

Resume of Mariam Al-Ali AlMa'adeed

Personal Details:

Name: Mariam Al-Ali AlMa'adeed

Academic Rank: Professor, Physics Program and Materials Science and Technology Program, Qatar University

Position: Vice President for Research and Graduate Studies, Qatar University.

E-mail: m.alali@qu.edu.qa

Education:

- Ph.D., Materials Science, Alexandria Univ., Egypt, January 2001.
- M.Sc., Materials Science, Alexandria Univ., Egypt, September 1996.
- B.Sc., Physics/ Mathematics, Qatar University, June, 1990. Graduated with High Honors standing and ranked first in class.

Other courses:

- Georgetown Leadership Seminar, Institute for the Study of Diplomacy, School of Foreign Service, Georgetown University, 2016
- Body Language for Journalists, Aljazeera Media Institute, 2016
- Launch and management of industrial projects in Qatar, Qatar Development Bank, 2013
- Investor Readiness Program, Qatar Science and Technology Park (QSTP), 2008

General Specialization: Materials Science

Specific Field: Polymers/Composites, Nanotechnology, Materials Characterizations

Nationality: Qatari

Languages:

Arabic: Speaking and writing fluently

English: Speaking and writing fluently

French: Basics

Administrative Activities:

- Vice President for Research and Graduate Studies (Qatar University), 2016 to date.
- Director, Center for Advanced Materials, Qatar University, 2012 to 2016.
- Coordinator, Materials Science and Technology Program, Qatar University, 2013 to 2016
- Head, Materials Technology Unit, Qatar University, 2009 – 2012
- Projects Manager, Materials Technology Unit, Qatar University, 2008 – 2009

Academic Career:

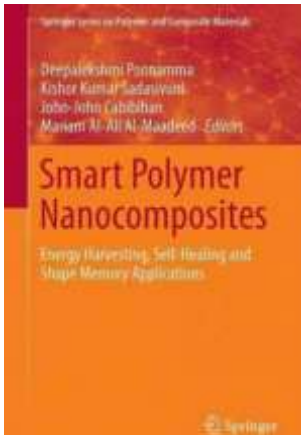
- Professor Physics Department/ Materials Science and Technology Program/ Center for Advanced Materials, Qatar University 2014 to date.
- Associate Professor - Physics Department/ Center for Advanced Materials, Qatar University 2006- 2014.
- Assistant Professor - Physics Department, Qatar University 2001- 2006
- Lecturer - Physics Department, Qatar University 1996- 2001
- Teaching Assistant- Physics Department, Qatar University 1991- 1996

Prizes:

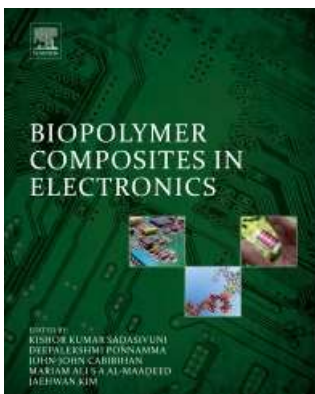
- ISESCO Prize in Science & Technology 2016. Awarded by the Islamic Educational, Scientific and Cultural Organization.
- Thomson Reuters Award for Excellence in Innovation (Qatar), 2016.
- Leadership Excellence for Women Award (Mentorship Award), Middle East Process Engineering Conference and Exhibition, 2015.
- AlBairaq- World Innovation Summit for Education (WISE), 2015.
- Second Prize, Research Competition, QU Research Forum, Student under supervision: Haneen Abdelrazeq (Poster). Supervisors: Igor Krupa, Mariam AlMaadeed, Patrick Sobolciak, 2015.
- Gulf Petrochemicals & Chemicals Association (GPCA) Plastic Excellence Award 2014
- Outstanding Faculty Service Award.- Qatar University, 2013-2014
- State of Qatar encouragement Award in Physics (2010- 2011)
- Outstanding Faculty Service Award_– Special award - Qatar University (2011-2012)
- Second prize, Sustainable System and the Environment, March 2011 American University of Sharjah
- One of the best 5 research projects in the 2nd UREP competition, March 2010 Qatar Foundation, Qatar.

Books

- Smart Polymer Nanocomposites: Energy Harvesting, Self-Healing and Shape Memory Applications, Deepalekshmi Ponnamma, Kishor Kumar Sadasivuni, John-John Cabibihan, Mariam Al-Ali Al-Maadeed ISBN 9783319504247, Springer
<http://www.springer.com/gb/book/9783319504230>



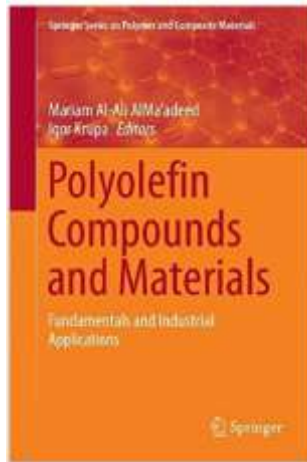
- Biopolymer Composites in Electronics, Authors: Kishor Kumar Sadasivuni, John-John Cabibihan, Deepalekshmi Ponnamma, Mariam Ali S A Al-Maadeed, Jaehwan Kim, Print ISBN 9780128092613, Electronic ISBN 9780081009741
<https://www.elsevier.com/books/biopolymer-composites-in-electronics/unknown/978-0-12-809261-3>



- Flexible and Stretchable Electronic Composites, Authors: Ponnamma, D., Sadasivuni, K.K., Wan, C., Thomas, S., Editors: Al-Ali AlMa'adeed, Mariam (Ed.), ISBN 978-319-23663-6 2015 <http://www.springer.com/us/book/9783319236629#aboutAuthors>



- Polyolefin Compounds and Materials, Fundamental and Industrial Applications, Editors: Mariam AlMaadeed, Igor Krupa, Springer. ISBN: 978-3-319-25980-2 <http://www.springer.com/in/book/9783319259802>



- GCC Energy Efficiency Guidebook, Expert, Gulf Organization for Industrial Consulting, Industrial Support Department, Role: Expert team, Qatar, 2013

Editorial Board:

- Advanced Manufacturing: Polymer & Composites Science, Taylor and Francis (2013 to date)
- Polyolefin Journal (2013 – 2014)

Research Activities:**Published Papers in International Journals:**

1. Miroslav Mrlić, Ma'rio Špirek, Jassim Al-Khori, Ali Abdulrahman Ahmad, Jaroslav Mosnacěk, **Mariam AlAli AlMaadeed**, Peter Kasać, Mussel-mimicking sulfobetaine-based copolymer with metal tunable gelation, self-healing and antibacterial capability, Arabian Journal of Chemistry, Accepted, 2017
2. Deepalekshmi Ponnamma, **Mariam Al Ali Al-Maadeed**, 3D architectures of titania nanotubes and graphene with efficient nanosynergy for supercapacitors, Materials and Design, Volume 117, Pages 203-212, 2017
3. Kalim Deshmukh, M Basheer Ahamed, Rajendra R Deshmukh, Kishor Kumar Sadasivuni, Deepalekshmi Ponnamma, SK Khadheer Pasha, **Mariam Al-Ali AlMaadeed**, Anji Reddy Polu, K Chidambaram, Eeonomer 200F®: A High-Performance Nanofiller for Polymer Reinforcement—Investigation of the Structure, Morphology and Dielectric Properties of Polyvinyl Alcohol/Eeonomer-200F® Nanocomposites for Embedded Capacitor Applications, Journal of Electronic Materials, Journal of Electronic Materials, Volume 46, Issue 4, pp 2406-2418, 2017
4. Kumar Digvijay Satapathy, Kalim Deshmukh, M. Basheer Ahamed, Kishor Kumar Sadasivuni, Deepalekshmi Ponnamma, S. K. Khadheer Pasha, **Mariam Al-Ali AlMaadeed**, Jamil Ahmad, High- quality factor poly (vinylidene fluoride) based novel

