

# CURRICULUM VITAE

## PROF. DR. MANSOR BIN AHMAD



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1. **FULL NAME:** MANSOR BIN AHMAD @ AYOB
  2. **ADDRESS:** Department of Chemistry  
Faculty of Science  
Universiti Putra Malaysia  
43400 UPM Serdang, Selangor
  3. **AREA OF SPECIALISATION:** Polymer & Analytical Chemistry
  4. **AGE:** 58
  5. **EDUCATION AND ACADEMIC QUALIFICATION:**
    - Ph.D. (Polymer Chemistry); University of Salford, Manchester UK (1994).  
Thesis: Preparation and characterization of copolymeric hydrogels based on N-vinyl-2-pyrrolidone.
    - M.Sc. (Analytical Chemistry); University of Kentucky, Lexington, Kentucky USA (1982). Thesis: Reconstitution of Modified Haem into Myoglobins.
    - B.Sc. (Chemistry); Indiana University, Bloomington, Indiana USA (1979)
  6. **ACADEMIC POSITION HELD:**

01 Sept. 2013 - Present	<b>Professor</b> , Department of Chemistry
01 Dec 2001 – 31 Aug. 2013	<b>Associate Professor</b> , Department of Chemistry
June 1987 – 30 Nov 2001	<b>Lecturer</b> , Department of Chemistry, UPM Serdang
June 1983 – June 1987	<b>Lecturer</b> , UPM Sarawak Branch, Kuching Sarawak
19 Jan. 1983 – June 1983	<b>Lecturer</b> , Department of Chemistry UPM Serdang
Aug. 1979 – May 1981	<b>Teaching Assistant</b> , University of Kentucky Lexington, Kentucky, USA.

## 7. ADMINISTRATIVE DUTIES AND OTHER RESPONSIBILITIES

01 Oct. 2014 – present	Deputy Director Corporate Strategy & Communications Office UPM
03 Oct. 2011 – 30 Sep. 2014	Head, Department of Chemistry Faculty of Science, UPM
01 Jan. 2004 – 31 Dec. 2009	Deputy Director (Teaching & Learning) Centre for Academic Development (CADE) UPM
16 Oct 2001- 31 Dec. 2003	Head, Advanced Materials Laboratory Institute of Advanced Technology (ITMA) UPM

## 8. TEACHING EXPERIENCE:

### a. Current Duties and Responsibilities

Main teaching duties are in the areas of expertise, i.e. Polymer Chemistry, Industrial Chemistry and Analytical Chemistry. However, over the years teaching experiences include other courses and supervision of research students at undergraduate and graduate levels.

- Introductory Chemistry (Undergraduate)
- Polymer Chemistry (Undergraduate)
- Industrial Polymer Chemistry (Undergraduate)
- Laboratory Safety (Graduate)
- Spectroscopy (Graduate)

### b. Courses Taught in Each of the Last 5 Years

Semester & Session	Course (Code)	Program	Credit hour	Contact hour	Enrolment
<b>Semester I 2014/2015</b>	Safety in Laboratory (CHM5002)	Graduate	3(3+0)	14	45
	Polymer Chemistry (CHM3102)*	Bachelor	3(2+1)	70	65
<b>Semester II 2013/2014</b>	Solid Materials Characterization (CHM5301)	Graduate	3(3+0)	14	35
	Industrial Chemistry I (CHM3501)	Bachelor	3(3+0)	14	40
	Polymer Chemistry (CHM3102)*	Bachelor	3(2+1)	28	36
<b>Semester I 2013/2014</b>	Spectroscopy 1 (CHM5201)	Graduate	3(3+0)	14	45
	Special Topics in Organic Chemistry (CHM4201)	Bachelor	3(3+0)	14	5
	Polymer Chemistry (CHM3102)*	Bachelor	3(2+1)	56	72

<b>Semester II 2012/2013</b>	Polymer Chemistry (CHM3102)*	Bachelor	3(2+1)	28	37
	Safety in laboratory (CHM5002)	Graduate	3(3+0)	14	45
<b>Semester I 2012/2013</b>	Safety in Laboratory (CHM5002)	Graduate	3(3+0)	14	45
	Polymer Chemistry (CHM3102)*	Bachelor	3(2+1)	70	65
<b>Semester II 2011/2012</b>	Solid Materials Characterization (CHM5301)	Graduate	3(3+0)	14	35
	Industrial Chemistry I (CHM3501)	Bachelor	3(3+0)	14	40
	Polymer Chemistry (CHM3102)*	Bachelor	3(2+1)	28	36
<b>Semester I 2011/2012</b>	Spectroscopy 1 (CHM5201)	Graduate	3(3+0)	14	45
	Special Topics in Organic Chemistry (CHM4201)	Bachelor	3(3+0)	14	5
	Polymer Chemistry (CHM3102)*	Bachelor	3(2+1)	56	72
<b>Semester II 2011/2012</b>	Solid Materials Characterization (CHM5301)	Graduate	3(3+0)	14	35
	Industrial Chemistry I (CHM3501)	Bachelor	3(3+0)	14	40
	Polymer Chemistry (CHM3102)*	Bachelor	3(2+1)	28	36
<b>Semester I 2011/2012</b>	Spectroscopy 1 (CHM5201)	Graduate	3(3+0)	14	45
	Special Topics in Organic Chemistry (CHM4201)	Bachelor	3(3+0)	14	5
	Polymer Chemistry (CHM3102)*	Bachelor	3(2+1)	56	72
<b>Semester II 2010/2011</b>	Solid State Characterization (CHM5301)	Graduate	3(3+0)	14	35
	Industrial Polymer Chemistry (CHM3503)*	Bachelor	3(3+0)	28	55
	Polymer Chemistry (CHM3102)*	Bachelor	3(2+1)	28	59
<b>Semester I 2010/2011</b>	Industrial Polymer Chemistry (CHM3503)*	Bachelor	3(3+0)	28	45
	Polymer Chemistry (CHM3102)*	Bachelor	3(2+1)	28	84
	Physical and Inorganic Chemistry (CHM3010)	Bachelor	4(3+1)	28	69

\*Course coordinator

### c. Students' Teaching Evaluation Scores

No.	Course	Semester	Score/5
1.	CHM3102: Polymer Chemistry	Semester I 2012/2013	4.56
2.	CHM3102: Polymer Chemistry	Semester II 2011/2012	4.51
3.	CHM3102: Polymer Chemistry	Semester I 2011/2012	4.47
4.	CHM4201: Special Topics Organic Chemistry	Semester I 2011/2012	4.67
5.	CHM3102: Polymer Chemistry	Semester II 2010/2011	4.46
6.	CHM3503: Industrial Polymer Chemistry	Semester II 2010/2011	4.34
7.	CHM5301: Solid State Characterization	Semester II 2010/2011	4.55
8.	CHM3102: Polymer Chemistry	Semester I 2010/2011	4.17
9.	CHM3102: Polymer Chemistry	Semester II 2009/2010	4.20
10.	CHM3503: Industrial Polymer Chemistry	Semester II 2009/2010	4.57
11.	CHM3102: Polymer Chemistry	Semester I 2009/2010	4.14
12.	CHM5002: Laboratory Safety	Semester I 2009/2010	4.30
13.	CHM3102: Polymer Chemistry	Semester II 2008/2009	4.41
14.	CHM3501: Industrial Chemistry I	Semester II 2008/2009	4.35
15.	CHM3503: Industrial Polymer Chemistry	Semester II 2008/2009	4.38
16.	CHM3503: Industrial Polymer Chemistry	Semester II 2006/2007	4.38
17.	CHM3010: Physical & Inorganic Chemistry	Semester II 2006/2007	4.15

### d. Supervision of Teaching Practicum (LMPK) and Industrial Training (LI)

No.	Name	Year	Super- vision	Training Location
1.	Mohamad Shukor Ismail (154630)	2013	LMPK	SMK Seksyen 7, Shah Alam
2.	Rinna Syazana Ayob (152166)	2013	LMPK	SMK Seksyen 7, Shah Alam
3.	Nuraina Kamarulzaman (151865)	2013	LMPK	SMK Seri Endah, Sri Serdang
4.	Nur Farhana Samsudin (153297)	2013	LMPK	SMK Sri Serdang, Sri Serdang
5.	Yaakob Ishak	2012	LI	La Farge Cement, Langkawi
6.	Ong Hui Jin (152161)	2012	LI	Euro-Chemo Pharma Sdn Bhd. Perai, Penang
7.	Charis Tan Ern Hui (151986)	2012	LI	Agricultural Chemicals (M) Sdn. Bhd. Perai Penang
8.	Zulhilmimiyana (146492)	2012	LMPK	SBPI Selandar Melaka
9.	Nur Amirah (146783)	2012	LMPK	SBPI Selandar Melaka

10.	Nurul Farhana (146622)	2012	LMPK	SBPI Selandar, Melaka
11.	Nurul Nabila (147453)	2012	LMPK	SMK Selandar, Melaka
12.	Muhammad Norhan bin Nor Azawadi	2011	LI	Forest Research Institute Malaysia (FRIM)
13.	Nor Farida Abdul Jani (136546)	2010	LMPK	SMK Sultan Salahuddin Abdul Aziz Shah
14.	Nurul Ain Amran (137074)	2010	LMPK	SMK Seksyen 7, Shah Alam
15.	Nur Fatma Liyana Nordin (136450)	2010	LMPK	SMK Seksyen 7, Shah Alam
16.	Siti Nurul Syazawani Ismail (136978)	2010	LMPK	SMK Seksyen Sebelas, Shah Alam
17.	Nik Mazlini Mohd Hanapiah (136366)	2010	LMPK	SMK TTDI Jaya, Shah Alam
18.	Alice Lee (139385)	2010	LMPK	SMK Bukit Jelutong, Shah Alam
19.	Noor Syafiqah Abdullah (137018)	2010	LMPK	SMK Bukit Jelutong, Shah Alam
20.	Zainab Chelsmail	2010	LMPK	SMK Puchong, Batu 14, Puchong
21.	Faisal Firdaus Tuah (135729)	2010	LMPK	SMK Seksyen 16, Shah Alam
22.	Siti Wajihah Che Rusli (136381)	2010	LMPK	SMK Seksyen 18, Shah Alam
23.	Kok Ing (124387)	2008	LMPK	SMK Seri Mulia, Bandar Tun Razak
24.	Winni Ngu Yu Ping (124527)	2008	LMPK	SMK Seri Mulia, Bandar Tun Razak
25.	Aida Zaharah Ismail (123373)	2008	LMPK	SMK Taman Kosas, Ampang
26.	Wan Nur Asmadiyah Wan Roslei (122183)	2008	LMPK	SMK Taman Tasik Ampang, Ampang
27.	Wan Hadhurah Wan Halim (125568)	2008	LMPK	SMK Sungai Besi, Kuala Lumpur
28.	Sharifah Zhafarina Syed Zainal Karib (128213)	2008	LMPK	SMK Lembah Keramat, Kuala Lumpur
29.	Ilyia Liyana Man (127032)	2008	LMPK	SMK Lembah Keramat, Kuala Lumpur
30.	Nurul Hidayah Mohamad (126664)	2008	LMPK	SMK Seri Keramat, Kuala Lumpur
31.	Nur Atifah Mohd Hanafi (126686)	2008	LMPK	SMK Seri Keramat, Kuala Lumpur
32.	Fazilatunisa Sultan Syed Abdul Kabeer (125970)	2008	LMPK	SMK Seksyen 5, Wangsa Maju, Kuala Lumpur
33.	Nazihah Nordin (127039)	2008	LMPK	SMK Pandan Jaya, Kuala Lumpur

34.	Mohamad Fidaus Mohd. Rafdzi (124322)	2008	LMPK	SMK Pandan Indah, Kuala Lumpur
35.	Nor Syahida Arbain (123389)	2008	LMPK	SMK Sg. Besar, Sg. Besar Sabak Bernam
36.	Nor Atikah Takruddin (116727)	2007	LMPK	SMK Kelana Jaya, Petaling Jaya
37.	Siti Hajar Yazid (117629)	2007	LMPK	SMK Sultan Salahuddin Abd Aziz Shah, Shah Alam
38.	Rabiatuadawiyah Abd Rahman (117743)	2007	LMPK	SMK Seksyen 18, Shah Alam
39.	Siti Shazwani Samsuddin (119045)	2007	LMPK	SMK Seksyen 19, Shah Alam
40.	Mashita Salleh (117162)	2007	LMPK	SMK Alam Megah, Shah Alam
41.	Roszaina Abd. Rahman (118185)	2007	LMPK	SMK Desa Cempaka, Bandar Baru Nilai
42.	Ayuni Azizan (117627)	2007	LMPK	SMK Desa Cempaka, Bandar Baru Nilai
43.	Suhaily Mohamad (116713)	2007	LMPK	SMK Desa Cempaka, Bandar Baru Nilai
44.	Zaihiza Hj Zainal (108074)	2007	LMPK	SMK Desa Cempaka, Bandar Baru Nilai
45.	Zuraini Zainul Abidin (109419)	2007	LMPK	SMK Desa Cempaka, Bandar Baru Nilai
46.	Siti Nur Surhayani Jefri	2004	LI	Unit Patologi, Hospital Sik
47.	Mohammad Rafaei Bin Ghazuli	2004	LI	Makmal Teknikal Bahan, Sime Tyres International(M) Sdn. Bhd. Alor Setar
48.	Tengku Shafazila bt Tengku Saharuddin	2004	LI	Makmal Kawalan Mutu Makanan, Lata Temin

## 9. MALAY AND ENGLISH COMPETENCY

- Excellent proficiency (oral and written) in English and Malay (Bahasa Melayu) and able to teach in both languages.
- Obtained Distinction in Bahasa Melayu and Credit in English in the Malaysian Certificate of Education Examination (MCE).

