**CURRICULUM VITAE**



**Name** : **Issam Ahmed Mohammed**

**Citizenship : Iraq**

**Age : 5/6/1964**

**Mailing Address : Iraq, Baghdad, Al-Mansour**

**H/P : 07500741194**

**E-mail :** [issam\_usm@yahoo.com](mailto:issam_usm@yahoo.com)

**Knowledge of Languages**: Arabic, English

**Academic Qualification** : **Ph.D.** in Organic Polymer Chemistry, School of Chemical

Sciences, Universiti Sains Malaysia (USM)-2002.

**M.Sc.** in Organic Chemistry, Department of Chemistry,

Faculty of Science, University of Baghdad-1992.

**B.Sc.** in Chemistry, University of Baghdad-1986.

**Rank and H-index** :  **Professor, H-index (23)**

**Summary of Work Experience**

* **22** years of Teaching and the details as follows;
* **16** years after **Ph.D**. (English media) in Reputable Universities; **9** years at Universiti Sains Malaysia (**USM**), and **2** years at Universiti Putra Malaysia (**UPM**), **3** years at University of Malaya (**UM**) [Malaysia].
* Lately **2** years at Al-Kitab University (Iraq).
* Currently, at Alrasheed University College (Iraq).
* **6** years of Teaching after **M.Sc**., **3** years at University of Baghdad, College of Science and **3** years at University of Al-Tahady, Libya.
* Published **over 80** International Refereed Journals in (ISI Impact Factor and Scopus) as well as Conferences Proceeding.
* **1** Patent.
* **5** Book Chapters in International Publisher.
* **5** International Invention and Innovation Awards.
* Leader and Co-leader for more than **12** Research Project Grants.
* Reviewer of **13** Various Refereed International Journals.
* Supervisor of **2** Post Doctorates.
* Supervisor/Co-supervisor of **17** Postgraduate Students (M.Sc. & Ph.D.) as well as **80** FYP projects.
* Thesis Examiner’s for several Postgraduate Students as well as for more than **100** FYP Thesis.
* Administrative functions: H.O.D, Coordinator, and Committee Scientific Member for Several International Conferences and Seminars.

**Teaching** : Various Courses in Pure Chemistry and Applied Chemistry for Undergraduate

Students as well as for Postgraduate Students (M.Sc., and Ph.D.).

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| **Interest Research** | * Polymer Synthesis * Organic Synthesis * Medicinal Chemistry |

**Supervision of Post-doctorate**

* **Dr. Sankar G.** (India) - Main Supervisor
* **Dr. Shaheen Khan** (India) - Co-Supervisor

### Supervision of Postgraduate Research Student

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| --- | --- | --- |
|  | Postgraduate | |
|  | M.Sc. | Ph.D. |
|  | **15** | **2** |

1. **Ubdullah Osman**, **Ph.D.** A New approach ofSynthesis 1,3-Benzoxazine

Derivatives and its Polymers. (Graduated - 2016).

1. **Chiya Othman Hassan, M.Sc.** Synthesis, Characterization and study bioactivity of new symmetrical and asymmetrical 1,3-benzoxazine compounds. ( Graduated - 2017).
2. **Yousif Ismail, M.Sc.** Synthesis andbioactivity studies of new azo coumarin

derivatives.( Graduated - 2018).

1. **Ling Jem Shan, M.Sc.** Novel Poly(alkyd urethanes) based on Vegetable Oils: Synthesis and Properties. (Graduated-2014 considered as the best Thesis).

1. **Nur Hafizah Abdul Ghafar, M.Sc.** Synthesis and Properties of Novel

Polyurethanes based on Curcumine. (Graduated-2014).

1. **Nurul Khizrien Abd Khadir, M.Sc.** Synthesis and Properties of New Thermoplastic and Thermosetting Polyurethanes Derived From Palm and Soya Oils. (Graduated-2012).
2. **Rashidah Mohamed Hamidi, M.Sc.** Synthesis, Characterization and Liquid Crystal Properties of New Polyurethane Elastomers. (Graduated-2012).
3. **Putri Nur Syazwani Azizan**, **M.Sc.**  Mechanical Properties of Composite Panels Made From Oil Palm Empty Fruit Bunch Fiber and Waste Polystyrene Foam (Graduated-2012).
4. **Marliana Mohd Mahadar**, **M.Sc.** Effect of Empty Fruit Bunches (EFB) based Lignin on the Properties of Epoxy EFB Fiber Composite. (Graduated-2011).
5. **Parisa Amouzgar**, **M.Sc.** Development and Properties of Resin Impregnated Microwave Dried Oil Palm Trunk Core Lumber. (Graduated-2011).
6. **Asniza Mustapha**, **M.Sc.** Utilization of Lignin Extracted From Soda Black Liquor in Wood Paint. (Graduated-2011).
7. **Khairul Bin Awang, Ph.D.** Properties and Characterisation of Acacia Wood Modified Using Propionic and Succinic Anhydride. (Graduated-2010).
8. **Ratnamalar a/p Rajasingam**, **M.Sc.** Synthesis and Liquid Crystalline Properties of New Twin Diglycidyl Ethers Based on Azomethine Group Cured by Aromatic Diamines. (Graduated-2009).
9. **Mohd Fadhley Bin Ali**, **M.Sc.** Development of A New Class of Liquid Crystalline Epoxy Resins Cured By Mesogenic Diols. (Graduated-2008).
10. **Noorshashillawati Mohammad, M.Sc.** Synthesis, Characterization and Properties of the New Unsaturated Polyester Resins for Composite Applications. (Graduated-2007).
11. **Fatma Awad Ragab, M.Sc.** Synthesis, Characterization and Biological properties Studies of new Acyl Hydrazones. (Graduated-2017).
12. **Mona Mohmoud Ahmed, M.Sc.** Synthesis, Characterization and Biological Activities of novel Schiff’s bases Compounds. (Graduated-2017).

