### 1- Personal Data

Name: Mohamed Salah Mahmoud Mohamed, Ph. D.

Date of Birth: 7/11/1976
Place of Birth: State of Kuwait

**Nationality: Egypt** 

Contact Address: Minia University, Faculty of Engineering, Chemical Engineering Department, Minia,

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### 2- ACADEMIC/PROFESSIONAL PARTICULARS

# (a) Field of Specialization:

Chemical Engineering, Laser ablation utilization in renewable energy cycles

### (b) Academic Qualifications

Degree, Major, Year, University, Country, Dissertation Title, GPA

- Ph. D, Chemical Engineering Department, Tokyo Institute of Technology, Japan, Oct. 2005-Sep. 2008, "MgO Reduction by Laser for Renewable Energy Cycle"
- M. Sc., Chemical Engineering Department, University of Minia, Egypt. Oct.2001-July. 2003: "Mixing and Hydraulics in Agitated Vessels of Different Geometries"
- B. Sc., Chemical Engineering Department, University of Minia, Egypt. 1<sup>st</sup> Class, honor's.

### (c) Academic Honors and Awards

- a. Egyptian governmental scholarship for PhD study in Japan(April 2005-April 2009)
- Research fellowship at Tokyo institute of technology (Jan, 2014 Jan, 2015)

#### (d) Membership of Professional Bodies

- 1- Egyptian engineering syndicate, 10/1999
- 2- The water network (AquaSPE), 2014

#### (e) Language Proficiency

- 1- Arabic (original Language)
- 2- English (very good)
- 3- Japanese (fair)

#### 3- CAREER DETAILS

### (a) Academic Positions Held

- Associate professor, Engineering department, collage of applied science, Sohar, Sultanate of Oman (20/10/2016~ present)
- Associate professor. Chemical Engineering Department, Minia University, Egypt, (1/2014~present)
- Assistant professor. Chemical Engineering Department, Minia University, Egypt. (12/2008-12/2013)
- Teaching Associate. Chemical Engineering Department, Minia University, Egypt. (8/2003 − 4/2005).
- Teaching Assistant. Chemical Engineering Department, Minia University, Egypt. (11/1999- 8/

2003).

# (b) Professional/Industrial Positions Held

- Visiting researcher. Tokyo Institute of Technology, Japan. (1/2014-1/2015)
- Research student. Entropia Laser Initiative, Tokyo Institute of Technology, Japan. (4/2005 10/2005).

(c)Administrative Positions Held (Quality Assurance Vice head: 12/2011-12/2013)

# 4- Teaching experience

(a) Summary of Courses Taught

Course Code	ode		Evaluation
Undergradua	ate		
CHE021	Engineering chemistry	4	
BES111	Engineering mathematics	3	
CHE415	Modeling and simulation in chemical engineering	5	Utilization of HYSYS <sup>™</sup> software
CHE412	Petrochemicals	2	
CHEx31	Energy conservation	2	
BES123	Programming languages	5	FORTRAN <sup>TM</sup> and MATLAB <sup>TM</sup>
CHE323	Computer application in chemical engineering	2	Utilization of HYSYS <sup>™</sup> , and Excel <sup>™</sup> software
CHE312	Mass transfer	3	
CHE316/ CHEN4234	Electrochemistry and Corrosion	3	Fuel cell course
CHEN2212	Thermodynamics	2	
CHEN2213	Applied physical chemistry	1	
CHEN3341	Separation processes	2	
ENGR3251	Professional practice	2	
CHEN2211	Principles of Chemical	3	
	Engineering		
CHEN3315	Chemical Reaction Engineering	1	
ENGR1204 Introduction to engineering		1	
Postgraduate			
CHE259 (Diploma Course),	Computer application in chemical engineering	3	
CHE403 (Master course)	Higher mathematics	2	