## 10. PROFESSIONAL MEMBERSHIP AND ADMINISTRATIVE POSTS

- Executive Committee & member, OIC Inter-Islamic Nanotechnology Network
- Member, Malaysian Institute of Chemistry (Institut Kimia Malaysia, IKM); AMIC since 1987
- Member, Malaysian Scientific Association (MSA); AFMSA since 1987

- Life Member, Malaysian Analytical Sciences Association (ANALIS); since 1996
- Life Member, Malaysian Senior Scientists Association (MSSA) since 2013
- Member, Malaysian Nanotechnology Association (MNA) since 2010
- Member, Royal Society of Chemistry (RSC); Affiliate Member since 2011
- Member, New York Academy of Sciences (NYAS); since 2013
- Council member in Malaysian Institute of Chemistry (IKM); 2012-2014
- Council member of Malaysian Scientific Association (MSA); 2012-2014
- Council member in Confederation of Scientific and Technological Associations of Malaysia (COSTAM); 2012-2015
- Council Member, Malaysian Nanotechnology Association (MNA) 2012-2014
- Chairman, IKM Physical and Theoretical Chemistry Section; 2013-2014
- Member, IKM Malaysian National Chemistry Quiz Technical Committee (Kuiz Kimia Kebangsaan Malaysia, K3M) since 2002
- Committee members, IKM Education and Community Section since 2003
- Member, Malaysian Chemistry Carnival Organising Committee (Karnival Kimia Malaysia, K2M) IKM since 2011-2013
- Chairman, Committee on Malaysian Standard (MS) on Safety Signages in the Workplace, Department of Health and Safety, Ministry of Human Resource Malaysia; 2011-2013
- Member, Health and Safety Committee Universiti Putra Malaysia since 2004
- Member, Examination Council (Jawatankuasa Lembaga Peperiksaan), National Institute of Occupational Safety and Health (NIOSH); 2013-2014

## 11. RESEARCH ACTIVITIES

### a. Research Interests

1. Preparation, modification and evaluation of polymers, copolymeric hydrogels and modified natural polymer systems as controlled release matrices in agriculture and medicine. Specifically, in the preparation of polymeric hydrogel using mixture of carboxymethyl sago pulp from sago waste and carboxymethyl sago starch for making drug delivery vehicles.
2. Application of polymers as supports for immobilisation of biocatalysts/ enzymes, collaborations with biochemists and protein chemists.
3. Characterization, degradation and biodegradation study of polymers, copolymers, modified polymers and polymer blends.
4. Development of biocomposites from natural fibers, especially oil-palm empty fruit bunch and rubberwood.
5. Preparation and Characterization of Nanoparticles and nanocomposites by Green methods.

### b. Research Collaborations

The polymer research group at UPM, which I am leading, has been actively engaging collaborators from different research institutions in various projects and activities; namely Malaysian Nuclear Agency, MNA (previously Malaysian Institute for Nuclear Research & Technology, MINT), Malaysian Rubber Board, MRB (previously Rubber Research Institute Malaysia, RRIM), Malaysian Palm Oil Board, MPOB (previously Palm Oil Research Institute Malaysia, PORIM) and Forest Research Institute of Malaysia (FRIM).

Research collaborations have been established with researchers from other universities; Monash University Australia (Prof. Dr. Steven Langford), Monash University Sunway Malaysia (Dr. Muniyandy Saravanan & Dr. Pushpamalar Janarthanan), Universiti Pertahanan Nasional Malaysia (Prof. Dato' Dr. Wan Md. Zin Wan Yunus & Assoc. Prof. Dr. Ong Keat Khim), Universiti Kebangsaan Malaysia (Prof. Dr. Rusli Daik).

### c. Research Summary

No.	Title of Research Project	Role	Source	Status	Finance (RM)
1	Preparation and Characterization of Core shell Ag/Au Nanoparticles in Biodegradable Polymeric Mediated by Green methods. (15/04/2011-14/10/2013)	Project Leader	RUGS	Completed	160,000
2	Preparation and Characterization of New Series of Heterocyclic Liquid Crystals Containing Triazine, Triazole or Tetrazine Derivatives as their Mesogenic Groups. (05-04-10-0934RU: 15/4/2010-15/6/2013)	Project Leader	RUGS	Completed	98,500
3	Optimization of Reaction Conditions for Preparing Novel Polymeric Hydrogel Using Mixture of Carboxymethyl Sago Pulp from Sago Waste and Carboxymethyl Sago Starch for Making Drug Delivery Vehicles. (25/3/2013 - 1/6/2016)	Team member	FRGS	On-Going	60,000
4	Developing a Biodegradable Low Cross-Linked Carboxymethyl-cellulose Hydrogels from Sago Pulp for Control Release of Colon Anticancer Drug. (01/10/2012-30/09/2014)	Team member	E-Science	Completed	155,500
5	The Controlled Release of Doxifluridine, a Pro-Drug of 5-Fluorouracil Used to treat Colorectal Cancer, using Sago Waste-derived Carboxymethyl-cellulose Hydrogels. (05/06/2012-14/7/2015)	Team member	ERGS	On-Going	50,000



6	Development of Portable Arsenic Detection System. (01/08/2012-31/07/2014)	Team member	PRGS	Completed	230,000
7	Graft Copolymerization of Vinyl Monomers on Oil Palm Empty Fruit Bunch (EFB) Fibres. (IRPA Project 09-02-04-0170; 2000-2002)	Project Leader	IRPA	Completed	121,000
8	Preparation of Biodegradable Film based on Sago Starch-Chitin/Chitosan. (IRPA Project 09-02-04-0171; 2000-2001)	Team member	IRPA	Completed	25,000
9	Preparation and Characterisation of Grafted Fibres Polyethylene Composites (Short Term Grant for year 2000)	Project Leader	UPM	Completed	10,000
10	Graft Copolymerization of Vinyl monomer onto Sago Starch (IRPA Project: 09-02-04-0056; 1998-2000)	Team Member	IRPA	Completed	110,000
11	Development of Environmentally Degradable Polymeric Materials from Sago Starch for Agriculture and Medical Industries (IRPA Project: 01-02-04-069; 1996-1998)	Team Member	IRPA	Completed	40,000
12	Graft copolymerization of vinyl monomers onto OPEFB	Team Member	IRPA	Completed	200,000
13	Preparation and Characterisation of Hydrogels as Controlled Release Matrices for Plant Nutrients (Short Term Grant for year 1995)	Project Leader	UPM	Completed	12,500
14	Synthesis and Characterisation of Copolymeric Hydrogels as Controlled Release Matrices for Plant Nutrients (Short Term Grant for year 1994)	Project Leader	UPM	Completed	10,000

#### d. Awards

No.	Presentation/publication	Event	Award
1	UPM Excellence/Exemplary Worker Award (Academics category) 2012	Workers Day Celebration 2013	
2	UPM 2011 Excellence Service Award	UPM Excellence Service Award Ceremony 2012	
3	Kamyar Shameli, Mansor B. Ahmad, Wan Md. Zin Wan Yunus and Nor Azowa Ibrahim: Synthesis and characterization of silver/montmorillonite/chitosan bionanocomposites by	Exhibition of Invention, Research and Innovation UPM 2011	Gold Medal

	chemical reduction method and their antibacterial activities.		
4	Mansor B. Ahmad, Kamyar Shameli, Wan Md. Zin Wan Yunus and Nor Azowa Ibrahim: Synthesis and characterization of silver/clay bionanocomposites by green chemistry method.	Exhibition of Invention, Research and Innovation UPM 2010	Silver medal
5	Mansor B. Ahmad, Kamyar Shameli, Nor Azowa Ibrahim and Wan Md. Zin Wan Yunus: Synthesis of silver/montmorillonite nanocomposites using $\gamma$ -irradiation.	Exhibition of Invention, Research and Innovation UPM 2011	Bronze medal
6	Mansor Ahmad, V. Pushpamalar and Kamaruddin Hashim: Biodegradability and controlled release studies on carboxymethyl cellulose hydrogels from sago waste.	Exhibition of Invention, Research and Innovation UPM 2010	Bronze medal
8	Mansor Ahmad, Kamaruddin Hashim and V. Pushpamalar: Biodegradable hydrogel from sago waste.	Exhibition of Invention, Research and Innovation UPM 2007	Bronze medal
9	Mansor Ahmad, Kamaruddin Hashim and V. Pushpamalar: Preparation and characterization of hydrogels from sago waste.	Exhibition of Invention, Research and Innovation UPM 2006	Bronze medal
10	Nor Azowa Ibrahim, Wan Md Zin Wan Yunus, Mansor Ahmad, Chantara T. Ratnam, Mohd Zaki Ab Rahman dan Khairul Zaman M. Dahlan: Reinforcement of thermoplastic by modified oil palm empty fruit bunch fiber.	Exhibition of Invention, Research and Innovation UPM 2005	Gold Medal
11	UPM 2005 Excellence Service Award	UPM Excellence Service Award Ceremony 2006	
12	Jamarosliza Jamaluddin, Wan Md Zin Wan Yunus, Nor Azowa Ibrahim, Mohd Zaki Ab Rahman dan Mansor Ahmad: OPEFB Fiber Modification by Graft Copolymerization.	Exhibition of Invention, Research and Innovation UPM 2005	Silver medal
13	Nor Azowa Ibrahim, Wan Md Zin Wan Yunus, Mansor Ahmad, Mohd Zaki Ab Rahman dan Khairul Zaman M. Dahlan: Modification of Oil Palm Empty Fruit Bunch Fiber by Graft Copolymerization.	Exhibition of Invention, Research and Innovation UPM 2003	Gold Medal
14	Nor Azowa Ibrahim, Wan Md Zin Wan Yunus, Mansor Ahmad, Mohd Zaki Ab Rahman dan Khairul Zaman M. Dahlan, Modification of Oil Palm Empty Fruit Bunch Fiber by Graft Copolymerization.	Invention & Innovation Competition , EXPO S&T 2003, Ministry of Science Technology & Environment Malaysia	Bronze medal
15	Faculty of Science 2008 Excellence Teacher Award	Faculty of Science Quality Day 2008	
16	Faculty of Science 2006 Excellence Scientist Award	Faculty of Science Quality Day 2007	