- nanocomposites filled with graphene nanoplatelets and vanadium pentoxide for high-Q capacitor applications, *Advanced Materials Letters*, 8(3), 288-294, 2017
5. Debora Puglia, **Mariam Ali SA Al-Maadeed**, Jose M Kenny, Sabu Thomas Elastomer/thermoplastic modified epoxy nanocomposites: The hybrid effect of ‘micro’and ‘nano’scale, *Materials Science and Engineering: R: Reports* 116 (2017) 1–29
 6. MK Mohanapriya, Kalim Deshmukh, K Chidambaram, M Basheer Ahamed, Kishor Kumar Sadasivuni, Deepalekshmi Ponnamma, **Mariam Al-Ali AlMaadeed**, RR Deshmukh, SK Khadheer Pasha, Polyvinyl alcohol (PVA)/polystyrene sulfonic acid (PSSA)/carbon black nanocomposite for flexible energy storage device applications, *Journal of Materials Science: Materials in Electronics*, Volume 28, issue 8,pp 6099-6111, 2017
 7. RG Pereyra, **MA Al-Maadeed**, MA Carignan, Modeling polymeric gels: The role of chain flexibility on the structure of physical gels, , *Express Polymer Letters*, Vol. 11 Issue 3, p199-208 2017
 8. P. Noorunnisa Khanam, Anton Popelka, Maryam Alejji, and **M. A.AIMaadeed**, Biotechnological Production Process and Life Cycle Assessment of Graphene, , *Journal of Nanomaterials*, Volume 2017 (2017), Article ID 5671584, 10 pages <https://doi.org/10.1155/2017/5671584>
 9. Aisha Al-Saygh , Deepalekshmi Ponnamma , **Mariam AlAli AlMaadeed**, Poornima Vijayan P, Alamgir Karim and Mohammad K. Hassan, Flexible Pressure Sensor Based on PVDF Nanocomposites containing Reduced graphene oxide- titania hybrid nanolayers, *Polymers* 2017, 9, 33; doi:10.3390/polym9020033
 10. Kalim Deshmukh, M. Basheer Ahmed, Kishor Kumar Sadasivuni, Deepa Ponnamma, Rajendra R. Deshmukh, Ajinkya M. Trimukhe, S. Khadeer Pasha, Ani Reddy Polu, Mariam Al-Ali AlMaadeed, K. Chidmbaram, Solution-processed white graphene-reinforced ferroelectric polymer nanocomposites with improved thermal conductivity and dielectric properties for electronic encapsulation, , *Journal of Polymer Research*, 24:27, 2017 DOI 10.1007/s10965-017-1189-4

11. Ali Ammar, Ahmed Elzatahry, **Mariam Al-Maadeed**, Abdullah M. Alenizi, Abul F. Huq, Alamgir Karim, Nanoclay compatibilization of phase separated polysulfone/polyimide films for oxygen barrier, *Applied Clay Science* 137 123-134, 2017
12. P. Noorunnisa Khanam, **Mariam A. AlMaadeed**, M. Ouederni, Beatriz Mayoral, Andrew Hamilton & Dan Sun, Effect of two types of graphene nanoplatelets on the physico-mechanical properties of linear low-density polyethylene composites, , *Advanced Manufacturing: Polymer & Composites Science*, Volume 2, Issue 2, 2016
13. Poornima Vijayan P. & **Mariam Ali S.A. Al-Maadeed**, TiO₂ nanotubes and mesoporous silica as containers in self-healing epoxy coatings, <http://www.nature.com/articles/srep38812> *Scientific Reports*, Nature, Published: 12 December 2016
14. Poornima Vijayan P, Yara Mohamed Hany El-Gawady, and **Mariam Ali S. A. Al-Maadeed**, Halloysite Nanotube as Multifunctional Component in Epoxy Protective Coating, *Industrial and Engineering Chemistry Research*, 55, 11186–11192, 2016
15. Sanghyun Yoo, Everson Kandare, Robert Shnaks, **Mariam AlMaadeed**, Akbar Afaghi Khatib, Thermophysical Properties of Multifunctional Glass Fibre Reinforced Polymer Composites Incorporating Phase Change Materials, <http://dx.doi.org/10.1016/j.tca.2016.09.003> *Thermochimica Acta*, Available online 4 September 2016
16. K. Deshmukh, M. B. Ahamed, K. K. Sadasivuni, D. Ponnamma, **M A Al-Maadeed**, R. R. Deshmukh, S.K. K. Pasha, A. R. Polu, K. Chidambaram. Fumed SiO₂ nanoparticle reinforced biopolymer blend nanocomposites with high dielectric constant and low dielectric loss for flexible organic electronics. *J. Appl. Polym. Sci.* 2016. DOI: 10.1002/app.44427
17. Sanghyun Yoo, Everson Kandare, Ghowsalya Mahendrarajah, **Mariam A Al-Maadeed** and Akbar Afaghi Khatibi, Mechanical and thermal characterisation of multifunctional composites incorporating phase change materials, *Journal of Composite Materials* 0(0)

1–12 DOI: 10.1177/0021998316673894 jcm.sagepub.com

18. Yoo, S., Kandare, E., Shanks, R., **Al-Maadeed, M. A.**, & Afaghi, K. A. Thermophysical properties of multifunctional glass fibre reinforced polymer composites incorporating phase change materials. *Thermochimica Acta* 2016; 642:25-31
19. K. Deshmukh, M. B. Ahamed, R. R. Deshmukh, S.K. K. Pasha, K. K. Sadasivuni, A. R. Polu, D. Ponnamma, **M A Al-Maadeed**, K. Chidambaram. Newly developed biodegradable polymer nanocomposites of cellulose acetate and Al₂O₃ nanoparticles with enhanced dielectric performance for embedded passive applications. *J Mater Sci: Mater Electron* 2016. DOI: 10.1007/s10854-016-5616-9
20. K. Deshmukh, M. B. Ahamed, R. R. Deshmukh, S.K. K. Pasha, K. K. Sadasivuni, D. Ponnamma, **M A Al-Maadeed**. Striking multiple synergies in novel three-phase fluoropolymer nanocomposites by combining titanium dioxide and graphene oxide as hybrid fillers. *J Mater Sci: Mater Electron* 2016. DOI: 10.1007/s10854-016-5559-1
21. D. Ponnamma, A. Saiter, J.M. Saiter, S. Thomas, Y. Grohens, **M. A. Al-Maadeed**, K. K. Sadasivuni. Influence of temperature on the confinement effects of micro and nano level graphite filled poly(isoprene-co-isobutylene) composites. *Journal of Polymer Research* 2016; 23:128-133.
22. Kalim Deshmukh, M. Basheer Ahamed, R.R. Deshmukh, S.K. Khadheer Pasha, K.Chidambaram, Kishore Kumar Sadasivani, Deepalekshmi Ponnamma and **Mariam Al-Ali Al-Maadeed**. Eco-friendly Synthesis of Graphene Oxide Reinforced Hydroxypropyl Methylcellulose (HPMC) /Polyvinyl Alcohol (PVA) Blend Nanocomposites filled with Zinc oxide (ZnO) Nanoparticles for High K Capacitor Applications. *Polymer-Plastics Technology and Engineering* 2016. DOI:10.1080/03602559.2015.1132451
23. Ahmed B. Radwan, Adel M. Mohamed, Aboubakr M. Abdullah and **M. Al-Maadeed**. Corrosion Protection of Electrospun PVDF-ZnO Superhydrophobic Coating. *Surf. Coat. Tech.* 2016; 289:136-143.

24. Mrlík, Miroslav, and **Mariam Al Ali Al Maadeed**. Tailoring of the thermal, mechanical and dielectric properties of the polypropylene foams using gamma-irradiation. *Polymer Degradation and Stability* 2016; 133:234-242.
25. Yaragalla, S., Rajendran, R., Jose, J., **Al-Maadeed, M. A.**, Kalarikkal, N., & Thomas, S. Preparation and characterization of green graphene using grape seed extract for bioapplications. *Materials Science & Engineering C* 2016; 65: 345-353.
26. Tanvir, A., **Al-Maadeed, M. A.** and Hassan, M. K. Secondary chain motion and mechanical properties of γ -irradiated-regenerated cellulose films. *Starch – Stärke* 2016. doi:10.1002/star.201500329
27. Deepalekshmi Ponnamma, Kishor Kumar Sadasivuni, Michael Strankowski, Peter Kasak, Igor Krupa & **Mariam Al-Ali AlMaadeed**. Eco-Friendly Electromagnetic Interference Shielding Materials from Flexible Reduced Graphene Oxide Filled Polycaprolactone/Polyaniline Nanocomposites. *Polymer-Plastics Technology and Engineering* 2016; 55:920-928.
28. H. Ben Yahia, R. Essehli, M. Avdeev, J-B. Park c , Y-K. Sun, **M.A. Al-Maadeed**, I. Belharouak. Neutron diffraction studies of the Na-ion battery electrode materials $\text{NaCoCr}_2(\text{PO}_4)_3$, $\text{NaNiCr}_2(\text{PO}_4)_3$, and $\text{Na}_2\text{Ni}_2\text{Cr}(\text{PO}_4)_3$. *Journal of Solid State Chemistry* 2016; 238:103–108.
29. Josef Osička, Marketa Ilčíková, Miroslav Mrlík, **Mariam Ali S.A. Al-Maadeed**, Miroslav Šlouf, Jan Tkac, Peter Kasák. Anisotropy in CNT composite fabricated by combining directional freezing and gamma irradiation of acrylic acid. *Materials and Design* 2016; 97: 300–306.
30. Mohammed B. Ghazy, Farag A. Esmail, Waleed K. El-Zawawy, **Mariam. A. Al-Maadeed** and Medhat E. Owd. Extraction and characterization of Nanocellulose obtained from sugarcane bagasse as agro-waste. *Journal of Advances in Chemistry* 2016; 2:3.
31. Eman M. Fayyad, Kishor Kumar Sadasivuni, Deepalekshmi Ponnamma, **Mariam A. Al-Maadeed**. Oleic acid-grafted chitosan/graphene oxide composite coating for corrosion

protection of carbon steel. Carbohydrate Polymers 2016.