(b) Participation in Academic Accreditation

Name of	Role	Institution	Name of Accreditation	Period
Program			Body	

Faculty of	Deputy	Minia	National Authority for	1/2009~1/201
Engineering,	Director of	University,	Quality Assurance and	4
Minia	Quality	Faculty of	Accreditation of Education	
University	Assurance	Engineering	(NAQAAE), Egypt	
	Unit			
accreditation	Deputy	The Minia	National Authority for	10/2013~1/20
program	Director of	Higher	Quality Assurance and	14
	Quality	Institute of	Accreditation of Education	
	Assurance	engineering	(NAQAAE), Egypt	
	Unit	and		
		Technology		

(c) Research Students Supervised/Trained

Level Number of Trainees	Postdoctoral Fellows	PhD Students	Master Students	Undergraduate Students
2	-	3	12	40

### 5- RESEARCH Theme

# (a) Research Interests

List of research interests in order of priority

- 1- Utilization of laser for reduction of metal oxides to produce metals for metal air fuel cell applications
- 2- Utilization of solar energy for hydrogen generation using nanoparticles/Nano fibers
- 3- Solar water desalination by humidification dehumidification technique
- 4- Utilization of electromagnetic field in wastewater treatment by electrocoagulation/electro floatation processes
- 5- Energy efficiency application in wastewater treatment
- 6- Preparation of Graphene over carbon substrate by electrophoretic deposition as electrode in Fuel cell
- 7- Preparation of nanoparticles by co-precipitation method

# (b) Publications/Citations Data

Type of Publication Number of Publications		
Articles in International Refereed	33	
Journals	33	
Conference Papers	17	
Books/Book Chapters	1	
Edited Books	-	
Patents	1	
H index	8	
Reviewed papers	10	
	https://publons.com/dashboard/summary/	
<b>Citation Source Number of Citations</b>	Clarivate / 267	
Orcid ID	orcid.org/0000-0003-3462-2281	
Clarivate ID	F-3038-2018	
Researchgate	https://www.researchgate.net/profile/Mohamed_Mahmoud27	
Scopus	https://www.scopus.com/authid/detail.uri?authorld=15136077300	

(c) Research Grants

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I	No	Type of	Role	Title of Project	Awarding body	Duration	

	Grant				
1	Scientific	Co-PI	Development of stand alone solar water desalination system based on humidification-dehumidification technology	Misr El Kheer Foundation / Egypt	12/2011- 12/2013
2	Scientific	Co-PI	Utilization of SOFC for electricity production in integration with a bio gas unit.	Ministry of scientific research and technological applications Egypt	6/2013- 12/2014
3	Scientific	Co-PI	A demonstration unit for sustainable utilization of gray water in siphon boxes, agriculture and gardening	Misr El Kheer Foundation, Egypt	3/2013- 9/2013
4	Scientific	Co- PI→PI	Nanotechnological Approach for the Development and Implementation of Microbial Fuel Cell for Energy Harvesting from Wastewater		27/5/2014- 27/11/2016
5	Scientific	PI	Production of Bio oil from Biomass (RDF and Agriculture Residues) by Fast Pyrolysis	Misr El Kheer Foundation / Egypt	12/2015- 6/2017
6	Scientific	Co-PI	Development of Electrodes using Carbon Nano-fibers for Fuel Cell	STDF/Egypt (15113/2014)	1/11/2015- 1/11/2017
7	Scientific	Co-PI	Advanced Solar Energy-Assisted Water Desalination System in High Salinity and Brackish Water Areas with Controlled Greenhouse for Sustainable Agriculture: A WEF Nexus Project	STDF/USA	1/12/2017- 1/12/2019

### (d) Patents

1- Title: LASER REFINING APPARATUS AND LASER REFINING METHOD Japanese patent WIPO Patent WO/2010/050450A1. International application No.: PCT/JP2009/068364. Inventors: YABE Takashi, CHOIJIL BAASANDASH, SATOH Yuji, MOHAMED SALAH MAHMOUD MOHAMED,