17	Faculty of Science 2006 Excellence Teacher Award	Faculty of Science Quality Day 2007	
18	Faculty of Science 2005 Excellence Scientist Award	Faculty of Science Quality Day 2006	
19	Faculty of Science 2004 Excellence Scientist Award	Faculty of Science Quality Day 2005	
20	Faculty of Science 2004 Excellence Service Award	Faculty of Science Quality Day 2005	
21	UPM 2004 Excellence Service Award	UPM APC Award 2005	
22	UPM 2001 Excellence Service Award	UPM APC Award 2002	
23	UPM 2000 Excellence Service Award	UPM APC Award 2001	
24	UPM 1997 Excellence Service Award	UPM APC Award 1998	
25	UiTM Service to Students Affairs	UiTM Deputy Rektor (HEP) 1999	

#### e. Research mentoring/supervision

1. Dr. Kamyar Shameli – Postdoctoral fellow (February 2012 – present)
2. Dr. Siti Nurul Ain Md. Jamil – New lecturer at PASP as RUGS & FRGS co-researcher/mentor (April 2012 – present)

## 12. STUDENT SUPERVISION

#### a. Summary

Program	Main supervisor		Co-supervisor		Total
	On-going	Graduated	On-going	Graduated	
Ph.D.	6	5	4	8	23
M.Sc	10	12	9	29	60
B.Sc.	-	134	-	-	134

#### b. Doctoral Programme (Ph.D.)

No.	Name of Student	Year	Title of Project & Role
1.	Katayoon Kalantari	2012-2015	Preparation and Characterization of talc/Fe <sub>3</sub> O <sub>4</sub> and Montmorillonite/ Fe <sub>3</sub> O <sub>4</sub> Magnetic Nanocomposites for antibacterial and waste water treatment applications ( <i>Chairman</i> )
2.	Roshanak Khandanlou	2012-2015	Preparation and Characterization of Iron Oxide/Rice Straw Polycaprolactone Nanocomposites and Applications for Antibacterial and Biodegradation ( <i>Chairman</i> )
3.	Susan Azizy	2011-2014	Chitosan/Poly(Vinyl Alcohol)Blend Bio-Nanocomposites Reinforced with Cellulose

			Nanocrystals, Zinc Oxide/Cellulose Nanocrystals And Zinc Oxide-Silver/Cellulose Nanocrystals ( <i>Chairman</i> )
4.	Elmy Nahida Binti Othman	2010 ( <i>on-going</i> )	Controlled Degradation of Polyhydroxyalkanoates by High Pressure Steam Hydrolysis for Chemical Recycling ( <i>co-supervisor</i> )
5.	Nasrin Khalilzadeh	2009-2015	Synthesis and Evaluation of Borate Based Nanocomposite as Thermoluminescent Dosimeter ( <i>co-supervisor</i> )
6.	Ashraf Mohammed Khair Abdella Mohammed Salih	2009-2014	Preparation and Characterization of Palm oil-based Polyurethane Acrylate/ clay Nanocomposites ( <i>Chairman</i> )
7.	Yadollah Gharayebi	2009-2014	Preparation and Characterization of Polyvinyl chloride- <i>g</i> -Polystyrene/Organoclay Nanocomposites ( <i>Chairman</i> )
8.	Hamdan bin Ramat	2010 ( <i>on-going</i> )	Development of Monitoring Tool For Critical Success factor In Managing Occupational Health and Safety For Natural gas Pipeline Installation Works In Peninsular Malaysia ( <i>co-supervisor</i> )
9.	Mahnaz Mahdavi	2010-2013	Preparation and Characterization of Magnetic Iron Oxide/Polymer Composite Nano Adsorbent for Removal of Heavy Metal ( <i>Chairman</i> )
10.	Mahboobeh Eili	2009-2012	Preparation and Characterization of Poly(Lactic Acid)-Layered Double Hydroxide PLA/LDH Nanocomposites ( <i>co-supervisor</i> )
11.	Majid Darroudi	2009-2011	Preparation and Characterization of Silver Nanoparticles in Organic and Inorganic Media ( <i>Chairman</i> )
12.	Kamyar Shameli*	2009-2011	Synthesis and Characterization of PLA/CLAY-AG-Nanocomposites ( <i>Chairman</i> ) –*with distinction & won the 2011 Faculty of Science Postgraduate Award
13.	Pushpamalar Vengidesh ( <i>Monash University, Australia</i> )	2005-2010	Preparation and Characterization of Carboxymethyl Cellulose and Carboxymethyl Cellulose Hydrogels from Sago Waste ( <i>co-supervisor</i> )
14.	Abdulsalam Abubakar Salisu	2006-2009	Design, Synthesis and Characterization of New Liquid Crystalline Compounds Containing Azobenzene and Bisazobenzene Moieties ( <i>co-supervisor</i> )
15.	Mohd Aidil Adha bin Abdullah	2002-2007	Preparation and Characterization of Natural Rubber-, Polyethylene- and Natural Rubber/Polyethylene-Clay Nanocomposites ( <i>Chairman</i> )

16.	Jamaliah Sharif	2002-2005	Preparation of Rubber-Clay Nanocomposites ( <i>co-supervisor</i> )
17.	Nor Azowa Ibrahim	2001-2005	Preparation of PMMA-Oil Palm EFB Fiber Composites ( <i>co-supervisor</i> )
18.	Faraj Ahmad Faraj Abu-Ilaiwi	2000-2004	Graft Copolymerization of Vinyl Monomers on EFB Fibres ( <i>Chairman</i> )
19.	Abduel Majed K. Najjar	1997-2002	Preparation and Characterization of Grafted Chitosan and Sago Starch ( <i>co-supervisor</i> )
20.	Md. Lutfor Rahman	1995-1999	Synthesis and Characterisation of Acrylonitrile and Methacrylate Grafted Sago Starch ( <i>co-supervisor</i> )
21.	Paymon Roustaian	1995-1999	Studies on the Nutrition and Development of Artificial Diet for <i>Macrobrachium rosenbergii</i> larvae ( <i>co-supervisor</i> )

### c. Masters Programme (M.Sc.)

No.	Name of Student	Year	Title of Project & Role
1.	Nur 'Iffah Shafiqah Abdullah	2012-2015	Preparation of Nanocomposite for Controlled Release Applications ( <i>Chairman</i> )
2.	Lamin Sanyang	2011-2014	Hydrogel-Biochar Composite: Arsenic Adsorption Isotherm And Kinetics ( <i>co-supervisor</i> )
3.	Mohd Zulfadli Adenan	2011-2014	Application Of Polymer Gel Magnetic Resonance Imaging In Radiotherapy Treatment ( <i>co-supervisor</i> )
4.	Ahmad Syafiq Ahmad Hazmi	2011-2014	Synthesis Of Jatropha-Based Polyol And Characterization Of Jatropha-Based Polyurethane ( <i>co-supervisor</i> )
5.	Masitah Mat Hussin	2011-2014	Natural-Based Plasticizer For Polylactic Acid (PLA) ( <i>co-supervisor</i> )
6.	Mohammadreza Ghorbani	2011 ( <i>on-going</i> )	Preparation And Characterization Of Cross-Linked Natural Rubber/Multi-Walled Carbon Nanotube/Clay Nanocomposites ( <i>co-supervisor</i> )
7.	Woo Fong Yen	2011 ( <i>on-going</i> )	Development Of Plant Based Neuroactive Pharmaceuticals By Using Patch Method ( <i>co-supervisor</i> )
8.	Asma Fatehi	2011-2013	Fabrication and Characterization of Varistor-Polymer Composite based on Zinc Oxide ( <i>Chairman</i> )

9.	Zakiah Binti Jamingan	2011-2014	Preparation and Characterization of Hydrogels from CMC for Controlled Release of Drugs ( <i>Chairman</i> )
10.	Pak Yen Leng	2011-2014	Preparation and characterization of Mg-Al Layered Double Hydroxide PHB/PCL/PAL Nanocomposites ( <i>Chairman</i> )
11.	Liau Cha Ping	2011-2014	Preparation and Characterization of Polyhydroxybutyrate (PHB)/ Polycaprolactone (PCL) Nanocomposites ( <i>Chairman</i> )
12.	Teh Siew Nu	2011-2014	Preparation and characterization of Mg-Al Layered Double Hydroxide PHB/PAL Nanocomposites ( <i>Chairman</i> )
13.	Norashikin Ahmad	2009–2013	Synthesis and Characterization of Palm Fatty Hydrazide Derivatives ( <i>Chairman</i> )
14.	Lim Jenn Jye	2010–2013	Synthesis and Characterization Of Silver/Gelatin/Chitosan Bionanocomposite and Its Antibacterial Activity ( <i>Chairman</i> )
15.	Tay Mei Yen	2011–2013	Synthesis and Characterization of Silver/Chitosan/Poly(Ethylene Glycol) Nanocomposites and Evaluation of Its Antibacterial Activity ( <i>Chairman</i> )
16.	Lim Rui Rui	2010-2015	Synthesis and Characterization of Poly(Glycerol Diacids) ( <i>Chairman</i> )
17.	Soleha Mohamat Yusuff	2010-2013	Removal of Heavy Metals using Poly(Hydroxamic Acid) Chelating Exchanger prepared from Poly(Methyl Acrylate)-grafted kenaf Fiber ( <i>co-supervisor</i> )
18.	Mojgan Shoja Abolfazl	2010-2014	Synthesis and Characterization of ZnO/PCL nanocomposites ( <i>Chairman</i> )
19.	Mohamad Hanif Mohamad	2009 - 2013	Catalytic Conversion Of Glycerol To Value-Added Liquid Product ( <i>co-supervisor</i> )
20.	Mohd Firdaus Bin Mohd Anuar	2009-2011	Preparation and characterization of Poly(hydroxybutyrate-co-hydroxyvalerate)/Clay Nanocomposites ( <i>co-supervisor</i> )
21.	Mohammad Reza Ghobani	2009-2011	Preparation and Properties of Natural Rubber/Multi-Walled Carbon Nanotube/Clay Nanocomposites ( <i>co-supervisor</i> )
22.	Nurul Akmil Binti Mustaffa	2009-2011	Nano Alumina and Radiation Effect Thermo-Mechanical Properties of High Density Polyethelene-Hydroxyapatite Composite ( <i>co-supervisor</i> )

23.	Sussan Azizy	2009-2011	The Effect of Clay on Mechanical Properties Hdpe/Ps Blend ( <i>co-supervisor</i> )
24.	Maryam Ebrahimian Gafshaee	2009-2011	Synthesis and Characterization Of Chitosan Based Absorbent for Heavy Metal Removal From Model Water ( <i>co-supervisor</i> )
25.	Wisam H. Hoidy Aljobori	2009-2010	Preparation and Characterization of Polylactic Acid/Polycaprolactone Clay Nanocomposite( <i>Chairman</i> )
26.	Mahnaz Mahdavi Shahri	2009-2010	Removal of Heavy Metal Ions from Water/Wastewater using Graft Copolymer of Acrylamide onto Cellulose as Sorbent ( <i>Chairman</i> )
27.	Norhanifah Binti Mohd Yazid	2008-2011	Hydrogels from Carboxymethyl cellulose/ Polyvinylpyrrolidone Interpenetrating Polymer Networks for Delivery Matrices Application ( <i>Chairman</i> )
28.	Sabariah Binti Kamarudin	2008–2013	Synthesis and Characterization of Carboxymethyl Starch-g-Acrylic Acid ( <i>Chairman</i> )
29.	Nurul Ain Binti A. Talib	2008–2013	Optimization of Parameter for Preparation of Ceramic Membrane ( <i>Chairman</i> )
30.	Tuan Noor Maznee Tuan Ismail	2008–2013	Optimization Of Enzymatic Production Of Fatty Hydrazides And Their Application As Polyurethane Chain Extender ( <i>co-supervisor</i> )
31.	Sharil Fadli bin Mohamad Zamri	2007-2009	Microwave-Assisted Preparation and Characterization of Natural Rubber-Modified Sodium Montmorillonite Poly(Methyl methacrylate) Interpenetrating Polymer Network Nanocomposites ( <i>co-supervisor</i> )
32.	Noor Azlina Binti Ngah	2007-2009	Biocomposites from Biodegradable Polymers and Modified Oil Palm Empty Fruit Bunch Fiber ( <i>co-supervisor</i> )
33.	Goh Wei Chee	2007-2009	Preparation and Characterization of Polypropylene-Natural Rubber/Clay Nanocomposites ( <i>co-supervisor</i> )
34.	Eid Moneer M. Alosime	2006-2008	Preparation and Characterization of Natural Rubber/Polypropylene/Fatty Hydrazide-Octadecyl Ammonium Modified Clay Nanocomposites ( <i>co-supervisor</i> )
35.	Intan Juliana Binti Shamsudin	2006-2009	Preparation of Epoxidised Palm Oil/Clay Nanocomposites by Microwave Heating ( <i>co-supervisor</i> )
36.	Lim Jew Kiat	2004-2006	Preparation and Characterization of Carboxymethyl Sago Waste and Its Hydrogel ( <i>Chairman</i> )

