



Curriculum Vitae

1- PERSONAL DATA:

Name : MOHAMED TALAAT MOHAMED MOUSTAFA
 Gender : MALE
 Date of Birth : 11 – 2 – 1979
 Place of Birth : ZAGAZIG, SHARKIA, EGYPT
 Nationality : EGYPTIAN
 Address : Electrical Power & Machines Department, Faculty of Engineering,
 Zagazig University, Zagazig, P.O. 44519, EGYPT.
 Current Position : Assistant Professor at Electrical Power & Machines Engineering
 Department, Faculty of Engineering, Zagazig University.
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 Marital Status : Married with 3 Children.
 Major : Electrical Engineering.
 Fine : Electrical Power and Machines Engineering.

2- EDUCATION AND OCCUPATION:

Ph. D. : July 2009, in Electrical Power and Machines Engineering, Zagazig
 University, Egypt.
 Ph.D. Title : Electrical Trees in Solid Insulation Analysis.
 M.Sc. : November 2005, in Electrical Engineering, Zagazig University,
 Egypt.
 M.Sc. Title : Electrical Pre-Breakdown Analysis in Dielectric Liquid Using Air
 Bubble Deformation in the Medium.
 B.Sc. : May 2000 in Electrical Engineering, with grade Distinction "very
 good with honor ", Zagazig University, Egypt.
 2000 – 2001 :

- Elec. Eng. at El-said Office for Engineering Design, next to
 Egyptian Zoo of Giza, Egypt from 1-8-2000 till 12-12-2000.
- Elec. Eng. at Egyptian Drilling Company (EDC) for Petroleum
 and Oil Drilling from 12-12-2000 till 11-2-2001.
- Elec. Eng. at Canal Electrical Distribution Company, Al Asher
 men Ramadan, from 11-2-2001 till 25-8-2001.

 2000 – 2005 : Demonstrator at the Faculty of Engineering, Zagazig university.
 2005 – 2009 : Lecturer Assistant at the Faculty of Engineering, Zagazig University

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|----------------|--------------------------------------------------------------------------------------------------|
| 2009 – present | : Assistant Professor at the Faculty of Engineering, Zagazig University. |
| 2009 – 2013 | Visitor professor at High Technology Institute in 10 th of Ramadan. |
| 2010 – 2012 | Consultant for Communication and Information Technology Center CITC/MIS with Zagazig University. |
| 2012 - present | MIS Project Manager at Zagazig University |

3- TEACHING EXPERIENCE:

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| Courses | <ul style="list-style-type: none"> : Power System Analysis for Fourth year Electrical Eng. Students. : Electrical Power Eng. for Fourth year Electrical Eng. Students : Power System Dynamics & control for Fourth year Electrical Eng. Students. : High Voltage for third year Electrical Eng. Students. : Electrical Measurement for third year Electrical Eng. Students. : Utilizations of power system for third year Electrical Eng. Students. : Computer Design of Electrical Power System for third year Electrical Eng. Students. : Electromagnetic Fields for second year Electrical Eng. Students. : Electrical Measurement for second year Electrical Eng. Students. : Electrical and Electronics Engineering for second year Mechanical Eng. Students. : Electrical Power & Machines Eng. for third year Computers and Systems Eng. Students : Computer applications in Electromagnetic Fields for post graduate Electrical Eng. (Master). : Modern Trends in High Voltage and DC Transmission Line for post graduate Electrical Eng. (Master). : Economic System Operation of Electrical Power System for post graduate Electrical Eng. (Diploma). : Artificial Intelligent for Power System Operation for post graduate Electrical Eng. (Doctor of Physiology). |
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4- RESEARCH INTERESTS:

- : High Voltage Technique.
- : Electromagnetic fields.
- : Underground cables.
- : Transformer oil.
- : Insulations Material (Dielectric Liquid – Gases – Solids)
- : Charge Simulation Technique.
- : Genetic Algorithms.
- : Computer Simulation.

5- THESIS SUPERVISION:

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| M. Sc. | : 6 |
| Ph. D. | : None. |

6- LANGUAGES:

- : Arabic.
- : English, Fluent spoken and written.

7- SOCIETY MEMBERSHIP:

- Member of
- : Member and Reviewer for IEEE PES Transactions on Power Delivery.
 - : Egyptian Syndicate for Engineers, 2000 – Present.
 - : Member of IEEE Society.
 - : Editor Board Member for International Journal of Electrical Engineering, Romania.
 - : Member and Reviewer for International Journal of Electric power components and systems.
 - : Editor Board Member for International Journal of Electromagnetics and Applications (USA).
 - : Reviewer for IEEE TDEI Transactions on Dielectric and Electrical Insulation.
 - : Reviewer for Journal of Electromagnetic Analysis and Applications, China.

