



DR. NORHAN NADY

ASSOCIATE PROFESSOR



<p>PERSONAL INFORMATION</p>	<p>Full Name: Affiliations: Address: Mobile No.: E-mail: Important links:</p>	<p>Norhan Nady Associate Professor at City of Scientific research and Technological Applications (SRTA-city). 01090918521 norhan.nady77@yahoo.com or nnady@srtacity.sci.eg</p>
<p>EDUCATION</p>	<p>PhD –2012 Food Process Engineering group and Laboratory of Organic Chemistry, Wageningen University – The Netherlands.</p> <p>M.Sc. –2007 Chemical Engineering Department –Alexandria University, Egypt.</p> <p>B.Sc. – 2002 Chemical Engineering Department –Alexandria University, Egypt.</p>	
<p>ACTIVITIES</p>	<p>Scientific Activities Joining Conferences, Workshops, and Symposia</p> <ul style="list-style-type: none"> • 1st Conference on Contemporary Environmental Issues in Arid and Semi-Arid Regions, Egypt (Alexandria University, 2008) • Workshop on your Factory and the Environment: Industrial Wastewater and Environmental Laws, Egypt (ATNMRI, 2009) • Food Process Engineering Internal Symposium, the Netherlands (2009, Oral) • NPS9: Process Technology at the Interface, the Netherlands (2009, Oral) • NanoMemCourse EA3: Nano-Structured Materials and Membranes in the Food Industry, Italy. (ITM-CNR, 2010, Poster) • Meeting of KNCV "Design & Synthesis", "Structure & Reactivity" and "Biomolecular Chemistry", the Netherlands (2010) • BerlinFOOD2010, Germany (2010, Oral) • Nano4water Workshop, Germany (2010) 	

- **13th Aachener Membrane Kolloquium, Germany (2010, Poster)**
- **Food Process Engineering Internal Symposium, the Netherlands (2010/11, Oral)**
- **International Congress on Membranes and Membrane Processes, the Netherlands (ICOM 2011, Oral)**
- **Desalination Workshop, the Netherlands (2011)**
- **NPS 11: From Plan to Plant, the Netherlands (2011, Oral)**
- **Netherlands MicroNanoConference '11, the Netherlands (2011, Oral)**
- **Workshop on Material Selection, Cathodic Protection and Corrosion Monitoring for Protection of Industrial Metallic Structures, Egypt (2012).**
- **Workshop on Biofuel Production, Egypt (2013)**
- **Water Desalination in the Arab World: Future Prospects”, Egypt (2013, Oral)**
- **29th EMS Summer school “Membranes for liquid separations from an industrial & academic point of view”, Germany (2013, 2nd poster prize)**
- **General Chromatography & New technique of the HPTLC symposium, SRTA-City, 3 April (2014)**
- **Symposium on SurPASSElectrokinetic Analyzer, National Research Center , Egypt 30 April (2014)**
- **3rd International Conference of the Arab Scientists forum on “Scientific Research & Development” in Arab countries & Facing the challenges, Sharm Elshekh, Egypt (5-8th April 2014, Oral)**
- **The 2014 Int’l conference on Advances in Membrane Water Treatment (AMWT14), Busan, South Korea (24-28th August 2014, Oral)**
- **The 2014 Int’l conference on Advances in Materials Research (ICAM14), Busan, South Korea (24-28th August 2014, Oral)**
- **Symposium on Scientific innovation in Egypt (encounter generations), Institute of Graduate Studies and Research, 16th October 2014 Alexandria, Egypt.**
- **Workshop on data analysis and modeling using CoStat Statistical software, 1st December 2014, SRTA-city, Egypt.**
- **The 15th Arab International Conference on Materials Science "Materials for water Applications", Alexandria, Egypt (2-4th December 2014, Oral)**
- **The 3rd International Conference on "Advanced Materials and their Applications", National Research Centre, Egypt (11-15th January 2015)**
- **Euromembrane 2015, Aachen, Germany (6-10th September2015, Poster and Poster Pitch)**
- **The 4th Ain Shams University workshop on Oilfield Chemistry, 2nd December 2015.**
- **Scientific Mission, Northern Ireland, 30 April-8 May 2016**
- **Desalination for the Environment, Clean Water and Energy, Rome, Italy (22-16th May 2016, Oral).**
- **The 16th Arab International conference on Material Science, Material and Society, Alexandria, Egypt. (3-5th December 2016, Keynote Speaker).**

- 1st international conference of Chemical, Energy and Environmental Engineering, Alexandria, Egypt (19-21th March 2017, Oral).
- 1st E-JUST Faculty Development Workshop, 11th September 2017, Egypt.
- Euromembrane2018, Valencia, Spain (9-13 July, Oral).