37.	Norhafizah Binti Rosman	2004-2006	Finishing Properties of Polyurethane, Nitrocellulose and Acid Catalyst Based Coatings on Oil Palm Stem Lumber ( <i>co-supervisor</i> )
38.	Jamarosliza Bt. Jamaluddin	2004-2006	Preparation of Poly(Styrene Grafted Oil Palm Empty Fruit Bunch Fiber and Its Application As a Filler for High Impact Poly(Styrene) Composites ( <i>co-supervisor</i> )
39.	Mohammad Hussein Al-Khawaledh	2002-2004	Preparation and Characterization of Natural Rubber/Bentonite Nanocomposites ( <i>co-supervisor</i> )
40.	Abdul Malek Yaacob	2002-2004	Experimental Studies on Fiber Orientation of Short Glass Fiber Reinforced Injection-Molded Thermoplastic Composites ( <i>Chairman</i> )
41.	Lai Chin Yung	2002-2004	Mechanical and Electrical Properties of Natural Fiber-Reinforced Propylene Composites ( <i>Chairman</i> )
42.	Sonny Widiarto	2001-2004	Preparation and Characterization of Polymer Film Based on Sago Starch ( <i>co-Supervisor</i> )
43.	Ng Su Fang	2002-2004	Synthesis and Characterization of Epoxidized Natural Rubber/Clay Nanocomposites ( <i>co-supervisor</i> )
44.	Ali Mohamad Ali Abdul Amir	2001-2004	Preparation and Characterization of Biodegradable Film Based on Sago Starch and Chitosan Blends ( <i>co-Supervisor</i> )
45.	Harris C. Raj Kumar	2001-2005	Study on Effect of Radiation on Octene Rubber Blends ( <i>Chairman</i> )
46.	Norhazlin Zainuddin	2000-2003	Synthesis and Characterization of Carboxymethylstarch ( <i>Chairman</i> )
47.	Tai Kin Leong (M.Ag.)	1999-2002	Development of Micronutrient Coated Urea in Rice Production ( <i>co-supervisor</i> )
48.	Mohd Shaberi b. Mohd Amin	1999-2002	Synthesis and Characterization of New Chelating Resins Containing Thiourea as The Funtional Group ( <i>co-supervisor</i> )
49.	Saliza Jam	1998-2002	Graft Copolymerization of Methyl Acrylate onto Rubberwood Fibres ( <i>Chairman</i> )
50.	Rafeadah Rusli	1997-2001	Graft Copolymerization of 2-Hydroxyethylmethacrylate onto Sago Starch ( <i>co-supervisor</i> )
51.	Wan Fadilah bt. Wan Abdullah	1998-2000	Themomechanical Properties of Poly(methylmethacrylate-co-styrene) Copolymers ( <i>Chairman</i> )



52.	Pushpamalar A/P Janarthanan	1996-1999	Preparation and Characterization of Polystyrene-grafted Sago Starch ( <i>co-supervisor</i> )
53.	Mohamad Hussain Haji Zain	1996-2002	Thermotropic side Chain Liquid Crystal Monomers: Synthesis and Characterization ( <i>co-supervisor</i> )
54.	Eltaib Saeed Mohamed Ganawa (M. Ag.)	1997-1999	Development of Slow Release Fertilisers for Pineapple ( <i>co-supervisor</i> )
55.	Radzuan Jamaludin	1997-1999	Synthesis of Light Colour Medium Chain Triglycerides from Palm Kernel Oil Products ( <i>co-supervisor</i> )
56.	Isam Yassin Mahmood Qudsieh	1997-1999	Grafting of Poly(N-vinyl-2-pyrrolidone) onto Sago Starch ( <i>co-supervisor</i> )
57.	Faraj Ahmad Faraj Abu-Ilaiwi	1996-1998	Preparation and Characterization of Polyacrylonitrile and Poly(methyl methacrylate) Grafted Chitosan ( <i>Chairman</i> )
58.	Seckin Balci	1996-1998	Synthesis Optimization and Extraction of Rare Earth Metal Ions by Poly(N-Methyl-hydroxamic acid) Resin ( <i>co-supervisor</i> )
59.	Norhaizan Md. Esa	1995-1997	Studies on the Suitability of Poly(HEMA-co-MMA) as a Support Matrix for Immobilisation of Lipase ( <i>co-supervisor</i> )
60.	Lim Wen Huei	1994-1996	Interaction of Polymer in Mixed Surfactants ( <i>co-supervisor</i> )

**d. Bachelor Programme (B.Sc.) - only as the main supervisor**

No.	Name of Student	Year	Title of Project
1.	Siti Rufaidah Mohamad	2012/2013	Preparation and Characterization of Silver Nanoparticles in Chitosan via Ultrasonic Method
2.	Then Pay Kee	2012/2013	Preparation and Characterization of PCL/CuO Nanocomposites prepared by Quick Precipitation and Antibacterial Activities
3.	Mohammad Raafi Bin Ahmad Taib	2012/2013	Preparation and mechanical properties of poly(lactic acid)/kenaf composite
4.	Hasshazly Bin Hasnan	2012/2013	Preparation and thermal properties of poly(lactic acid)/kenaf composite
5.	Fatin Nur Atiyah Bt Ab Razak	2010/2011	Preparation and Characterization of RubberWood Fiber Reinforced Polymer Composites

6.	Siti Hafizah Binti Nawawi	2010/ 2011	Preparation and Characterization of Hydrogel Based on Carboxymethyl Cellulose with Activated Carbon
7.	Nurshazlin Binti Ismail	2010/ 2011	Synthesis and Characterization of Sol-Gel Derived Zinc Oxide/PVP Nanoparticles
8.	Anis Iliyana Binti Mazelan	2010/ 2011	Preparation and Characterization of Zinc Oxide by using Sol-Gel Method with Chitosan as Capping Agent
9.	Hernita Binti Katni	2010/ 2011	Preparation and Characterization of Polycaprolactone/Rubber Wood Fiber/Triacetin Composites
10.	Tuan Syarifah Rossyidah Binti Tuan Naiwi	2010/ 2011	Effect of Triacetin Concentration on Poly(Lactic Acid) (PLA) and Rubber Wood Fiber (RWF) Composites
11.	Nuraini bt Sha'ban	2009/ 2010	Preparation and Characterization of Poly(Lactic Acid)/ Oil Palm Empty Fruit Bunch Fiber Composites
12.	Jacqueline Mitchell Varonica Anak Ratai	2009/ 2010	Preparation and Characterization of Polycaprolactone/Rubberwood Fibre Composites
13.	Hayatul Qhadirah Binti Ismail @ Ishak	2009/ 2010	Removal of Copper(II) Ion and Nickel(II) Ion by Carboxymethyl starch Graft Acrylic Acid Copolymers.
14.	Lim Jenn Jye	2009/ 2010	Preparation and Characterization of Sol-Gel Derived Zinc Oxide with Chitosan as Capping Agent
15.	Zakiah Binti Jamingan	2009/ 2010	Removal of Cadmium(II) Ion and Chromium(III) Ion by Carboxymethyl starch-g-Acrylic Acid Copolymers.
16.	Lau Woei Ming	2009/ 2010	Synthesis and Characterization of Sol-Gel Derived Zinc Oxide/Gelatin Nanocomposite
17.	Nor Syafiqah Bt. Tukiran	2008/ 2009	Preparation of Soil Diagnostic Test Kits
18.	Ng Lek Yin	2008/ 2009	Preparation and Characterization of Polycaprolactone/ Oil Palm Empty Fruit Bunch/ Triacetin Composite
19.	Syahira Binti Kasman	2008/ 2009	Preparation and Characterization of Polycaprolactone-Rubber Wood Fiber Composites

20.	Tan Mei Fong	2008/ 2009	Preparation and Characterization of Poly(lactic acid) Rubberwood Fiber/Triacetin Composites
21.	Suzanita Binti Latip	2008/ 2009	Preparation and Characterization of Hydrogel from Carboxymethyl-cellulose: Effect of Monomer Ratio
22.	Siti Aminah Binti Abdul Aziz	2008/ 2009	Preparation Characterization and Evaluation of Polymer-Coated Fertilizer
23.	Azean Binti Azzemin	2008/ 2009	Preparation and Characterization of Hydrogel from Carboxymethyl-cellulose
24.	Siti Syamimi Binti Suhairi	2007/ 2008	Preparation and Characterization of Carboxymethylcellulose-Polyacrylamide Hydrogels
25.	Nur Safawati Binti Ahmad	2007/ 2008	Preparation and Characterization of Carboxymethylcellulose/Acrylic Acid Hydrogels
26.	Muhammad Faiz bin Abu Bakar	2007/ 2008	Preparation of Polymer Coated Fertilizer using Wurster Process; Analysis and Evaluation
27.	Kwek Choo Geok	2006/ 2007	Preparation of Soil Diagnostic Test Kits
28.	Nazihah Binti Nordin	2006/ 2007	Preparation and Characterization of Hydrogel from Carboxymethyl-cellulose
29.	Chew Yoon Ping	2006/ 2007	Preparation and Characterization of Polypropylene-Rubber Wood Fibre Composites
30.	Nurul Izzah binti Abdul Samad	2006/ 2007	Relationship Between Heat Exposure and Occupational Stress among Automotive Factory Workers in Shah Alam Selangor
31.	Azmalisa Tahar	2006/ 2007	Preparation and Characterization of Oil Pal Empty Fruit Bunch-Polypropylene Composites with Maleated Polypropylene
32.	Choong Lai Kwan	2006/ 2007	Preparation and Characterization of Polymer-coated Fertiliser
33.	Faizatul Hanis Binti Sahir	2006/ 2007	Preparation and Characterization of Hydrogel from Carboxymethyl-cellulose
34.	Norhani Othman	2006/ 2007	Preparation of Polymer-Coated Fertilizer using Wurster Process
35.	Noor Asmah bt Ishak	2006/ 2007	Preparation and Characterization of Carboxymethylstarch Hydrogel from Sago Starch

36.	Ivan Chai Choi Seng	2005/ 2006	Preparation and Characterization of Hydrogel from Carboxymethylstarch (Sago) and Poly (Vinyl Pyrrolidone)
37.	Bahiyah Mat Rasid	2005/ 2006	Preparation and Characterization of Hydrogel from Carboxymethyl-cellulose
38.	Norhidayati binti Hassan @ Desah	2005/ 2006	Preparation and Characterization of Hydrogel from Sago Starch and Poly (Vinyl Alcohol)
39.	Aesya Sofiah bt. Abd Rahim	2005/ 2006	Preparation and Characterization of Carboxymethylcellulose (CMC) Hydrogel from Sago Waste and Poly Vinyl Alcohol (PVA)
40.	Abdul Rasheed b. Abdul Karim	2005/ 2006	Preparation, Characterization and Evaluation of Latex-Palm Stearin Coated Fertilizer
41.	Ainul Nazlin binti Mohd Yunus	2005/ 2006	Preparation and Characterization of Polycaprolactone-Starch Blends
42.	Norhanifah binti Mohd Yazid	2005/ 2006	Preparation and Characterization of Polycaprolactone/Chitosan Blends
43.	Norzaina Abu Bakar	2005/ 2006	Preparation and Characterization of Hydrogel from Carboxymethyl-cellulose
44.	Umi Izwani Tawang	2004/ 2005	Preparation and Characterization of Polymer Composites from Natural Rubber and Rubber Wood Fiber
45.	Noor Azley bin Ahmad	2004/ 2005	Craft Copolymerization of Polypropylene with Butyl Acrylate
46.	Tan Pei Kei	2004/ 2005	Preparation, Characterization and Evaluation of Polymer-coated Fertilizer
47.	Tan Heng Yee	2004/ 2005	Preparation, Characterization and Evaluation of Polymer-coated Fertilizer
48.	Lim Pei Yeek	2004/ 2005	Preparation, Characterization and Evaluation of Polymer-coated Fertilizer
49.	See Sim Hooi	2004/ 2005	Preparation and Characterization of Hydrogel from Sago Waste
50.	Aznida bt Azmi	2004/ 2005	Preparation, Characterization and Evaluation of Polylactic Acids Coated Fertilizer
51.	Nurulzuliana bte. Kepli	2004/ 2005	Preparation and Characterization of Polypropylene Blends with Rubber (ENR25) and Rubber Wood Fiber