DOI:10.1016/j.carbpol.2016.06.001

- 32.P. Noorunnisa Khanam, **M. A. Al-Maadeed**, Miroslav Mrlik. Improved flexible, controlled dielectric constant material from recycled LDPE polymer composites. Journal of Materials Science: Materials in Electronics 2016. DOI 10.1007/s10854-016-4910-x
- 33.Ahmed A. Issa, **Mariam Al-Maadeed**, Adriaan S. Luyt, Miroslav Mrlik, Mohammad K. Hassan. Investigation of the physico-mechanical properties of electrospun PVDF/cellulose (nano)fibers. Journal of Applied Polymer Science 2016. DOI: 10.1002/APP.43594
- 34.J. Bhadra, N. J. Al-Thani, N. K. Madi, **M. A. Al-Maadeed**,. High performance sulfonic acid doped polyaniline–polystyrene blend ammonia gas sensors. Journal of Materials Science: Materials in Electronics 2016. DOI: 10.1007/s10854-016-4825-6
- 35.Kalim Deshmukh, M. Basheer Ahamed, Anji Reddy Polu, Kishor Kumar Sadasivuni, S. K. Khadheer Pasha, Deepalekshmi Ponnamma, **Mariam Al-Ali AlMaadeed**, Rajendra R. Deshmukh, K. Chidambaram. Impedance spectroscopy, ionic conductivity and dielectric studies of new Li⁺ ion conducting polymer blend electrolytes based on biodegradable polymers for solid state battery applications. J Mater Sci: Mater Electron 2016. DOI: 10.1007/s10854-016-5267-x
- 36.Kalim Deshmukh, M. Basheer Ahamed, Kishor Kumar Sadasivuni, Deepalekshmi Ponnamma, Rajendra R. Deshmukh, S. K. Khadheer Pasha, **Mariam Al-Ali AlMaadeed**, K. Chidambaram. Graphene oxide reinforced polyvinyl alcohol/polyethylene glycol blend composites as high-performance dielectric material. Journal of Polymer Research 2016. DOI: 10.1007/s10965-016-1056-8
- 37.Patrik Sobolčiak, Haneen Abdelrazeq, Nesibe Özerkan, Mabrouk Ouederni, Zuzana Nógelová, **Mariam A. AlMaadeed**, Mustapha Karkri, Igor Krupa. Heat transfer performance of paraffin wax based phase change materials applicable in building industry. Applied Thermal Engineering 2016.
DOI:10.1016/j.applthermaleng.2016.07.050

38. Deepalekshmi Ponnamma, Kishor Kumar Sadasivuni, Sabu Thomas, Igor Krupa, and **Mariam Al-Ali AlMa'adeed**. Flexible oil sensors based on multiwalled carbon nanotube-filled isoprene elastomer composites. *Rubber Chemistry and Technology* 2016; 89:306-315.
39. Sobolciak, P., Karkri, **M.**, **Al-Maadeed, M.A.**, Krupa, I., Thermal characterization of phase change materials based on linear low-density polyethylene, paraffin wax and expanded graphite. *Renewable Energy* 2016; 88:372-382.
40. Poornima Vijayan P and **Mariam Ali S A Al-Maadeed**. 'Containers' for self-healing epoxy composites and coating: trends and advances. *eXPRESS Polymer Letters* 2016; 10:506–524.
41. SOBOLČIAK, Patrik KARKRI, Mustapha – **AL MAADEED, Mariam-** KRUPA, Igor. Thermal characterization of phase change materials based on linear low-density polyethylene, paraffin wax and expanded graphite. *Renewable Energy* 2016; 88:372-382.
42. P. Noorunnisa Khanam, **MA Al-Maadeed**, M. Ouederni, Eileen Harkin-Jones, Beatriz Mayoral. Melt Processing and Properties of Linear Low Density Polyethylene-Graphene Nano platelet composites. *Vacuum* 2016; 130:63-71.
43. Ali Ammar, Abdullah M. Al-Enizi, **Mariam AlAli AlMaadeed**, Alamgir Karim. Influence of Graphene Oxide on Mechanical, Morphological, Barrier, and Electrical Properties of Polymer Membranes. *Arabian Journal of Chemistry* 2016; 9:274-286.
44. Deepalekshmi Ponnamma, Qipeng Guo, Igor Krupa, **Mariam Ali S. A. Al-Maadeed**, Varughese K. T. Sabu Thomas and Kishor Kumar Sadasivuni. Graphene and graphitic derivative filled polymer composites as potential sensors. *Physical Chemistry Chemical Physics* 2015; 17:3954-3981.
45. Eman M. Fayyad, **Mariam A. Al-Maadeed**, Alan Jones. Encapsulation of Tung Oil for Self-Healing Coatings in Corrosion Applications. *Science of Advanced Materials* 2015; 7: 2628–2638.

46. Gossard, D., Karkri, M., **AlMaadeed, M.A.**, Krupa, I. A new experimental device and inverse method to characterize thermal properties of composite phase change materials. *Composite Structures* 2015; 133:1149-1159.
47. J. Bhadra, N.J. Al-Thani, N.K. Madi, **M.A. Al-Maadeed**. Effects of aniline concentrations on the electrical and mechanical properties of polyaniline polyvinyl alcohol blends. *Arabian Journal of Chemistry* 2015. DOI: 10.1016/j.arabjc.2015.04.017
48. A. M. Abdullah, A. A. Mohamed, A. Bahgat, and **M. Al-Maadeed**. Superhydrophobic and Corrosion Behavior of Electrospun PVDF-ZnO Coating. *ECS Transactions* 2015; 64:57-67.
49. Eman Fayed, **Mariam A. AlMaadeed**, Allen Johns. Preparation and characterization of urea–formaldehyde microcapsules filled with paraffin. *Polymer Bulletin* 2015. DOI 10.1007/s00289-015-1518-x
50. Mustapha Karkri , Mohamed Lachheb , Didier Gossard , Sassi Ben Nasrallah and **Mariam A AlMaadeed**. Improvement of thermal conductivity of paraffin by adding expanded graphite. *Journal of Composite Materials* 2015. DOI:10.1177/0021998315612535.
51. Patrik Sobolciaka, Miroslav Mrlíka, **Mariam A. AlMaadeed** , Igor Krupa. Calorimetric and dynamic mechanical behavior of phase change materials based on paraffin wax supported by expanded graphite. *Thermochimica Acta* 2015; 617:111–119.
52. Igor Krupa, Zuzana Nógellová, Zdenko Špitalský, Marta Malíková, Patrik Sobolčiak, Haneen W Abdelrazeq, Mabrouk Ouederni, Mustapha Karkri, Ivica Janigová, **Mariam Ali SA Al-Maadeed**. Positive influence of expanded graphite on the physical behavior of phase change materials based on linear low-density polyethylene and paraffin wax. *Thermochimica Acta* 2015; 614: 218-225.
53. Nader Shehata, Nabil Madi, **Mariam Al-Maadeed**, Ibrahim Hassounah, and Abdullah Ashraf. Improved Electrical Conductivity of Carbon/Polyvinyl Alcohol Electrospun Nanofibers. *Journal of Nanomaterials* 2015. DOI:10.1155/2015/812481

54. Patrik Sobolčiak, Haneen Abdelrazeq, Mabrouk Ouederni, Mustapha Karkri, **Mariam A Al Maadeed**, Igor Krupa. The stabilizing effect of expanded graphite on the artificial aging of shape stabilized phase change materials. *Polymer Testing* 2015; 46:65-71.
55. Beatriz Mayoral, Eileen Harkin-Jones, Noorunnisa Patan Khanam, **Mariam Al-Maadeed**, Mabrouk Ouederni, Andrew Hamilton and Dan Sun. Melt processing and characterisation of polyamide 6/graphene nanoplatelet composites. **RSC Advances** 2015. **DOI:** 10.1039/C5RA08509H
56. P. Noorunnisa Khanam and **Mariam Al Ali AlMaadeed**, Processing and characterization of polyethylene-based composites. *Advanced Manufacturing: Polymer & Composites Science* 2015; 1:63-79.
57. Jobin Jose, Mamdouh A Al-Harhi, **Mariam Al-Ali AlMa'adeed**, Jolly Bhadra Dakua, Sadhan K De. Effect of graphene loading on thermomechanical properties of poly(vinyl alcohol)/starch blend, *Journal of Applied Polymer Science* 2015.
DOI: 10.1002/app.41827
58. Jobin Jose, SK De, **Mariam Al-Ali AlMa'adeed**, Jolly Bhadra Dakua, PA Sreekumar, Rachid Sougrat, Mamdouh A Al-Harhi. Compatibilizing role of carbon nanotubes in poly(vinyl alcohol)/starch blend. *Starch-Stärke* 2014; 67:147-153.
59. M Karkri, M Lachheb, Z Nógellová, B Boh, B Sumiga, **MA AlMaadeed**, A Fethi, I Krupa. Thermal properties of phase-change materials based on high-density polyethylene filled with micro-encapsulated paraffin wax for thermal energy storage. *Energy and Buildings* 2015. **DOI:**10.1016/j.enbuild.2014.11.061
60. **M. A. AlMaadeed**, Sami Labid, Igor Krupa, Mustapha Karkri. Effect of expanded graphite on the phase change materials of high density polyethylene/wax blends. *Thermochimica Acta* 2015; 600:35-44.
61. Roda F. Al-Thani, Noorunnisa Khanam Patan and **Mariam A. Al-Maadeed**. Graphene Oxide as antimicrobial against two gram-positive and two gram-negative bacteria in addition to one fungus. *Online Journal of Biological Sciences* 2014; 14: 230-239.

