



**MOHAMED ELSAYED ALY MOHAMED YOUSSEF**

**PROFESSOR, INFORMATIC RESEARCH INSTITUTE – CITY OF SCIENTIFIC RESEARCH AND TECHNOLOGY APPLICATIONS**

<p><b>PERSONAL INFORMATION</b></p>	<p>Full Name: Affiliations: Address:  Mobile No.:  E-mail:  Important links:</p>	<p>Mohamed Elsayed Aly Mohamed Youssef</p> <p>Informatics Research Institute, City of Scientific Research and Technological Applications, Universities and Research center District, New Borg El-Arab, Alexandria, Egypt.</p> <p>Phone –Cell : (+20)121 121 3444 -(+20100) 3703515 Phone-House : (+203) 4595123 Phone –Office : (+203) 45 93 409</p> <p>elsayed168@yahoo.com elsayed168@gmail.com</p>
<p><b>EDUCATION</b></p>	<p>List your Degrees here... (start with the most recent) <b>(Degree's Name &amp; Year)</b> – in <b>BOLD</b> (School Name – Location)</p>	<p>1999-2004                      PhD. of Mechanical Power Engineering, Cairo University, Channel system, Cairo University and Faculty of Mechanical Engineering, Technical University of Munich, Germany (<b>Modeling and Performance analysis of solid oxide fuel cells (SOFC)</b>)</p> <p>1994-1997                      M. Sc. Of Mechanical Engineering Faculty of Engineering, Cairo University (<b>Experimental and Theoretical Study of a Heat Storage System Utilizing New Phase Change Materials</b>)</p> <p>1985-1990                      B. Sc. Of Mechanical Engineering Faculty of Engineering, Cairo University.</p>

ACTIVITIES	Scientific Activities
	List your Scientific Activities here... (Activity Title, Description & Date)
2016-Now	Professor, Informatic Research Institute – City of Scientific research and Technology Applications
2011-2016	Associate Professor, Informatic Research Institute – City of Scientific research and Technology Applications
2006-2007	Post Doctor in Numerical Simulation of Fuel Cell Stack Optimization at Korea Institute of Energy Research (KIER), South Korea
2001-2003	Numerical simulation of Solid Oxide Fuel cell (SOFC) in Faculty of Mechanical Engineering, Technical University of Munich, Germany
2004- 2011	Researcher, Informatic Research Institute –City of Scientific research and Technology Applications
1998-2004	Researcher Assistant – Informatic Research Institute – City of Scientific Research and Technology Applications
1995-1996	Assistant Researcher - Storage system at Fraunhofer Institute for solar energy systems, Freiburg, Germany
1993-1994	Assistant Researcher - Storage and Conversion of Renewable Energy (Solar Energy) – CNR–Messina-Italy
1991-1997	Assistant Researcher - Solar Energy Department – National Research Center – Cairo Egypt

## **Projects**

1. Project title , STDF ID/1310 : Modeling, Construction and -Performance analysis of Proton Exchange Membrane Fuel Cell (PEMFC) as Clean Portable Power Source.

Fund: L.E. 954,000 ( 200,000 U\$) (STDF)

Period: July 2010 – January 2014

Execution Place: City of scientific Research and Technology Application Alexandria, Egypt.

Incorporation: P.I (Principale Investegator)

2. Project title: Multipurpose Applications by Thermodynamic Solar

Fund: ( 22 Millions Euro) (FP7)

Period: July 2011 –2016

Execution Place: City of scientific Research and Technology Application Alexandria, Egypt.

Incorporation: Member

3. STDF Project ID/4989 (March 2014 - Feb 2016)

Development of Polymer Electrolyte Membranes for Direct Methanol Fuel Cell Application.

Fund: L.E. 1,000,000 (STDF)

Execution Place: City of scientific Research and Technology Applications, Alexandria, Egypt.

Incorporation: Member

4. STDF ID/10495 Solar-Greenhouse-Desalination System Self productive of Energy and Irrigating Water Demand

Fund: L.E. 1,500,000 (STDF)

Execution Place: City of scientific Research and Technology Applications, Alexandria, Egypt.