## Supervision of Final Year Undergraduate Research Project

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| --- | --- | --- | --- | --- |
| Academic Session | | | No. of Candidates | |
| 2003**/04** | | | **12** | |
| Academic Session | | | No. of Candidates | |
| 2004**/05** | | | **8** | |
| Academic Session | | | No. of Candidates | |
| 2005**/06** | | | **10** | |
| Academic Session | | | No. of Candidates | |
| 2006**/07** | | | **11** | |
| Academic Session | | | No. of Candidates | |
| 2007**/08** | | | **9** | |
| Academic Session | | | No. of Candidates | |
| 2008**/09** | | | **7** | |
| Academic Session | | | No. of Candidates | |
| 2009**/10** | | | **4** | |
| Academic Session | | | No. of Candidates | |
| 2010**/12** | | | **6** | |
| Academic Session | | | No. of Candidates | |
| **2013-2015 UPM** | | | **8** | |
| Academic Session | | | No. of Candidates | |
|  | | |  | |
|  | **2015-2018 UM** |  | **5** |

1. **Mohd Fadhley Bin Ali** (2004) Synthesis and characterization of new epoxy containing

azomethine linkage.

2. **Sherilyn Emariza Sharifuddin** (2004) Synthesis and characterization of azo- 2-naphthol

pigment based on *p*-aminophenol.

3. **Chiang Yuh Yee** (2004) Synthesis and characterization of new epoxy resin (Diglycidyl Ether) based on bisazomethine network.

1. **Firdaus Muhammad Ali** (2004) Properties of alkyd resin based on soya oil.
2. **Thor Shei Wei** (2004) Synthesis of a new epoxy resin from bisphenol containing azomethine linkage.
3. **Tan Hwee Mean** (2004) Synthesis of a new diglycidyl ether containing imine group.
4. **Lee Chwee Koon** (2004) Synthesis and Properties of azo Pigments.
5. **Cheng Seik Huei** (2004) Synthesis of new Epoxy derived from bisphenol containing schiff base group and aliphatic diamine.
6. **Lau Wei Ling** (2004) Synthesis and Characterization of azo pigments based on 2- naphthol.
7. **Loo Soon Leong** (2004) New epoxy resin based on aromatic diamines.
8. **Mohd Hazril Muhamad Mansor** (2004) Synthesis and Characterization of New Azo Pigments.
9. **Muhammad Haris Harun** (2004) Synthesis and Characterization of New Poly (azomethine siloxane).
10. **Ong Teck Guan** (2005) Preparation of Epoxy Compound Containing Azomethine moiety derived from 3-methoxy-4- (2,3-epoxyproxy)- benzaldehyde.
11. **Teng Choi Har** (2005) Preparation and Characterization of Polyurethane based on 4,4’- methylene diphenyl diisocyanate and hydroquinone.
12. **Vikrom Charenchit A/L Ainul** (2005) Synthesis and Characterization of Mono Glycidyl Ether Based on Azomethine Linkage.
13. **Tan Kwee Sien** (2005) Synthesis and Characterization of Polysiloxane Based on 3,3- Bis (4-hydroxyphenyl) phthalide.
14. **Goh Yen Mui** (2005) Preparation and Characterization of a New Mono Epoxy Resin Containing Imine Group.
15. **Hazaitul Akma Mohd Hanapiah** (2005) Synthesis and Characterization of Polyurethane Based on Ethylene glycol.
16. **Chin Chia Hoi** (2005) Preparation and Characterization of new epoxy Resin Containing Urethane Linkage.
17. **Cheng Eng Chun** (2005) Preparation and Properties of new Epoxy Containing azomethine groups.

21. **Aziana Jaludin** (2006). Synthesis of New Unsaturated Polyester based on cis 2-

butene-1,4-diol.

