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**-Name :-** Rana Afif Majed Anaee

**-Born date:-** 1975

**-Permanent address:-** Baghdad - Iraq

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**-Contact numbers:-** 07901900945

**-Nationality:-** Iraqi

**-Marital status:-** Married

**-Languages:-** Arabic, English

**-Qualification:-**

**B.Sc.** Science of Chemistry (University of Baghdad – College of Science), 1996.

**M.Sc.** Science of Physical Chemistry (University of Baghdad – College of Science/Chemistry), 2000.

**Ph.D.** Physical chemistry-Corrosion (University of Baghdad – College of Science/Chemistry), 2007.

**-Teaching experience:-**

- Corrosion of biomaterials and effect of drugs: Papers, Supervision, Lectures and Training programs.
- Corrosion in refineries: Papers, Supervision, Lectures and Training programs.
- Studies in building field such as stones, thermostones and preparation guide of ISO 9001 in plastic factory.
- Studies in measuring many physical and mechanical properties of materials.
- Some studies in nanotechnology.
- Coating methods to prevention the corrosion.
- Cathodic protection method to control the corrosion.
- Inhibition to reduce corrosion.

### **-Conferences and Seminars:-**

- 1-** 1<sup>st</sup> Scientific Conference of nanotechnology, Advanced materials and their application, University of Technology-Iraq, 2009.
- 2-** 2<sup>nd</sup> Scientific Symposium of Role the materials engineer in construction and supporting the infrastructure of the country, Iraq, 2009.
- 3-** 2<sup>nd</sup> Scientific Conference of nanotechnology, Advanced materials and their application, University of Technology-Iraq, 2010.
- 4-** 3<sup>rd</sup> Scientific Conference of nanotechnology, Advanced materials and their application, University of Technology-Iraq, 2011.
- 5-** 1<sup>st</sup> Scientific Conference of energy and renewable energy applications, Iraq, 2011.
- 6-** 1<sup>st</sup> Scientific Symposium for role of nanotechnology and advanced materials in industry and detection of environmental contamination, Iraq, 2011.
- 7-** International Symposium about nanomaterials and advanced materials applications in the field of energy and renewable sources, Iraq, 2011.
- 8-** 1<sup>st</sup> Scientific Conference of lasers and advanced materials engineering: Technology and applications, Iraq, 2012.
- 9-** Symposium about principles, fundamentals and application of quality by using ABET system, Iraq, 2012.
- 10-** Symposium about the role of drugs and its effect on the adolescent health, Iraq, 2012.
- 11-** Symposium about Sustainability, University of Technology 2012.
- 12-** Symposium about Nanotechnology in Materials Engineering, 2012.
- 13-** The 16<sup>th</sup> International conference on petroleum, mineral resources & development, 10-12 February, 2013.
- 14-** Symposium about Biomaterials and Biomedical Engineering, University of Technology – Materials Engineering department, 2012.
- 15-** Symposium about Modern application of laser in environmental, medical and engineering fields, University of Technology, 2012.
- 16-** Symposium about Using IR and Raman spectra in materials engineering, University of Technology – Materials Engineering department, 2012.
- 17-** Symposium about Energy path in Iraq after 2012, University of Technology – Energy and Renewable Energies Technology Center, 2012.
- 18-** Symposium about Nanotechnology in materials engineering, University of Technology – Materials Engineering department, 2012.
- 19-** Symposium about Iraqi cements industry and its improvement, University of Technology – Chemical Engineering department, 2013.

**20-** Symposium about National conference for renewable energies ,its applications, University of Technology – Energy and Renewable Energies Technology Center, 2013.

**21-** Symposium about Nanomaterials in biological and medical applications, University of Technology – Nanotechnology and Advanced Materials Center, 2013.