Incorporation: Member.

5. Development of ship simulator with six degree of freedom (6DOF).  
Fund: L.E. 3,000,000 Academy of Scientific Research and Technology (ASRT) Execution Place: City of scientific Research and Technological Applications, Alexandria, Egypt.  
Incorporation: Member

**Professional society memberships**

Egyptian Syndicate of Engineers

**Reviewers on the following Scientific Journals**

- 1- Journal of Convergence Information Technology
- 2- Journal of Mechanical Engineering Research
- 3- Journal of Petroleum Technology and Alternative Fuels
- 4- Journal of Petroleum and Gas Engineering
- 5- Journal of Environmental Chemistry and Ecotoxicology (JECE)
- 6- International Journal of Green Energy

**Editor in the following Scientific Journals**

- 1- Journal of Petroleum Technology and Alternative Fuels
- 2- International Journal of Engineering and Industries
- 3- Journal of Next Generation Information Technology
- 4- Advances in Information Sciences and Service Sciences
- 5- SCICON: The International Association of Science & Engineering Congress

**Administrative Activities**

[List your Administrative Activities here...](#)

(Activity Title, Description & Date)

2018-2019: Dean of Informatics Research Institute

2014-2018: Vice Dean of Informatics Research Institute

2004-2018: Head of Computer Based Engineering Applications  
Department

2018-Now: Vice President of the Regional Center for New and Renewable Energy

#### Extra-curriculum Activities

List your Extra-curriculum Activities here...

e.g. (Leadership, Community services & Volunteer work)

#### **Training courses**

- 1- Storage and Conversion of Renewable Energy (Solar Energy) – CNR– Messina Italy, 1993-1994
- 2- Solar Cell and wind turbine in Oldenburg University, Germany, 1995.
- 3- Storage system at Fraunhofer Institute for solar energy systems, Freiburg, Germany, 1995-1996.
- 4- Numerical simulation of Solid Oxide Fuel cell (SOFC) in Faculty of Mechanical Engineering, Technical University of Munich, Germany.2001-2003.
- 5- Post Doctor in Numerical Simulation of Fuel Cell Stack optimization at Korea Institute of Energy Research (KIER), South Korea, one year Apr. 2006 to Apr. 2007.

#### **Experience**

- 1- Good experience in Computational Fluid Dynamics (CFD) applications by using FEMLAB (COMSOL) and ANSYS software.
- 2- Computer skills, FORTRAN, C++, JAVA, ICDL (Word, Excell, Internet, Power point, and Access).
- 3- Teaching in King Institutes, Computer Institutes, Alexandria
- 4- Teaching in Faculty of Engineering October 6 University, Cairo.
- 5- Charmin of Cooperation with Industry Committee, Moubark City for Scientific research and Technological Applications (MuCSAT), 2007-2010.
- 6- Supervisor of training program for 600 graduated on computer skills funded by IMC (Industrial Modernization Centre)
- 7- Design and manufacturing vibrating dryers for drying agricultures products.