52.	Fadzliza bt. Fadzil	2003/ 2004	Preparation and Characterization of Carboxymethylstarch From Sago Starch
53.	Prema a/p Ramiah	2003/ 2004	Preparation, Characterization and Evaluation of Polymer-coated Fertilizer
54.	Nur Shanirul Mohd. Rosli	2003/ 2004	Preparation and Characterization of Poly(Propylene) Blends with Natural Rubber and Empty Fruit Bunch
55.	Wahida Binti Mohamed Sabri	2003/ 2004	Preparation and Characterization of Blend Polyaniline with Sago Starch
56.	Kamil Hakimi Abd. Hak	2003/ 2004	Preparation Characterization and Evaluation of Polymer-coated Fertilizer
57.	Siti Fatimah Kassim@ Othman	2003/ 2004	Effect of Electron Beam Pretreatment on Biodegradation of Polyethylene and Polyethylene-Starch Blends in Soil
58.	Fariz Adzmi	2002/ 2003	Preparation Characterization and Evaluation of Polymer-coated Fertilizer
59.	Seah Keen Hoong	2002/ 2003	Preparation and Characterization of Carboxymethylstarch from Sago Starch
60.	Md. Uwaisulqarni Osman	2002/ 2003	Preparation, Characterization and Evaluation of polylactic Acids Coated fertilizer
61.	Norshuhaila Salleh	2002/ 2003	Study on Degradaation of HDPE Plastic Packaging Film by Electron Beam Irradiation
62.	Muzafar Yusuf	2002/ 2003	The Preparation and Characterization of Hydrogels Based On PEG/Starch Blends
63.	Mohd Faizal Bin Bahrom	2001/ 2002	Preparation, Characterization and Evaluation of Polymer Coated Fertilizer
64.	Nurul Hasyrin Hashim	2001/ 2002	Preparation and characterization of Polypropylene-EFB Fiber Composites
65.	Ooi Sock Siang	2001/ 2002	Radiation-Induced Degradation of LDPE
66.	Alan Tee Kian Keong	2001/ 2002	Effect of Metallic Oxide on Thermal Degradation of Low Density Polyethylene
67.	King Teck Sing	2001/ 2002	Preparation of Poly(styrene) Grafted EFB (Oil Palm Empty Fruit Bunch) Fiber
68.	Lawrencius Lakinson	2001/ 2002	Polymer Coating of Fertilizer For Controlled Release Application
69.	Mohamad Ikhwanee Rabaiee	2001/ 2002	Polymer Coating of Fertilizers

70.	Nafizo Othman	2001/ 2002	Preparation and Characterization of Copolymeric Hydrogels Base on N-Vinyl-2-Pyrrolidone
71.	Seah Keen Hoong	2001/ 2002	Preparation and Characterization of Carboxymethylstarch From Sago Starch
72.	Harris C. Raj Kumar	2000/ 2001	Study on Effect of Radiation of Octene Rubber
73.	Azma Abdullah	2000/ 2001	Preparation of Carboxymethyl Cellulose from Sago Starch
74.	Intan Zainura Bidin	2000/ 2001	Preparation and characterization of Carboxymethyl Starch from Sago Starch
75.	Tham Kok Chun	2000/ 2001	Dielectric Properties of Hydrogels
76.	Phua Boo	2000/ 2001	Thermal Analysis Study of Hydrogels
77.	Norfaizah Ab. Azib	2000/ 2001	Dielectric Properties of Sago Starch and Chitosan Blend
78.	Ng Suit Leong	2000/ 2001	Thermal Analysis Studies of Chitin/Chitosan
79.	Faizah Mohd Shato	2000/ 2001	Preparation and Characterization of Polymer-coated Fertilizer
80.	Sheikh Shamsul Anuar Amran Johari	2000/ 2001	Preparation and Characterization of Polymer-coated Fertilizer For Controlled Release
81.	Chin Chi Khei	1999/ 2000	Study of Polymer Degradation
82.	Wan Wai Hoe	1999/ 2000	Biodegradation of Polypropylene-Starch Blends in Aquatic Environment
83.	Cha Siang Long	1999/ 2000	Preparation and characterization of Copolymeric Hydrogels as Release Matrices
84.	Low Kok Fong	1999/ 2000	Preparation and Characterization of Polyethylene-Starch Blend
85.	Chai Teck Seong	1998/ 1999	Preparation and characterization of Biodegradable Plastics
86.	Cenderawati Abdul Manan	1998/ 1999	Preparation and characterization of Linear Low Density Polyethylene-Starch Blends
87.	Lim Chai Seng	1998/ 1999	Graft Polymerization of Acrylamide onto Low Density Polyethylene by Pre-Irradiation
88.	Lim Mun Ling	1998/ 1999	Preparation and Characterization of Poly(ethylene glycol) Based Hydrogels as Release Matrices
89.	Aniza Idris	1998/ 1999	Evaluation and Characterization of Hydrogels as a Release Matrix
90.	Noor Mohamed bin Mohamed Haniba	1998/ 1999	Preparation Optimization of Tin/Lead Electrodeposition in Semiconductor Industry

91.	Siti Rohaida Bt. Mohd. Shafian	1998/ 1999	Studies on Adhesive Polymethyl trimethoxy silane (PMTMS) in optoisolator production
92.	Abdullah Ghazali	1998/ 1999	Photodegradation of Polymer with Additives
93.	Soong Chen Kheong	1998/ 1999	Synthesis and characterization of LDHs-Nanocomposites
94.	Norafizah Mohamed Afiff	1997/ 1998	Preparation and Characterization of Superabsorbent Polymer
95.	Saliza Jam	1997/ 1998	Preparation Biodegradation of Polypropylene-Starch Blends in Aquatic Environment
96.	Leong Wai Shean	1997/ 1998	Release of Sodium Salicylate From Hydrogels Based on Chitosan
97.	Nuriyana Omar	1997/ 1998	Preparation and characterization of Low Density Polyethylene-Starch Blends
98.	Norhazlin Zainuddin*	1997/ 1998	Release of Sodium Salicylate From Hydrogels Based on Chitosan/PEG Blends (*Best graduate (Overall) Chemistry Department, 1998)
99.	Kamariahtul Izual Bte. Mohamed Tahir	1997/ 998	Preparation and characterization of Polypropylene-Starch Blends
100.	Zulawati Embong	1997/ 1998	Blending Chitosan Based With Sago Starch
101.	Shafiee Embong	1997/ 1998	Preparation and Properties of Polypropylene and Sago Starch Blend
102.	Md Zaki bin Ngadol	1997/ 1998	Preparation and characterization of Superabsorbent Materials Based on Chitosan
103.	Sitti Rysma bt Lencio	1997/ 1998	Photodegradation of Polymeric Materials Containing Flame-Retardant
104.	Mohammed Nafi Abdullah	1997/ 1998	Thermal and Photodegradation of Polystyrene
105.	Lim Guat Teng	1997/ 1998	Immobilization of Lipase from <i>Candida rugosa</i> on Poly(N-vinyl-2-pyrrolidone-co-2-hydroxyethyl methacrylate) Hydrogel for use in Synthesis of Fatty Ester
106.	Mohd Azhar bin Abdullah	1996/ 1997	Synthesis and Characterization of Superabsorbent Materials
107.	Ahmad As-Sadique bin Mohd Shahr	1996/ 1997	Preparation and Characterization of Superabsorbent Polymers
108.	Norlaili Binti Abu Bakar	1996/ 1997	Synthesis and Characterization of Hydrogel Based on AMPS (2-Acrylamido-2-Methylpropane Sulphonic Acid) as A Monomer
109.	Kalaiselvi a/pVadarajoo	1996/ 1997	Swelling Properties of Polymer Hydrogel based on AMPS (2-Acrylamido-2-Methypropane Sulphonic Acid) in Solution of Albumin Bovine

110.	Lim Sin Fa	1996/ 1997	Preparation and characterization of Sago Starch Graft Copolymer with Methyl Methacrylate
111.	Ganeshakumaran a/l Balamuniandy	1996/ 1997	Study on Polymer Degradation
112.	Norhayaniwati Abd. Razak	1996/ 1997	Polymer Degradation of Polystyrene and Polypropylene
113.	Roozana Md. Aman	1996/ 1997	Polymer Degradation of Polymethyl Methacrylate and Low Density Polyethylene
114.	Karen Tan Chek Houn	1996/ 1997	Release of Sodium Chloride from Copolymeric Hydrogels Based on N-vinyl-2-pyrrolidone
115.	Teoh Boon Ping	1996/ 1997	Graft Polymerization of Methyl Acrylate onto Sago Starch by Ceric Ammonium Nitrate Initiation: Preparation and Properties
116.	Phua Kok Ling	1996/ 1997	Stereoselective Reactions Using Hydrogel Immobilized Lipase
117.	Norazlinda Ibrahim	1996/ 1997	Immobilization of Lipase on Poly(2-hydroxyethyl methacrylate-co-Methyl Methacrylate) for Use in Organic Synthesis
118.	Wan Nor Zuaini Wan Abdullah	1995/ 1996	Study on Water in Synthetic Hydrogels by Differential Scanning Calorimetry
119.	Dahlia Mohamed	1995/ 1996	Effect of Varying Copolymer Composition on the Properties of Hydrogels
120.	Norizan Mat Ghani	1995/ 1996	Preparation and characterization of Copolymeric Hydrogels Based on N-vinyl-2-pyrrolidone
121.	Wong Chee Coun	1995/ 1996	Immobilization of Lipase from <i>Candida rugosa</i> on Poly(N-vinyl-2-pyrrolidone-co-2-hydroxyethyl methacrylate) Hydrogel for use in Organic Synthesis
122.	Hanizam Jumiran	1995/ 1996	Preparation and Characterization of Poly(N-vinyl-2-pyrrolidone-co-hydroxyethyl methacrylate) Hydrogels
123.	Aiza Harun	1995/ 1996	Immobilization of Lipase on Poly(N-vinyl-2-pyrrolidone-co-styrene) for Use in Organic Synthesis
124.	Fatimah Kaderi	1994/ 1995	Studies on Polymeric Hydrogels as Immobilisation Matrices
125.	Suriana Samsudin	1995/ 1996	Stability of Immobilized Lipase onto Hydrogels in Organic Synthesis
126.	Pusphamalar a/p Janarthanan	1995/ 1996	Preparation and Characterization of Styrene Grafted Sago Starch
127.	Saleha Zainuddin	1994/ 1995	Studies on polymeric hydrogels as immobilisation matrices



128.	Ad. Zamakhshari Bin Hashibullah	1994/ 1995	Immobilization of Lipase from <i>Candida rugosa</i> on Hydrogels and Suitability Study as a Catalyst in Organic Reactions
129.	Tan Sock Peng	1994/ 1995	Studies on the Miscibility and Tensile Properties of Natural Rubber-Polystyrene and Natural Rubber-Modified Natural Rubber Blends
130.	Lizana Ramly	1994/ 1995	Preparation and Characterization of Copolymeric Hydrogels as Release Matrices
131.	Lee Mooi Hwa	1994/ 1995	Study on Water in Synthetic Hydrogels by Differential Scanning Calorimetry
132.	Samsuddin Musa	1994/ 1995	Preparation and Characterization of Copolymeric Hydrogel based on N-vinyl-2-pyrrolidone
133.	Ahmad Fauzi Haji Ibrahim	1994/ 1995	Preparation and characterization of Crosslinked Poly(2-hydroxyethyl methacrylate-co-methacrylic acid)
134.	Tang Kar Lai	1994/ 1995	Blending of Natural Rubber and Synthetic Polymer