# (e) Participation in Regional & International Conferences

- **1-** The second international conference of Minia, The environmental and developing the society in the countries of the third world. 2-3 March 2009
- 2- The 5<sup>th</sup> International Conference of Military Technical College, Egypt,27-29/5/2010
- 3- The 15<sup>th</sup> international water technology conference, Alexandria, Egypt, 28-30 May 2011.
- **4-** The 6<sup>st</sup> international conference of Military Technical Collage, 28-30 May 2012, Cairo, Egypt.
- **5-** The 15<sup>th</sup> International Conference on Petroleum, Mineral Resources and Development PMRD 2012, Cairo, 8-10 April 2012.
  - **6-** The 3<sup>rd</sup> international conference on sustainable future of human security, Kyoto, Japan, 3-5 Nov., 2012.
- 7- The 17<sup>th</sup> international water technology conference, Istanbul, Turkey, 5-7 Nov., 2013.
- **8-** The 3<sup>rd</sup> International Conference on Advanced Engineering and Technology (ICAET), Seoul, Korea, 20-21 Dec, 2014
- **9-** The 5th International Conference on Green and Sustainable Innovation (ICGSI 2015) "Moving Towards Green Growth and Green Competitiveness", Pataya, 14-17/11/2015 Thailand
- 10-The EFC2015 European Fuel Cell Technology & Applications Conference Piero Lunghi Conference December 16-18, 2015, Naples, Italy
- **11-**The 21<sup>th</sup> international water technology conference, Ismailia, Egypt, 28-29 June, 2018.

#### 6- SERVICE

# (a) Membership of Institution, National, or International Scientific

1-Egypt Engineering syndicate

### (b) Membership of Conference Committees

1- Administrative committee, 1<sup>st</sup> international conference on fuel cell and its application, (Minia, Egypt), 15-17/5/2016

### (c) Service as Reviewer

#### Journals

- 1- Desalination and Water Treatment, ISSN 1944-3994 (Print), 1944-3986 (Online).
- 2- Environmental protection engineering, ISSN: 0324-8828
- 3- Journal of Bio and Tribo Corrosion
- 4- RSC Advances
- 5- Surface review and letters

# (d) Invited Presentations at Scientific Meetings/Workshops

1- New Renewable Energy Cycle by Magnesium, Laser, and Magnesium air Fuel cell, Chonbuk National University – organic material and fiber engineering Chonbuk, South Korea, 23/12/2014

### (e) University Service

Participated as vice head of the quality assurance unit in the faculty of Engineering, Minia University and participated in the activities for accreditation of the faculty

### (f) Service to Profession/Industry

Participated in many consultations for factories in El- Minia industrial city

#### 7- List of Publications

### (a) International Refereed Journals

- [1] Hager M. Moustafa, M. Obaid, Mamdouh M. Nassar, Mohammad A. Abdelkareem, <u>Mohamed S. Mahmoud</u>, Titanium dioxide-decorated rGO as an effective electrode for ultrahigh-performance capacitive deionization, 235(2020) 116178, https://doi.org/10.1016/j.seppur.2019.116178
- [2] Hager M. Moustafa, Mamdouh M. Nassar, Mohammad A. Abdelkareem, <u>Mohamed S. Mahmoud</u>, M. Obaid, Synthesis and characterization of Co and Titania nanoparticle -intercalated rGO as a high capacitance electrode for CDI, *Journal of Environmental Chemical Engineering*, <a href="https://doi.org/10.1016/j.jece.2019.103441">https://doi.org/10.1016/j.jece.2019.103441</a>
- [3] Mohamed S. Atrees, Ebraheim E. Ebraheim, Mohamed E. M. Ali, Yasser M. Khawassek, Mohamed S. Mahmoud & Mohammad M. Almutairi, Synergetic effect of metal-doped GO and TiO2 on enhancing visible-light-driven photocatalytic hydrogen production from water splitting, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, https://doi.org/10.1080/15567036.2019.1629130
- [4] Mohammad M. Almutairi; Ebraheim E. Ebraheim; <u>Mohamed S. Mahmoud</u>; Mohamed S. Atrees; Mohamed E. M. Ali; Yasser Mahmoud Khawassek, Nanocomposite of TiO2 @ Ni- or Codoped graphene oxide for efficient photocatalytic water splitting, Accepted, Egyptian journal of chemistry, 10.21608/EJCHEM.2019.9722.1648
- [5] Mohamed S. Mahmoud, Moaaed Motlak, and Nasser A. M. Barakat, Facile Synthesis and Characterization of Two Dimensional SnO<sub>2</sub>-Decorated Graphene Oxide as an Effective Counter Electrode in the DSSC, Catalysts 2019, 9, 139; doi:10.3390/catal9020139
- [6] Ashraf Abdel Raheem; Ashraf Mahroos; <u>Mohamed S. Mahmoud</u>; Ibrahim Ashour, Fabrication of conductive human bio-nanoelectrode from graphene oxide modified with polyvinyl alcohol,: Volume 13, Issue 1, 2019, 1 – 5
- [7] Olfat A.Fadali, Mohamed S.Mahmoud, Omnia H.Abdelraheem, Shimaa G.Mohammed, Evaluation of the