Organization of International workshops and Conferences

- Member of the organizing committee of The 1st ENMRI International Workshop of Environment: Challenges & Solutions”, 5th April 2016, Bibliotheca Alexandria, Egypt.
- Member of the organizing committee of The 6th China-Africa Water Forum organized by China Africa Water Association (CAWA) with City of Scientific Research and technological Applications (SRTA-City), entitled “Sustainable Utilization of Water resources in Developing Countries”, 23-27th July 2018, Ibrotel Palace Hotel, Sharm El-Shikh, Egypt.

Invited Speaker in conferences and public seminars:

1. Keynote Speaker for lecture entitled “Materials Created a Breakthrough in Water Desalination”, the 16th Arab International conference on Material Science, Material and Society, 3-5th December 2016, Alexandria, Egypt.
2. Public Seminar entitled "Green Chemistry met Membrane Technology at Surface Modification", 18 October 2016, Basic and Applied Science institute, Egypt-Japan University of Science and Technology. Alexandria, Egypt.

Post- and Undergraduates Teaching

Postgraduates' courses:

- “Membrane Separation Processes” has been taught as a part of “Advanced Separation Processes” course, Egypt-Japan University of Science and Technology (E-JUST) (spring 2013).
- “Seminars on Polymer Processing Processes” course CPE705, Egypt-Japan University of Science and Technology (E-JUST) (spring 2014, autumn 2015, and fall 2017, spring 2018).
- "Advanced Polymerization Engineering" course CPE602, Egypt-Japan University of Science and Technology (E-JUST) (spring 2015, 2016, and 2017, fall 2017).

	<p><u>Undergraduates' Courses:</u></p> <ul style="list-style-type: none"> • CPE223 Thermodynamics for undergraduates, Egypt-Japan University of Science and Technology (E-JUST) (spring 2019). • Chemistry (2) course and Lab Chemistry (2) for undergraduates, Egypt-Japan University of Science and Technology (E-JUST) (spring 2018). <p>Supervision Theses and Dissertations Supervision on different PhD and MSc studies.</p> <p>Administrative Activities</p> <ul style="list-style-type: none"> • Member of the Executive Committee of Environmental and Natural Materials Institute, City of Scientific Research and technological Applications (SRTA-City). [2015- now]. <p>Extra-curriculum Activities</p> <p><u>Memberships</u></p> <ul style="list-style-type: none"> • European Desalination Society (EDS) [2015- now] • The Arabic Academy of Material Sciences [2014-Now].
<p>GRANTS & AWARDS</p>	<ul style="list-style-type: none"> • Member of International Project funded by Chemical Security Improvement Grant (CSIG), USA. The project title is "Integrated Biometric Door Lock and Outdoor Alarm System for the Central Research Laboratories Building Security and Control", (June-December 2017, \$30000). <p>نظام الأمن والتحكم المتكامل لمبنى مختبرات البحوث المركزية باستخدام أقفال البيومترية (البصم) للابواب ونظام إنذار خارجي.</p> <ul style="list-style-type: none"> • The PI (not the leader) of STDF Project No. 4746 titled "Preparation, characterization and photocatalytic activity assessment (standardization) of nano-sized supported TiO₂ for efficient treatment of industrial wastewater" (2014-2016 – 1500000 L.E).

