



Mohamed Samir Mohy Eldin Saad

Professor (April 2011 until now)

Polymer Materials Research Department, Institute of Advanced Technology and New Materials, City of Scientific Research and Technological Applications, New Boarg El-Arab City, Alexandria, Egypt.

<p>PERSONAL INFORMATION</p>	<p>Full Name: Affiliations: Address: Mobile No.: E-mail: Important links:</p>	<p>Mohamed Samir Mohy Eldin Saad</p> <p>Advanced Technology and New Materials Research Institute (ATNMRI), City of Scientific Research and Technological Applications (SRTA-City).</p> <p>New Boarg El-Arab City 21934, Alexandria, Egypt.</p> <p>+20100-5318399</p> <p>mmohyeldin@srtacity.sci.eg mohyeldinmohamed@gmail.com</p> <p>Linkein: https://eg.linkedin.com/in/m-s-mohy-eldin-3894b943 Google Scholar: scholar.google.com/citations?user=mPGfRo4AAAAJ&hl=en Research Gate: https://www.researchgate.net/profile/Mohamed_Mohy_Eldin Scopus Author ID: 6603077092 (Mohy-Eldin, Mohamed Samir)</p>
<p>EDUCATION</p>	<p>Ph.D. degree (November 1999) “Enzyme immobilization on graft copolymers” Department of Food Technology and Nutritional Sciences, Wageningen University and Research Centre, Wageningen, The Netherlands.</p> <p>M.Sc. degree (April 1996) “Preparation and characterization of some cellulosic grafted membranes” Department of chemistry, Faculty of Science, Helwan University, Helwan, Cairo, Egypt.</p> <p>B.Sc. degree in Chemistry, Excellent (May 1989) Department of chemistry, Faculty of Science, Helwan University, Helwan, Cairo, Egypt.</p>	
<p>ACTIVITIES</p>	<p>Scientific Activities <i>Reviewing Activities</i></p>	

1) Scientific Periodicals

- Biomaterials
- Journal of Molecular Catalysis: B. Enzymatic
- Journal of Applied Polymer Science
- European polymer journal
- Chemical Engineering Communications
- Polymer Engineering and science
- Bio-macromolecules
- Journal of Hazardous Materials
- Polymer
- Journal of Microbiology and Antimicrobials
- Polymers for Advanced Technology
- Journal of Membrane Science
- Desalination
- Bioresource Technology
- Industrial & Engineering Chemistry Research
- Cellulose

2) Scientific Research Project

- Academy of Scientific Research and Technology, Egypt
- King Abdul Aziz City for Technology and Science, KSA
- Hael University, KSA

Editorial boards Member

Associate Editor

International Journal of Chemical Research, Bioinfo Publication Journals
(<http://www.bioinfo.in>).

Editorial Board Member

International Research Journal of Pure and Applied Chemistry, Science domain
International (<http://www.sciencedomain.org>)

Editorial Board Member

Research Journal in Engineering and Applied Sciences (RJEAS), Emerging Scientific
Resource (<http://rjeas.emergingresource.org>)

Editorial Board Member

Journal of Modern Chemistry and Chemical Technology (JoMCCT), STM journals

(<http://www.stmjournals.com>)

Membership of Scientific Societies

- ✚ Member of Egyptian Society for Polymers Science
- ✚ Member of American Nano Society

