### **CURRICULUM VITAE**

### Ali I.Al-Mosawi

#### **Education**

Degree	Institution	Date Degree Granted
B.S. in Materials Engr.	Babylon University, IRAQ	2000
Ms.C. in Materials Engr.	Babylon University, IRAQ	2003

# Positions/Employment

Technical Institute-Babylon, Mechanical Depart. January 2006 - May 2012

Lecturer

Technical Institute-Babylon, Machines Depart. May 2012 - yet

Lecturer

#### 2. Researchs

- 1- Experimental study of the effect of zinc borate on flame retardancy of carbon-Kevlar hybrid fibers reinforced composite materials, Al-Qadisiya journal for engineering sciences, 1(1), 2008.
- 2- Improvement of mechanical properties of alloy steel type (40x) by using heat treatments, Al-Qadisiya journal for engineering sciences, special issue for 2<sup>nd</sup> conference of engineering college /Al-Qadisiya university, 2009.
- 3- Mechanical properties of araldite matrix composites reinforced with hybrid carbon Kevlar fibers, Al-Qadisiya journal for engineering sciences, 3(1), 2010.
- 4- Using of hybrid flame retardants to increase thermal erosion resistance for advanced composite materials, Diyala Journal of Engineering Sciences, 1<sup>st</sup> Engineering Scientific Conference, College of Engineering –University of Diyala, 2010.
- 5- Hybrid fire retardants to increasing combusting resistance for fibers-reinforced composites, International journal of chemistry, Vol. 41, 2011.
- 6- Effect of compacting pressure on microstructure and mechanical properties of Carbide cutting tools , Powder metallurgy , 54(5) , 2011 .
- 7- Flame retardancy enhancement of hybrid composite material by using inorganic retardants, Materials Sciences and Applications, 2(8), 2011.

- 8- Inhibiting pyrolysis process for fiber-reinforced composites by using flame retardants additions, ICSTE 2011Conference, Kuala Lumpur, Malaysia, ASME Press, 2011.
- 9- Reducing of flammability for polymeric composite material by using flame retardants coating, Eng. & Tech. Journal, 29(11), 2011.
- 10- Geometrically nonlinear analysis of imperfect laminated composite plate with variable fiber spacing, Al-Qadisiya journal for engineering sciences, 4(4), 2011.
- 11- Using of reinforcing by hybrid fibers to increase efficiency of unsaturated polyester resin (SIROPOL 8340-Pi) to resisting mechanical loads, The Iraqi journal for mechanical and material engineering, Special Issue for 3<sup>rd</sup> conference of Engineering College/Babylon University, 2011.
- 12- Effect of shells powder on scorch and cure time of elastomer material, Iraqi J. Polymers, Special Issue ,2011.
- 13- Enhancement of flame resistance for aircrafts tires by using magnesium hydroxide, Iraqi J. Polymers, Special Issue, 2011.
- 14- Effect of adding shells powder on rheological properties of natural rubber, Iraqi J. Polymers, Special Issue, 2011.
- 15- Effect of physical additives of shells powder on mechanical properties of natural rubber, Iraqi J. Polymers, Special Issue, 2011.
- 16- Thermal resistance of araldite resin composite mixed with hybrid retardants, Iraqi J. of Polymers, 16(2), 2012.
- 17- Evaluation flame retardancy of epoxy composite by using design of experiments, Applied Mechanics and Materials, 186, 2012.
- 18- Flammability behavior of composite mixed with retardant agents, Applied Mechanics and Materials, 186, 2012.
- 19- Experimental study of fire retardancy of aircrafts tires by using inorganic fire retardants, Proceedings of 1<sup>st</sup> conference of Lasers and Advanced Materials Engineering, University of Technology, 2012.
- 20- Reinforcing by Palms Kevlar Hybrid Fibers and Effected on Mechanical Properties of Polymeric Composite Material, Babylon University journal, 20 (1), 2012.
- 21- Increasing flammability resistance for aircrafts tires by using magnesium hydroxide, Academic research international, 3(2), Sept., 2012.
- 22- Theoretical evaluation to tensile strength of composite material by using Ansys program, Babylon University journal, accepted for publishing, 2011.
- 23- Improvement of flame retardancy for hybrid composite material by using zinc borate, The Iraqi journal for mechanical and material engineering, accepted for publishing, 2012.
- 24- Using of Ansys program to calculate the mechanical properties of advanced fibers reinforced composite, The Iraqi journal for mechanical and material engineering, accepted for publishing, 2012.
- 25- Experimental investigation in zinc borate effect on flammability characteristics of polymeric composite material, Academic research international, 3(2), Sept., 2012.