	<p>8- Certificate program consisting of a series of six workshops on different topics in the fields of management and communication skills. The specific topics covered in the course of these workshops are the following:</p> <ul style="list-style-type: none"> <li>a) Communication in Teams</li> <li>b) Basics of Management and Leadership</li> <li>c) Time Management and Planning</li> <li>d) Strategic Management</li> <li>e) Conflict Management and Negotiation</li> <li>f) Finance for Non-Financials</li> </ul>
<p><b>LIST OF PUBLICATIONS</b></p>	<p>List your Publications here...(start with the most recent)</p> <ol style="list-style-type: none"> <li><b>1- Green and Low-Cost Membrane Electrode Assembly for Proton Exchange Membrane Fuel Cells: Effect of Double-Layer Electrodes and Gas Diffusion Layer</b>, M. H. Gouda, Mohamed Elnouby, Andrew N. Aziz, M. Elsayed Youssef, D. M. F. Santos and Noha A. Elessawy, <i>Frontiers in Materials</i>, volume (6),article 337, 2020.</li> <li><b>2- Carboxylated Alginate Hydrogel Beads for Methylene Blue Removal: Formulation, Kinetic and Isothermal Studies</b>, Mohamed Samir Mohy Eldin, Emad Ali Soliman, Ahmed Abdel Fattah Elzatahry, Mohamed Ramadan Elaassar, Bassant Yossri Eweida, Marwa Farouk Elkady, Aref Mohamed Abdel Rahman, Mohamed Elsayed Yossef , <i>Desalination and Water Treatment</i>, volume (163),308-323, 2019.</li> <li><b>3- Numerical and experimental analyses of a transparent solar distiller for an agricultural greenhouse</b>, Omar O Rabhy, IG Adam, M Elsayed Youssef, AB Rashad, Gasser E Hassan, <i>Applied Energy</i>, volume (253), 2019.</li> <li><b>4- Development and Performance Analysis of PEMFC Stack based on bipolar plates fabricated employing different</b></li> </ol>

**designs**, R.S. Amin, K.M. El-Khatib and, M. Elsayed Youssef , Arabian Journal of Chemistry volume (11) pp 609-614, 2018.

**5- EVALUATION OF DIFFERENT SUNSHINE-BASED MODELS FOR PREDICTING GLOBAL SOLAR RADIATION– Case Study: New Borg El- Arab city, Egypt**, Gasser E. Hassan M. Elsayed Youssef, Mohamed A. Ali, Zahraa E. Mohamed Ahmed A. Hanafy, Thermal Science, Volume 22, Issue 2, 2018, Pages 979-992.

**6- Development of Cross linked Chitosan/Alginate Polyelectrolyte Proton Exchanger Membranes for Fuel Cell Applications**, M. S. Mohy Eldin, A. E. Hashem, T. M. Tamer , A. M. Omer , M. E. Yossuf, M. M. Sabet, International Journal of Electrochemical Science, 12 (2017) 4301 – 4318.

**7- Novel Aminated Cellulose Acetate Membranes for Direct Methanol Fuel Cells (DMFCs)**, M. S. Mohy Eldin, A. M. Omer, T. M. Tamer, M. H. Abd Elmageed , M. E. Youssef, R. E. Khalifa, International Journal of Electrochemical Science, 12 (2017) 3840 – 3858.

**8- Extensive parametric study for bipolar plate channel to Enhance PEMFC performance**, M. Elsayed Youssef, Walaa. M. Galal, Gasser Hassan, and Medhat M. Sorour, CFD letters, 2017 (Accepted).

**9- Sulfated Chitosan/PVA Absorbent Membrane for Removal of Copper and Nickel Ions from Aqueous Solutions – Fabrication and Sorption Studies**, M.A. Abu-Saied, Ryszard Wycisk, Moustafa M. Abbassy, G. Abd El-Naima, F. El-Demerdash, M.E. Youssef, H. Bassuony, Peter N. Pintauro, Carbohydrate Polymers, (165), 149-158, 2017.

**10-Performance Assessment of Different Day-of-the-Year-based Models for Estimating Global Solar Radiation - Case Study: Egypt**, M. Gasser E. Hassan, Elsayed Youssef, Mohamed A. Ali,

Zahraa E. Mohamed Ali I. Shehata, Journal of Atmospheric and Solar–Terrestrial Physics 149, 69–80 , 2016.

**11-Removal of Methylene Blue by Amidoxime Polyacrylonitrile-Grafted Cotton Fabrics: Kinetic, Equilibrium, and Simulation Studies**, M. S. Mohy Eldin, M. H. Gouda, M. E. Youssef, Yehia M.S. El-Shazly, H. A. Farag, Fibers and Polymers, Springer Journals, Vol.17, No.11, 1884-1897, 2016.