Conferences, Workshops and Training courses

Conferences

1. Modification of hydroxyapatite for HA-HEMA-g-chitosan bio-composite., *6th Arab International Conference on Polymer Science & Technology*, 1-5 September 2001, Ismailia - Sharm El-Sheikh, Egypt.
2. Biomimetic approach to induce phosphate biolayer by serum immersion of PHEMA-g-chitosan / calcium carbonate biocomposites *2nd International Conference of Chemistry and its Applications*, 6-9 Dec. 2003, Doha, Qatar.
3. Thermal and special assessment of a novel biocomposite via loading PHEMA-g-chitosan with biodegradable calcium carbonate *2nd International Conference of Chemistry and its Applications*, 6-9 Dec. 2003, Doha, Qatar.
4. *Regional Conference on Industrial Property Systems and its Role in Promoting Innovation in the Arab Region*, 7-8 June 2004, Cairo, Egypt.
5. *The First international conference for Applications of Biotechnology*, 18 - 19 October 2008, Faculty of Biotechnology, October University for Modern Sciences and Arts and University of Greenwich, 6 October city, Egypt.
6. *International Conference on Chemistry and Its Role in Development of Chemistry*. 16-21 March 2009, Department of chemistry, Faculty of Science, Mansoura University, Egypt,
7. *Conference On Innovative materials and technologies for the conservation of paper made of books, documents of archive and graphic artworks of historical, artistic and archaeological value in the Mediterranean basin*, 29-30 June 2009, Bibliotheca Alexandrina Alexandria, Egypt
8. *10th Arab International Conference on Polymer Science & Technology*, 14-17 December

2009, Ain El-Sokhna, Egypt.

9. The First International Conference on Biotechnology, 16-18 February 2009, King Fahd Cultural Centre in Riyadh, Saudi Arabia.

10. "The Inhibitory Effect of Chitosan and Its Derivatives after Enzymatic and Chemical Modifications on Bacterial Growth", *Water and Sanitation in Africa and the Middle East Conference*, 28-29 October 2013, Bibliotheca Alexandria (BA) Alexandria, Egypt.

11. The 8th International Scientific Conference: Environment, Development, and Bioinformatics, Faculty of Science, Al-Azhar University (26-28 March 2012). Cairo, Egypt.

11. **The Fourth International Chemistry Conference**, Organized by Saudi Chemical Society and Chemistry Department, King Saud University, 19-21 November 2011, Riyadh Saudi Arabia.

12. **The sixth International Conference on Biological Sciences**, Faculty of Science, Tanta University, 10-11 November 2010, Tanta, Egypt.

Workshops

➤ **IFEP Workshop on Proficiency Tests**, 18 – 21 February 2007, Cairo, Egypt.

➤ (Oral presentation) **Nanobiotechnology Workshop**, The Japanese-Egyptian Year of Science and Technology, 8 November 2008, Cairo University, Cairo, Egypt.

➤ **Biomedical Applications of Biodegradable Polymers Workshop**, IGSR, Alexandria University & KTH, Sweden, 28-29 September, 2009

➤ (Oral presentation) **Industrial Biotechnology Workshop**, The France –Egypt year of Science and Technology, 3-4 July 2010, Movenpick Hotel Cairo Media City, Egypt.

Training courses

❖ **Strategic Thinking, Planning & Managing Training course**, 20 -24 June 2010, Rutgers University, USA & NMI, Egypt.

❖ **NATO ASI Summer School 982808**, 2-14 July 2007, Instiut des Etudes Scientifiques de Cargese-France

Supervision on Scientific Theses

M. Sc. Theses

1. Preparation of alginate hydrogels and its Application as drug delivery system., Faculty of Science, Al-Azhar University, December 2003.
2. Preparation of some polymers and its applications in wastewater treatment., Faculty of Engineering, Alexandria University, October 2004.
3. Immobilization of β -galactosidase onto modified alginate matrices to be used in lactose degradation in the process of whey waste treatment., Faculty of Science, Al-Azhar University, May 2006.
4. Covalent immobilization of glucoamylase onto activated alginate beads for degradation of starch., Faculty of Science, Alexandria University, December 2007.
5. Grafted polymers applications in affinity separation of proteins., Faculty of Science, Al-Azhar University, May 2006.
6. Membrane separation., Faculty of Engineering, Alexandria University, May 2007.
7. Preparation of polyelectrolyte membranes and electrodes for direct methanol fuel cells., Faculty of Science, Al-Azhar University, May 2007.
8. Polymers preparation and modification for separation and purification of proteins., Faculty of Science, El-Zagazig University, March 2008.
9. Modification and preparation of some antimicrobial polymeric membranes to be used in medical applications., Faculty of Science, Ain Shams University, March 2008.
10. Preparation and characterization of graft copolymers hydrogel to be used as soil conditioners, Faculty of Science, Al-Azhar University, May 2008.
11. Studies on acylase enzyme produced by *E. coli* for preparing 6- APA., Faculty of Science, Al-Azhar University. November 2008.
12. Novel polyvinyl chloride films for biomedical applications., Faculty of Science, Alexandria University.