	<p>تحضير وتوصيف وتقييم (معايرة) نشاطية الحفز الضوئي لحبيبات ثاني أكسيد التيتانيوم النانومترية المحملة في المعالجة الفعالة لمياه الصرف الصناعي.</p> <ul style="list-style-type: none"> • The principle investigator (PI) of STDF Project No. 6070 titled “Improving the Performance of RO Desalination Process by Reducing the Biofouling Using Enzyme-Catalyzed Modification of Membranes”, (2014-2017- 750000 L.E) <p>تحسين أداء وحدة تحلية المياه باستخدام التناضح العكسي عن طريق تقليل تلوث الغشاء الناجم عن امتزاز الخلايا الميكروبية (التلوث الحيوي) وذلك باستخدام طريقة تعديل الاغشية المحفزة بالانزيم</p> <p>Awards</p> <ul style="list-style-type: none"> • 3rd Place in The International Festival “Cairo Innovates” in Water and Society section. • 2nd poster prize, 29th EMS Summer school “Membranes for liquid separations from an industrial & academic point of view”, Germany (2013). • Scientific Achievement, City of Scientific Research and Technological Application (SRTA-City), Egypt (2012).
<p>LIST OF PUBLICATIONS</p>	<ol style="list-style-type: none"> 1. Development of Functionalized Supperwetable Janus Membrane with Controllable Asymmetric Wettability for Highly-efficient Oil/water Emulsions Separation, Yuqing Lin, Mohamed S Salem, Lei Zhang, Qin Shen, Ahmed H El-shazly, Norhan Nady, Hideto Matsuyama, Journal of Membrane Science, 606 (2020) 118141. 2. Triple-Layer Nanocomposite Membrane Prepared by Electrospinning Based on Modified PES with Carbon Nanotubes for Membrane Distillation Applications, Mohamed Elmarghany, Ahmed El-Shazly, Saeid Rajabzadeh, Mohamed S. Salem, Mahmoud A. Shouman, Mohamed Nabil Sabry, Hideto Matsuyama and Norhan Nady, Membranes 10 (2020) 15. 3. PES/PVDF blend membrane and its composite with graphene nanoplates: preparation, characterization, and water desalination via membrane distillation, Mohamed S. Salem, Ahmed H. El-Shazly, Norhan Nady, Mohamed R. Elmarghany, Mohamed Nabil Sabry, Desalination and water Treatment 166 (2019) 9-23. 4. Metal Organic Framework Based Polymer Mixed Matrix Membranes: Review on Applications in Water Purification, Asmaa Elrasheedy, Norhan Nady, Mohamed Bassyouni, Ahmed El-Shazly, Membranes 9 (2019) 88.

5. 3-D numerical investigation on commercial PTFE membranes for membrane distillation: Effect of inlet conditions on heat and mass transfer, Mohamed S Salem, Ahmed H El-shazly, **Norhan Nady**, Mohamed R Elmarghany, Mahmoud A Shouman, Mohamed Nabil Sabry, **Case Studies in Thermal Engineering** 13 (2019) 100396.
6. Thermal analysis evaluation of direct contact membrane distillation system, Mohamed R Elmarghany, Ahmed H El-Shazly, Mohamed Salem, Mohamed Nabil Sabry, **Norhan Nady**, **Case Studies in Thermal Engineering** 13 (2019) 100377.
7. Novel Membrane Suitable for Membrane Distillation: Effect of Mixed Nanofillers on the Membrane Performance, Mohamed R El-Marghany, Ahmed H El-Shazly, Mohamed Salem, Mohamed Nabil Sabry, **Norhan Nady**, **Key Engineering Materials** 801 (2019) 325-330.
8. Effect of Adding Functionalized Graphene on the Performance of PVDF Membrane in Direct Contact Membrane Distillation, Mohamed Salem, Ahmed H El-Shazly, Mohamed R El-Marghany, Mohamed Nabil Sabry, **Norhan Nady**, **Key Engineering Materials** 801 (2019) 337-342.
9. Radiation Crosslinking of Modifying Super Absorbent (Polyacrylamide/Gelatin) Hydrogel as Fertilizers Carrier and Soil Conditioner, Mohamed Mohamady Ghobashy, Basem Kh. El-Damhougy, **Norhan Nady**, H. Abd El-Wahab A., M. NaserFarag Abdelhai, **Journal of Polymers and the Environment** 26 (2018) 3981.
10. Novel Blend for Producing Porous Chitosan-Based Films Suitable for Biomedical Applications, **Norhan Nady**, Sherif H. kandil, **Membranes**, *Membranes* 8 (2018) 2.
11. Fouling-Resistant Brush-like Oligomers of Poly(3-aminophenol), **Norhan Nady**, Noha Salem, Ahmed H. El-Shazly, Sherif H. Kandil, **Desalination and Water treatment** 73 (2017) 237.
12. Protein-Repellence PES Membranes Using Bio-grafting of Ortho-aminophenol, **Norhan Nady**, Ahmed H. El-Shazly, Hesham M.A. Soliman, Sherif H. Kandil, **Polymers** 8 (2016) 306.
13. Temperature-dependent Magnetism and Durability of Polyamide 6 Nanocomposites based on Nanocrystalline Fe-Ni alloy of Various Geometries,