- hydrodynamics generated by agitation and electromagnetic field during the electrocoagulation of oil/water emulsion, Journal of Water Process Engineering, 25(2018)182-189
- [8] Mohamed S. Mahmoud, Enas Ahmed, A.A. Farghali, A.H. Zaki, Nasser A.M. Barakat, Synthesis of Fe/Co-doped titanate nanotube as redox catalyst for photon-induced water splitting, Materials Chemistry and Physics 217(2018)125–132
- [9] Mohamed S. Mahmoud, Enas Ahmed, A.A. Farghali, A.H. Zaki, Emad A.M. Abdelghani, Nasser A.M. Barakat, Influence of Mn, Cu, and Cd-doping for titanium oxide nanotubes on the photocatalytic activity toward water splitting under visible light irradiation, Colloids and Surfaces A: Physicochemical and Engineering Aspects, 554(5) (2018) 100–109.
- [10] Mohamed S. Mahmoud, M. Shaheer Akhtar, Ibrahim M.A. Mohamed, Rawan Hamdan, Yara Abu Dakka, Nasser A.M. Barakat, Demonstrated photons to electron activity of S-doped TiO2 nanofibers as photoanode in the DSSC, Materials Letters 225 (2018) 77–81
- [11] <u>M. S. Mahmoud</u>, T. Yabe, Silicothermic reduction of MgO using diode laser: Experimental and kinetic study, Journal of Magnesium and Alloys, 5(4) (2017) 430-438
- [12] <u>M.S. Mahmoud</u>, T. Yabe, and E. Iida, Novel Approach for the Reduction of ZnO and MgO Using a Direct Diode-Laser, Metallurgical and Materials Transactions B, 48(1), (2017), 179–186
- [13] Nasser A. M. Barakat, Motlak Moaaed, Ahmed Taha, M. M. Nassar, <u>M. S. Mahmoud</u> & H. Fouad, Super Effective Zn-Fe-doped TiO<sub>2</sub> Nanofibers as Photocatalyst for Ammonia Borane Hydrolysis,
  - Int. J. Green Energy, 13(7), (2016), 642-649
- [14] Nasser A.M. Barakat, Hajer M. Moustafa, M.M. Nassar, Mohammad Ali Abdelkareem, M.S. Mahmoud, Abdulhakim A. Almajid, Khalil Abdelrazek Khalil, Distinct influence for carbon nanomorphology on the activity and optimum metal loading of Ni/C composite used for ethanol oxidation, Electrochimica Acta 182 (2015) 143–155
- [15] M.M. Nassar a, T.E. Farrag, M.S. Mahmoud, S. Abdelmonem, Khalil Abdelrazek Khalil, Nasser A.M. Barakat, Influence of the operating conditions on the morphology of CaCO<sub>3</sub> nanoparticles prepared by modified co-precipitation with pulse mode feeding, Advanced Powder Technology 26 (2015) 914–919
- [16] Olfat A. Fadali, Mohamed Obaid, <u>Mohamed S. Mahmoud</u>, Taha E. Farrag, Kim TaeWoo, Khalil Abdelrazek Khalil, Nasser A. M. Barakat, Copper Ion Cementation in Presence of a Magnetic Field, Chem. Eng. Technol. (2015), 38, No. 3, 441-445
- [17] Nasser A. M. Barakat, Moaaed Motlak, M. M. Nassar, Mohammad Ali Abdelkareem, M. S. Mahmoud, Mohamed H. El-Newehy, and Hager M. Moustafa, From Secondary to Primary Role in Alkaline Fuel Cells: Co-Decorated Graphene as Effective Catalyst for Ethanol Oxidation, ECS Electrochemistry Letters, 4 (1) F5-F8 (2015)
- [18] M.M. Nassar, Taha Ebrahiem Farrag, <u>M.S. Mahmoud</u>, Sayed Abdelmonem, Morphology-controlled CaCO<sub>3</sub> nanostructures by modified co-precipitation in pulsed mode, Applied Mechanics and Materials 12/2014; 752 753:148-153.
- [19] Nasser A.M. Barakat, Ahmed Taha, Moaaed Motlak, M.M. Nassar, M. S. Mahmoud, Salem S. Al-Deya, Mohamed El-Newehy, Hak Yong Kim, ZnO&Fe2O₃-incoportaed TiO₂nanofibers as super effective photocatalyst for water splitting under visible light radiation, Applied Catalysis A: General 481 (2014) 19−26
- [20] Rehab Abdelfattah N. A. Mostafa, <u>Mahmoud S. Mahmoud</u>, Wael Abdelmoez, Recovery of Oil and Free Fatty Acids from Spent Bleaching Earth Using Sub-critical Water Technology supported with Kinetic and Thermodynamic Study, Advances in Bioscience and Biotechnology, 2014, 5, 261-272
- [21] Nasser A. M. Barakat, M. M. Nassar, Farrag T.E., Mahmoud M.S. (2014), Effective