62. Sara Madadi Ardekani, Alireza Dehghani, **Mariam A Al-Maadeed**, Mat Uzir Wahit, Azman Hassan. Mechanical and thermal properties of recycled poly (ethylene terephthalate) reinforced newspaper fiber composites. *Fibers and Polymers* 2014; 15:1531-1538.
63. Igor Krupa, Martin Prostředný, Zdenko Špitalský, Juraj Krajčí and **Mariam Ali S AlMaadeed**. Electrically conductive composites based on an elastomeric matrix filled with expanded graphite as a potential oil sensing material. *Smart Materials and Structures* 2014. DOI: 10.1088/0964-1726/23/12/125020
64. Kaltham Al-Ghanim, **Mariam A. Al-Maadeed**, Noora Jabor Al-Thani. Impact of innovative learning environment based on research activities on secondary school students' attitude towards research and their self-efficiency. *European Journal of Educational Sciences* edition 2014; 1:39-57.
65. Kishore Kumar, Deepa Lakshmi, Peter Kasak, Igor Krupa, **Mariam Al-Ali AlMaadeed**. Designing dual phase sensing materials from polyaniline filled styrene-isoprene styrene. *Materials chemistry and Physics* 2014; 147:1029-1036.
66. Igor Krupa, Zuzana Nógellová, Zdenko Špitalsk, Ivica Janigová, Bojana Boh, Bostjan Sumiga, Angela Kleinová, Mustapha Karkri, **Mariam A. AlMaadeed**. Phase change materials based on high-density polyethylene filled with microencapsulated paraffin wax. *Energy Conversion Management* 2014; 87:400-409.
67. E. M. Fayyad, **M. A. AlMaadeed**, A. Jones, A. M. Abdullah. Evaluation Techniques for the Corrosion Resistance of Self-Healing Coatings. *International Journal of Electrochemical Science* 2014; 9:4989-5011.
68. **M. A. Al-Maadeed**, Yasser M. Shabana, P. Noorunnisa Khanam. Processing, characterization and modeling of recycled polypropylene/glass, fibre/wood flour composites. *Materials & Design* 2014; 581:374-380.
69. P. Noorunnisa Khanam, **M.A. Al-Maadeed**. Improvement of ternary recycled polymer blend reinforced with date palm fibre. *Materials & Design* 2014; 60:532- 539.

70. Ahmed A El-Zatahry, Abdullah M AL-Enizi, Aboubakr M Abdullah, **Mariam A AlMaadeed**, Jinxiu Wang, Donguan Zhao, Salem Al-Deyab. Synthesis and electrochemical properties of nickel oxide/carbon nanofiber composites. *Carbon* 2014; 71:276-283.
71. **M. A. AlMaadeed**, Sami Labidi, Igor Krupa, Mabrouk Ouederni, Effect of waste wax and chain structure on the mechanical and physical properties of polyethylene. *Arabian Journal of Chemistry* 2014. DOI:10.1016/j.arabjc.2014.01.006.
72. Ioannou Ioannis & Hodzic Alma & Gitman Inna & Soutis Costas & **M. A. Al-Maadeed**. Micro-Mechanical Parameters in Short Fibre Composites. *Applied Composite Materials* 2014; 21:197-211.
73. **M. A. AlMaadeed**, N. K. Madi, A. Hodzic, C. Soutis. Influence of Additives on Recycled Polymer Blends. *Journal of Thermal Analysis and Calorimetry* 2014; 115:811-821.
74. **Mariam A. AlMaadeed**, Zuzana Nogellova, Matej Mic`ušik, Igor Novak, Igor Krupa. Mechanical, sorption and adhesive properties of composites based on low density polyethylene filled with date palm wood powder. *Materials and Design* 2014; 53:29–37.
75. J. Bhadra, N.K. Madi, N.J. Al-Thani, **M.A. Al Maadeed**. Polyaniline/poly vinyl alcohol blends: Effect of sulfonic acid dopants on microstructural, optical, thermal and electrical properties. *Synthetic Metals* 2014; 191:126-134.
76. J. Bhadra, N.J. Al-Thani, N.K. Al-Madi, **Mariam A. Al-Maadeed**. Preparation and characterization of chemically synthesized polyaniline–polystyrene blends as a carbon dioxide gas sensor. *Synthetic Metals* 2013; 181:27– 36.
77. Alireza Dehghani, Sara Madadi Ardekani, **Mariam A. Al-Maadeed**, Azman Hassan, Mat Uzir Wahit. Mechanical and thermal properties of date palm leaf fiber reinforced recycled poly(ethylene terephthalate) composites. *Materials and Design* 2013; 52:841– 848.
78. **M. A. Al Maadeed**, N.J. Al Thani , M. Sadeq, R. Sobott. Pottery from Halat Aobeer and Hazem Al-Jasrah, Qatar. *Ceramics International* 2013; 39:8301-8309.

79. **M. A. AlMaadeed**, Mabrouk Ouederni, P.Noorunnisa Khanam. Effect of Chain Structure on the Properties of Glass fibre/Polyethylene Composites. *Materials and Design* 2013; 47:725-730.
80. S. Rajendran, A. Hodzic, L. Scelsi, S. Hayes, C. Soutis, **M. AlMa'adeed** and R. Kahraman. Plastics recycling: insights into life cycle impact assessment methods. *Plastics, Rubber and Composites* 2013; 42:1-10.
81. **M.A. AlMaadeed** , Ramazan Kahraman , P. Noorunnisa Khanam, Somaya Al-Maadeed. Characterization of untreated and treated male and female date palm leaves. *Materials and Design* 2013; 43:526–531.
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84. Saravanan Rajendran, Lino Scelsi, Alma Hodzic, Constantinos Soutis, **Mariam A. Al-Maadeed**. Environmental impact assessment of composites containing recycled plastics, *Resources. Conservation and Recycling* 2012; 60:131-139.
85. **M. AlMaadeed**, N. K. Madi , Ramazan Kahraman, A. Hodzic, N.G. Ozerkan. An Overview of Solid Waste Management in Qatar. *Journal of Polymer Environment* 2011; 20:186-194.
86. **M. AlMaadeed**, N. Gözde Özerkana, Ramazan Kahraman, Saravanan Rajendran, Alma Hodzic. Life Cycle Assessment of Particulate Recycled Low Density Polyethylene and Recycled Polypropylene Reinforced with Talc and Fiberglass. *Key Engineering Materials* 2011; 471:999-1004.

