21-23, 2010. The conferences remain faithful to their original idea of providing a platform to discuss environment and sustainable development, indoor air quality in offices and houses, research on natural hazards, renewable energy systems, electrochemistry, solar energy systems, industrial gas turbines and microturbines, energy conservation in industry, thermodynamics of ecosystems, environmental management, natural resources management, mathematical biology, landscape design, land art, earthworks art, playgrounds, landscape architecture and structural issues, conservation and management of ecological areas, soil and agricultural issues, natural resources management, ecological restoration etc. with participants from all over the world, both from academia and from industry.

Their success is reflected in the papers received, with participants coming from several countries, allowing a real multinational multicultural exchange of experiences and ideas.

The accepted papers of these conferences are published in this Book that will be indexed by ISI. Please, check it: www.worldses.org/indexes as well as in the CD-ROM Proceedings. They will be also available in the E-Library of the WSEAS. The best papers will be also promoted in many Journals for further evaluation.

Conferences such as these can only succeed as a team effort, so the Editors want to thank the International Scientific Committee and the Reviewers for their excellent work in reviewing the papers as well as their invaluable input and advice.

The Editors

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Plenary Lecture 1

Photovoltaic Sources Efficiency Evaluation in Urban Ecosystems Conditions



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Abstract: The paper presents a study of the urban microclimate characteristics on the photovoltaic sources efficiency. Considering the actual interest for the renewable sources application in European Union and in the world, involving important financial efforts, the study continue with an economic component, focused to the bankability of the concrete investments projects. There are considered different photovoltaic equipments, operating in standardized and in field conditions. The conclusions are based on computer simulations and supported by measurements in the laboratory of the Hydraulic, Hydraulic Machineries and Environmental Engineering of the University Politehnica Bucharest. The results offer a clear picture of the real efficiency of photovoltaic equipments exploited in practical situations, and can be applied for a correct evaluation of renewable sources potential evaluation and planning.

Brief Biography of the Speaker:

Mircea Grigoriu is assistant professor of Department of Energy and Environmental Engineering, University POLITEHNICA of Bucharest, Romania, where he is also the coordinator of the Hydraulic Machineries Laboratory and director of the Romanian Cleaner Production Center. His main research interests concern Pumping systems energy efficiency and the energy savings and environmental impact; Pumping systems design, operation, automatics, diagnostics and protection; Climate changes assessment; Management systems. In these fields, he authored or co-authored over 50 scientific papers published in reviewed journals or presented at international conferences. He was minister of Environment counselor, national focal point of the UNFCCC of Romania and now is listed in the Roster of experts of UNFCCC. He is technical counselor of important pumping equipments producers. He is a redactor at the Energetica Journal edited by the National Energy Producers Association (IEA), representing Eurelectric in Romania.