1. **Lok Sook Kuen** (2006) Synthesis and Characterization of new Heterocyclic Azo Pigment based on N-(4-methylphenyl)maleimide.
2. **Tan Mei Ling** (2006) Preparation and Properties of Polyurethane based on cis 2-butene-1,4-diol.
3. **Lim Chia Teen** (2006) Synthesis of a new Epoxy resin based on aliphatic spacers.
4. **Ng She Eng** (2006) Study Mechanical Properties of New Epoxy resin cured by p-phenylenediamine.
5. **Pang Yong Jia** (2006) Mechanical Properties of a New Epoxy resin cured by aliphatic diamine.
6. **Goy Hui Ming** (2006) New Heterocyclic azo pigments containing Maleic anhydride: Synthesis and Characterization.
7. **Ng Lai Qing** (2006) Synthesis of a new Unsaturated poly(ester-urethane).
8. **Nur Hidayah Hashim** (2006) Synthesis of Polyurethane based on Castor Oil.
9. **Oon You Bing** (2006) New Epoxy resin containing Fumaric acid: Synthesis and Properties.
10. **Anas Sabri Ghazali** (2007) Mechanical Properties of Natural Rubber with Different Ratio of Polystyrene.
11. **Goh Shing Lei** (2007) Preparation of New Epoxy Containing Azo Pigment.
12. **Koay Ee Ling** (2007) Alkyd resin Based on Soya Oil, Fumaric Acid and Glycerol.
13. **Lim Sock Siew** (2007) Production of New Adhesive from Polystyrene.
14. **Mohd. Hazim Mohamad Amini** (2007) Determination of the Effect of Polystyrene Addition into Natural Rubber Based Adhesive.
15. **Ng Soo Huey** (2007) Modification of Alkyd Resin by diglycidyl ether Based on bisphenols-A.
16. **Nursyahieda Yusof** (2007) Manufacture of Wood Paint from Azo Pigment.
17. **Ooi Suei Hoon** (2007) Synthesis of New Monoepoxy Based on phenylazo-2-naphthol.
18. **Tan Sze Jia** (2007) Preparation of alkyd resin based on Castor Oil.
19. **Yak Kwan Lin** (2007) Synthesis of Unsaturated Polyester resin based on Fumaric Acid and Ethylene Glycol.
20. **Yusof Mohamad** (2007) Preparation of Adhesive Based on Natural Rubber (SMR-L) and Polystyrene.
21. **Asniza Mustapha** (2008) Manufacture a Lignin-Based Wood Paint.
22. **Cheun Chin Yin** (2008) A new Alkyd Resin Based on Palm Oil.
23. **Lee Wan Cheng** (2008) Polystyrene Based Adhesive for Plastic.
24. **Loo Ching How** (2008) A new Wood Adhesive from waste Polystyrene.
25. **Mohd Najib Baharu** (2008) Utilization of oil Palm Empty Fruit Bunch (EFB)-Lignin in Developing Paint for Steel.
26. **Ratnamalar A/P Rajasingam** (2008) Development of Lignin-Based Epoxy Paint for Steel.
27. **Sharifa Zaharah** (2008) The Blended properties of Oil-Modified Alkyd with Epoxy resin.
28. **Tan Han Woei** (2008) A new Composite produced from Waste Polystyrene and Oil Palm Empty Fruit Bunches (OPEFB).
29. **Wong Chee Weng** (2008) Modification of Alkyd resin based on Palm Oil with Epoxy resin.
30. **Jesselina Ooi Phaik Kin** (2009) Synthesis, Self-Curing and Characterization of New Epoxy Compounds Containing Azomethine Linkages.
31. **Gayathiry A/P Rajasekaran** (2009) Review in Epoxy and Polyester Thermoset Based Powder Coatings.
32. **Goh Kar Yee** (2009) Eco-Friendly Wood Paint Based on Oil Palm Empty Fruit Bunch Lignin.
33. **Mohd Faris b. Maslan** (2009) Mechanical and Physical Properties of Hybrid Epoxy-Polyester in Powder Coating Applications.
34. **Rashidah bt. Mohamed Hamidi** (2009) Synthesis and Properties of New Polyurethane Elastomers.
35. **Nurul Khizrien bt. Abd Khadir** (2009) Physical and Mechanical Properties of Different Ratios of Palm Oil Based Alkyd/Epoxy Hybrid Resins.
36. **Siti Fatimah bt. Mohd Razali** (2009) Preparation of Thermoplastic Composite From Fiber Reinforced Thermoplastic Composite and Waste Polystyrene.
37. **Ling Jem Shan** (2010) Synthesis and Characterization of Poly (alkyd-urethane) Based on Palm Oil.
38. **Sha’azizi Ibrahim Abdullah** (2010) Preparation of New Polysiloxane from Soy Oil as Raw Material.
39. **Norpadil Nizam Padilah Kamal** (2010) Preparation of New Polyurethane Based on Palm Oil.
40. **Ismaya Mohd Zamani** (2010) Preparation of New Poly (urethane-alkyd) derived from Soya Oil.
41. **Mohd Ezwan Selamat** (2011) Novel study of Polyurethanes based on Curcumin.
42. **Teoh Chee Leng** (2011) Synthesis of Alkyd resin derived from Palm Oil and PET waste.
43. **Koay Sang Sar** (2011) Synthesis of Alkyd resin based on Soya Oil and PET Post-Consumer Bottles.
44. **Sri Hema Jeevitha A/P Dorai Raj** (2012) Synthesis of New Linear Poly (silyl ether) based on Renewable Resources, Palm Oil and Soya Oil.
45. **Ng Pui Pui** (2012)Synthesis and Properties of a New Ladder Poly (azomethine ester).
46. **Oon Xin Tian** (2012) Synthesis of New Liquid Crystalline T-Shape Poly (azomethine ester).
47. **Wan Amirah Aishah Wan Amran** (2014) Synthesis of Cyclopent-2-en-1-one Derivatives Based on Benzil and Acetone.
48. **Thanusha** **A/P K.Sugumaran** (2014) Synthesis and Characterization of 1,3- Benzoxazines Based on 2,4,4-trimethyl-7,2’,4’-trihydroxy Flavan.
49. **Mohd Hisyam Maing**  (2014) Synthesis, Characterization and study Their Bioactivity of Some New 1,3-Oxazepine Compounds.
50. **Khairul Nazrin Ibrahim** (2014) Synthesis and Characterization of New 1,3- Benzoxazines From 2,4,4-trimethyl-7,2’,4’-trihydroxy Flavan With Substituted Ethanolamine and Cyclohexylamine.
51. **Syahirah Ishak** (2014) 4-Alkoxy-3,4-Diphenyl- Cyclopent-2-enone: Synthesis and Characterization of New Compounds.
52. **Muhammad Hafiz Idris** (2014) Synthesis and Characterization of New 1,3- Benzoxazines From 2,4,4-trimethyl-7,2’,4’-trihydroxy Flavan With Substituted Aniline and *p*-Nitroaniline.
53. **Maryam Aisyah Abdullah** (2014) Synthesis and Characterization of New azo Coumarine compounds.
54. **Nur Izzati Zambari** (2014) Synthesis and Bioactivity studies of New azo Coumarine derivatives.
55. **Nurul Natasha Shamsul Ariffin** (2016) Synthesis and Characterization of A new 1,3,4-Oxadiazol derivative.
56. **Siah Anak Moris** (2016) Synthesis and Characterization of A new Ladder Dialdehyde Monomer.
57. **Ayashi** (2017) Synthesis and Characterization of A new Ionic liquid compound.
58. **Mohammad Ashraf** (2017) Design of A new Ionic liquid based on cyclohexanol.
59. **Lee** xing(2018) Synthesis and Characterization of A new Ionic liquid as a catalyst.