13. Preparation and study of some physical properties of polymer nanocomposites with magnetic oxides., Faculty of Science, Alexandria University, August 2009.
14. Preparation and Characterization of Novel Poly Vinyl Chloride Ion Exchanger membranes for DMFC Applications., Faculty of science, Alexandria University.
15. Nano ion exchanger polymeric resin for water purification applications., Faculty of Science, Ain Shams University, March 2013.
16. Design and evaluation of some wound dressings with antimicrobial properties., Faculty of Science, Tanta University, March 2013.
17. Preparation and characterization of biopolymers biocompatible hydrogels drug delivery system., Faculty of Science, Damietta University, Nov. 2013.
18. A Study in the Recycling of One of the Industrial Wastes., Faculty of Engineering, Alexandria University, 2012.
19. Evaluation of the inhibitory effect of Chitosan pre and post enzymatic or chemical treatment on bacterial growth: an in-vitro study., Institute of Medical Research, Alexandria University, Oct. 2013.
20. Reduction of toxic hexavalent chromium in presence of some organic toxic substances., Faculty of science, Alexandria University, Sep. 2010.
21. Preparation and Characterization of Functional Polyacrylonitrile for Waste Water Treatment., Faculty of science, Suez Canal University, 2011.
22. The effect of different partial denture designs on the abutment teeth under vertical loading, Faculty of Dentistry, Alexandria University, 2011.
23. Evaluation of the thermoplastic resin as a resilient denture base materials (Laboratory Study)., Faculty of Dentistry, Alexandria University, 2012.
24. Preparation and characterization of some nano-polymers and their applications, Faculty of Science, Damietta University 2012.

Ph.D. Theses

1. Study of the sustained release phenomena of biomolecules immobilized onto environmentally sensitive polymers, Faculty of Science, Al-Azhar University, March 2007.
2. Preparation and Characterization of Polymer Polyelectrolyte Membranes for Direct Methanol Fuel Cell application., Faculty of Science, Al-Azhar University, 2011.
3. Preparation of nano-copolymers as novel matrices for immobilizations of bioactive molecules and their characterization., Faculty of Science, Al-Azhar University, 2011.
4. Physicochemical studies on polycarbonate feeding baby bottles to reduce their potential risks on children health, Faculty of Science, Al-Azhar University, Jan. 2013.
5. Preparation and Characterization of Novel Smart Drug Delivery Systems, Faculty of Science, Al-Azhar University, June 2013.
6. Immobilization of chitosan with some bioactive molecules for biomedical applications, Faculty of Science, Ain Shams University, Nov. 2012.
7. Production of fructose from dairy industry byproducts using immobilization technology of microbial enzyme, Faculty of Science, Al-Azhar University, Sep.2013.
8. Development of polymer ion exchange polyelectrolyte membranes for fuel cell applications, Faculty of Engineering, Alexandria University, 2016.
9. Development of some bio-based graft copolymers for oil spill removal, Faculty of Science, Al-Azhar University, 2017.
10. Development of polymers polyelectrolyte membranes for direct methanol fuel cell applications, Faculty of Science, Ain Shams University, 2017.
11. Preparation and characterization of polyelectrolyte materials for energy application, Faculty of Engineering, Alexandria University, 2017.
12. Preparation and characterization of modified PVC membranes for water treatment applications, Faculty of Science, Ain Shams University, 2016.

