3rd International Conference on Advances on Clean Energy Research (ICACER 2018)

E3S Web of Conferences Volume 51 (2018)

Barcelona, Spain 6 – 8 April 2018

Editors:

W. Cui E. Rusu

ISBN: 978-1-5108-7007-9

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

This work is licensed under a Creative Commons Attribution license: http://creativecommons.org/licenses/by/2.0/

You are free to:

Share – copy and redistribute the material in any medium or format.

Adapt – remix, transform, and build upon the material for any purpose, even commercial.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. The copyright is retained by the corresponding authors.

Printed by Curran Associates, Inc. (2018)

For additional information, please contact EDP Sciences – Web of Conferences at the address below.

EDP Sciences – Web of Conferences 17, Avenue du Hoggar Parc d'Activité de Courtabœuf BP 112 F-91944 Les Ulis Cedex A France

Phone: +33 (0) 1 69 18 75 75 Fax: +33 (0) 1 69 28 84 91

contact-edps@webofconferences.org

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA

Phone: 845-758-0400 Fax: 845-758-2633

Email: curran@proceedings.com Web: www.proceedings.com

TABLE OF CONTENTS

ASSESSMENT OF WIND ENERGY POTENTIAL AT KUWAITI ISLANDS BY STATISTICAL	
ANALYSIS OF WIND SPEED DATA	1
Al-Salem Khaled, Al-Nassar Waleed	
BIOGAS GENERATION USING KITCHEN WASTE	10
Younas T, Taha M, Ehtesham S F, Siddiqui M F	
CHARACTERIZATION OF LACIANA VALLEY DISTRICT MINE WATER AS GEOTHERMAL	1.5
RESOURCE	15
Matas Alejandro, García-Carro Francisco, Loredo Jorge	
COASTAL PROTECTION OF THE ROMANIAN NEARSHORE THROUGHOUT HYBRID WAVE AND OFFSHORE WIND FARMS	21
Raileanu Alina, Onea Florin, Rusu Liliana	∠1
PREDICTION OF HORIZONTAL AXIS WIND TURBINE ROTOR PERFORMANCE: BOND	
GRAPH APPROACHGRAPH APPROACH	30
Jouilel Naima, Radouani Mohammed, El Fahime Benaissa	
PREDICTION OF THE WAVE POWER IN THE BLACK SEA BASED ON WIND SPEED USING	
ARTIFICIAL NEURAL NETWORKS	36
Ciortan Sorin, Rusu Eugen	
AN OVERVIEW OF THE WIND POWER POTENTIAL IN THE ROMANIAN COASTAL	
ENVIRONMENT - MOVING FROM ONSHORE TO OFFSHORE	40
Niculescu Dragos M., Rusu Eugen V. C.	
ECONOMIC PERFORMANCE EVALUATION OF NATURAL GAS VEHICLES AND THEIR	
FUEL INFRASTRUCTURES	46
Hagos Dejene A, Ahlgren Erik O	
ANALYSIS-BASED RESULTS ON THE DELINEATION OF PREARRANGEMENT AREAS FOR	
MARINE RENEWABLE ENERGY INSTALLATIONS IN THE WESTERN BLACK SEA BASIN	54
Mateescu Razvan, Vlasceanu Elena, Rusu Liliana	
SOLAR ENERGY AS EXPEDIENT ALTERNATIVES FOR NUCLEAR ENERGY	58
Younas T, Rasheed H, Rehman M M, Ramzan R	
WEATHER DATA ERRORS ANALYSIS IN SOLAR POWER STATIONS GENERATION	(2)
FORECASTING Eroshenko Stanislav, Khalyasmaa Alexandra	02
VERY-SHORT TERM SOLAR POWER GENERATION FORECASTING BASED ON TREND-	
ADDITIVE AND SEASONAL-MULTIPLICATIVE SMOOTHING METHODOLOGY	68
Eroshenko Stanislav, Khalyasmaa Alexandra, Valiev Rustam	00
MACHINE LEARNING TECHNIQUES FOR SHORT-TERM SOLAR POWER STATIONS	
OPERATIONAL MODE PLANNING	74
Eroshenko Stanislav, Khalyasmaa Alexandra, Snegirev Denis	
THE DEVELOPMENT OF SWIRLING DECAYING LAMINAR FLOW IN AN ANNULAR PIPE	79
Chen Baiman, Qin Frank G. F., Shao Youyuan, Xiao Hanmin, Huang Simin, Ho Kelvin	
HEMP IS THE FUTURE OF PLASTICS	83
Modi Ali Asghar, Shahid Rehmatullah, Saeed Muhammad Usman, Younas Tanzila	
PRODUCTION OF HYDROGEN BY STEAM METHANE REFORMATION PROCESS	87
Younus T, Anwer A, Asim Z, Surahio M S	
POLYANILINE MODIFIED WITH COBALT-HEXACYANOFERRATE (PMCH) AS AN	
ADSORBENT FOR REMOVAL OF HEAVY METALS FROM AQUEOUS SOLUTIONS	92
Moazezi Nima, Moosavian Mohammad Ali	
EVALUATION OF THE SHORELINE EFFECT OF THE MARINE ENERGY FARMS IN	
DIFFERENT COASTAL ENVIRONMENTS	97
Rusu Eugen, Onea Florin AN AIR CIRCULATION PURIFYING SYSTEM BASED ON PLC	104
AN AIR CIRCULATION PURIFYING SYSTEM BASED ON PLC	104
Author Index	
ANNIVA ANNVA	