### 13. POSTGRADUATE EXAMINATION

#### a. Summary

Level	Examiner	Chairman of Examination Committee
PhD	20	4
MSc	36	9

#### b. Doctoral Program

No.	Student	Program (Univ)	Year	Title
1	Jamileh Amin	Ph.D. (UPM)	2013	Preparation, Characterization and Application Of Magnetic Conductive Polymer Composite ( <i>Internal Examiner</i> )
2	Norazlinaliza Salim	Ph.D. (UPM)	2013	Formation Of Palm Kernel Oil Esters Nanoemulsion Systems Containing Ibuprofen For Topical Delivery (Chairman)
3	Brian Teo Sheng Xian	Ph.D. (UPM)	2013	Design And Development Of New Colloidal Delivery System For Oxygen-Enriched Cosmeceutical Skin Care ( <i>Internal Examiner</i> )
4	Loo Chew Hung	Ph.D. (UPM)	2013	Formation Of Nanostructured Lipid Carrier System Loaded With Concentrated Palm Phytonutrients, ( <i>Internal Examiner</i> ).
5	Noor Izah Zahari	Ph.D. (UPM)	2013	Formation Of Palm-Based Parenteral Nanoemulsions Containing Gentamicin Sulfate ( <i>Internal Examiner</i> )
6	Siti Khadijah Ab. Rahman	Ph.D. (UPM)	2013	Fabrication And Characterization Of Molecularly Imprinted Polymer (Mip) For Melamine ( <i>Internal Examiner</i> )
7	Lee Ek Giat	Ph.D. (UPM)	2013	Studies On The Properties Of ZNO Nanoparticles And Its Photocatalytic Activity ( <i>Internal Examiner</i> )
8	Mohammad Hesham Abdelrahman Abu Alrub	Ph.D. (UPM)	2013	Lipase Catalysed Synthesis And Optimization Of Biologically Active Cinnamic Acid Amides ( <i>Internal Examiner</i> )
9	Nur'izzah Md Nasir	Ph.D. (UPM)	2013	The Effects Of Modified Montmorillonite In The Performance Of Glass Polyalkenoate Cement ( <i>Internal Examiner</i> )
10	Jong Chin Yun	Ph.D. (UPM)	2013	Synthesis And Photocatalytic Activity Of Bivo <sub>4</sub> , Ag-Bivo <sub>4</sub> And Cu-Bivo <sub>4</sub> In Degradation Of Methylene Blue ( <i>Internal Examiner</i> )

11	Muhammad Raznisyafiq Razak	Ph.D. (UPM)	2013	Preparation And Characterization Of Chelating Functional Group Grafted Kenaf Fiber For Adsorption Of Heavy Metal ( <i>Internal Examiner</i> )
12	Noraini Binti Abd Ghani	Ph.D. (UPM)	2012	Development of Green Surface Coating Materials of Wax Esters and Epoxides for Coating Industries ( <i>Internal Examiner</i> )
13	Samer Hasan Ahmad Husseinalali	Ph.D. (UPM)	2012	Preparation of Ellagic Acid, Hippuric Acid, Perindopril Erbumine and Cetirizine Nanocomposites for Drug Delivery ( <i>Chairman</i> )
14	Afarin Bahrami Shabestari	Ph.D. (UPM)	2012	Synthesis, Electrical and Thermal Investigation of Conducting Polymer Polypyrrole and Polypyrrole/Multiwall Carbon Nanotube Composite ( <i>Internal Examiner</i> )
15	Lim Chee Siong	Ph.D. (UPM)	2012	Preparation and Characterization of Natural Rubber/Clay, Polycaprolactone/Clay and Natural Rubber/Polycaprolactone/Clay Nanocomposites ( <i>Internal Examiner</i> )
16	Nursyamsyila Binti Mat Hadzir	Ph.D. (UPM)	2012	Optimizing the Formation of Fatty Acid Esters Nanoemulsions System for Non-steroidal Anti-inflammatory Drugs Delivery ( <i>Chairman</i> )
17	Uswatun Hasanah Binti Zaidan	Ph.D. (UPM)	2011	Immobilization of Lipase onto Aluminosilicate Supports as Biocatalysts for Fatty Acid Sugar Ester Syntheses ( <i>Internal Examiner</i> )
18	Saeideh Ebrahimiasl	Ph.D. (UPM)	2011	Synthesize of Nanocrystalline Tin Oxide and Optimization by using Statistical Algorithms for Solar Cell Application ( <i>Chairman</i> )
19	Maizatunlisa Binti Hj Othman	Ph.D. (UPM)	2011	Characterization and Modification of Biodegradable Poly(Lactic Acid) Bio-Composite ( <i>Internal Examiner</i> )
20	Khalina Binti Abdan	Ph.D. (UPM)	2005	Rheological Behaviour and Properties of Injection Moulded Oil Palm ( <i>Elaeis Guineensis Jacq.</i> ) Empty Fruit Bunch Fibers/Polypropylene Composites ( <i>Internal Examiner</i> )
21	Nor Yuziah Mohd Yunus	Ph.D. (UPM)	2004	Effect of Fiber Loading and Additives on the Properties of Rubberwood-Polypropylene Composites ( <i>Internal Examiner</i> )
22	Abdul Majed K. Najjar	Ph.D. (UPM)	2002	Preparations and Characterization of Grafted Chitosan and Sago Starch ( <i>Internal Examiner</i> ).

23	Md. Lutfor Rahman	Ph.D. (UPM)	1999	Synthesis and Characterisation of Acrylonitrile and Methacrylate Grafted Sago Starch ( <i>Internal Examiner</i> ).
24	Paymon Roustaian	Ph.D. (UPM)	1999	Studies on the Nutrition and Development of Artificial Diet for <i>Macrobrachium rosenbergii</i> Larvae, ( <i>Internal Examiner</i> ).

### c. Masters Program

No.	Student	Programme (Univ)	Year	Title
1	Tarig Elshaarani Mohamed Ali	M.Sc. (UKM)	2013	Preparation and Characterization of Bio-Composites from Jatropha Deoiled Cake and Medium Density Polyethylene ( <i>External Examiner</i> )
2	Sami Muhsen Sleman	M.Sc. (UPM)	2012	Concentration and Distribution of Linear Alkylbenzene (Labs) in Sediments of Selected Rivers in Malaysia as Molecular Markers for the Efficiency of Sewage Treatment ( <i>Internal Examiner</i> )
3	Nurrulhidayah Salamun	M.Sc. (UTM)	2012	Removal of Chromium(VI) from Aqueous Solution by using Zirconium/Mesostructure Silica Nanoparticles ( <i>External Examiner</i> )
54	Salwani Asyikin Zakarya	M.Sc. (UPM)	2012	Synthesis and characterization of carbon Nanotube Catalyst Substrate from Cockle (Andara Granosa) Shells and its Application in Transesterification of Palm Oil ( <i>Chairman</i> )
5	Mohd Yusof bin Hamzah	M.Sc. (UPM)	2012	Preparation and Characterization of Polyethylene Glycol diacrylate Microgels using Electron Beam ( <i>Internal Examiner</i> )
6	Nor Shazlirah Shazlyn Binti Abdul Rahman	M.Sc. (UPM)	2012	Synthesis of 4-(2,4 dichlorophenoxy) butyrate and 2-(3-chlorophenoxy) propionate Nanohybrids ( <i>Internal Examiner</i> )
7	V.S. Giita Silverajah	M.Sc. (UPM)	2012	Preparation and Characterization of Plasticized Poly(Lactic acid) with Epoxidized Palm Oil Blend ( <i>Internal Examiner</i> )
8	Aqilah Noor Binti Bahari	M.Sc. (UPM)	2012	Biodiesel Production from <i>Jatropha Curcas</i> Oil Via Heterogeneous Bismuth Vanadyl Phosphate Catalyst ( <i>Internal Examiner</i> )

9	Anith Liyana Binti Mohd Sis	M.Sc. (UPM)	2012	Effect of (3-Aminopropyl) Trimethoxysilane and (3-Aminopropyl) Trimethoxysilane on Mechanical, Thermal and Morphological Properties of Kenaf Fiber Reinforced Poly(lactic acid)/Poly(butylenes adipate-co-terephthalate) Blends ( <i>Internal Examiner</i> )
10	Mohd Azlan Kassim	M.Sc. (UPM)	2012	Scale-up Production of Palm Oil Esters using Immobilized Lipase ( <i>Chairman</i> )
11	Suhaizam Shahrul Affendy Suhaimi	M.Sc. (UPM)	2012	Vanadium Phosphate Catalyst Synthesized by Organic Method using Sonicated V <sub>2</sub> O <sub>5</sub> for selective Oxidation of <i>n</i> -butane to maleic anhydrate ( <i>Internal Examiner</i> )
12	Mahdi Shahmiri	M.Sc. (UPM)	2012	Synthesis and Characterization Copper Oxide Nanosheets and Their Antibacterial Activity ( <i>Internal Examiner</i> )
13	Samira Siyamak	M.Sc. (UPM)	2011	Effects of Coupling Agent on Mechanical and Thermal Properties of Biodegradable Poly(Butylene Adipate-Co-Terephthalate)/Oil Palm Empty Fruit Bunch Fiber Composites( <i>Internal Examiner</i> )
14	Kamarularifin Hadithon	M.Sc. (UPM)	2011	Preparation and Characterization of Whole Stem Kenaf Fibre-Polybutylene Adipate Co-Terephthalate Composites ( <i>Internal Examiner</i> )
15	Nurulhuda Abdullah	M.Sc. (UPM)	2011	Synthesis and Photocatalytic Activity of TiO <sub>2</sub> , Nb <sub>2</sub> O <sub>5</sub> and Nb <sub>2</sub> O <sub>5</sub> -Doped TiO <sub>2</sub> in Degradation of Methyl Orange ( <i>Chairman</i> )
16	Mohd Junaedy Bin Osman	M.Sc. (UPM)	2011	Preparation and Characterization of Poly(lactic acid)/Poly(Butylene Adipate-co-terephthalate)/Clay Nanocomposites ( <i>Chairman</i> )
17	Then Yoon Yee	M.Sc. (UPM)	2011	Preparation and Characterization of Composite of Tapioca Starch/Polycaprolactone/Clays Composites ( <i>Internal Examiner</i> )
18	Mohd Khairulniza Mansor	M.Sc. (UPM)	2010	Preparation and Characterization of Biodegradable Poly(Lactic Acid)/Tapioca Strach Composites ( <i>Internal Examiner</i> )
19	Sanaz Abdolmohammadi	M.Sc. (UPM)	2010	Preparation and Characterization of Polycaprolactone (PCL)/Chitosan/Clay Nanocomposite ( <i>Chairman</i> )