Teaching Experiences

- ✚ Teaching "**Polymer Principles Course**" at Department of Chemistry, Faculty of Science, Canal Suez University (Suez Branch), Al-Salam, Suez, Egypt. 2010-2011.
- ✚ Teaching "**Chemistry of Synthetic Polymers; CHEM 438**" at Chemistry Department, Faculty of Science, University of Jeddah, Jeddah, Saudi Arabia (2014-Now).
- ✚ Teaching "**General Chemistry; CHEM 110**" at Chemistry Department, Faculty of Science, University of Jeddah, Jeddah, Saudi Arabia (2014-Now).
- ✚ Teaching "**Research Project; CHEM 491**" at Chemistry Department, Faculty of Science, University of Jeddah, Jeddah, Saudi Arabia (2014-Now).
- ✚ Teaching "**Chemistry Labs; CHEM 281**" at Chemistry Department, Faculty of Science, University of Jeddah, Jeddah, Saudi Arabia (2015).
- ✚ Teaching "**Bio-Organic Chemistry; CHEM 360**" at Chemistry Department, Faculty of Science, University of Jeddah, Jeddah, Saudi Arabia (2017).

Administrative Activities

- ✚ **Head of Polymer Materials Research Department** (April 2006 - January 2007)
Mubarak City for Scientific Research and Technological applications, New Boarg El-Arab City, Alexandria, Egypt.
- ✚ **Acting Dean of Institute of Advanced Technology and New Materials** (February 2007- April 2008)
Mubarak City for Scientific Research and Technological applications, New Boarg El-Arab City, Alexandria, Egypt.
- ✚ **Assistant Director for General and Specialized Committees** (July 2009 - May 2010)
Mubarak City for Scientific Research and Technological applications, New Boarg El-Arab City, Alexandria, Egypt.
- ✚ **Supervisor of Small Industries Development Center** (June 2010 – June 2011)
Mubarak City for Scientific Research and Technological applications, New Boarg El-Arab City, Alexandria, Egypt.

Extra-curriculum Activities

[List your Extra-curriculum Activities here...](#)

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

GRANTS & AWARDS

- ✚ European Commission Project (FP6) (**Contract No.: 509095**) (June 2004 - December 2007)
INNOVATION MATERIALS AND TECHNOLOGIES FOR HISTORICAL, ARTISTICAL AND ARCHAEOLOGICAL VALUE.

- ✚ **Egyptian - Italian Project** (May 2008- April 2010)
NEW NANO-POLYMERIC CARRIERS FOR ENZYME IMMOBILIZATION AND ITS APPLICATION IN BIOREMEDIATION OF WATERS POLLUTED BY ENDOCRINE DISRUPTORS.

- ✚ **STDF Project ID/409** (September 2009- August 2011)
TWO EFFECTIVE HUMAN INTERFERON: GENE SYNTHESIS, PROTEIN PRODUCTIONS AND ANTI-HEPATITIS BIOASSAY.

- ✚ **RDI Project III/C1/D9/20 (May 2010 - April 2012)**
CONSTRUCTION OF THE FIRST PRODUCTION LINE OF BIODEGRADABLE PLASTIC IN EGYPT.

- ✚ **Egyptian –Bulgarian Project** (July 2013- June 2016)
NEW PHOSPHORYLATED ALGINATE-CHITOSAN POLYELECTROLYTE COMPLEX FOR BONE REGENERATION AND DRUG DELIVERY SYSTEMS.

Awards

- ✚ **ICGEB / UNIDO Training fellowship** (July 1996 – July 1998)
International Center for Genetics and Biophysics, CNR, Naples, Italy.

- ✚ **Wageningen University PhD Scholarship** (July 1998 – November 1999)
Department of Food Technology and Nutritional Sciences, Wageningen University and Research Centre, Wageningen, The Netherlands.

- ✚ **WL Post-doctor fellowship** (One year 2000, not presumed)
Institute of protein and biochemistry, CNR, Naples, Italy.