8- TRAINING WORKSHOPS:

- : Faculty and Leadership Development Project (FLDP)- 16 programs
- : ICDL Examiner in the project of UNISCO for computer training
- : Training in Poland 2013 for mechatronics degree funded by Europe

9- PUBLICATIONS:

- [1]. **A. El-Zein and M. Talaat** "New Experimental Study of an Injected Air Bubble Deformation in Dielectric Liquid under Applied High D.C. Voltage Using Photographic Recording" **IEEE**, Ninth International Middle East power systems conference, **MEPCON' 2003**, pp. 869-873 Shebin El-Kom, **Egypt**, December 16-18, **2003**.
- [2]. **A. El-Zein and M. Talaat** "Pre-Breakdown Analysis during the Deformation of an Artificial Air Bubble in Transformer Dielectric Liquid under High DC Negative Applied Voltage" **IEEE**, Tenth International Middle East power systems conference, **MEPCON' 2005**, pp. 113-117, Port-said, **Egypt**, December 13-15, **2005**.
- [3]. **A. El-Zein, M.M. El Bahy and M. Talaat** "Types of Electrical Tree in Solid Insulation Under Electrical and Mechanical Energy Basis" **IEEE**, Power System Conference **MEPCON' 2008**, pp. 80-84, Aswan, **Egypt**, **2008**.

http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=4562308&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%3D4562308

- [4]. **A. El-Zein, M.M. El Bahy and M. Talaat** "A Simulation Model for Electrical Tree in Solid Insulation Using CSM Coupled with GAs" **IEEE Annual Report Conference on Electrical Insulation and Dielectric Phenomena CEIDP 2008**, pp. 645-649, Quebec, Canada October 26-29, 2008.
- <http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=4772768&url=http%3A%2F%2Fieeexplore.ieee.org%2Fiel5%2F4760206%2F4772762%2F04772768.pdf%3Farnumber%3D4772768>
- [5]. **A. El-Zein, M.M. El Bahy and M. Talaat** "A Prediction Methodology of Electrical Tree Propagation in Solid Dielectrics" **International Journal of Electrical Engineering, J. Elec. Eng. (2009) Vol. 9 / 2009 – No. 2**, pp. 87-93, 2009.
- https://el.trc.gov.om/htmlroot/ENGG/tcolon/e_references/Consolidated/Electrical%20And%20Electronics/Journals/A%20Prediction%20Methodology%20of%20Electrical%20Tree%20Propagation%20in%20Solid%20Dielectrics.pdf
- [6]. **A. El-Zein, M. Talaat and M.M. El Bahy** "A New Method to Predict the Electrical Tree Growth in Solid Insulation" **Proceedings of the 16th International Symposium on High Voltage Engineering, (ISH 2009)**, paper D-15, pp. 1-6, 2009.
- [7]. **A. El-Zein, M. Talaat and M.M. El Bahy** "A Numerical Model of Electrical Tree Growth in Solid Insulation" **IEEE Transactions on Dielectrics and Electrical Insulation, Vol. 16, No. 6; pp. 1724-1734, December 2009.**
- http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=5361596&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%3D5361596
- [8]. **A. El-Zein and M. Talaat**, "A New Model of Investigating the Electric Field in Dielectric Liquid for Streamer Initiation" **International Journal of Electrical Engineering, J. Elec. Eng. (2010) Vol. 10 / 2010 – No. 2**, pp. 47-51, 2010.
- <http://www.jee.ro/covers/editions.php?act=art&art=WN1257336554W4af16eea2e29a>
- [9]. **A. El-zein and M. Talaat**, "A Numerical Model of Investigating the Electric Field in Dielectric Liquid" **IEEE MELECON Conference 2010**, pp. 393-397, 2010.
- <http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=5476252&url=http%3A%2F%2Fieeexplore.ieee.org%2Fiel5%2F5470286%2F5475895%2F05476252.pdf%3Farnumber%3D5476252>
- [10]. **M. Talaat** "A Simulation Model of Fluid Flow and Streamlines Induced by Non-Uniform Electric Field" **IEEE, 14th International Middle East Power Systems Conference MEPCON'10**, pp. 371-375, Cairo University, **Egypt**, December 19-21, 2010. www.sdaengineering.com/mepcon10/Papers/181.pdf
- [11]. **M. Farahat and M. Talaat** "A New Approach for Short-Term Load Forecasting Using Curve Fitting Prediction Optimized by Genetic Algorithms" **IEEE, 14th International Middle East Power Systems Conference MEPCON'10**, pp. 106-110, Cairo University, **Egypt**, December 19-21, 2010.