20	Tang Lok Hing	M.Sc. (UPM)	2010	Development of New Microwave Synthesized Vanadium Phosphate (VPO) Catalyst for N-Butane Oxidation Maleic Anhydride ( <i>Internal Examiner</i> )
21	Hairunnisa Ramli	M.Sc. (UPM)	2010	Preparation and Characterization of Epoxidised Palm Oil/Clay Nanocomposites ( <i>Internal Examiner</i> )
22	Zahra Nozari	M.Sc. (UPM)	2010	Effect of Fiber Loading and Silan Loading on Mechanical and Thermal Properties of PBAT/Oil Palm Empty Fruit Bunch Fiber Biocomposites ( <i>Internal Examiner</i> )
23	Mohd Nazri Mohd Rahim	M.Sc. (UPM)	2010	Preparation and Characterization of Poly Vinyl Chloride/Poly(Butylene Adipate-Co-Terephthalate) Nanocomposite ( <i>Internal Examiner</i> )
24	Faiza Abdul Bahar	M.Sc. (UPM)	2009	Controlled Release Formulation of Zn/Al-Hippurate Nanocomposite Prepared by Direct Co-Precipitation and Indirect Anion Exchange Methods ( <i>Internal Examiner</i> )
25	Siti Nur Afifi Ahmad	M.Sc. (UPM)	2009	Biocomposites from Biodegradables Polymer and Modified Oil Palm Empty Fruit Bunch Fiber ( <i>Internal Examiner</i> )
26	Akramsadat Tayefeh Morsal	M.Sc. (UPM)	2007	Preparation and Characterization of Rubberwood Fiber/Polypropylene Composite ( <i>Internal Examiner</i> )
27	Yeoh Ean Nee	M.Sc. (UPM)	2006	Preparation and Characterization of Poly(Methyl Methacrylate)/Clay and Poly(Methyl Acrylate)/Clay Nanocomposites by Microwave Irradiation and Conventional Heating ( <i>Internal Examiner</i> )
28	Cheong Mei Yee	M.Sc. (UPM)	2006	Synthesis and Characterization of Palm Based Resin for UV Coating ( <i>Internal Examiner</i> )
29	Gunasunderi a/p Raju	M.Sc. (UPM)	2005	Preparation of Methyl Acrylate (MA) Grafted Oil Palm Empty Fruit Bunch (OPEFB) Fiber and Its Application as a Filler in PVC/ENR Composites ( <i>Internal Examiner</i> )
30	Tan Wee Chang	M.Sc. (UPM)	2004	Removal of Hazardous Oxyanions by Hydrous Sn(IV) Dioxide and Sn(IV)-Loaded Ion Exchangers ( <i>Chairman</i> )
31	Aw Yeong Chee Hong	M.Sc. (UPM)	2004	Kenaf ( <i>Hibiscus Cannabinus.L</i> ) Bast Fiber Reinforced Unsaturated Polyester Composite ( <i>Internal Examiner</i> )

32	Adila Mohamad Jaafar	M.Sc. (UPM)	2004	Synthesis of 2,4 Dichlorophenoxy-acetate-Layered Double Hydroxides-Nanocomposites ( <i>Examiner</i> )
33	Mohd Hussain Haji Zain	M.Sc. (UPM)	2002	Themotropic side Chain Liquid Crystal Monomers: Synthesis and Characterization ( <i>Examiner</i> )
34	Norhazlin Zainuddin	M.Sc. (UPM)	2002	Synthesis and Characterization of Carboxymethylstarch ( <i>Examiner</i> )
35	Saliza Jam	M.Sc. (UPM)	2002	Graft Copolymerization of Methyl Acrylate onto Rubberwood Fibres ( <i>Examiner</i> )
36	Yiam Chong Bin	M.Sc. (UPM)	2001	Preparation and Characterization of Sago Starch-Graftpoly(Acrylic Acid) and Sago Strach-Graft-Poly(Methyl Acrylate) ( <i>Chairman</i> )
37	Wan Fadilah Wan Abdullah	M.Sc. (UPM)	2000	Thermomechanical Properties of Poly(methyl methacrylate-co-styrene) Copolymers ( <i>Examiner</i> )
38	Mariam Bt. Taib	M.Sc. (UPM)	1999	Effects of Water Activity and Modification on Lipase Activity During Esterification (( <i>Chairman</i> ))
39	Puspamalar a/p Janarthanan	M.Sc. (UPM)	1999	Preparation and Characterization of Polystyrene Grafted Sago Starch ( <i>Examiner</i> )
40	Isam Yassin Mahmood Qudsieh	M.Sc. (UPM)	1999	Grafting of Polyvinylpyrrolidone onto Sago Starch ( <i>Examiner</i> )
41	Saeed Eltaib	M.Sc. (UPM)	1999	Development of Slow Release Fertilisers for Pineapple ( <i>Examiner</i> )
42	Radzuan Jamaluddin	M.Sc. (UPM)	1999	Synthesis of Light Colour Medium Chain Triglycerides from Palm Kernel Oil Products ( <i>Examiner</i> )
43	Faraj Ahmad Faraj Abu-Ilaiwi	M.Sc. (UPM)	1998	Preparation and Characterization of Polyacrylonitrile and Poly(methyl methacrylate) Grafted Chitosan ( <i>Examiner</i> )
44	Zainab Idris	M.Sc. (UPM)	1997	Enzymatic Synthesis of Fatty Ester Amines (( <i>Chairman</i> ))
45	Norhaizan Md. Esa	M.Sc. (UPM)	1997	Studies on the Suitability of Poly(HEMA-co-MMA) as a support matrix for immobilisation of lipase ( <i>Chairman</i> )

## 14. PUBLICATIONS

### a. Published Work in Refereed Journals

1. Mahdavi, M., **Ahmad, M.B.**, Haron, M.J., Namvar, F., Nadi, B., Ab Rahman, M.Z.A. & Amin, J. (2013). Synthesis, Surface Modification and Characterisation of Biocompatible Magnetic Iron Oxide Nanoparticles for Biomedical Applications. *Molecules*, 18, 7533-7548; doi:10.3390/molecules18077533
2. Kalantari, K., **Ahmad, M.B.**, Shameli, K., Khandanlou, R. (2013). Size controlled synthesis of Fe<sub>3</sub>O<sub>4</sub> magnetite nanoparticles on exterior talc layers. *Research on Chemical Intermediates*, 2 Aug. 2013, pp. 1-18; doi:10.1007/s11164-013-1336-4
3. Shameli, K., **Ahmad, M.B.**, Khorramie, S.A., Lotfi, R., Zamanian, A., Shabanzadeh, P. (2013). Synthesis of Nickel Doped Cobalt Ferrite in Presence of SDS with Different Heat Treatment by Co-Precipitation Method. *Dig. J. Nanomater. Biostruct.* 8 (3), 981-985
4. **Ahmad, M.B.**, Gharayebi, Y., Salit, M.S., Hussein, M.Z., Shameli, K., Dehzangi, A., Jahangirian, H., Abdolmohammadi, S. & Behzad, K. (2013). Effect of SiO<sub>2</sub> particles on dispersion of montmorillonite (MMT) in polyimide nanocomposite during thermal imidization. *Research on Chemical Intermediates*, 13 July 2013, pp. 1-18; doi:10.1007/s11164-013-1301-2
5. Khandanlou, R., **Ahmad, M. B.**, Shameli, K. & Khalantari, K. (2013). Synthesis and characterization of rice straw/Fe<sub>3</sub>O<sub>4</sub> nanocomposites by quick precipitation method. *Molecules*, 18, 6597-6607; doi:10.3390/molecules18066597 (IF=2.428)
6. Azizi, S., **Ahmad, M. B.**, Hussein, M.Z. & Ibrahim, N.A. (2013). Synthesis, antibacterial and thermal studies of cellulose nanocrystals stabilized ZnO-Ag heterostructures nanoparticles. *Molecules*, 18, 6269-6280; doi:10.3390/molecules18066269 (IF=2.386)
7. Mahdavi, M., Namvar, F., **Ahmad, M.B.** & Mohamad, R. (2013). Green biosynthesis and characterization of magnetic iron oxide (Fe<sub>3</sub>O<sub>4</sub>) nanoparticles using seaweed (*sargassum muticum*) aqueous extract. *Molecules*, 18, 5954-5964; doi:10.3390/molecules18055954 (IF=2.386)
8. Khalantari, K., **Ahmad, M. B.**, Shameli, K. & Khandanlou, R. (2013). Synthesis of talc/Fe<sub>3</sub>O<sub>4</sub> magnetic nanocomposites using chemical co-precipitation method. *International Journal of Nanomedicine*, 8, 1817-1823; doi:10.2147/IJN.S43693 (IF=3.130)



9. Shameli, K., **Ahmad, M. B.**, Al-Mulla, E. A. J., Shabanzadeh, P. & Bagheri, S. (2013). Antibacterial effect of silver nanoparticles on talc composites. *Research on Chemical Intermediates*, April 2013, 1-13; doi:10.1007/s11164-013-1188-y (IF=0.697)
10. Al-Mulla, E. A. J., Ibrahim, N. A. B., Shameli, K., **Ahmad, M. B.** & Wan Yunus, W. M. Z. (2013). Extraction of molybdenum(VI) from hydrochloric acid solution by N,N'-carbonyl difatty amides. *Research on Chemical Intermediates*, 0922-6168; doi:10.1007/s11164-013-1135-y (IF=0.697)
11. Mahdavi, M., **Ahmad, M. B.**, Haron, M. J., Gharayebi, Y., Shameli, K. & Nadi, B. (2013). Fabrication and characterization of SiO<sub>2</sub>/(3-aminopropyl)triethoxysilane-coated magnetite nanoparticles for lead(II) removal from aqueous solution. *Journal of Inorganic and Organometallic Polymers and Materials*, 23(3), 599-607; doi:10.1007/s10904-013-9820-2 (IF=1.452)
12. Azizi, S., **Ahmad, M. B.**, Mahdavi, M. & Abdolmohammadi, S. (2013). Preparation, Characterization and antimicrobial activities of ZnO nanoparticles/cellulose nanocrystal nanocomposites, *BioResources*, 8(2), 1841-1851 (IF=1.418)
13. Darroudi, M., **Ahmad, M. B.**, Hakimi, M., Khorsand Zak, Hosseini, H. A., Zargar, M. (2013). Preparation, characterization, and antibacterial activity of  $\gamma$ -irradiated silver nanoparticles in aqueous gelatin. *International Journal of Minerals, Metallurgy and Materials*, 20(4), 403-409; doi:10.1007/s12613-013-0743-2 (IF=0.691)
14. Pushpamalar, V., Langford, S. J., **Ahmad, M. B.**, Hashim, K. & Lim, Y. Y. (2013). Absorption characterization of Ca<sup>2+</sup>, Na<sup>+</sup>, and K<sup>+</sup> on irradiation crosslinked carboxymethyl sago pulp hydrogel. *Journal of Applied Polymer Science*, 128(3), 1828-1833; doi:10.1002/app.38342 (IF=1.29)
15. Shameli, K., **Ahmad, M. B.**, Shabanzadeh, P., Jaffar Al-Mulla, E. A., Zamanian, A., Abdollahi, Y., Jazayeri, S. D., Eili, M., Jalilian, F. A. & Haroun, R. Z. (2013). Effect of Curcuma longa tuber powder extract on size of silver nanoparticles prepared by green method. *Research on Chemical Intermediates*, pp. 1 – 13; doi:10.1007/s11164-013-1040-4 (IF=0.697)
16. **Ahmad, M. B.**, Shameli, K., Tay, M. Y., Shameli, K., Hussein, M. Z. & Lim, J. J. (2013). Antibacterial effect of silver nanoparticles prepared in bipolymers at moderate temperature. *Research on Chemical Intermediates*, 1-19; doi:10.1007/s11164-012-1005-z (IF=0.697)

17. Pushpamalar, V., Langford, S. J., **Ahmad, M. B.**, Hashim, K. & Lim, Y. Y. (2013), Preparation of carboxymethyl sago pulp hydrogel from sago waste by electron beam irradiation and swelling behavior in water and various pH media. *Journal of Applied Polymer Science*, 128(1), 451–459; doi:10.1002/app.38192 (IF=1.29)
18. Al-Mulla, E. A. J., Ibrahim, N. A. B., Karkhi, I. H. T., Shameli, K., **Ahmad, M. B.** & Wan Yunus, W. M. Z. (2013). Effect of epoxidized palm oil on the mechanical and morphological properties of a PLA-PCL blend. *Research on Chemical Intermediates*, 0922-6168; doi:10.1007/s11164-012-0994-y (IF=0.697)
19. Shameli, K., **Ahmad, M. B.**, Al-Mulla, E. A. J., Ibrahim, N. A. B, Shabanzadeh, P., Rustaiyan, A., Abdollahi, Y., Bagheri, S., Abdolmohammadi, S., Usman, M. S. & Zidan, M. (2012). Green biosynthesis of silver nanoparticles using *callicarpa maingayi* stem bark extraction. *Molecules*, 17(7), 8506-8517; doi:10.3390/molecules17078506 (IF=2.386)
20. Shameli, K., **Ahmad, M. B.**, Zamanian, A., Sangpour, P., Shabanzadeh, P., Abdollahi, Y. & Zargar, M. (2012). Green biosynthesis of silver nanoparticles using *Curcuma longa* tuber powder. *International Journal of Nanomedicine*, 7, 5603–5610 (IF=3.130)
21. **Ahmad, M. B.**, Fatehi, A., Zakaria, A., Mahmud, S. & Mohammadi, S. A. (2012). Fabrication of an electrically-resistive varistor-polymer composite. *International Journal of Molecular Sciences*, 13(12), 15640-15652; doi:10.3390/ijms131215640 (IF=2.598)
22. **Ahmad, M. B.**, Lim, J. J., Shameli, K., Ibrahim, N. A. B, Tay, M. Y. & Chieng, B. W. (2012). Antibacterial activity of silver bionanocomposites synthesized by chemical reduction route. *Chemistry Central Journal*, 6:101; doi:10.1186/1752-153X-6-101 (IF=3.28)
23. Shameli, K., **Ahmad, M. B.**, Jazayeri, S. D., Sedaghat, S., Shabanzadeh, P., Jahangirian, H., Mahdavi, M. & Abdollahi, Y. (2012). Synthesis and characterization of polyethylene glycol mediated silver nanoparticles by the green method. *International Journal of Molecular Sciences*, 13(6), 6639–6650; doi:10.3390/ijms13066639 (IF=2.598)
24. **Ahmad, M. B.**, Hashim, K. B., Mohd Yazid, N. & Zainuddin, N. (2012). Preparation and characterization of hydrogels from grafting of vinyl pyrrolidone onto carboxymethyl cellulose. *Pertanika Journal of Science & Technology*, 20(2), 425–433.