- 87.Scelsi, L., Hodzic, A., Soutis, C., Hayes, S. A., Rajendran, S., **AlMa'adeed M.A.** A review on composite materials based on recycled thermoplastics and glass fibres. *Plastics, Rubber & Composites* 2011; 40:1-10.
- 88.**M. Al-Ma'adeed**, N.J. Al-Thani. Effect of Gamma Irradiation on the Microstructure and Morphology of Polyethylene Oxide and Polyvinyl Alcohol Blend. *Advanced Materials Research* 2010; 83:524-529.
- 89.**M. Al-Ma'adeed**, N.J. Al-Thani , M. Bader. Microstructural Investigation of Gamma-Irradiated Ultra High Molecular Weight Polyethylene in Nitrogen Atmosphere. *Advanced Materials Research* 2010; 83:505-523.
- 90.Desouky A.M. Abd-El-Haleem, **M.A.AIMa'adeed**, N. Al-Thani. Physical and Chemical Properties of Polyhydroxylkantes Biodegradable Polymers Produced in Transgenic Yeasts. *Global Journal of Environmental Research* 2007; 1:69-73.
- 91.I.Y. Al-Qaradawi, D. A. Abdulmalik, N. K. Madi, **M. AlMaadeed**. Gamma irradiation effects on polymethyl methacrylate. *Physica Status Solidi C* 2007; 4:3727-3730.
- 92.**M.A. Al-Ma'adeed**, N.J. Al-Thani. Effect of Aging and Thickness on Sorption, Solubility and Surface of Light Cured Dental Composites in Water and Artificial Saliva. *International Journal of Pure and Applied Physics* 2006; 2: 29-43.
- 93.**M.A. Al-Ma'adeed** , I.Y. Al-Qaradawi, N. Madi , N.J. Al-Thani. The effect of gamma irradiation and shelf aging in air on the oxidation of ultra-high molecular weight polyethylene. *Applied Surface Science* 2006; 252:3316-3322.
- 94.**M. A. Al-Maadeed**. Change in Structure of Ultrahigh Molecular Weight Polyethylene Due to Irradiation in Air and in Nitrogen. *International Journal of Polymer Analysis and Characterization* 2006; 11: 71-84.
- 95.A.M. Abdul-Kader, A. Turos, D. Grambole, J. Jagielski, A. Piątkowska, N.K. Madi and **M. Al-Maadeed**. Compositional Transformations in ion implanted polymers. *Nuclear Instruments and Methods in Physics Research Section B* 2005; 240:152-156.

96. A.M. Abdul-Kader, A. Turos, J. Jagielski, L. Nowicki, R. Ratajczak, A. Stonert, **M.A. Al-Ma'adeed**. Hydrogen release in UHMWPE upon He-ion bombardment. *Vacuum* 2005; 78: 281-284.
97. **Mariam Al-Ali**, N.K Madi, Nora J. Al Thani, M. El-Muraikhi, A. Turos. Mechanical and thermal properties of gamma-ray irradiated polyethylene blends. *Vacuum* 2003; 70:227-236.

National and International Conferences

1. Mrlik, M., Leadenham, S., AlMaadeed, M., and Erturk, A. "Figure of merit comparison of PP-based electret and PVDF-based piezoelectric polymer energy harvesters," Proceedings of SPIE, Vol. 9799, paper # 9799-77 (Las Vegas, NV, 2016)
2. B. Mayoral, Dan. Sun, A. Hamilton, E. Harkin-Jones, P. N. Khanam, **M.A. Almaadeed**, M. Ouederni, Effect of GNPs addition and Uniaxial/ Biaxial drawing on PA6/GNPs and PP/GNPs composites. Materials Science and Engineering Symposium, March 10, Qatar University.
3. Poornima Vijayan P and **M. Ali S A Al-Maadeed**, Self-healing epoxy coatings: TiO₂ nanotube and mesoporous silica as containers for healing agents, 4th Nano Today Conference, December 6-10, 2015, Dubai.
4. E. M. Fayyad and **M. A. Al-Maadeed**, 16th Tetrahedron Symposium at the Grand Hyatt Berlin, Germany from 16-19 June 2015 "Evaluation of self-healing performance of Tung oil microcapsules against environmental conditions". "poster presentation" The Minerals, Metals & Materials Society, Middle East – Mediterranean Materials Congress on Energy and Infrastructure Systems in Doha, Qatar, January 11-14, 2015. "New Self-Healing Coatings Technique for Corrosion Protection" "Oral presentation"
5. A. Baghat Radwan, Adel M. Mohamed, Aboubakr M. Abdullah, **Mariam A. Al Maadeed**, Superhydrophobic Coating for Protection Against Corrosion. EUROCORR 2015 September 6th-10th. Stadthalle Graz, Austria.
6. Mayoral, B, Harkin-Jones, E, Khanam, PN, **Al-Maadeed** , **MA**, Ouederni, M, Hamilton, A & Sun, D. 2015, 'Melt Processing and Properties of Polyamide 6/Graphene Nanoplatelet Composites'. ICCM20, 20th International Conference on Composite Materials, Copenhagen, Denmark, 19-24 July
7. 10th International Conference on Composite Science and Technology ICCST/10 CHARACTERISATION OF MELT PROCESSED NANOCOMPOSITES OF

POLYAMIDE 6 SUBJECTED TO UNIAXIAL-DRAWING, B. Mayoral, E. Harkin-Jones, P. Noorunnisa Khanam, M.A. AlMaadeed, M. Ouederni, Mark Tweedie, D. Sun and A. Hamilton Lisbon, Portugal 2015.

8. 10th International Conference on Composite Science and Technology Effect of the ZnO star-like particles on the physical properties of the poly(vinylidene fluoride) composite films, Mariem M. Chamekh, Miroslav Mrlík, Stephen Leadenham, Pavel Bažant, Mariam Al Ali S AlMaaded, Alper Erturk, Ivo Kuřitka ICCST/10 Lisbon, Portugal 2015. Speaker
9. Meditation Materials Congress on Energy and Infrastructure Systems, Synthesis, Characterization and Environmental Impact Assessment of Graphene (Speaker). Doha, RitzCarlton Hotel, Qatar, January 2015.
10. TMS Middle East - Mediterranean Materials Congress on Energy and Infrastructure Systems (MEMA 2015) SOBOLCIAK, Patrik – KARKRI, Mustapha – KRUPA, Igor – AL MAADEED, Mariam. Storage and release of thermal energy of phase change materials based on linear density of polyethylene, paraffin wax and expanded graphite applicable in building industry, Doha, Qatar, 11- 14th January 2015. Poster Presentation
11. Qatar Foundation Annual Research Conference 2014, Qatar Foundation (ARC14) Miroslav Mrlik, Mariam Al Ali Al Maadeed, Mechanical Energy Harvesting Behaviour of soft polymer electret materials (poster), Doha, Qatar
12. Materials science and engineering symposium: Doha, Qatar, 18th February 2014, Center for Advanced Materials, Qatar University, SOBOLCIAK, Patrik – KARKRI, Mustapha – KRUPA, Igor – AL MAADEED, Mariam. Thermal investigation of phase change materials based on linear low density polyethylene, paraffin wax and expanded graphite (Second Prize in poster competition).
13. M.A. Al Maadeed, P. Noorunnisa Khanam, Mabrouk Ouederni. “Synthesis and Characterization of Graphene and LLDPE/Graphene Nano platelets Composites”. Materials Science and Engineering Symposium 2014, Qatar University. Poster Presentation
14. Mariam A. AlMaadeed, Yasser M. Shabana, P. Noorunnisa Khanam, “Processing, characterization and modelling of recycled polymer-matrix composites”. Frontiers in

Polymer Science (in association with Journal Polymer), Poster Presentation, Sitges, Spain
May 2013.

- 15.** M.A. Al Maadeed, P. Noorunnisa Khanam, Mabrouk Ouederni. “Processing, characterization and modelling of date palm wood flour reinforced recycled polymer matrix composites”. Materials Science and Engineering Symposium 2014, Qatar University.
- 16.** M.A. Al Maadeed, P. Noorunnisa Khanam, M. Ouederni, Eileen Harkin-Jones, Beatriz Mayoral. “New processing technique to improve physical and mechanical properties of graphene Nanocomposites”. “New processing technique to improve physical and mechanical properties of graphene Nanocomposites”. Qatar Foundation Annual Research Forum, Qatar, October 17 to 20th November, -2014.
- 17.** P. Noorunnisa Khanam, M.A. Al Maadeed, Roda F. Althani. “Anti-microbial Activity of Graphene Oxide against bacteria and fungi”. Qatar Foundation Annual Research Forum, Qatar, October 17 to 20th November, -2014.
- 18.** Preparation and characterization of microcapsules containing natural oil, A. Hassiba , E. Fayyad, M.A. Maadeed, Materials Science and Engineering Symposium, 2014
- 19.** Qatar Foundation Annual Research Conference 2014, Qatar Foundation (ARC14) SOBOLCIAK, Patrik – KARKRI, Mustapha – KRUPA, Igor – AL MAADEED, Mariam. Advanced thermal energy systems based on paraffin waxes applicable in building industry Doha, Qatar, 18-19th November 2014
- 20.** Self-healing Epoxy Coating against Corrosion” E.M. Fayyad, M.A. Almaadeed, A. Hassiba, Materials Science and Engineering Symposium 2014.
- 21.** Materials and Chemistry for New Energy Technology, New Phase Change Materials based on Polyethylene (Invited Speaker), Qatar University, Qatar, December 2013.
- 22.** Z. Spitalsky, I. Krupa, M. Prostredny, J. Krajci, M. AlMaadeed: Electrically Conductive Composites Based on an Elastomeric Matrix Filled with Expanded Graphite for Development of Oil Sensors, Eurofillers 2013, Bratislava (Slovakia), August 2013, Book of abstracts, p. 282, Poster No. 62