- ✚ **Post-doctor fellowship** (One year 2002, not presumed)
McGowan Institute for Regenerative Medicine, Pennsylvania, USA.

✚ **DFG Post-doctor fellowship** (October 2005 – December 2005)
FAL, Braunschweig , Germany.

LIST OF PUBLICATIONS

1. M. Portaccio, S. Stellato, S. Rossi, U. Bencivenga, **M. S. Mohy Eldin**, F. S. Gaeta and D.G. Mita (1998). Galactose competitive inhibition on β -galactosidase immobilized on chitosan and nylon supports. *Enzyme and Microbial Technology* 23, 101-106 (**I.F = 1.9**)
2. **M. S. Mohy Eldin**, U. Bencivenga, **M.** Portaccio, S. Stellato, S. Rossi, M. Santucci, P. Canciglia, F. S. Gaeta, D. G. Mita (1998). β -galactosidase immobilization on pre-modified Teflon membranes using γ -radiation grafting. *J. Appl. Polym. Sci.* 68, 613-624 (**I.F = 1.4**)
3. **M. S. Mohy Eldin**, U. Bencivenga, **M.** Portaccio, S. Stellato, S. Rossi, M. Santucci, P. Canciglia, D. Castagnolo, F. S. Gaeta, D. G. Mita (1998). Characterization of the activity of β -galactosidase immobilized on Teflon membranes pre-activated with different monomers by γ -irradiation. *J. Appl. Polym. Sci.*, 68, 625-636 (**I.F = 1.4**)
4. **M. S. Mohy Eldin**, A. De Maio, S. Di Martino, M. Portaccio, S. Stellato, U. Bencivenga, S. Rossi, M. Santucci, P. Canciglia, F. S. Gaeta and D. G. Mita (1998). Non-isothermal bioreactors utilizing catalytic Teflon membranes grafted by γ -radiation. *J. Membrane Sci.* 146, 237-248 (**I.F = 3.44**)
5. N. I. El-Awady, M. M. El-Awady and **M. S. Mohy Eldin** (1999). Ceric ion-initiated grafting of acrylonitrile onto cellophane films. *Egypt. J. Polym. Sci. Technol.* 3, 25-41
6. **M. S. Mohy Eldin**, A. De Maio, S. Di Martino, N. Diano, V. Grano, N. Pagliuca, S. Rossi, U. Bencivenga, F. S. Gaeta and D. G. Mita (2000). Isothermal and non-isothermal lactose hydrolysis by means of β -galactosidase immobilized on single (double grafted) Teflon membrane. *J. Membrane Sci.* 168, 143-158 (**I.F = 3.44**)
7. **M. S. Mohy Eldin**, A. De Maio, S. Di Martino, U. Bencivenga, S. Rossi, A. D'Uva, F. S. Gaeta, and D. G. Mita (1999). Immobilization of β -galactosidase on nylon membranes grafted with diethylene glycol dimethacrylate (DGDA) by γ -radiation: Effect of the pore size. *Adv. Polym. Technology* 18, 109-123 (**I.F= 0.7**)
8. **M. S. Mohy Eldin**, M. Portaccio, N. Diano, S. Rossi, U. Bencivenga, A. D'Uva, P. Canciglia, F. S. Gaeta and D. G. Mita (1999). Influence of the microenvironment on the activity of enzymes immobilized on Teflon membranes grafted by γ -radiation. *J. Mol. Catal. B: Enzymatic* 7, 251-261 (**I.F = 2.15**)

9. M. S. Mohy Eldin, M. Santucci, S. Rossi, U. Bencivenga, P. Canciglia, F. S. Gaeta, J. Tramper, A. E. M. Janssen, C. G. P. H. Schroën and D. G. Mita (2000). Non-isothermal cephalixin hydrolysis by penicillin G acylase immobilized on grafted nylon membranes. *J. Mol. Catal. B: Enzymatic* 8, 221-232 (I.F = 2.15)