**12-New Temperature-based Models for Predicting Global Solar Radiation**, Gasser E. Hassan, M. Elsayed Youssef , Zahraa E. Mohamed, Mohamed A. Ali, Ahmed A. Hanafy, Applied Energy in Elsevier Publisher, 2016 (179), 437-450.

**13-Novel Proton Exchange Membranes Based on Sulfonated Cellulose Acetate for Fuel Cell Applications: Preparation and Characterization**, M. S. Mohy Eldin, M. H. Abd Elmageed, A. M. Omer, T. M. Tamer, M. E. Youssef, R. E. Khalifa, International Journal of Electrochemical Science, 11 (2016) 10150 – 10171.

**14-Investigating the performance of different models in estimating global solar radiation**, M. Elsayed Youssef, Gasser E. Hassan, Zahraa E. Mohamed, Mohamed A. Ali, Advances in Natural and Applied Sciences, 2016 V. 10(4), 379-389.

**15-Theoretical and experimental study of bipolar plates for Proton Exchange Membrane Fuel Cell**, M. Elsayed Youssef., Walaa. M. Galal, K.M. El-Khatib, and M. M. Sorour, Journal of Electrical Systems and Information Technology, 2015, (Accepted).

**16-Development of Novel Phosphorylated Cellulose Acetate Polyelectrolyte Membranes for Direct Methanol Fuel Cell Application**, M. S. Mohy Eldin, M. H. Abd Elmageed, A. M. Omer, T. M. Tamer, M. E. Yossuf, R. E. Khalifa, International Journal of Electrochemical Science, (11)2016 , 3467-3491.

**17-Efficient adsorption of copper and nickel ions from aqueous solution using sulfonated Poly (vinylalcohol)/chitosan/arabic gum as adsorbent membrane**, M.A. Abu-Saied, M. Elsayed Youssef, M.E. El-Naggar, Ryszard Wycisk, Gamal Abd El-Naim, Fatma M. El-Demerdash, Moustafa M. Abbassy and Haytham Bassuony, *Australian Journal of Basic and Applied Sciences*, 9(35) November 2015, Pages: 310-320.

**18-Ion Conducting Nanocomposite Membranes Based on PVA-HAHAP for Fuel Cell Application: II. Effect of Modifier Agent of PVA on Membrane Properties**, Elbadawy A. Kamoun, M. Elsayed Youssef, Mouhamed A. Abu-Saied, Alaa Fahmy, Hazem F. Khalil, and Farag Abdelhi, *International Journal of Electrochemical Science*, 10(2015)6627-6644.

**19-Development of polystyrene based nanoparticles ions exchange resin for water purification applications**, M. S. Mohy Eldin, M.A. Abu-Saied, M. Elsayed Youssef, T. M. Tamer, A. I. Hashem, M.M. Sabet. *Desalination and Water Treatment Journal*, pp1-14, 2015.

**20-Removal of cationic reactive dye using SPGMA combined with an isolated bacterial strain**, N. A. Taha, T. H. Taha, M. A. Abu-Saied, M. Elsayed Youssef, CHMELA Štefan, *Advances in Environmental Biology*, 9(24) November 2015, Pages: 466-481.

**21-POLYELECTROLYTE NANOCOMPOSITE MEMBRANES BASED ON PVA-HA-HAP: SYNTHESIS AND CHARACTERIZATION**, Alaa F. Abd Elal, Mouhamed A. Abu-Saiedb, Elbadawy A. Kamoun, Hazem F. Khalil, M. Elsayed Youssef, Attia M. Attia and Farag A. Esmail *Journal of Advances in Chemistry*, V 11, N. 3, 2015, pp 4326-3439

**22-Numerical Investigation of Medium Range Re Number Aerodynamics Characteristics for NACA0018 Airfoil**, Gasser E. Hassan , Amany Hassan, M. Elsayed Youssef, CFD Letters 6 (4), 2014, pp 175-178.

