

International Conference on Wind Energy and Applications in Algeria (ICWEAA'2018)

Algiers, 6-7 November 2018

Programme

Mardi 06 Novembre 2018 – matinée

8h00 – 9h30	Accueil et enregistrement des participants
9h30 – 10h00	Allocution de Bienvenue Allocution de Mr le Directeur Général de la Recherche Scientifique et du Développement Technologique Allocution de Mr le Directeur du CDER
10h00 – 10h30	Conférence plénière – Dr Ouahiba Guerri. Energie Eolienne: Etat des lieux et perspectives
10h30 – 10h45 : Pause-Café	
10h45 – 11h15	Conférence plénière – Mr Abdelaali Badache
11h15 – 11h30	Débats
11h30 – 12h00	Conférence plénière – Professeur Saad Mekhilef. Power Electronics in Wind Energy and its Role in Providing a Sustainable Energy Supply.
12h00 – 12h15	Débats
12h15 – 14h00: Pause-Déjeuner	

Mardi 06 Novembre 2018 – après midi

14h00 – 14h30	Conférence plénière – Professeur Christian Masson. Application of Actuator Surface Concept in LES Simulations of the Near Wake of Wind Turbines.		
Sessions thématiques			
Salle 1: Topic 5 – Chairmans : C. Masson & Dr H. Nedjari Daaou		Salle de Conférences: Topic 6 – Chairmans : Pr D. Rekioua & Dr Y. Bakelli	
14h30 – 14h45	Abdelhamid Bouhelal , Contribution to the Aerodynamic Study of the Air-Sand Flow Around a Wind Turbine Blade Installed in Desert Environment of Algeria.	14h30 – 14h45	Djohra Saheb Koussa , Behavior analysis and optimal management of hybrid Wind/Diesel/Storage power system.
14h45 – 15h00	Mohammed Nadjib Hamlaoui , Improved BEM Method for HAWT Performance Predictions.	14h45 – 15h00	Ali Dali , Development of a Sizing Interface for Photovoltaic Wind Microgrid Based on PSO-LPSP Optimization Strategy.
15h00 – 15h15	Fatima Souad Bezzaoucha , Failure causes Based Wind Turbine Components Classification and Failure Propagation: For proactive maintenance implementation.	15h00 – 15h15	Abdeselem Nekkache , Optimal sizing of hybrid PV/Wind based water pumping system considering reliability and economic aspects.
15h15 – 15h30	Madjid Tata , Experimental and numerical analysis of a scaled wind turbine near wake.	15h15 – 15h30	Soumia Khenfous , Optimal size of renewable hybrid system applying nature-inspired algorithms.
15h30 – 15h45	Débats	15h30 – 15h45	Débats
15h45 – 16h00: Pause – Café			
Salle 1: Topic 5 – Chairmans : Dr A. Hamidat & M. Boudia		Salle de Conférences: Topic 6 – Chairmans : E.M. Berkouk & A. Hadj Arab	
16h00 – 16h15	Ahmed Bekhti , Numerical analysis of dynamic stall on wind turbine airfoils.	16h00 – 16h15	Salima Nemsy , Parallel Operation of Flywheel Energy Storage Systems in a Microgrid using droop control.
16h15 – 16h30	Mohamed Debbache , The analysis study of the effect of airfoil thickness variation on the performance of wind speed.	16h15 – 16h30	Khadidja Mostefa Sba , Sizing of a hybrid (photovoltaic/wind) pumping system based on metaheuristic Optimization methods.
16h30 – 16h45	Hafida Daaou Nedjari , Wind Turbine Wake Assessment Using an Open Source CFD Code.	16h30 – 16h45	Issam Abadlia , Echo State Network Based Power Control and Energy Management in Grid-Connected a Hybrid Wind-Hydrogen Power Generation System.
16h45 – 17h00	Débats	16h45 – 17h00	Débats