10. M. S. Mohy Eldin, U. Bencivenga, S. Rossi, P. Canciglia, F. S. Gaeta, J. Tramper and D. G. Mita (2000). Characterization of the activity of penicillin G acylase immobilized onto nylon membranes grafted with different acrylic monomers by means of γ -radiation. *J. Mol. Catal. B: Enzymatic* 8, 233-244 (I.F = 2.15)

11. Massimo Santucci, Marianna Portaccio, **M. S. Mohy Eldin**, Nicola Pagliuca, Sergio Rossi, Umberto Bencivenga, Francesco S. Gaeta and Damiano G. Mita (2000). Glucose determination by means of a new reactor/sensor system operating under non-isothermal conditions. *Enz. Microbial and Technology* 26, 593-604 (I.F = 1.9)

12. M. S. Mohy Eldin, C. G. P. H. Schroën, A. E. M. Janssen, D. G. Mita and J. Tramper (2000). Immobilization of Penicillin G acylase onto chemically grafted nylon particles. *J. Mol. Catal. B: Enzymatic* 10, 445-451 (I.F = 2.15)

13. C. G. P. H. Schroën, **M. S. Mohy Eldin**, A. E. M. Janssen, G. D. Mita and J. Tramper (2001) Cephalixin Synthesis by immobilized Penicillin G acylase under non-isothermal conditions: Reduction of the diffusion limitation. *J. Mol. Catal. B: Enzymatic* 15, 163-172 (I.F = 2.15)

14. M. M. El-Awady, N. I. El-Awady and **M. S. Mohy Eldin** (2002). Chemically induced graft copolymerization of acrylic acid onto cellophane. *Int. J. Polym. Mater.* 51, 209-223 (I.F = 0.9)

15. M. S. Mohy Eldin, E.A. Hassan , A.A. El-Zatahry (2004). Chitosan hydrogel beads containing saponin as a matrix for a significant molluscicidal activity. *Al-Azhar Bull. Sci.* 15, (2) 95-106.

16. M. M. Abd El-Latif, **M. S. Mohy Eldin**, M. F. El-Kady (2005). Optimization of flocculation conditions of low concentrated clay suspensions using prepared and commercial nonionic flocculants. *Alexandria Engineering Journal* 44 (1), 101-110.

17. M. S. Mohy Eldin (2005). Covalent immobilization of β -galactosidase onto polypropylene hollow fiber membranes. *Deutsch lebensmittel-Rundschau* 101 (5), 193-198 (I.F= 0.11).

18. M. S. Mohy Eldin, E. A. Hassan , M. R. Elaassar (2005). β -Galactosidase covalent immobilization on the surface of alginate beads and its application in lactose Hydrolysis”.

Deutsch lebensmittel-Rundschau 101(6), 255-259 (I.F= 0.11).

19. M. S. Mohy Eldin (2005). β -Galactosidase covalent immobilization on the surface of alginate beads and its application in lactose hydrolysis: Effect of introducing ethylene diamine spacer. *Deutsch lebensmittel-Rundschau* 101 (7) , 309-314 (I.F= 0.11).

20. M. S. Mohy Eldin , E. A. Hassan , E. A. Kamoun , A.A. El-Zatahry (2005). Alginate hydrogel beads as drug delivery system : I. Optimization of formulation conditions To have zero order release. *Egyptian Journal of Biomedical Science* 17, 116-127.

21. M.S. Mohy Eldin , E. A. Hassan , E. A. Kamoun , A.A. El-Zatahry (2005). Alginate hydrogel beads as drug delivery system: II. Effect of water content on the release behavior of bovine serum albumin. *Egyptian Journal of Biomedical Science* 17, 104-115.

22. M.S. Mohy Eldin, E. A. Hassan, H. S. M. Soliman , A.A. El-Zatahry (2004). *Calendula Officinalis* Encapsulation in alginate hydrogel beads for a significant molluscicidal activity. *Al-Azhar Bull. Sci.* 15 (2) , 85-94.