- photodegradation of methomyl pesticide in concentrated solutions by novel enhancement of the photocatalytic activity of TiO2 using CdSO4 nanoparticles, Environ Sci Pollut Res, 21:1425–1435
- [22] Olfat A. Fadali, Ebrahiem E. Ebrahiem, Taha E. Farrag, Nasser A. Barakat, <u>Mohamed S.</u> <u>Mahmoud</u> and Mohamed Obaid, "Effect of Magnetic Field on the Rate of Copper Cementation onto Rotating Iron Cylinder", Energy and Environment Focus Vol. 2, pp. 13-138, 2013
- [23] <u>Mohamed S. Mahmud</u>, Joseph Y. Farah, Taha E. Farrag, "Enhanced Removal of Methylene Blue Dye by Electrocoagulation Using Iron Electrodes", Egyptian Journal of Petroleum (2013) 22, 211–216
- [24] <u>Mohamed S. Mahmoud</u>, Taha E. Farrag, Wael A. Mohamed, Experimental and theoretical model for water desalination by humidification dehumidification (HDH), Procedia Environmental Sciences 17 ( 2013 ) 503 512
- [25] <u>Mohamed Salah Mahmoud</u>, "Enhancement of Solar Desalination by Humidification-Dehumidification technique", desalination and water treatment, 30(2011)310-318
- [26] S. H. Liao, T. Yabe, <u>M. S. Mohamed</u>, C. Baasandash, Y. Sato, C. Fukushima, M. Ichikawa, M. Nakatsuka, S. Uchida, and T. Ohkubo, "Laser-induced Mg production from magnesium oxide using Si-based agents and Si-based agents recycling", J. Appl. Phys., 109, 013103 (2011)
- [27] Ebrahiem E. Ebrahiem, Josiph Y. Farah, Taha E. Farrag, <u>Mohamed S. Mahmoud</u>, and M. S. Mansour, "Adsorptive removal of phenolic compounds from wastewater by carbon synthesized from tree branches", Alexanderia Engineering Journal, Vol. 48, No 6, (2009), 1-9
- [28] Y. Sato, T. Yabe, Y. Sakurai, M. S. Mohamed, S. Uchida, C. Baasandash, T. Ohkubo, Y. Mori, and H. Sato "Experimental Study of Magnesium Production with Laser for Clean Energy Cycle", AIP Conf. Proc. April 28, 2008 997, 546-552 BEAMED ENERGY PROPULSION: Fifth International Symposium on Beamed Energy Propulsion; doi:10.1063/1.2931925
- [29] M. S. Mohamed, T. YABE, C. BAASANDASH, Y. SATO, Y. MORI, Liao Shi-Hua, H. SATO, and S. UCHIDA "Laser-induced magnesium production from magnesium oxide using reducing agents" J. Appl. Phys., 104(11), 113110, (2008).
- [30] Mohamed S. MOHAMED, Takashi YABE, Choijil BAASANDASH, Yuji SATO, Yuichi MORI, Hiroki SATO, and Shigeaki UCHIDA, "Laser Induced Magnesium Oxide Reduction for Renewable Energy Cycle with Solar Power", The Review of Laser Engineering, Vol. 36, (2008) p.1199.
- [31] T.Yabe, M. S. Mohamed, S. Uchida, C. Baasandash, , Y. Sato , M. Tsuji, Y. Mori, , "Noncatalytic dissociation of MgO by laser pulses towards sustainable energy cycle", J. Appl.Phys., 101(12), 123106-1 (2007).
- [32] T.Yabe, S. Uchida, K. Ikuta, K. Yoshida, C. Baasandash, M. S. Mohamed, Y. Sakurai, Y. Ogata, M., Tsuji, Y. Mori, Y. Satoh, T. Ohkobo, M. Murahara, and A. Ikesue; "Demonstrated Fossil-Fuel-Free Energy Cycle Using Magnesium and Laser", Appl. Phys. Lett., 89 (2006), 261107.
- [33] T. Yabe, K. Ikuta, C. Baasandash, R. Katano, S.Uchida, M., Tsuji, Y. Mori, J Maehara, M. S. Mahmoud, and T. Toya; "MgO Deoxidization by Focused Laser Pulse for a New Energy Cycle", AIP Conference Proceedings 830, pp.447-456 (2006), Proc. of 4th International Symposium on Beamed Energy Propulsion (ISBEP4), Nara, Japan, November 15-18, (2005)