#### **-Awards:-**

ت	المناسبة	الجهة المانحة	العدد والتاريخ
1-	يوم الجامعة	رئيس الجامعة التكنولوجية	5هـد/ 105 في 2002/5/4
2-	لجنة امتحانية	رئيس قسم هندسة المواد	5هـد/ 732 في 2003/8/16
3-	لجنة امتحانية	رئيس الجامعة التكنولوجية	6656 في 2007/8/15
4-	الندوة العلمية الثانية للقسم	رئيس قسم هندسة المواد	م ر ج / 319 في 2009/4/21
5-	درع هندسة المواد –المؤتمر العلمي الاول	رئاسة الجامعة التكنولوجية	2010
6-	تصويب الدرجات	رئيس قسم هندسة المواد	4 هـد /2266 في 2010/9/26
7-	لجنة امتحانية	رئيس قسم هندسة المواد	4 هـد /1626 في 2010/6/29
8-	تصويب الوثائق	رئيس قسم هندسة المواد	4هـد /6078 في 2011/10/25
9-	لجنة امتحانية	رئيس قسم هندسة المواد	4هـد /6599 في 2011/11/30
10-	تكريم بيوم المرأة	رئاسة الجامعة التكنولوجية	2011
11-	شهادة تقديرية/الموسم الثقافي	رئيس قسم هندسة المواد	2012/6/7
12-	تتمين جهود	وزير التعليم العالي والبحث العلمي	ج م/3312 في 2012/6/3
13-	شكر وتقدير عن جهود متميزة	رئيس قسم هندسة المواد	4هـد/2855 في 2012/6/6
14-	شهادة تقديرية	رئيس الجامعة التكنولوجية	القاء بحث في مؤتمر المواد والليزر
15-	شهادة تقديرية	رئيس الجامعة التكنولوجية	التنظيم والاعداد للمؤتمر العلمي الاول لقسم هندسة المواد 2012
16-	درع المرأة المثالية – يوم المرأة	رئاسة الجامعة التكنولوجية	2012
17-	شهادة تقديرية	رئيس الجامعة التكنولوجية	ندوة مفاهيم الاستدامة 2012
18-	شكر وتقدير / ندوة مفاهيم الاستدامة	رئيس الجامعة التكنولوجية	أ ت/18222 في 2012/11/24
19-	شكر وتقدير/مجلة الجيولوجيا	المدير العام لهيئة المسح	826 في 2013/2/4

	والتعدين العراقية	الجيولوجي العراقية	
20-	شكر وتقدير/حضور ندوة المواد النانوية في التطبيقات الطبية والاحيائية	مدير مركز بحوث النانوتكنولوجي والمواد المتقدمة	م ن/546 في 2013/6/12
21-	شكر وتقدير/لجنة الترقيات	رئيس قسم هندسة المواد	4 هـ د/4653 في 2013/7/1
22-	شكر وتقدير/مؤتمر عالمي للبترول والثروة المعدنية	مركز بحوث البترول-جمهورية مصر العربية	شباط 2013
23-	شكر وتقدير	رئيس قسم هندسة المواد	4 هـ د/5353 في 2013/9/8
24-	شكر وتقدير ودرع الجامعة التكنولوجية عن انهاء طالبة الماجستير رنا صاحب بحثها ضمن المدة	رئيس جامعة	م.ج /24/1348 في 2013/11/13
25-	شكر وتقدير عن اهداء كتابين	عميد الكلية التقنية/الموصل	2013/10/31 في 3407/11/2

## -Publications:-

### 1- Researches:-

- 1-  $\beta$ - coefficients and apparent molal volume of coumarin in ( $H_2O$ ,  $C_2H_5OH$ ) mixtures at different temperature, *Iraqi Journal of Chemistry*: Vol.28, No.1, 2002, P.169-175.
- 2- Study of thermodynamic function for hydrolysis of lactone ring in coumarin and its derivatives in 70% ethanol – water at five temperature: *Engineering & Technology Journal* Vol.22, No.5, 2003.
- 3- Study of chemical kinetics for hydrolysis of coumarin and its derivatives at five temperature: *Engineering & Technology Journal* Vol.26, No.9, 2008, P. 386-400.
- 4- Study of some electrical properties of coumarin in (ethanol-water) mixtures with three weight percentage at five temperature: *Engineering & Technology Journal* Vol.26, No.3, 2008, P. 115-130.
- 5- Corrosion inhibition of Al-Si-Cu alloy in the basic media by using six inhibitors at four temperatures: *Um – Salama Science Journal*: Vol.5, No.3, 2008, P.427-439.
- 6- Effect of chloride ions on the corrosion behavior of Al-Zn alloy in NaOH solution at four different temperature: *Al-Khawarizmi Engineering Journal*: Vol.4, No.4, 2008, P.26-36.
- 7- Effect of chloride ions on the passive layer for three Al alloys at pH=9: *Al-Nahrin University Journal for Science*: Vol.12, No.3, 2009, P.23-32.
- 8- Effect of deaeration on the corrosion of pure Aluminium and its three alloys in NaOH solution at pH=11: *Engineering & Technology Journal* Vol.27, No.8, 2009, P. 1532-1543.