Marwa A. A. Mohamed, Diego Pedrazzoli, **Norhan Nady** and Kyriaki Kalaitzidou, **express Polymer Letters** 10 (2016) 822.

14. Design and Application of bench-scale recirculating flow CPC: Photoreactor Prototype Using TiO₂ immobilized on PET sheets for Solar photocatalytic degradation of methylene blue as model pollutant, Doaa M. EL-Mekawi, **Norhan Nady**, Nourelhod A. Abdelwahab, Walied A. A. Mohamed, M. S. A. Abdel-Mottaleb, **International Journal of Photoenergy** 2016 (2016) 9.
15. PES Surface Modification Using Green Chemistry: New Generation of Antifouling Membranes, **Norhan Nady**, **Membranes** 6 (2016) 23.
16. Laccase-catalysed Modification of PES Membranes Using Amine-bearing modifiers, Norhan Nady, Ahmed. H. El-Shazly, **Desalination and Water Treatment** 55 (2015) 2996.
17. *Listeria monocytogenes* repellence by enzymatically modified PES surfaces, Stijn van der Veen, **Norhan Nady**, Maurice C. R. Franssen, Han Zuilhof, Remko M. Boom, Tjakko Abee, Karin Schroën, **Journal of Applied Polymer Science** 132 (2015) 41576.
18. Laccases as Bio-catalyst for green chemistry (A review study), **Norhan Nady**, **International Journal of Development** 3 (2) (2014) 119.
19. Enzyme-Catalyzed Modification of PES Surfaces: Reduction in Adsorption of BSA, Dextrin and Tannin, **Norhan Nady**, Karin Schroën, Maurice Franssen, Remco Fokkink, Mohamed Mohy Eldin, Han Zuilhof, and Remko Boom, **Journal of Colloid & Interface Science** 378 (2012) 191.
20. Laccase-Catalyzed Modification of PES Membranes with 4-Hydroxybenzoic Acid and Gallic Acid, **Norhan Nady**, Karin Schroën, Maurice Franssen, Mohamed Mohy Eldin, Han Zuilhof, and Remko Boom, **Journal of Membrane Science** 394-395 (2012) 69.
21. Mild and Highly Flexible Enzyme-Catalyzed Modification of Poly(ethersulfone) Membranes, **Norhan Nady**, Karin Schroën, Maurice Franssen, Barend van Lagen, Sukumaran Murali, Mohamed Mohy Eldin, Remko Boom, and Han Zuilhof, H., **ACS Applied Materials & Interfaces** 3 (2011) 801.
22. Modification Methods for Poly(arylsulfone) Membranes: A Mini-Review Focusing on Surface Modification, **Norhan Nady**, Maurice Franssen, Han

Zuilhof, Mohamed Mohy Eldin, Remko Boom, and Karin Schroën, *Desalination* 275 (2011) 1.

Conference papers:

1. Effect of nanofiller geometry on the polymer physical structure and mechanical properties of nanocrystalline Fe-Ni alloy/polyamide 6 composites, Marwa A. A. Mohamed, Diego Pedrazzoli, **Norhan Nady**, Kyriaki Kalaitzidou, *16th European Conference on Composite Materials*, Spain (2014).
2. Antifouling PES Membranes Using Bio-Catalyzed Surface Modification, **Norhan Nady**, Ahmed H. Elshazly, *The 2014 Int'l conference on Advances in Membrane Water Treatment (AMWT14)*, Busan, South Korea (2014).
3. Modification of PES Membranes: An Environmentally Friendly Approach, **Norhan Nady**, Maurice Franssen, Remko Boom, Mohamed Mohy Eldin, Han Zuilhof, and Karin Schroën, *13th Aachener Membrane Kolloquium*, Germany (2010) 417.