23. M. M. Abd El-Latif, **M. S. Mohy Eldin**, M. F. El-Kady (2005). Settling of high Concentrations of clay suspended in water by non ionic polyacrylamide flocculants. *Alexandria Engineering Journal* 44 (2), 325-338.

24. Mohamed Rashad, **M. S. Mohy Eldin**, M. M. Abd El-Latif (2005). Thermodynamic approach for copper and cadmium specific and non specific adsorption on calcareous soil-bio-polymer composite. *Alexandria Engineering Journal* 44 (3), 469-476.

25. M. S. Mohy Eldin, M. M. Abd El-Latif, M. F. El-Kady (2005). Preparation of nonionic polyacrylamide flocculant and its application in removal of clay suspension. *Alexandria Engineering Journal* 44 (3), 463-468.

26. M. M. Abd El-Latif, **M. S. Mohy Eldin**, Mohamed Rashad (2006). Kinetic study of copper and cadmium removal by soil-calcium alginate composite. *Alexandria Engineering Journal* 45 (1), 119-129.

27. A. A. El-Zatahry, and **M. S. Mohy Eldin** (2008). Preparation and characterization of metronidazole loaded chitosan nanoparticles for drug delivery application. *Polymer for advanced technologies* 19, 1787-1791 (I.F = 1.43)

28. A. A. El-Zatahry, E. A. Soliman, E. A. Hassan and **M.S. Mohy Eldin** (2009). Evaluation of alginate-chitosan bioadhesive beads for controlled release of theophylline. *J. Appl. Poly. Sci.* 111:2452-2459 (I.F = 1.2)

- 29. M.S. Mohy Eldin**, E. A. Soliman, E. A. Hassan, M. A. Abu-Saied (2009). Immobilized metal ions cellophane–PGMA grafted membranes for affinity separation of β -galactosidase enzyme: Preparation and characterization. *J. Appl. Poly. Sci.* 111, 2647-2656 (**I.F = 1.2**)
- 30. M. S. Mohy Eldin**, A. A. El-Zatahry, E. A. Hassan, M. R. Elaassar (2012). Covalent immobilization of β -galactosidase onto functionalized PVC microspheres *J. Appl. Poly. Sci.* 125, 1724-1735 (**I.F = 1.2**)
- 31. M.S. Mohy Eldin**, E. A. Soliman, A.I. Hashem, T.M. Tamer (2008). Antibacterial activity of chitosan chemically modified with new technique. *Trends Biomater. Artif. Organs* 22 (3), 121-133.
- 32. M.S. Mohy Eldin**, E. A. Soliman, A.I. Hashem, T.M. Tamer (2008). Chitosan modified membranes for wound dressing applications: Preparations, characterization and bio-evaluation . *Trends Biomater. Artif. Organs* 22 (3), 154-164.
33. Emad A. Soliman, **Mohamed S. Mohy Eldin**, Masakazu Furuta (2009). Biodegradable zein-based films: Influence of gamma-irradiation on structural and functional properties. *Journal of Agricultural and Food Chemistry* 57 (6), 2529-2535. (**I.F = 2.67**)
- 34. M. S. Mohy Eldin**, E. A. Hassan, A. A. El-Zatahry, K. M. El-Katib, M. A. Abu-Saied. (2011). Novel grafted Nafion membranes for proton exchange membrane fuel cell (PEMFC) applications. *J. App. Poly. Sci.* 119, 120–133 (**I.F = 1.2**)
- 35. M. S. Mohy Eldin**, E. A. Soliman, A. A. El-Zatahry and D. G. Mita (2010). Modification of poly-tetrafluoroethylene surface properties for biocatalytic membrane applications. *Trends Biomater. Artif. Organs* 23,150-158.
- 37. M. S. Mohy Eldin**, E. A. Hassan, H. A. El-Enshasy, B. M. Haroun and M. A. Hassan (2012). Covalent immobilization of penicillin G acylase onto chemically activated surface of PVC membrane for 6-APA production from penicillin Hydrolysis Process: I - Optimization of surface modification and its characterization. *J. App. Poly. Sci.* 124, Special Issue : Membrane (S1), E27–E36 (**I.F = 1.2**).
38. Hesham A. El-Enshasy, **Mohamed S. Mohy El Din**, Mohamed Elsayed Salah Elsayed, Bakry M. Haroun and Elsayed A. Hassan (2009). Optimization and scaling up of penicillin G acylase production process by *E. coli*. *JAS* 6, 1348-1358.
- 39. M. S. Mohy Eldin**, M. F. Elkady, M. A. Abu-Saied, A. M. Abdel Rahman, E. A. Soliman