**Publications *(International Refereed Journals, ISI Impact Factor)***

1) **Issam A.M.** Syed Shahabuddine H.S Kareem S. Mohamad and Rahman Saidur. Synthesis of a Novel Ladder Poly (azomethine-ester) based on PET Waste Bottles*,* ***International polymer processing, 2019,*** *34(3), 296-306*.

2) **A.M. Issam.** M. Ahmed, R. Ikram, M. Muddassar and M.A Qadir. Synthesis and biological activity of New 1,3- Benzoxazines based on 2,4,4-trimethyl-7,2’,4’-trihydroxy Flavan: Antibacterial, Anti-inflammatory, Cyclooxygenenase-2-Inhibition and Molecular Modeling Studies. ***Letters in Drug Design and Discovery***. ***2019,*** *16(1), 58-65.*

3) **A.M. Issam.** M. Ahmed, R. Ikram, M.A Qadir and R. Hussain. 1,3-oxazepine compounds derived from azomethine: Synthesis, characterization and antibacterial evaluation. **2018,** 37(3), 540-546.

4) **Issam A.M.** Syed Shahabuddine, Rashmin Khanam and Rahman Saidur. Synthesis, Characterization and Antibacterial Activity of Novel Poly (silyl ether)s based on Palm and Soy oils, ***Polimeros* 2018**, 352-359.

5) M.S Tahir, M. Ahmed, **A. M. Issam,** M.A.Qadir, A. Adnan and A. Rashid. Determination of sofosbuvir and velpatasvir in solid pharmaceutical dosage from by hplc-pda and its application into vitro dissolution studies. ***Latin American Journal******of Pharmacy.2018,*** *37(6), 1067-1073.*

6) S.N Sulaiman, A. Zahari, S.Y. Liew, **A. M. Issam and** Khalijah, A. Adnan and A. Rashid. Pahangine A and B, two new oxetane containing neolignans from the barks of Beilschmiedia glabra Kosterm (Lauraceae). ***Phytochemistry letters. 2018,*** *25, 22-26****.***

7) Shabnam Bakhshaei, Muhammad Afzal Kamboh, Hamid Rashidi Nodeh, Sharifuddin Md Zain,a Siti Khalijah Mahmad Rozi,a Sharifah Mohamad and **Issam A. Mohammed** . Magnetic solid phase extraction of polycyclic aromatic hydrocarbons and chlorophenols based on cyano-ionic liquid functionalized magnetic nanoparticles and their determination by

HPLC-DAD. ***RSC Adv., 2016,*** *6, 77047–77058****.***

8) Farhatun N. Maluin, Sharifah M.,Poomrat Rattanarat,c Weena Siangproh, Orawon Chailapakul, **Issam A. M** and Ninie S. A. Manan. Synthesis of PANI/hematite/PB hybrid nanocomposites and fabrication as screen printed paper based sensors for cholesterol detection. ***Anal. Methods, 2016, 8, 8049–8058.***

9) Emad A. Jaffar Al-Mulla, **A.M. Issam**, Khalid Waleed S. Al-Janabi. A novel method for the synthesis of biodiesel from soybean oil and urea. ***C. R. Chimie*****2015***,* 18, 525-529*.*

10) **Issam A.M.** and Ling, J. S., Arniza G., Melati K. Novel Poly(alkyd urethane)s from Vegetable oils: Synthesis and Properties. ***Industrial crops and Products* 2014**, 52, 74-84.