Mercredi 07 novembre 2018

9h00 – 9h30	Conférence 4 – M. Razagui. La prévision du potentiel éolien à l'échelle locale par la technique du down-scaling en utilisant le modèle WRF.		
Sessions thématiques			
Salle de Conférences 2: Topics 1 – 3 – Chairmans : A.Smaili & N.K. Merzouk		Salle de Conférences: Topics 2 – 4 – 7 – Chairmans : S. Hadji & D.Saheb- Koussa	
9h30 – 9h45	Saida Makhloufi , Long-term Forecasting of Intermittent Wind and Photovoltaic Resources by using Adaptive Neuro Fuzzy Inference System (ANFIS).	9h30 – 9h45	Djamila Rekioua , Nonlinear Control Strategies of a Variable Speed Wind Turbine.
9h45 – 10h00	Salima Adjiri , Prediction of vertical wind speed by artificial neural network for wind energy application in Algeria.	9h45 – 10h00	Hammou Tebibel , Wind Turbine Power System for Hydrogen Production and Storage: Techno-economic Analysis.
10h00 – 10h15	Ayoub Alem , Numerical study of the potential and the energetic productible of wind energy in the North West region of Algeria.	10h00 – 10h15	Tarek Benhacine , A New Control Method of Three-Phase SEIG Feeding a Single-Phase Load by using SVC.
10h15 – 10h30	Débats	10h15 – 10h30	Débats
10h30 – 11h00: Pause – Café & sessions Posters			
Salle de Conférences 2: Topics 1 – 5 – Chairmans : K. Abdeladim & O. Guerri		Salle de Conférences 1: Topics 2 – 4 – 7. Chairmans : S. Mekhilef & A. Kaabeche	
10h45 – 11h00	Sidi Mohammed Boudia , Wind resource assessment in the western part of Algerian highlands, case study of El-Bayadh.	10h45 – 11h00	Abdelouhab Zaoui , Improvement of the Performance of Doubly Fed Induction Generator for Wind Turbines by Optimizing the Parameters of the Fuzzy Controller.
11h00 – 11h15	Ahmed Mazidi , Comparative study of wind pumping performance in Two Algerian regions coastal and Saharan.	11h00 – 11h15	Abdelkader Garmat , Wind turbine power tracking using an improved PID multimodel approach with 4 and 8 models.
11h15 – 11h30	Omar Madani Fouatih , How the optimization of aerodynamic performances of a NACA 4415 airfoil equipped with passive vortex generators can benefit to improve wind turbine efficiency.	11h15 – 11h30	Issam Benouaret , Fuzzy Logic Based P/Q Control Design for Grid Connected Wind conversion System.
11h30 – 11h45	Débats	11h30 – 11h45	Abdelouahed Touhami , Improved Dynamic Performance of Wind Energy Conversion System by STATCOM.
11h45 – 12h00		11h45 – 12h00	Ali Benachour , Implementation and experimental validation of space vector modulation for indirect matrix converter using STM32.
		12h00 – 12h15	Débats

12h15 – 12h45: Table ronde et recommandations
12h45 – 13h00: Cérémonie de clôture de la conférence
13h00 – 14h00: Déjeuner

Sessions Posters – S. Makhloufi & S.M. Boudia

Topic 1

Miloud Benmedjahed, Wind power Assessment in Algeria: Methods Development.

Samira Louassa, Wind resources assessment of an Algerian arid area using a CFD model.

Sabiha Kheder Haddouche, Wind resource assessment and economic analysis of a grid-connected wind farm in an Algerian Highlands site.

Samira Louassa, Valuation of diverse methods used to estimate Weibull parameters for wind speed in various Algerian stations.

Belkacem Belabes, A techno economic study of wind energy potential using wind energy turbines for electricity generation in two region of Algeria.

Topic 2

Mohamed Rida Bengourina, Multifunctional Grid Connected Inverter Interfaced by Wind Energy Conversion System.

Mohamed Keddar, Experimental Validation of Photovoltaic Grid Connected NPC Multilevel Inverter Based on Neural Network MPPT.

Mohamed Bendib, Design of Axial Flux PM Machine for Flywheel Energy Storage System.

Hamza Afghoul, Design and real time implementation of robust switched fractional order controller for grid connected wind energy conversion system.

Younes Sahri, Direct Torque Control of DFIG Driven by Wind Turbine System Connected to the Grid.

Oum El Fadhel Loubaba Bekri, Impact of wind turbine on voltage stability.

Zoubir Zeghdi, Wind Energy Conversion Systems Based on a Doubly Fed Induction Generator Using Artificial Fuzzy Logic Control.

Topic 5

Jackson Tellez-Alvarez, 3D Numerical simulation of wind turbines and fractal dimension analysis.

Ali Boudis, Aerodynamic optimization of active flow control over S809 airfoil using synthetic jet.

Samir Ouchene, Numerical Simulation of a Pitching NACA 0015 Airfoil in Deep Stall regime: Comparison of turbulence models.

Abdellah Boumehani, Effect of computational grid on prediction of a vertical axis wind turbine rotor using Delayed Detached-Eddy Simulations.

I. Boumrar, Rotor Blade Inclination Effects on Electrical Power Generated.

M.A. Mahdi, Numerical Study of the Thermal Behavior of a HAWT nacelle Operating Under Severe Saharan Climate