- 26- Formation hybrid flame retardant and its effect on thermal resistance of araldite resin composite, Academic research international, 3(2), Sept., 2012.
- 27- *Mechanical properties of plants synthetic hybrid fibers composites*, Research Journal of Engineering Sciences, 1(3), Sept. ,2012.
- 28- Using ultrasonic sensor for blind and deaf persons combines voice alert and vibration properties, Research Journal of Recent Sciences, 1(11), Nov., 2012.
- 29- Flammability of araldite based composite mixed with inorganic retardants, International Journal of Engineering Science and Technology (IJEST), 4(10), Oct., 2012
- 30- *Influence of retardant agent on flame spread through composite surface*, International Journal of Innovative Research in Engineering & Science, issue 1, volume 6, December 2012.
- 31- Study the effect of angle dorsiflexion on bending stress of prosthetic pylon, International Journal of Engineering Science and Technology (IJEST), 4(12), December 2012.
- 32- Stress analysis of conical shell, Academic research international, 3(3), Nov., 2012.
- 33- *Flame retardancy of structural composites*, International Journal of Innovative Research in Engineering & Science, issue 1, volume 6, December 2012.
- 34- Mechanical properties of composite material reinforcing by natural-synthetic fibers, Academic research international, 3(3), Nov., 2012.
- 35- The synergistic effect of hybrid flame retardants on pyrolysis behaviour of hybrid composite materials, Journal of Engineering Science and Technology, 7(3), 2012.
- 36- Effect of variable fiber spacing on post-buckling of boron/epoxy fiber reinforced laminated composite plate, Applied Mechanics and Materials, 245, 2013.
- 37- Development hybrid retardant agent and its effect on flammability resistance of composites, Research journal of chemical sciences, 3(1), 2013.
- 38- *Flexural strength of fiber reinforced composite*, International journal of enhanced research in science technology & engineering, 2(1), 2013.
- 39- *Effect of carburizing on fatigue strength*, 3<sup>rd</sup> Scientific International conference ,technical college –Najaf ,accepted for publishing , 2013.
- 40- Spectroscopic studies of polyester carbon black composites, 2<sup>nd</sup> International Science Congress (ISC-2012) Conference, India, 2013.
- 41- Study the Efficiency of adsorption Leshman's Stain Dye on the surface of some metal oxides, 2<sup>nd</sup> International Science Congress (ISC-2012) Conference, India, 2013.
- 42- Increasing combusting resistance for advanced composites by using fire retardants, 2<sup>nd</sup> International Science Congress (ISC-2012) Conference, India, 2013.

## 2.Books

- **1- Properties of Composite Materials Databook**, LAP LAMBERT Academic Publishing ,2012, ISBN: 978-3-659-24295-3
- **2- Flame Retardancy of Polymers** ,LAP LAMBERT Academic Publishing ,2012 , ISBN:978-3-659-25531
- **3- Composite Materials** ,LAP LAMBERT Academic Publishing ,2012 , ISBN:-5 978-3-659-27625

# 3. Conferences

- 1- 3<sup>rd</sup> International Conference on Software Technology and Engineering (ICSTE 2011), Kuala Lumpur, Malaysia ,2011.
- 2-International Conference on Optimization of Mechanical Engineering, Manufacturing Systems, Robotics and Aerospace (OPTIROB 2012) ,Romania ,2012 .
- 3- 2<sup>nd</sup> International Science Congress (ISC 2012) ,India ,2012 .
- 9- International Conference on mechanical engineering ,robotics and aerospace (ICMERA 2012) ,Romania ,2012 .