- 23.** Z. Spitalsky, Z. Nogellova, O. Zigo, M. Malikova, J. Kratochvila, K. Csomorova, M. Al-Maadeed, I. Krupa: New Phase Change Materials with Improved Heat Transfer Properties based on the High Density Polyethylene and Encapsulated Paraffin Wax, Bratislava (Slovakia), Poster Presentation. Eurofillers 2013, August 2013.
- 24.** Spitalsky, I. Krupa, M. Prostedny, J. Krajci, M. AlMaadeed, Electrically Conductive Nanocomposites Based on an Elastomeric Matrix Filled with Expanded Graphite for Development of an Oil Sensors; *Materialy Polimerowe - Pomerania plast Szczecin* 2013, pp. 333; ISBN 978-83-7663-153-0, June 2013
- 25.** Processing, characterization and modelling of recycled polymer-matrix composites, Mariam A. AlMaadeed , Yasser M. Shabana, P. Noorunnisa Khanam, *Frontiers in Polymer Science* (in association with *Journal Polymer*), Poster Presentation, Sitges, Spain May 2013.
- 26.** Development of Green Composites Based on Ternary blend of Recycled Polymers filled with Date Palm Fibre, Khadija Zadeh, Mariam A. Al-Maadeed, Azman Hassan, *Frontiers in Polymer Science* (in association with *Journal Polymer*), Poster Presentation, Sitges, Spain May 2013.
- 27.** Binary Recycled Reinforced Blends of Low Density Polyethylene and Polypropylene, M. A. AlMaadeed, N. Madi, S Rajendran, A Hodzic, C Soutis, *Deformation and Fracture of Composites (DFC-12) & Structural Integrity and Multi-scale Modelling (SI-6)*, Queens College, Cambridge University, Oral presentation, April 2013.
- 28.** New environmentally friendly polypropylene hybrid composites, Qatar Foundation Annual Research Forum, Qatar, Poster Presentation, October 2012.
- 29.** Characterization of Qatari untreated and treated male and female date palm leaves, M. A. AlMaadeed, Qatar Foundation Annual Research Forum, Qatar, Poster Presentation, October 2012.
- 30.** Mechanical, morphological and thermal properties of LDPE/glass, MDPE/glass and HDPE/glass fibre reinforced composites, Qatar Foundation Annual Research Forum, Qatar, Poster Presentation, October 2012.

- 31.** Date palm fibre as a reinforcement of recycled polymer blend matrix, Qatar Foundation Annual Research Forum, Qatar, Poster Presentation, October 2012.
- 32.** M. A. AlMaadeed , Mabrouk Ouederni , Nabil Madi , Noora AlQahtani , Maryam AlEjji, Effect of carbon black on the mechanical and thermal properties of LLDPE nano composites , Mechanics of Nano, Micro and Macro Composite Structures Politecnico di Torino, Poster Presentation, 18-20 June 2012.
- 33.** M. A. AlMaadeed, Nesibe Gozdeozzerkan, Maryam AlEjji Noora AlQahtani , The environmental effect of recycle polypropylene reinforced with wood and glass fibers by using life cycle assessment, Mechanics of Nano, Micro and Macro Composite Structures Politecnico di Torino, Poster Presentation, 18-20 June 2012.
- 34.** M. A. AlMaadeed, Ramazan Kahraman, Nabil Madi, P. Noorunnisa Khanam, Development of hybrid composite of recycled polypropylene, Mechanics of Nano, Micro and Macro Composite Structures Politecnico di Torino, Poster Presentation, 18-20 June 2012.
- 35.** M. A. AlMaadeed, Ramazan Kahraman, P. Noorunnisa Khanam ,Khadija Zadeh, Characterization of male and female date palm leaves for using as reinforcements in polymer composites , Mechanics of Nano, Micro and Macro Composite Structures Politecnico di Torino, Poster Presentation, 18-20 June 2012.
- 36.** Influence of Combination of fillers and fibers on the morphological, thermal, and mechanical properties of recycled polymers, 14th IUPAC POC 2012, Qatar, Oral Presentation , January 2012.
- 37.** Life Cycle Assessments of Composites, Eighth International Conference On Composite Science and Technology. Universiti Putra Malaysia (UPM) Malaysia, Oral Presentation, 2011.
- 38.** Recycling Polymers in Qatar, Advantages and Obstacles, Oral presentation, Qatar Foundation Forum, Qatar 2011.
- 39.** Waste Management in Qatar, Poster Presentation Macro2010, Glasgow, UK, July 2010.
- 40.** Life Cycle Assessments of Polymers in Qatar, Oral Presentation, International Sustainable Buildings Symposium (ISBS), Ankara, Turkey, May 2010.

- 41.** Recycling Plastics in Qatar - Current Situation and Future Aspects, Oral Presentation, International Conference on: Applications of Traditional and High Performance Materials in Harsh Environments, Sharjah, UAE, March 2010.
- 42.** Blending Polyethylene Oxide and Polyvinyl Alcohol, Oral Presentation, CAS research Fair, Qatar University, May 2008.
- 43.** Structural Changes of Combining Gama Rays and Soil Burial on Polymers, Poster Presentation, CAS research Fair, Qatar University, May 2008.
- 44.** Many Faces of Polymers, Oral Presentation, Annual Qatar University Research Forum, April, 2008.
- 45.** Blending Polyethylene Oxide and Polyvinyl Alcohol Structural investigation, The 3rd IMS International Conference on: Applications of Traditional and High Performance Materials in Harsh Environment, Oral Presentation, American University of Sharjah, College of Engineering, Sharjah - United Arab Emirates, January 23 – 24, 2008.
- 46.** Modifications of Polymers by Gamma Irradiation, QAFCO – TAMUQ Chemistry Conference 2008, Qatar, Oral Presentation, 9 January, 2008.
- 47.** Monitoring Changes in the Microstructure of Ultra High Molecular Weight Polyethylene Due to Irradiation, Environment, and Aging, - (28th) - International Conference on Science and Technology (2007-(2008th)-ICST), Prague, Czech Republic, Oral Presentation, July 5-6 July 2007.
- 48.** How does Gamma Irradiation Change the Microstructure and Morphology of Polymers, First Symposium on Polymer Sciences, Qatar University, Qatar, Oral Presentation, April 18 2007.
- 49.** Storage of Gamma Irradiated Ultra High Molecular Weight Polyethylene in Nitrogen Environment and its Effect on Microstructure and Crystallinity, 12th International Conference on Polymers and Organic Chemistry 2006 (POC '06), International Union of Pure and Applied Chemistry (IUPAC) Japan, Oral Presentation, 2-7 July 2006.
- 50.** Microstructure Changes of Ultra High Molecular Weight Polyethylene Due to the Effect of Gamma Rays and Electron Beams, 2nd International IMS Conference On: Applications of

Traditional and High Performance Materials in Harsh Environments, American University of Sharjah, Oral Presentation, March, 2006.

51. Physics Labs at QU, Symposium on Teaching, Learning and Curriculum Development, WCMC-Q / Qatar University, Oral Presentation, February, 2006.
52. Change in structure of Ultra High Molecular Weight Polyethylene due to Irradiation, ISPAC-2005, 18th International Symposium on Polymer Analysis and Characterization Halifax Hall University of Sheffield UK Poster Presentation, June, 2005.
53. Effect of Aging in Air on the Structure of Ultra High Molecular Weight Polyethylene, SLOPOS 10, Oral Presentation, Qatar University Doha Qatar March, 2005.
54. Effect of Gamma Irradiation on the Crosslinking of UHMWP, 1st workshop on advanced materials, Oral Presentation, Qatar University, 2004.
55. Effect of Aging and Thickness on Sorption, and Solubility of Light Cured Dental Composites in Water and Artificial Saliva, Second International Conference on Chemistry and Applications, Oral Presentation, Qatar University, 2003.
56. Mechanisms of Surface Modification of Polypropylene by Helium and Argon Ion Bombardment, Second International Conference on Chemistry and Applications, Poster Presentation, Qatar University, 2003.
57. Tailoring of Surface Properties of Selected Polymers by Ion Implantation for Technical and Biomedical Applications, Second International Conference on Chemistry and Applications, Poster Presentation, Qatar University, 2003.
58. Thermal and Mechanical behavior of Recycled high density Polyethylene HDPE, Effect of blending, Sixth International Conference on Materials Chemistry, MC6: Frontiers and Interfaces, University of Sheffield UK, R.S.C Royal Society of Chemistry, Poster Presentation, 2003.
59. Modification and Recovery of Polymers waste, Quest 2002 for MENA Conference, Supreme Council for the Environment and Natural Reserves, Poster Presentation, 2002.