#### (b) Conference Papers

- **1-** The 54<sup>th</sup> spring meeting, 2007, the Japan Society of Applied Physics, Kanagawa, Japan, March 27-30 (2007)
- **2-** Mohamed S. MOHAMED, Takashi YABE, Choijil BAASANDASH, Yuji SATO, Yuichi MORI, Hiroki SATO, and Shigeaki UCHIDA, "Laser Induced Magnesium Oxide Reduction for Renewable Energy Cycle with Solar Power", The 6<sup>th</sup> Asia Pacific Laser Symposium, Nagoya, Japan, Jan 2008.
- 3- T. Yabe, S. Uchida, M.S. Mohamed, C. Baasandash, Y. Sato, Y. Mori, and H. Sato, "Laser-Induced MgO

- Reduction for Renewable Energy Cycle with Solar Power", Egypt Japan International Symposium on Science and Technology (EJISST2008), Waseda University, Tokyo, Japan, 8~10 June 2008.
- **4-** Mamdouh M. Nassar, A. M. El Kersh, Ebrahiem E. Ebrahiem, <u>Mohamed S. Mahmoud</u>, "Mixing and flow visualization in agitated vessels of different geometries", 8th international conference of chemical engineering, Egyptian Society of Chemical Engineers, Cairo, Egypt, Nov. 2008.
- **5-** Ebrahiem E. Ebrahiem, <u>Mohamed Salah</u>, "An Investigation on the Removal of Phenolic Compounds from Wastewater" The second international conference of Minia, The environmental and developing the society in the countries of the third world, 2-3 March 2009, pp: 319-332.
- **6-** Ebrahiem E. Ebrahiem, Joseph Y. Farah, <u>Mohamed. S. Mahmoud</u>, "An investigation on the removal of Nitrophenol onto carbon obtained from trees branches", Fifth International Conference of Military Technical College, Egypt,27-29/5/2010
- 7- Mohamed Salah Mahmoud, Asma Abd El-Sattar Mohamed, "UTILIZATION OF FRESNEL LENS IN WATER DESALINATION BY HUMIDIFICATION-DEHUMIDIFICATION PROCESS", 15<sup>th</sup> international water technology conference, Alexandria, Egypt, 28-30 May 2011.
- **8-** Olfat A. Fadali, Ebrahiem E. Ebrahiem, <u>Mohamed S. Mahmoud</u> and Mohamed Obaid, "Contribution of Electromagnetic Field in Elimination of Heavy Metal from Industrial Wastewater", 6<sup>st</sup> int. conference of Military Technical Collage, 28-30 May 2012, Cairo, Egypt.
- **9-** Mohamed S. Mahmud, Joseph Y. Farah, Taha E. Farrag, "Enhanced Removal of Methylene Blue Dye by Electrocoagulation Using Iron Electrodes", 15<sup>th</sup> International Conference on Petroleum, Mineral Resources and Development PMRD 2012, Cairo, 8-10 April 2012.
- **10-Mohamed S. Mahmoud**, Taha E. Farrag, Wael A. Mohamed, Experimental and theoretical model for water desalination by humidification dehumidification (HDH), the 3<sup>rd</sup> international conference on sustainable future of human security, Kyoto, Japan, 3-5 Nov., 2012.