11) **Issam A.M.,** Nurul Khizrien, A. K. and Emad A. J. Al-Mula New Polyurethane Nanocomposites based on Soya Oil, ***Journal of Oleo Science* 2014**, 63(2), 193-200.

12) **Issam A.M.,** An Alternative Synthetic Approach for 1,3- Benzoxazine derivatives. ***International Journal of Science and Technology*** **2014**, 3(6), 46-48.

13) **Issam A.M.** A New Approach to obtain Kevlar-49 from PET Waste bottles, ***Research on Chemical Intermediates* 2014**, 40(8), 3033-3044.

14) Khalil, H. P. S., Rudi Dungani and **Issam A.M.,** Determination of the combined Effect of Chemical Modification and Compression of Agatis Wood on the Dimension stability, Termite Resistance, and Morphological Structure. ***Bioresources* 2014**, 9(4), 6614-6626.

15) Arniza G., Mohd Ridzuan, Yunita M. D., W. R. Wan Daud, Baharin A., Nurul H. K. and **Issam A. M**. Nanofibre Network Rooted from the Alkaline Peroxide Treatment of Oil

Palm Empty Fruit Bunches ***Advanced Materials Research*****2014**Vol. 832, 500-505.

16) Arniza G., Mohd Ridzuan, W. R. Wan Daud, Baharin A., **Issam A. M**. and Ziya Ahmad Khan, Augmentation of EFB Fiber Web by Nano-Scale Fibrous Elements. ***Advanced Materials Research*****2014** Vol. 832, 494-499.

17)S. Hena, N. Ismail, **A. M. Isaam**, A. Ahmad and S. A. Bhawani, Removal of microcystin-LR from aqueous solutions using % burn off activated carbon of waste wood material.  ***Journal of Water Supply: Research and Technology - AQUA* 2014**, 63(5), 332-341.

18) **Issam A. M.,** Emad A. J. Al-Mula, A. K. Nurul Khizrien and I. Mazlan. Structure-property studies of thermoplastics and thermosetting polyurethanes using palm and soya oils-based polyols. ***Journal of Oleo Science* 2013**, 62(12), 1059-1074.

19) Khalil, H. P. S., **Issam A.M.,** Physical and thermal properties of microwave-dried wood lumber impregnated with phenol formaldehyde resin, ***Journal of Composite Materials* 2013**, 47(28), 3565-3571.

20) **Issam A. M.,** Mohd Fadhley A. and Wan Rosli W. D. New class of liquid crystalline epoxy resins: Synthesis and properties.***Journal of Industrial and Engineering Chemistry*** **2012,** 18, 364-372.

21) **Issam A. M.** and Rashidah Mohamed Hamidi Synthesis of new liquid crystalline diglycidyl ethers. ***Molecules* 2012*,*** 17, 645-656.

22) **Issam A. M.** and Sufia Hena New T-shape polyurethanes: Synthesis, thermal and mechanical properties. ***Polymer-Plastic and Engineering Technolog****y* **2012**, 51(4), 391- 395.

23) Rosniza H., Abu Bakar M., Khairuddean M., **Issam A. M.**and Rohana A. The Structural Study of Epoxidized Natural Rubber (ENR-50) and its Cyclic Dithiocarbonate Derivative Using NMR Spectroscopy Techniques, ***Molecules* 2012*,*** 17, 10974-10993.

24) **A.M. Issam,** Sufia Hena and A. K. Nurul Khizrien. A new unsaturated poly(ester-urethane) based on terepthalic acid derived from polyethylene terephtalate (PET) of Waste Bottles. ***Journal of Polymers and the Environment*****2012,** 20(2), 469-476.

25) **Issam A.M.** and Sankar, G. Synthesis, deblocking and cure reaction studies of secondary alcohol-blocked isocyanates. ***High Performance Polymers* 2011**, 23(7), 535-541.

26) **A. M. Issam,** A. K. Nurul Khizrien and I. Mazlan.Physical and mechanical properties of different ratios of palm oil based alkyd/epoxy resins. ***Polymer-Plastic and Engineering Technology*****2011,** 50, 1256-1261.

27) **A. M. Issam,** M. Noorshashillawati Azura, and H.P.S. Abdul Khalil. **Effect of methylene spacers of unsaturated resins on the properties of composites based on oil palm empty fruit bunches and fiberglass.** ***Advanced Composite Materials* 2011**, 20, 1- 12.

28) **Issam A.M.** and Sankar, G. Catalysis of secondary alcohol blocked isocyanate- hydroxyl terminated polybutadiene cure reaction. ***Polymer Science Series B*****2011**, 53, No. (1-2), 52-56.

29) M. Asniza, **A. M. Issam** and H.P.S. Abdul Khalil. Synthesis and characterization of a new heterocyclic azo pigment. ***Sains Malaysiana*** **2011,** 40(7), 765-770.

30)H.P.S. Abdul Khalil,I. O. Bakare , A. Khairul, **A. M. Issam** and [Irshad-Ul-Haq Bhat](http://www.springerlink.com/content/?Author=Irshad-Ul-Haq+Bhat). Effect of anhydride modification on the thermal stability of cultivated Acacia mangium,***Journal of Wood Chemistry and Technology***, **2011,** 31,154-171.