**23-Electrocatalytic activity of nanostructured Ni and Pd-Ni on Vulcan XC-72R carbon black for methanol oxidation in alkaline medium**, R.S. Amin, R.M. Abdel Hameed, K.M. El-Khatib and, M. Elsayed Youssef, international journal of hydrogen energy 39 (2014) 2026-2041.

**24-DESIGN AND MODELING OF BIPOLAR PLATES FOR PEMFC BY USING COMSOL SOFTWARE**, M. Elsayed Youssef., Walaa. M. Galal, K.M. El-Khatib, A.A. Elzatahry, and M. M. Sorour, Proceeding of the Global Conference on Global Warming-2012 (GCGW-2012), 8-12 July 2012, Istanbul, Turkey, pp. 41-53

**25-Preparation and characterization of imino diacetic acid functionalized alginate beads for removal of contaminants from waste water: I. methylene blue cationic dye model by** M. S. Mohyeldin, E. A. Soliman, A. A. Elzatahry, M. F. Elkady, A. M. Abdel Rahman, M. Elsayed Youssef and B. Y. Eweida, Desalination and Water Treatment Journal, 40(2012), 15-23.

**26-Pt-NiO/C anode electrocatalysts for direct oxidation methanol fuel cells**, R.S. Amin, R.M. Abdel Hameed, K.M. El-Khatib, M. Elsayed Youssef and A.A. Elzatahry, Electrochimica Acta 59 (2012) 499– 508.

**27-Nano-Sulphonated Poly (glycidyl methacrylate) Cations Exchanger for Cadmium Ions Removal: Effects of operating parameters**, M.S.Mohy Eldin,M.F. Elkady,M.A.Abu-Saied,A.M.AbddelRahman, E.A. Soliman, A.A. Elzatahry, M.Elsayed. Youssef, Desalination, ELSEVIER SCIENCE BV – Desalination 297 (2011) 152-162.

**28-Nanocatalysts Prepared by Microwave and Impregnation Methods for Fuel Cell Application**, R.S. Amin, A.A. Elzatahry\* ,

K.M. El-Khatib, and M. Elsayed Youssef, *International Journal of Electrochemical Science*, 6(2011)4572-4580.

**29-Experimental Evaluation and Numerical Modeling of Catalytic Activity of Ag-Fe Nanoparticles Systems Prepared by Microwave Synthesis Method for CO Oxidation**, A.A. Elzatahry, Hassan M. Hassan, M. ELSayed Youssef, *International Journal of Electrochemical Science*, 5(2010)1496-1506.

**30-Laboratory Studies and Numerical Modeling of using Natural Micro beads for Environmental Applications**, M. Elsayed Youssef , E. A. Soliman, M. A. Abu-Saied, M. S. Mohy Eldin, Salem S. Al-Deyab, ElRefaie Kenawy, A. A. Elzatahry, *International Journal of Electrochemical Science*, 5(2010)1887-1897.

**31-Experimental and Simulation Study on Removal of Methylene Blue Dye by Alginate Micro-beads**, A. A. Elzatahry, E. A. Soliman, M. S. Mohy Eldin, M. Elsayed Youssef, *Journal of American Science*, 6, 846-851, 2010

**32-Lumped Model for Proton Exchange Membrane Fuel Cell (PEMFC)**, M. ELSayed Youssef , Khairia E.AL-NAdi, Moataz H.Khalil· *International Journal of Electrochemical Science* , 5(2010), 267-277.

**33-Neural network model for proton exchange membrane fuel cell (PEMFC)**, M. ELSayed Youssef <sup>\*b</sup>, Khairia E.AL-NAdi<sup>a</sup>, Moataz H.Khalil<sup>b</sup>, *AISS : Advances in Information Sciences and Service Sciences*, Vol. 2, No. 2, pp. 61 ~ 66, 2010

**34-Removal of cadmium ions from synthetic aqueous solutions using a novel nano-sulphonated poly glycidylmethacrylate cation exchanger: Kinetic and equilibrium studies**, M.S.Mohy Eldin, M.F. Elkady, M.A. Abu-Saied, A.M. AbdelRahman, E.A. Soliman, A.A. Elzatahry, M.E. Youssef, *Journal of Applied Polymer Science*, Vol. 118, 3111–3122 (2010).