- **11-**Taha E. Farrag, Mohamed S. Mahmoud, Wael A. Mohamed, "EXPERIMENTAL VALIDATION FOR TWO STAGES HUMIDIFICATION DEHUMIDIFICATION (HDH) WATER DESALINATION UNIT, the 17<sup>th</sup> international water technology conference, Istanbul, Turkey, 5-7 Nov., 2013.
- **12-**M. M. Nassar, T. E. Farrag, <u>M. S. Mahmoud</u>, S. Abdelmonem, Morphology-Controlled CaCO<sub>3</sub> Nanostructures by Modified Co-Precipitation in Pulsed Mode, 3<sup>rd</sup> International Conference on Advanced Engineering and Technology (ICAET), Seoul, Korea, 20-21 Dec, 2014
- **13-**Mamdouh M. Nassar, Taha E. Farrag, <u>Mohamed S. Mahmoud</u>, and Said Abdelmonem, **Synthesis of CaCO3 Nanostructures and its Application as Fillers in Papermaking,** The 5th International Conference on Green and Sustainable Innovation (ICGSI 2015) "Moving Towards Green Growth and Green Competitiveness"
- 14-Wael Abdelmoez, Mohamed S Mahmoud, Taha E. Farrag, Feasibility Study for Locally Manufactured and Standalone Water Desalination Unit by Humidification Dehumidification Technology, The 5th International Conference on Green and Sustainable Innovation (ICGSI 2015) "Moving Towards Green Growth and Green Competitiveness"
- 15-M. A. Abdelkareem, M. S. Mahmoud, Mohammad R. O. Ali, Faiza A. Hammad, N.A.M. Barakat, and I. A. Ashour, COBALT-DOPED CARBON NANOFIBERS AS EFFECTIVE ORR CATALYST, Proceedings of EFC2015 European Fuel Cell Technology & Applications Conference Piero Lunghi Conference December 16-18, 2015, Naples, Italy
- 16-Mohamed S. Mahmoud, Mohammad A. Abdelkareem, Hager M. Moustafa, Mamdouh M. Nassar, and Nasser A. M. Barakat, ELECTROCATAYLTIC ACTIVITY OF GRAPHENE CONTAINING DIFFERENT PERCENTAGES OF NICKEL TO ETHANOL OXIDATION, Proceedings of EFC2015 European Fuel Cell Technology & Applications Conference Piero Lunghi Conference December 16-18, 2015, Naples, Italy
- 17-Wael A. Mohamed, <u>Mohamed S. Mahmoud</u>, "IMPROVING THE CONTACT PATTERN OF THE HUMIDIFICATION STEP IN THE WATER DESALINATION PROCESS BY HUMIDIFICATION DEHUMIDIFICATION TECHNIQUE,, the 21<sup>th</sup> international water technology conference, Ismailia, Egypt, 28-30 June., 2018.
- (c) Books/Book Chapters

Authors, Title of Book/Chapter, Publisher (Country), Pages, Year

 Mohamed Obaid, Olfat A. fadali and <u>Mohamed S. Mahmoud</u>, "Magic of magnetic field: Influence of Magnetic Field on Removal of Copper Ions from Waste-water" LAP LAMBERT Academic Publishing, 2012

#### 8- References

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