31)H.P.S. Abdul Khalil, M.M. Marliana, **A. M. Issam** andI. O. Bakare. Exploring isolated lignin material from oil palm biomass waste in green composites. ***Materials and Design*****2011**, 321, 6502-6506.

# 32) Ratnamalar, R, Issam A.M. and Baharin Z. Comparative Study of Two Twin Liquid-Crystalline Diglycidyl Ethers Containing Azomethine Moieties. *Molecular Crystals and Liquid Crystals* 2011,537, 128-140.

33) **Issam A. M** and Asniza M. Synthesis of new azo compounds based on N-(4-hydroxyphenyl)maleidei and N-(4-methylphenyl)maleimide. ***Molecules*** **2010**, 15, 7498-7508.

34) **Issam A.M.** and Ratnamalar, R. Synthesis and nonlinear optical properties of polyester containing 4-di-(2'-hydroxyethoxy)-4-diphenyl-hydrazonomethyl chromophore. ***Polymers for Advanced Technologies*****2010**, 21, 442 - 446.

35) **Issam A.M,** Asniza M. and Abdul Khalil H.P.S. Lignin filler enhances performance of alkyd wood coating. ***European Coating Journal*****2010**, 2, 24 - 27.

36) **Issam A. M**, Sankar G., Melati K. and Abu Bakar M. Synthesis and Liquid Crystalline Properties of New Diols Containing Azomethine Groups. ***Molecules*****2010**, 15, 3260 - 3269.

37) H.P.S. Abdul Khalil, B.T. Poh, **A. M. Issam** and M. Jawaid. Recycled Polypropylene – Oil Palm Biomass: The Effect On Mechanical and Physical Properties. ***Journal of Reinforced Plastic and Composites*****2010**, 29, 1117-1130.

38) H. L. Lee, **A.M. Issam,** M. Belmahi, M. B. Assouar, H. Rinnert and M. Alnot. Synthesis and Characterizations of Bare CdS Nanocrystals Using Chemical Precipitation Method for Photoluminescence Application. ***Materials*****2010,** 3, 2069 - 2086.

39) Shaheen K., Othman S., **A.M. Issam,** C. S. Yeap,Fun K. Y.A second monoclinic polymorph of 3b – chlorocholes-5-ene. ***Acta Crystallographica Section E66*****2010,** o1249 - o1250.

40) **Issam A.M.** and Sankar, G. New Nonlinear Polyurethane: Synthesis and Optical Properties. ***Polymer-Plastic and Engineering Technology*****2010**, 6312-6320.

41) Irshad-ul-Haq Bhat, H.P.S. Abdul Khalil, Khairul B. Awang, I.O. Bakare, **A. M. Issam** Effect of weathering on physical, mechanical and morphological properties of chemically modified wood materials. ***Materials and Design*****2010**, 31, 4363-4368.

42) Parisa Amouzgar, H.P.S. Abdul Khalil , Babak Salamatinia, Ahmad Zuhairi Abdullah, **A.M. Issam** Optimization of bioresource material from oil palm trunk core drying using microwave radiation: a response surface methodology application. ***Bioresource Technology* 2010**, 101, 8396-8401.

43) H.P.S. Abdul Khalil, B.T. Poh, **A.M. Issam**. and M. Jawaid. Recycled Polypropylene–Oil Palm Biomass: The Effect On Mechanical & Physical Properties. ***Journal of Reinforced Plastic and Composites* 2010,** 29 (8), 1117-1129.

44) **Issam A.M.** and Cheun C.Y. A study of the effect of palm oil on the properties of a new alkyd resin*.* ***Malaysian Polymer Journal*** **2009**,4(1), 42-49.

45)**Issam A. M**. and R.Ratnamalar New Liquid Crystal diglycidi ether bearing azomethine linkage cured by aromatic diamines. ***Polymer Preprints*** **2009**,50(1), 246-248.

46) **A. M. Issam**, B.T. Poh, H.P.S. Abdul Khalil and W.C. Lee Adhesion properties of adhesive prepared from waste polystyrene. ***Journal of Polymers and the Environment*** **2009**, 17, 165-169.

47)**Issam A. M.** and Haris, M. Synthesis, Characterization and Optical Properties of Novel Nonlinear Polysilylether. ***Journal of Inorganic and Organometallic Polymers and Materials* 2009**, 19, 454-458.

48) B.T. Poh and **A. M. Issam**. Dependence of adhesion properties of SMR L based adhesive on molecular weight of rubber. ***Plastics, Rubber and Composites*** **2009**, 38(9/10), 453-456.

49) H. L. Lee, **A.M. Issam,** M. Belmahi, M. B. Assouar, H. Rinnert and M. Alnot. Thermal and Properties of CdS Nanoparticles in Thermotropic Liquid Crystal Monomers. ***Journal of Nanomaterials*** **2009**, 1-9.