- 9- Effect of molybdate anions on corrosion behavior of SS 304 in 0.1M NaCl solution: *Engineering & Technology Journal* Vol.27, No.16, 2009, P. 2931-2945.
- 10- Effect of halogen ions on the corrosion of brass in Na<sub>2</sub>SO<sub>4</sub> solution: *Engineering & Technology Journal* Vol.28, No.7, 2010, P.1386-1395.
- 11- Effect of Different coating techniques with aluminum on the corrosion behavior of stainless steel 316L in seawater: *Al-Nahrain University Journal for Science*, Vol.15, No.3, 2012, P.112-122.
- 12- Effect of Some Anti-inflammatory drugs on the Corrosion Behavior of Implant Biomaterials in Human Body Fluid: *Engineering & Technology Journal*, Vol.30, No.6 2012, P. 959-973.
- 13- Effect of Tobacco Smoking on the Corrosion Behavior of Three Dental Alloys in Artificial Saliva: *Tikrit Journal of Dental Sciences*, Vol.2, No.2, 2012, P.145-153.
- 14- Effect of oxygenated additives on the corrosion behavior of Al-Si-Cu alloy in a synthetic condensed automotive solution: *Journal of King of Abdulaziz University – Engineering science*, JKAU: Eng.Sci., Vol.23, No.2, 2012, p.3-18.
- 15- Corrosion Inhibition of Carbon Steel by Diphenylamine In Oil and Gas Production Environment, *The 16<sup>th</sup> International Conference on Petroleum, Mineral Resources & Development*, 10-12 February, 2013, p.35, Egypt.
- 16- Some mechanical properties and corrosion behavior of low carbon steel weldments: *Al-Khawarizmi Engineering Journal*, Vol.9, No.1, 2013, p.83-93.
- 17- Experimental study and numerical modeling for behavior of amalgam at different periods of the filling: *Tikrit Journal of Dental Sciences*, Vol.2, No.1, 2013, p.30-37.
- 18- Galvanic Corrosion of Dental Alloys in Artificial Saliva Containing Citric Acid, *Engineering & Technology Journal*, Vol.31, Part A, No.12, 2013, p.2299-2310.
- 19- Sodium silicate and phosphate as Corrosion Inhibitors for Mild Steel in Simulated Cooling Water System, *The Arabian Journal for Science and Engineering*, Springer, Vol.38, No.12, November 2013.
- 20- Phenylenediamine as Inhibitor in Sour Water at Oil Refinery, *Int. J. Electrochem. Sci.*, Vol. 8, (2013), p.12402 – 12416.
- 21- Experimental and Numerical study of CO<sub>2</sub> corrosion for carbon steel, *Engineering & Technology Journal*. Vol.31, Part A, No. 15, 2013, p. 2885-2904.
- 22- Corrosion of Foodstuffs Cans in Saline Solutions Containing Preservative Material, *Asian Journal of Agriculture and Food Science*, Vol.1, issue 5, December 2013, p.236-242.

## **2- books:-**

- 1- Nanotechnology, Dardijlah- Gordon 2010.
- 2- Nanoscience in our life, Dardijlah- Gordon 2011.
- 3- Thermodynamic and kinetic study for the corrosion of aluminium, Lambert Academic Publishing, 2013.

## **-Work shop attended:-**

### **Supervision on Scientific Thesis:**

- 1-** M. Sc., thesis of Zina Noori Abdulhameed, “Corrosion behavior of some implant alloys in simulated human body environment”, University of Technology – Materials Eng. Department, 2010.
- 2-** M.Sc., thesis of Ali Abdulkareim Mohsan, “Effect of laser surface melting on corrosion of dental alloys with harmful materials in artificial saliva medium”, University of Technology – Materials Eng. Department, 2011.
- 3-** M.Sc., thesis of Dalia M. Jomaa, “Experimental and numerical modeling for corrosion of carbon steel in 5%NaCl carbonated water for oil industries”, University of Technology – Materials Eng. Department, 2012.
- 4-** M.Sc., thesis of Rana Sahib Noor, “Corrosion inhibition in sour medium at different temperatures”, University of Technology – Materials Eng. Department, 2013.
- 5-** M.Sc., thesis of Rusl Fadhel, “Investigation of corrosion resistance of  $V_2AlC$  and  $Cr_2AlC$  ternary carbides in different media”, 2013.
- 6-** M.Sc., thesis of Hiba Anor, “Natural products as corrosion inhibitors in petroleum medim”, 2013.