- 60.** Effect of Gamma Irradiation on the IR Spectroscopy and Mechanical Properties of Low Density Polyethylene, Quest 2002 for MENA Conference, Supreme Council for the Environment and Natural Reserves, Oral Presentation, 2002.
- 61.** Electric Field induced Degradation in Modified Polyvinyl chloride, International Workshop on Polymer and Environment, International Center for science and High Technology Trieste-Italy, University of Qatar, Oral Presentation, 1999.
- 62.** Field Induced Changes in the Optical, Electrical and Mechanical Properties of Modified Polyvinyl chloride, Polymer Technology and Applications Workshop, SARC, Oral Presentation, Qatar, 1997.
- 63.** Environmental and Gamma Irradiation Effects on The Optical and Electrical Properties of Modified Polyvinyl chloride, Fourth International Conference on Frontiers of Polymers and Advanced Materials, Organized by State University of New York (SUNY), Buffalo, USA., Academy of Scientific Research and Technology, Cairo, The Arab Society for Materials Science, Poster Presentation, January, 1997.

Grants and Research Projects:

- Nanotubes Containers in Self-Healing Epoxy for Coating and Composite Applications (\$277,200.00) 2015- 2017, PDRA1-1216-13014, POSTDOCTORAL RESEARCH AWARD PROGRAM, Postdoc: POORNIMA VIJAYAN P, Supervisor: Mariam AlMaadeed.
- Energy Harvesting Techniques and Energy Waste in Qatar- A Scientific and Social Study (QR 25,000), LPI: Mariam AlMaadeed PI: Hmoud S Al-Olimat
- Physical-mechanical properties of New Electro Spun polyvinylidene flouride nanofibers. (Students grant). 2014/2015
- Unpublished Coins from Al-Zubarah: A Historical-Scientific Approach Funded by Center for Humanities and Social Sciences (CHSS) for Seed Support for

Interdisciplinary Research Collaboration/QU (QR 33,500) 2014-2015, PI: Sherine El-Menshawly, History program/ QU, PI: Mariam AlMaadeed, CAM/QU, PI: Noora Al Thani, CAM/QU, PI: Mariam Al Mulla, History program/QU, Co-PI: Faisal Al Numai, QMA.

- Flexoelectricity, soft nanomaterials and next-generation energy-harvesting. Funded by QF/NPRP (\$ 1,049,794.82) 2014- 2017, Co LPI: Mariam AlMaadeed, LPI: Pradeep Sharma, University of Houston, CoPI: Marcelo Carignano, Qatar Environment and Energy Research Institute.
- Discovering Materials Science (Al-Bairaq), Co- PI: Mariam Al-Ali AlMa'adeed, Co-PI: Kaltham Al Ghanim, PI: Noora Al- Thani. (\$180,000)
- Development of Self-Healing Coatings for Corrosion Resistance in Qatar in collaboration with Indiana University Purdue University at Indianapolis, LPI: John Alan, Co Lead Principle Investigator: M. Al-Ali AlMa'adeed, Funded by QF/NPRP (\$952,000) 2012-2015
- Tailoring of new Phase Change Materials, Qatar University Grant, Principle Investigator, Qatar Petrochemical Company in collaboration with PI: Igor Krupa, Polymer Institute of Slovak Academy of Sciences, Bratislava, Slovakia and Co-PI: Karakri Mustapha, University of Paris-Est Creteil Val-de Marne, Paris, France Funded by QF/NPRP (\$653,000) 2012-2015
- Discovering Materials Science Program (Al Bairaq), Co PI: Mariam Al-Ali AlMa'adeed, PI: Noora Al- Thani, (\$850,000) , (2011 – 2016). Funded by Qatar Industry (RasGas, Shell, Msherieb Property, QP)
- Tailoring mechanical and electrical properties of conducting polymers for gas sensing applications. Qatar University Grant (QR150,000), Co-PI: Mariam Al-Ali AlMa'adeed, PI: Noora Al- Thani. (2011-2012)
- Optimization of polymer blends from Qatar recycled stream, for sustainable products in harsh environment, Principle Investigator, funded by QSTP Research network

program (\$ 2,000,000),2009- 2012

- Establishment of a Paper Recycling Technology Center in Qatar, Seventh Cycle , \$ 87,500, 2009- 2010
- Summer Grant from Qatar University: Institute of Electronic Materials Technology: Common research on tailoring of surface properties of selected polymers by ion implantation, Poland (2003).
- Structure and properties of modified hydrogels - Small Research Grant, Qatar University, 2006, PI: Mariam Ali S. Al Ali Alma'adeed, Co- Investigators: Noora Jabor AL Thani, Hamda Abdulla Al-Naemi, Ilham Al-Qaradawi
- Microstructure changes of Low Density Polyethylene due to Sterilization by Gamma Rays, Undergraduate Research Experience Program (First Cycle), 2006
- Structural Changes of Combining Gamma Rays and Soil Burial on Polymers, Research Proposal for the Undergraduate Research Experience Program THIRD Cycle,2007
- A survey Study of the Perceptions of and Attitudes Towards Physics Among Secondary School and College Students in Qatar, Research Proposal for the Undergraduate Research Experience Program THIRD Cycle,2007
- Tailoring of surface properties of selected polymers by ion implantation with Institute of Electronic Materials Technology, Poland & Scientific and Applied Research Center (SARC), Co. Investigator, October 2002.
- Study of light cured dental composites, supported by Scientific and Applied Research Center (SARC), Principle Investigator, February 2002

Book Chapters

- Piezo- and Thermoelectric Materials From Biopolymer Composites, Pages 333-352, D. Ponnamma, G.J. Ogunleye, P. Sharma, **M.A. AlMaadeed**, Book: Biopolymer Composites in Electronics, ISBN: 978-0-12-809261-3 Elsevier, 2017
- Spectroscopy of Polymer Nanocomposites, Chapter 8: NMR Spectroscopy of Polymer Nanocomposites. Kishor Kumar Sadasivuni, John-John Cabibihan, **Mariam Ali S A Al-Maadeed**. Elsevier 2016: *181-201*. ISBN: 978-0-323-40183-8
- Fundamental, Fabrication and Applications of Superhydrophobic Surfaces: IGI Global, Adel M.A. Mohamed, Aboubakr M. Abdullah, **Mariam A. Al-Maadeed**, A. Bahgat Radwan, DOI: 10.4018/978-1-5225-0066-7.ch013, 2016
- Fillers and Reinforcements for Advanced Nanocomposites, Chapter 16: Fillers in Advanced Nanocomposites for Energy Harvesting, Woodhead Publications, Elsevier, Miroslav Mrlik and **Mariam AlMaadeed**, July, 2015, ISBN 978-0-08-100079-3
- Electrical Properties of Graphene Polymer Nanocomposites, P. Noorunnisa Khanam, Deepalekshmi Ponnamma and **M.A. AL-Maadeed**, Springer Publications 2015, DOI 10.1007/978-3-319-13875-6
- Silk as a reinforcement in polymer matrix composites (Chapter) in Advances in Silk Science and Technology, Elsevier, P. Noorunnisa Khanam, **M.A. Al-Maadeed**, P. Naseema Khanam, A volume in Woodhead Publishing Series in Textiles, 2015 Pages 143-170. <http://www.sciencedirect.com/science/article/pii/B9781782423119000082>
- Recycled Polymer Natural Fiber Composites: Materials, processes and applications, chapter 11, Woodhead Publishing Series in Composites Science and Engineering No. 47, **M. A. AlMaadeed**, Sami Labidi, Woodhead Publications, ISBN 0 85709 524 2, 2014.

Patents and IP Applications

- Reinforced Polymer Composites from Recycled Plastic - United States Patent Application 20160017131, **Almaadeed, Mariam Alali** , Madi, Nabil , Hodzic, Alma, Rajendran, Saravanan
<http://www.freepatentsonline.com/y2016/0017131.html>
- New methods for Graphene production -Application No.: 62/002,225
<http://www.patentsencyclopedia.com/app/20150336799>

Current Professional Membership:

- Society of Research Administrators International
- Institute of Materials, Minerals and Mining
- The Minerals, Metals & Materials Society (TMS)
- Institute of Electrical and Electronics Engineers
- Society of Plastics Engineers

Reviewing Activities:

International Awards, Journals and Conferences:

- 2016 WISE Awards <https://www.wise-qatar.org/mariam-al-ali-al-maadeed>
- Composites, Part B, ELSEVIER
- Polymer Engineering and Science, Wiley
- Journal of Applied Polymer Science, Wiley
- Arabian Journal of Chemistry, ELSEVIER
- Starch, Wiley
- International Journal of Polymer Analysis and Characterization, Taylor & Francis
- Food and Bioproducts Processing, ELSEVIER
- International Journal of Chemical Engineering, Hindawi
- Journal of Waste Management, Hindawi
- Usak University of Material Sciences (UJMS)
- Middle East Process Engineering Conference & Exhibition, 2011
- Qatar Foundation Annual Research Forum, 2010
- Materials Science Symposium, Qatar University, 2010- 2013
- Qatar Symposium on Science Teaching and Learning, 2007, 2008

Academic Promotion/ Grants:

- Sultan Qaboos University, Oman (External reviewer, Grant) 2015
- King Abdulaziz University (External Reviewer, Promotion) – Saudia Arabia 2015
- CAS Promotion Committee (Chair) – Qatar University 2015
- CAM Promotion Committee (Chair) - Qatar University 2015
- Qatar University (Physics Program) – Qatar University 2007

Teaching Activities:

- MATS580 Graduate Seminar
- 1052341 Solid State Physics
- 1052342 Practical Solid State Physics
- MATS 514 Research Methodology
- MATS 545 Polymers Science and Technology
- MATS 511 Materials Principles and Characterizations (exp.)
- 308 103 General Physics (exp.) 1
- 308 108 General Physics for Biology (exp.) 1
- 308 108 General Physics for Biology
- 308 212 Modern Physics
- 308 101/ 105201 General Physics 1
- 308 202 Electricity and Magnetism
- 308 210 Introduction to Applied Physics
- 1052102/ 1052193 General Physics 2
- 1052107 Physics for Biology
- 105201 Electricity and Magnetism
- 1052488 Independent Study
- 1052499 Senior Project

Graduate Students supervision/ Examiner:

- MSc: Aisha Nagi AlSaygh, New flexible Polyvinylidene fluoride (PVDF) Nanocomposites for future applications, Qatar University (2016 to 2017)
- MSc: Ahmed Issa AbdelAti, Physico-mechanical properties of new electrospun polyvinylidene fluoride nanofibres, Qatar University (2014 - 2015).
- MSc: Sanghyun Yoo, The development of multifunctional composites incorporating Phase Change Materials for thermal management applications, supervisors: Akbar Khatibi, Everson Kandare, Mariam Al-Maadeed, RMIT university (2014 – to date)
- PhD: Medhat ElSeid Eid, Preparation and characterization of nanocellulose/polymer composite prepared from agricultural wastes, College of Science, AlAzhar University, Egypt, supervisors: Faraj AbdelHay Ahmed, Mohamed Baseuni Ghazi, Waleed AlZwawy, Mariam AlMaadeed (2013 – to date).
- MSc: Khadija Zadeh, MSc. New polymer fire retardant Composites, Universiti Teknologi Malaysia, supervisors: Azman Hassan, Mariam AlMaadeed , (2011 – 2014)
- MSc: Sara Madadi Ardekani, MSc. Recycled Wastepaper Reinforced PET Composites , Universiti Teknologi Malaysia , supervisors: Azman Hassan, Mat Uzir, Mariam AlMaadeed (2010 – 2012)
- MSc: Alireza Dehghani, MSc. Date Palm Leaf Fibre Reinforced PET Composites, supervisors: Azman Hassan, Mat Uzir, Mariam AlMaadeed, Universiti Teknologi Malaysia, (2010 – 2012)
- International Examiner: Tay Chen Chiang, Swinburne University of Technology (Sarawak Campus), Sarawak, Malaysia (2013)

Advisory Board Committee:

- Center for Advanced Materials Advisory Committee (2013- 2016)
- Materials Science and Technology Program Advisory Committee (2014- 2016)
- MSc student: Youmna Hassouna, Biodegradable elastomeric scaffolds, Supervisor: Husam Younes, Pharmacy College, Qatar University (2013 – 2015)
- MSc student: Amina Amir, Graphene/metal oxide nanocomposites as electrode for renewable energy application, Materials Science and Technology Program, Qatar University (2015 – to date)
- MSc student: Haneen Abdulraziq, Energy Storage Polymeric Phase Change Materials for Smart Bioclimatic Buildings, Materials Science and Technology Program, Qatar University (2015 – to date)
- MSc student: Nour Muneer Bader, Polysulfone/ Polyimide Blend, Materials Science and Technology Program, Qatar University (2015 – to date)

Conference organizing and chairing:

MS Middle East-Mediterranean Materials Congress on Energy and Infrastructure Systems- Doha, Qatar, January 2015

Materials Science and Engineering Symposium, Qatar University in collaboration with Texas A&M at Qatar, a yearly symposium from 2010- to date

Global School for Advanced Studies, Session on Catalysis and Materials for Hydrocarbon Conversions, January 2013

Qatar Symposium on Science Teaching and Learning, 2007, 2008

Conference and General Lectures Invitations:

- Education Conference, The National Scientific Research Week, Invited Speaker, Qatar, March 2017
- Women in Science Workshop (WIS), Panel discussion speaker (Navigation Cultural challenges to Pursue careers in Science) and speaker: Research, opportunities and challenges for women, QNRF, Qatar, October 2015
- The Future of interdisciplinary studies in Humanities and Social Sciences: Towards a twenty First century paradigm, Qatar University, May 2015
- Nanotechnology in Drug Delivery and Bio-engineering Symposium, Tailoring and Characterizing New Nanomaterials and Nanocomposites, 6th, May 2015, Qatar
- IMS7 International Conference - American University of Sharjah, UAE, Polyolefin Composites and its Eco friendly applications March 2014.
- Global Research Council Regional Meeting, Global Research Council, Qatar National Research Fund, Qatar, December 2013
- Materials and Chemistry for New Energy Technologies, Royal Society of Chemistry (RSC), Qatar University, December 2013
- Aluminum Week, Qatalum, Hydro, Qatar University, December 2013
- QAPCO Research and Development Forum, Doha, May 2013
- 13th Industrialists Conference, Gulf Organization for Industrial Consulting, Rihad, Saudia Arabia, January 2012
- Middle East Process Engineering Conference & Exhibition, Manama, Bahrain, November 2011
- Arab Network for Women in Science & Technology, 2004 - 2006

Committees Membership:

External to the university

- Qatar Leadership Center Interview Panel (member) for the year 2017-2018, December 2016 to date
- The Board of Trustees of the Anti-Doping Lab, 2016 to date (Member)
- Gulf Petrochemicals Association, Research and Innovation Committee, 2013 to 2014 (Member).
- Petrochemical Research and Innovation Center, Technical Committee, QAPCO 2013 to 2014 (Member).
- QNRS Conference, Qatar's Grand Challenges of Energy and Water (2014).
- EU-GCC-STI PROGRAMME FOR COOPERATION, IN SCIENCE, TECHNOLOGY AND INNOVATION 2013 TO DATE (Founder in Qatar and head of Materials Science sector).
- State Prize for Children's Literature, Ministry of Culture, Arts and Heritage, 2013 to 2016 (Member).
- Qatar National Research Strategy, Qatar Foundation, 2012 (Member).
- Japan Scholarship, Japan Embassy in Qatar, 2010 to 2014 (Member).
- Metrology Committee, Ministry of Environment, 2010 to 2011 (Member).

Within the University:

- QU Procurement Committee, 2015 to 2016 (Member)
- QU (College of Arts and Science) Promotion Committee, Fall 2015 to 2016 (Chair)
- QU (Center for Advanced Materials) Promotion Committee, Fall 2015 to 2016 (Chair)
- QU Technical Committee – Scientific Equipment, 2015 (Chair)
- QU Research Policy Committee, 2015 (Member)
- Reform Committee, Qatar University, 2013 - 2014 (Member).

- Qatar University Faculty Conduct Committee, standby member, 2013 to 2016.
- CAS Taskforce to review Academic Offerings in Basic Sciences, 2014 (Member).
- Founder/ coordinator of MSc Materials Science and Technology Program, 2011 to 2016 (Chair).
- Research council committee, Qatar University, 2011 to 2016 (Member).
- Qatar University Review Board, Qatar University , 2010- 2012 (Member).
- Qatar University Institutional Bio-safety committee, Qatar University, 2011- 2012 (Chair).
- Research Committee, CAS, Qatar University, 2007- 2008 (Member).
- Continuous Education Committee, CAS, Qatar University, 2003-2004 (Chair).

Other Activities:

I am an experienced university professor who is known for dynamic presentations and interpersonal skills.

I have developed a vital network between academia represented by Qatar University and some of the Education City universities, within the industry, ministries and international organizations.

I have given many consultations and presentations to a diverse group of organizations such as: Qatar Petrochemical Company (QAPCO), Supreme Council for the Environment and Natural Reserves, Qatar Museum Authorities (QMA), Arab Network for Women in Science & Technology, different high schools and colleges, as well as international science fairs and laboratories developments.

I attended many training and workshops in strategic management, research administration, diplomacy and in teaching strategies.

I have also coordinated and was a member of many committees at Qatar University, such as the Research Council, Quality and management committee, Reform Committee, the Materials Science and Engineering symposium, and I am a member of a team which successfully set the compliances of research at Qatar University.

Self attributes:

I am an avid team worker, have good communication skills, strong organizing and monitoring abilities and I am always seeking to learn and achieve set tasks and objectives.

Furthermore I am pleased to count myself as an enthusiastic supporter of international collaboration, environmental rights and implementation of materials science in real life applications that will eventually lead to better energy management and cleaner environment.