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**Book chapter**

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2. New liquid crystalline polyurethane elastomers containing Thiazolo[5,4d] Thiazole moiety: Synthesis and properties. **Book chapter 2,** publishedin **INTECH** **2012**.
3. **Issam A.M** *New Epoxy Resins Based On Azomethine Groups For Potentials Polymer Applications,* **Book chapter,** publishedin **ACC4 Australia** **2004**.
4. **Issam A.M** *Various Lignocellulosics Fibre Reinforced Polyester Composites: The Study on Mechanical, Physical, and Biological Properties*, **Book chapter,** publishedin **ACC4 Australia** **2004**.
5. **Issam A.M** *From waste to wealth: A new composite*, **Book chapter,** publishedin **USM 2010**.

**Conference Proceeding**

1*)* I.O. Bakare, H. P. S. Abdul Khalil, A. Khairul and **A.M. Issam**. *Sustainable Commercial Utilization of Cultivated Acacia Mangium:Effect of Anhydride Modification on Thermal Stability.* International Conference on Environmental Research and Technology (ICERT), Penang, Malaysia, 2-4 June **2010**, p. 105-110.

2) **A.M. Issam**, A. Putri Nur Syazwani and H.P.S. Abdul Khalil. *The Study on Performance of New Composite Produced from Waste Polystyrene Resin Reinforced by Oil Palm Empty Fruit Bunch Fiber*. Malaysia Polymer International Conference (MPIC), Putrajaya, Malaysia, 21-22 October **2009**.p.166-172.

3*)* **A.M. Issam**, R. Ratnamalar and A. Baharin. *New Twin Diglycidyl Ether Cured by Aromatic Diamines: Synthesis and Liquid Crystalline Properties*. Malaysia Polymer International Conference (MPIC), Putrajaya, Malaysia, 21-22 October **2009**. p.146-150.

4*)* **A.M. Issam**, M. Asniza and H.P.S. Abdul Khalil. *Synthesis and Characterization of A New Heterocyclic Azo Pigment*. Malaysia Polymer International Conference (MPIC), Putrajaya, Malaysia, 21-22 October **2009**.p.193-201.

5*)* M. Noorshashillawati Azura, H.P.S Abdul Khalil, **A.M. Issam.** *New Unsaturated Polyesters with Different Lengths of Methylene Spacers for Composite Applications.* 7th Regional Wood Anatomy Conference (PRWAC) 2009, Kuala Lumpur, Malaysia, 3-5 August **2009**, p. 1-12.

6*)* **Issam A. M,** Lim S. S, Poh B. T and Teng T. T. *A new Adhesive from waste Polystyrene,* International Conference on Environmental Research and Technology (ICERT), Penang, Malaysia, 28-30 May **2008,**  p. 178-183.

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9*)* Noorshashillawati Aura M., **Issam A. M**., Abdul Khalil H. P. S. *Synthesis and properties of new unsaturated polyester resins for composite Applications,* 3rd Life Sciences Postgraduate Conference, 1st USM-Penang International Postgraduate Convention , USM, Penang, Malaysia, 24-27 May **2006,**  p. 89-93.

10*)* H. L. Lee., M. Abu Bakar., J. Ismail., **Issam A. M**. *A simple one-step synthesis of Cds nanoparticals via reflux technique,* 3rd Life Sciences Postgraduate Conference, 1st USM-Penang International Postgraduate Convention, USM, Penang, Malaysia, 24-27 May **2006,** p. 182.

11*)* Mohd Fadhley A., **Issam A.M**. and Wan Rosli W.D. *Characterization of New Class Liquid Crystalline Epoxy Resins Cured by Mesogenic Diols.* 3rd Life Sciences Postgraduate Conference, 1st USM-Penang International Postgraduate Convention, USM, Penang, Malaysia, 24-27 May **2006**, p. 230.

12*)* Noorshashillawati Aura M., **Issam A. M**., Abdul Khalil H. P. S. *New unsaturated polyesters with different length of methylene spacers for composite Applications,* Proceeding of the 8th Pacific Rim Bio-Based Composites Symposium, Kuala Lumpur, Malaysia, 20-23 Nov. **2006,** p. 144.

13*)* **Issam A. M**. and Abdul Khalil H. P. S. *Synthesis and properties of polyurethanes based on a new Schiff base liquid crystalline diol for industrial resins,*8th Pacific Rim Bio-Based Composites Symposium, Kuala Lumpur, Malaysia, 20-23 Nov **2006,**  p.165.

14*)* Issam A. M., Wan Rosli, W.D., and Abdul Khalil, H.P.S. *New Epoxy Resins Based On Azomethine Groups For Potentials Polymer Applications,* Proceeding of the 4th Asian – Australian Conference on Composites Materials ACCM4, Sydney, 2004, p.149-153.

15*)* Abdul Khalil, H.P.S. and **Issam A. M.** *Various Lignocellulosics Fibre Reinforced Polyester Composites: The Study on Mechanical, Physical, and Biological Properties*, Proceeding of the 4th Asian – Australian Conference on Composites Materials ACCM4, Sydney, **2004**, p.15-20.