- A. A. Elzatahry, M. E. Youssef (2010). Removal of cadmium ions from synthetic aqueous solutions using a novel nano-sulphonated poly glycidylmethacrylate cation exchanger: Kinetic and equilibrium studies. *J. App. Poly. Sci.* 118, 3111–3122 (**I.F 1.2**)
40. L. Mita, V. Sica, M. Guida, C. Nicolucci, T. Grimaldi, L. Caputo, M. Bianco, S. Rossi, U. Bencivenga, **M. S. Mohy Eldin**, D.G. Mita, N. Diano (2010). Employment of immobilized Lipase from *Candida rugosa* for bioremediation of waters polluted by dimethylphthalate taken as model of endocrine disruptors. *J. mol. catal. B: Enzymatic*, 62 (2),133-141 (**I.F = 2.4**)
- 41. M. S. Mohy Eldin**, M. F. Elkady, M. A. Abu-Saied , A. M. Abdel Rahman , E. A. Soliman A. A. Elzatahry, M. E. Youssef (2011). Novel nano-sulphonated polyglycidyl methacrylate cation exchanger for removal of heavy metals: Optimization of the operational conditions. *Desalination* 279, 152–162 (**I.F = 1.852**)
- 42. M. S. Mohy Eldin**, H.M. El-Sherif, E. A. Soliman , A. A. Elzatahry, A. M. Omer (2011). Polyacrylamide grafted carboxymethyl cellulose: Smart pH-sensitive hydrogel for protein concentration. *J. App. Poly. Sci.* 122, 469-479 (**I.F = 1.2**)
43. M. A. Abu-Saied, A.A. Elzatahry, K. M. El-Khatib, E. A. Hassan, M. M. El-Sabbah, E. Drioli, **M. S. Mohy Eldin** (2012). Preparation and characterization of novel grafted cellophane-phosphoric acid doped membranes for proton exchange membrane fuel cell (PEMFC) applications. *J. App. Poly. Sci.* 123, 3710–3724 (**I.F = 1.2**)
- 44. M.S. Mohy Eldin**, S. Abdel Rahman, G. F. El-Fawal (2011). Preparation and characterization of Grafted cellophane membranes for affinity separation of His-Tag chitinase. *Advances in Polymer Technologies* 30, 191-202 (**I.F = 1.04**)
- 45. Mohamed Samir Mohy Eldin**, Ehab Serour, Mahmoud Nasr and Husam Teama (2011). Affinity covalent immobilization of glucoamylase onto chemically modified alginate beads for starch hydrolysis application. I. Beads modification. *Journal of Applied Biochemistry and Biotechnology* 164 (1), 10 -22 (**I.F = 1.87**)
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- 47. M. S. Mohy Eldin**, M. F. Elkady, A. M. Abdel Rahman , E. A. Soliman A. A. Elzatahry, M. E. Youssef and B.Y. Eweida (2012). Preparation and characterization of imino diacetic acid functionalized alginate beads for removal of contaminates from waste water: I. methylene blue cationic dye model. *Desalination and Water Treatment* 40, 15-23 (**I.F = 0.75**)

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Patents

National Patent

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