www.sdaengineering.com/mepcon10/papers/125.pdf

- [12]. **M. Talaat** "Charge Simulation Modeling for Calculation of Electrically Induced Human Body Currents" **IEEE Annual Report Conference on Electrical Insulation and Dielectric Phenomena CEIDP 2010**, pp. 644-647, **USA**, October 17-20, **2010**.
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=5723972&contentType=Conference+Publications&queryText%3DCharge+Simulation+Modeling+for+Calculation+of+Electrically+Induced+Human+Body+Currents>
- [13]. **M. Talaat** "Influence of Transverse Electric Fields on Electrical Tree Initiation in Solid Insulation" **IEEE Annual Report Conference on Electrical Insulation and Dielectric Phenomena CEIDP 2010**, pp. 313-316, **USA**, October 17-20, **2010**.
http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=5724019&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%3D5724019
- [14]. **M. Talaat** "Electric Field Simulation along Silicone Rubber Insulators Surface" **Proceedings of the 17th International Symposium on High Voltage Engineering, (ISH 2011) Germany**, paper A-22, pp. 1-6, **2011**.
- [15]. **M. Talaat, A. El-Zein**, "Analysis of Air Bubble Deformation Subjected to Uniform Electric Field in Liquid Dielectric", **International Journal of Electromagnetics and Applications**, Vol. 2, No. 1, pp. 4-10, **2012**.
<http://article.sapub.org/10.5923.j.ijea.20120201.02.html>
- [16]. **M. A. Farahat, M. Talaat**, "Short-Term Load Forecasting Using Curve Fitting Prediction Optimized by Genetic Algorithms", **International Journal of Energy Engineering**, Vol. 2, No. 2, pp. 23-28, **2012**.
<http://article.sapub.org/10.5923.j.ijee.20120202.04.html>
- [17]. **M. Talaat, M. Magdy, A. Abd El-Baset, M. Abo-Msallam, A. Abdallah, E. Mohamed, A. Amer, M. El-Dallal**, "Software for Calculating The Non-Uniform Electric Field Causing Electrical Tree in Underground Cables", **International Journal of Electromagnetics and Applications**, Vol. 2, No. 4, pp. 69-82, **2012**.
<http://article.sapub.org/10.5923.j.ijea.20120204.04.html>
- [18]. **M. A. Farahat, M. Talaat**, "The Using of Curve Fitting Prediction Optimized by Genetic Algorithms for Short-Term Load Forecasting", **International Review of Electrical Engineering (IREE)**, Vol. 7, No. 6, pp. 6209-6215, **December 2012**
http://www.praiseworthyprize.com/journals/IREE_issues.html#Part_B
- [19]. **M. Talaat, A. El-Zein**, "A Numerical Model of Streamlines in Coplanar Electrodes Induced By Non-Uniform Electric Field", **Journal of Electrostatics** Vol. 71, No. 3, pp. 312-318, **2013**.
<http://www.sciencedirect.com/science/article/pii/S0304388612001969>
- [20]. **Mohamed Talaat, Reda Edris, Naglaa Ibrahim, Fatma Omar, Mohamed Ibrahim**, "A New Approach for Converting Renewable Energy to Stable Energy", **Engineering**, Vol. 5, No. 10A, pp. 27-33, **2013**.
<http://dx.doi.org/10.4236/eng.2013.510A005>

- [21]. **M. Talaat and A. El-Zein**, "Suppression of the Electrical Tree Growth in Solid Insulation Using a Transverse Layer of Dielectric Barrier", **Journal of Electrical Engineering** Vol. 13, No. 3, pp. 114-117, **2013**.
<http://www.jee.ro/covers/editions.php?act=art&art=WB1350251109W507b32657d9cc>
- [22]. **M. Talaat**, "Calculation of electrostatically induced field in humans subjected to high voltage transmission lines", **Electric Power Systems Research** Vol. 108, , pp. 124-133, **2014**.
<http://www.sciencedirect.com/science/article/pii/S0378779613002964>

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