16*)* **Issam A. M.** and Ismail, J. *Synthesis and characterization of New Poly(azomethine urethane)s.* Regional Conference-USM,Penang, Malaysia, **2001***,* p.77-86*.*

**Patent**

**Issam A. M.,** Atto, A.T. and Sarah, F.Y. *Synthesis and Properties of Some New*

*Copolysilyl ethers:* Pat. Iraq. *No.3805* **30/11/1993.**

### Research Projects (Grants)

|  |  |  |  |
| --- | --- | --- | --- |
| Sponsor | Project Title | Amount of Grant | Role |
| Short Term Grant (USM) | Synthesis and Properties of New Poly(ether-urethane)s Based on Palm and Soya Oils. | RM 30,500.00 | **Leader** |
| Short Term Grant Application (IRPA) | Synthesis and Properties of Novel Epoxy Azomethine Resin as Coating Materials. | RM 19,000.00 | **Leader** |
| RU-Grant | Synthesis, Crystal and Spectroscopic Study of New Twin Liquid Crystalline Diglycidyl Ethers Bearing Azomethine Linkage. | RM 150,507.00 | **Leader** |
| Short Term Grant Application (IRPA) | Preparation and properties of rubber-based adhesives. | RM 18,476.20 | Co-researcher |
| Short Term Grant Application (IRPA) | Synthesis, Characterization and Photonic Application of New Liquid crystalline Organomatallic Nanocomposites. | RM 20,000.00 | Co-researcher |
| Short Term Grant Application (IRPA) | Fundamental Studies of Agro – Wastes Fibers. | RM 20,000.00 | Co-researcher |
| Fundamental Research  Grant Scheme (FRGS) | Effect of Molecular weight, Phase Separation and Molecular Interaction on the Adhesion Properties of NR and ENR-Based Pressure Sensitive Adhesives. | RM 88,000.00 | Co-researcher |
| E-Science Grant | Physical, Mechanical and Thermal Fundamental Studies of Commodity Plant Wastes Fibres. | RM281,684.00 | Co-researcher |
| E-Science Grant | Development of New Palm Wood Lumber Materials From Oil Palm Trunk. | RM162,684.00 | Co-researcher |
| Malaysian Timber Industry Board(MTIB) | Development of Palm –Lumber: A Pilot Scale Study. | RM 881,400.00 | Co-researcher |

**Conference’s Participation**

* International Conference on Environmental Research and Technology (ICERT), Penang, Malaysia, 2-4 June **2010**
* Malaysia Polymer International Conference (MPIC), Putrajaya, Malaysia, 21-22 October **2009**
* International Conference on Environmental Research and Technology (ICERT), Penang, Malaysia, 28-30 May **2008**
* International Conference on Chemical Sciences (ICCS), Yogyakarta-Indonesia, 24-26 May **2007**
* 3rd Life Sciences Postgraduate Conference, 1st USM-Penang International Postgraduate Convention, USM, Penang, 24-27 May **2006**,Malaysia.
* Proceeding of the 8th Pacific Rim Bio-Based Composites Symposium, **2006**, Kuala Lumpur, Malaysia.
* Proceeding of the 4th Asian – Australian Conference on Composites Materials ACCM4, **2004**, Australia.
* National Symposium on Polymeric Materials **2000**, Malaysia.
* Regional Conference **2001**, Malaysia.

**Reviewing Articles in Academic Journals (International)**

* European Polymer Journal (Elsevier)
* Polymer Bulletin (Springer)
* Materials Science and Engineering B (Elsevier)
* Journal of Applied Polymer Science (John Wiley)
* Journal of Inorganic and Organometallic Polymers and Materials(Springer)
* e-Polymers (European Polymer Federation / EPF)
* Journal of Polymer and the Environment (Springer)
* Advanced Composite Materials (VSP)
* Materials Letters (Elsevier)
* Journal of Materials Science (Elsevier)
* Journal of Industrial and Engineering Chemistry (Elsevier)
* Molbank (MDPI)
* Malaysian Polymer Journal

**Short Course**

* Invited speaker, Short Course on Polymeric Coatings and Adhesives, 19-20 August **2008**, School of Industrial Technology, USM, Malaysia.
* Invited speaker, Short Course on Polymeric Coatings and Adhesives, 12-13 April **2006**, School of Industrial Technology, USM, Malaysia.
* Invited speaker, In-House Short Course on Polymeric Coatings and Adhesives Training, 29-30 May **2006**, W. R. Grace Company, Kuantan, Malaysia.

**Invention and Innovation Award**

* **Gold Medal**, “Waste to Wealth: A new Composite”. **Malaysia Technology Expo (MTE 2010)**, Kuala Lumpur, Malaysia. (Organized by Ministry of Science, Technology & Innovation).
* **Silver Medal**, “A New innovative composite from polystyrene waste” **International Warsaw Inventions Show (IWIS 2011), Poland.**
* **Bronze Medal**, “A New innovative composite from polystyrene waste”. **(IENA 2011)**, **Nurnberg, Germany**.
* **Bronze Medal**, “A New Adhesive from Waste Polystyrene”. **18th** **International invention, Innovation & Technology Exhibition (ITEX 2007)**, Kuala Lumpur, Malaysia. (Organized by Ministry of Science, Technology & Innovation).
* **Bronze Medal**, “New Liquid Crystalline Epoxy Resin”. **Malaysia Technology Expo (MTE 2006)**, Kuala Lumpur, Malaysia. (Organized by Ministry of Science, Technology & Innovation).

**Professional Member Ship**

* Member of Society of Plastics Engineers (USA).
* Member of Iraqi Chemist Union.
* Member of Iraqi Teacher’s Union.