Recent Advances in Environmental & Biological Engineering

Proceedings of the 10th International Conference on Cellular and Molecular Biology, Biophysics and Bioengineering (BIO '14)

Proceedings of the 3rd International Conference on Sustainable Cities, Urban Sustainability and Transportation (SCUST '14)

Istanbul, Turkey, December 15-17, 2014

ISBN: 978-1-61804-259-0
RECENT ADVANCES in ENVIRONMENTAL and BIOLOGICAL ENGINEERING

Proceedings of the 10th International Conference on Cellular and Molecular Biology, Biophysics and Bioengineering (BIO '14)

Proceedings of the 3rd International Conference on Sustainable Cities, Urban Sustainability and Transportation (SCUST '14)

İstanbul, Turkey
December 15-17, 2014

ISBN: 978-1-61804-259-0
RECENT ADVANCES in ENVIRONMENTAL and BIOLOGICAL ENGINEERING

Proceedings of the 10th International Conference on Cellular and Molecular Biology, Biophysics and Bioengineering (BIO '14)

Proceedings of the 3rd International Conference on Sustainable Cities, Urban Sustainability and Transportation (SCUST '14)

Istanbul, Turkey
December 15-17, 2014

Published by WSEAS Press
www.wseas.org

Copyright © 2014, by WSEAS Press

All the copyright of the present book belongs to the World Scientific and Engineering Academy and Society Press. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the Editor of World Scientific and Engineering Academy and Society Press.

All papers of the present volume were peer reviewed by no less that two independent reviewers. Acceptance was granted when both reviewers' recommendations were positive.

ISBN: 978-1-61804-259-0
RECENT ADVANCES in 
ENVIRONMENTAL and BIOLOGICAL 
ENGINEERING

Proceedings of the 10th International Conference on Cellular and Molecular Biology, Biophysics and Bioengineering (BIO '14)

Proceedings of the 3rd International Conference on Sustainable Cities, Urban Sustainability and Transportation (SCUST '14)

Istanbul, Turkey
December 15-17, 2014
# Table of Contents

**Methodological Approach to Decision-Making on Reconstruction of Compact Build-Up Development Areas**  
Sergei I. Matreninskiy, Valeriy Y. Mischenko, Evgeniy M. Chernyshov  
9

**Ciproxin Removal from a Raw Wastewater by Nano Bentonite-ZnO: Comparison of Adsorption and Photooxidation Processes**  
Delia Teresa Sponza, Rukiye Oztekin  
18

Francesco Calabro, Daniele Campolo, Giuseppina Cassalia, Carmela Tramontana  
28

**Usability of Municipal and Medical Waste Plastics as a Fuel in Diesel Engines**  
Kadir Aydin, Çağrı Ün  
34

**Chemical Treatments for Bathroom Greywater Reuse**  
Andrea Uveges, Norbert Boros, Levente Ungvari, Ildiko Bodnar  
43

**Unbiased and Targeted Conformational Transition Pathways of Hinge-bending Proteins**  
Caglar Mericer, Doga Findik, Arzu Uyar, Turkan Haliloglu, Pemra Doruker  
48

**The Influence of the Climatic Factor on the Evolution of Landslides in the Ialomita Subcarpathians Post Year 2000. Case Studies**  
Ovidiu Murărescu, George Murătoreanu, Mădălina Frînculeasa  
58

**Production of (S)-1-Phenylethanol in Continuous Systems**  
Hilal Çelik Kazıcı, Ülkü Mehmetoğlu  
64

**Design of a Controller for VAD with Electrocardiogram-Based Setpoint**  
Eduardo Souza, Flávio Paula, Igor Munhoz, Diolino J. Santos Filho, Marcelo Silva, Eduardo Bock, Paulo E. Miyagi, Fabricio Junqueira, Lucas A. Moscato  
67

**Optimization of Extraction of Phytochemicals from Calendula Officinalis by Response Surface Methodology**  
Fatih Mehmet Göktaş, Bilgesu Şahin, Sibel Yigitarslan  
74

**Sustainable Development of Urban Structures - Approach based on Trnava (Slovakia) Case Study**  
Ingrid Belčáková, Tamara Reháčková, Miriam Heinrichová  
79

**Determination of the Urban Heat Island in Sakarya City, Turkey**  
Mahnaz Gümrükçüoğlu  
87

**Polyphenols Inhibit Band 3 Protein of the Erythrocyte Membrane**  
Izabela Sadowska-Bartosz, Ireneusz Stefaniuk, Grzegorz Bartosz  
95

**City’s Action, between Architectural Scenography and Social Inclusion**  
Valentina Beatini  
98
Theoretical Investigation on Thermal Responses of Port Wine Stain Lesions to 585 nm, 595 nm and 1064 nm Lasers
Bin Chen, Dong Li, Wenjuan Wu, Guo-Xiang Wang

Microalgae for Renewable Energy: Is it a Solution for Global Warming?
Meltem Conk Dalay

Comparative Study on Reinforced Masonry with Polymer Grids
Calbureanu Popescu Madalina Xenia, Codita Alina

Indoor Thermal Environment in Residential Buildings at Different Micro-Climates in Malaysia
Nazhatulzalkis Jamaludin, Nurul Izma Mohammed, Syed Mohd Farhan, Syed Iskandar

Adsorption Phenomena of Telon Blue AGLF: Isotherms, Kinetics and Thermodynamics of Dye Adsorption onto Chitosan
Ferda Gönen, Fulya Önalan

Medical Knowledge Management since the Integration Heterogeneous Data until the Knowledge Exploitation in a Decision-Making System
Nadjat Zerf Boudjettou, Fahima Nader, Rachid Chalal

Authors Index