**35-Solid Oxide Fuel cell (SOFC): Modeling and Testing Reliability Using Neural Network**, Mostafa A. El-Hosseini, M. Elsayed Youssef, Amira Y. H, Journal of Next Generation Information Technology Volume 1, Number 1, May 2010.

**36-A Device for Enhancement and Controlling of the Cohesive Powder Discharging without Aeration**, Aref M.E. Abd-El-Rahman and M. ElSayed Youssef, Journal of Applied Science Research, 4(2): 133-137, 2008, INSInet Publication

**37-Modeling and Simulation of Anode-Supported SOFC by using CFD Commercial Software**, M. Elsayed Youssef., Lim Tak-Hyoung, Song Rak-Hyun, Lee Seung-Bok, Shin Dong-Ryul, Proceeding of the Global Conference on Global Warming-2008 (GCGW-08), 6-10 July 2008, Istanbul, Turkey, Paper 367.

**38-CFD Simulation Tool for Anode-Supported Flat-Tube Solid Oxide Fuel Cell**, Youssef M. Elsayed., Lim Tak-Hyoung, Song Rak-Hyun, Lee Seung-Bok, Shin Dong-Ryul, Journal of the Korean Electrochemical Society, 1229-1935, v 9 N 4 , pp.151-157 , 2006.

**39-Simplified lumped model for solid oxide fuel cells**, A. Hanafi , E. H. Atta, Wolfgang Polifke, and M. El-Sayed Youssef, THE 8<sup>th</sup> ARAB INTERNATIONAL CONFERENCE ON MATERIALS SCIENCE Materials for Energy Applications", April 18-20 2004, at the Sheraton Montaza Hotel, Alexandria, Egypt

**40-Thermal Energy Storage System utilizing New Phase Change Material**, M. A. MOHAMED , H. M. HENNING, F. FRUSTERI, M. ELSAYED , A. ABDEL RAOUF,AND A. HANAFI, Al-Azhar Engineering Fifth International Conference, Cairo, December 19-22, 1997.

**41-Experimental and Theoretical Study of a New Phase Change Material**, M. ELSAYED , H. M. HENNING, F. FRUSTERI, M. A. MOHAMED, A. ABDEL RAOUF,AND A. HANAFI, EuroSun96 Conference, 18-20 Sep., Freiburg, Germany, 1996

## Conferences

- EuroSun96 Conference, 18-20 Sep., Freiburg, Germany, 1996.
- Al-Azhar Engineering Fifth International Conference, Cairo, December 19-22, 1997.
- THE 8<sup>th</sup> ARAB INTERNATIONAL CONFERENCE ON MATERIALS SCIENCE Materials for Energy Applications", April 18-20 2004, at the Sheraton Montaza Hotel, Alexandria, Egypt
- Global Conference on Global Warming-2008 (GCGW-08), 6-10 July 2008, Istanbul, Turkey
- Global Conference on Global Warming-2012 (GCGW-2012), 8-12 July 2012, Istanbul, Turkey
- Rabhy O. O., Adam I. G. , Youssef M. E. , Hassan G. E. and Rashad A. B, "EXPERIMENTAL STUDY ON A NEW TRANSPARENT PASSIVE SOLAR DISTILLER IN A NOVEL AGRICULTURAL GREENHOUSE," proceeding of 11<sup>th</sup> International Conference on The Role Of Engineering Towards A Better Environment (RETBE'17) 18-20 December 2017, Alexandria, Egypt, pp. 1-14, 2017.
- Andrew N. Aziz, M. Elsayed Youssef, Mohammed A. Hassab, and Wael M. El-Maghlany, Performance analysis of DMFC and PEMFC numerically with models validation, Int. Conf. on science, Technology, Engineering and Management. ICSTEM, Cairo, Egypt. (2018) 14–17.