25. Salih, A. M., Wan Yunus, W. M. Z, Dahlan, K. Z. M., Mahmood, M. H. & **Ahmad, M. B.** (2012). UV-curable palm oil based-urethane acrylate/clay nanocomposites. *Pertanika Journal of Science & Technology*, 20(2), 435 – 444.
26. Shameli, K., **Ahmad, M. B.**, Jazayeri, S. D., Shabanzadeh, P., Sangpour, P., Jahangirian, H. & Gharayebi, Y. (2012). Investigation of antibacterial properties silver nanoparticles prepared via green method. *Chemistry Central Journal*, 6, 73; doi:10.1186/1752-153X-6-73 (IF=3.28)
27. Al-Mulla, E. A. J., Ibrahim, N. A. B., Karkhi, I. H. T., Shameli, K., Zidan, M., **Ahmad, M. B.** & Wan Yunus, W. M. Z. (2012). Synthesis of palm oil-based fatty methylhydrazide. *Research on Chemical Intermediates*, 39(5), 2133-2139; doi:10.1007/s11164-012-0745-0 (IF=0.697)
28. **Ahmad, M. B.**, Gharayebi, Y., Salit, M. S., Hussein, M. Z., Ebrahimiasl, S. & Dehzang, A. (2012). Preparation, characterization and thermal degradation of polyimide (4-APS/BTDA)/SiO<sub>2</sub> composite films. *International Journal of Molecular Sciences*, 13, 4860-4872 (IF=2.598)
29. Al-Mulla, E. A. J., Ibrahim, N. A. B., Shameli, K., **Ahmad, M. B.** & Wan Yunus, W. M. Z. (2012). Fatty amides synthesized from vegetable oil as extractant of molybdenum(IV). *Research on Chemical Intermediates*, 39(3), 1313-1321; doi:10.1007/s11164-012-0687-6 (IF=0.697)
30. Khorrami, S. A., **Ahmad, M. B.**, Lotfi, R., Shameli, K., Sedaghat, S., Shabanzadeh, P. & Baghchesara, M. A. (2012). Preparation of  $\gamma$ -Al<sub>2</sub>O<sub>3</sub> nanocrystallites by sol-gel auto combustion process and production of Al-Al<sub>2</sub>O<sub>3</sub> aluminum matrix composites. *Digest Journal of Nanomaterials and Biostructures*, 7(3), 871-876 (IF=2.078)
31. Mahdavi, M., **Ahmad, M. B.**, Haron, M. J., Rahman, M. Z. A. & Azizi, S. (2012). Rapid removal of Cu(II) ion by chemically modified rubber wood fiber, *Environmental Engineering Science*, 29, 101-107 doi:10.1089/ees.2011.0129 (IF=0.877)
32. **Ahmad, M. B.**, Gharayebi, Y., Salit, M. S., Hussein, M. Z. & Shameli, K. (2011). Comparison of in-situ polymerization and solution-dispersion techniques in the preparation of polyimide/montmorillonite (MMT) nanocomposites. *International Journal of Molecular Sciences*, 12(9), 6040-6050 (IF=2.598)
33. **Ahmad, M. B.**, Lim, J. J., Shameli, K., Ibrahim, N. A. B. & Tay, M. Y. (2011). Synthesis of silver nanoparticles in chitosan, gelatin and chitosan/gelatin

- bionanocomposites by a chemical reducing agent and their characterization. *Molecules*, 16, 7237-7248 (IF=2.386)
34. Darroudi, M., **Ahmad, M. B.**, Ali Khorsand Zak, A. K., Zamiri, R. & Hakimi, M. (2011). Fabrication and characterization of gelatin stabilized silver nanoparticles under UV-light. *International Journal of Molecular Sciences*, 12, 6346-6356 (IF=2.598)
  35. **Ahmad, M. B.**, Tay, M. Y., Shameli, K., Hussein, M. Z., & Lim, J. J. (2011). Green synthesis and characterization of silver/chitosan/polyethylene glycol nanocomposites without any reducing agent. *International Journal of Molecular Sciences*, 12(8), 4872-4884 (IF=2.598)
  36. Shameli, K., **Ahmad, M. B.**, Wan Yunus, W. M. Z., Ibrahim, N. A., Zargar, M. & Moghaddam, M. G. (2011). Synthesis and characterization of silver/montmorillonite/chitosan bionanocomposites using the chemical reduction method and evaluation of antibacterial activity. *International Journal of Nanomedicine*, 6, 271-284 (IF=4.976)
  37. Mahdavi, M., **Ahmad, M. B.**, Haron, M. J. & Rahman, M. Z. A. (2011). Adsorption of Cr(III) from aqueous solutions by polyacrylamide-grafted rubberwood fibre: Kinetics, equilibrium and thermodynamic studies. *BioResources*, 6, 22-33 (IF=1.418)
  38. Darroudi, M., **Ahmad, M. B.**, Zamiri, R., Abdullah, A. H., Ibrahim, N. A. & Sadrolhosseini, A. R. (2011). Time-dependent preparation of gelatin-stabilized silver nanoparticles by pulsed Nd:YAG laser. *Solid State Sciences*, 13, 520-524 (IF=1.856)
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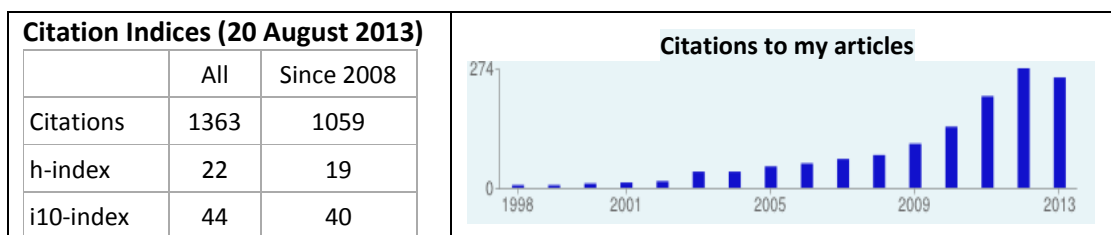
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144. Wan Yunus, W.M.Z., Lutfor, R., Ab. Rahman, M. Z., **Ahmad, M.B.**, Haron, M. J., Silong, S., Kassim, A. and Badhi, W. A. (1997). Graft Copolymerization of Methacrylate onto Sago Starch, *Seminar Penyelidikan, Fakulti Sains Dan Pengajian Alam Sekitar* 1997, UPM, 17<sup>th</sup> December 1997.

145. **Ahmad, M.B.**, Tan, K., Wan Yunus, W.M.Z. and Ab. Rahman, M. Z. (1997). Perparation and Characterization of Copolymeric Hydrogels as Release Matrices. Proceeding: 10th Malaysian Analytical Chemistry Symposium, UKM, Bangi, 21-23th October 1997.
146. Abdullah, M. A., Ngadol, M. Z., Ab.Rahman, M. Z. and **Ahmad, M.B.** (1997). "Synthesis and Characterization of Supersorbent Material. Proceeding: 5th Industrial Chemistry Seminar, UPM 23 – 24<sup>th</sup> April 1997.
147. Ghani, R., Ibrahim, N., **Ahmad, M.B.**, Razak, C.N.A., Salleh, A.B. and Basri, M. (1997). Immobilization of Candida Rugosa Lipase on Hydrogel from Poly(2-hydroxyethyl methacrylate-co-styrene) for Use in Organic Synthesis. Proceeding: 5th Industrial Chemistry Seminar, UPM 23 – 24<sup>th</sup> April 1997.
148. Lim, S.F., **Ahmad, M.B.** and Wan Yunus, W.M.Z. (1997). Preparation and Characterization of Sago Starch-Based Graft Polymer with Methyl Methacrylate. Proceeding: 5th Industrial Chemistry Seminar, UPM 23 – 24<sup>th</sup> April 1997
149. Teoh, B.P. and **Ahmad, M.B.** (1997). Graft Polymerization of Methyl Acrylate onto Sago Starch by Ceric Ammonium Nitrate Initiation: Preparation and Properties. Abstracts of 5th Industrial Chemistry Seminar, UPM 23 – 24<sup>th</sup> April 1997 (Winner of Best Poster Overall).
150. Chek Houn, K. T. and **Ahmad, M.B.** (1997). Preparation and Characterization of Copolymeric Hydrogels as a Release Matrix. Abstracts of 5th Industrial Chemistry Seminar, UPM 23 – 24<sup>th</sup> April 1997.
151. Wan Yunus, W.M.Z., Liew, Y.S.O, Basri, M., Razak, C.N.A., **Ahmad, M.B.** and Salleh, A.B. (1997). Immobilization of Lipase on Poly(2-hydroxyethyl methacrylate-N-vinyl-2-Pyrrolidone-Ethylene Glycol Dimethacrylate) for Lipid Hydrolysis. Abstracts of 5th Industrial Chemistry Seminar, UPM 23 – 24<sup>th</sup> April 1997.
152. Wan Yunus, W.M.Z., Ong, H.C., Basri, M., **Ahmad, M.B.**, Razak, C.N.A. and Salleh, A.B. (1997). Immobilization of Lipase on Synthetic Polymer Beads for Use in the Synthesis of Fatty Esters. Abstracts of 5th Industrial Chemistry Seminar, UPM 23 – 24<sup>th</sup> April 1997.
153. Ibrahim, S., Kassim, A., Suhaimi, H., **Ahmad, M.B.**, Dzulkefly, K., Ibrahim, R. and Wan Yunus, W.M.Z. (1997). Binding Study of Sodium Dodecyl Sulfate with Water-Soluble Polymer Poly(2-acrylamido-2-methylpropane sulphonic Acid) and Poly(vinyl acrylate) using Electrochemical Methods. Abstracts of 5th Industrial Chemistry Seminar, UPM 23 – 24<sup>th</sup> April 1997.
154. Salleh A.B., Esa, N.M., Wan Yunus, W.M.Z., **Ahmad, M.B.**, Basri, M. and Razak, C.N.A. (1997). Water Activity effect of lipase immobilised onto different composition of poly (2-hydroxyethyl methacrylate-co-methylmethacrylate). Proceeding: Enzyme Engineering IV, Beijing China, 12-17<sup>th</sup> October 1997.



155. **Ahmad, M.B.**, Harun, A., Razak, C.N.A., Salleh, A.B. and Basri, M. (1996). Immobilization of Lipase from *Candida rugosa* on Hydrogel from Poly(2-hydroxyethyl methacrylate-co-Styrene) for Organic Synthesis. Proceeding: 9th Malaysian Analytical Chemistry Symposium, USM 14-16<sup>th</sup> August 1996.
156. Wan Yunus, W.M.Z., Pusphamalar, J., Ab. Rahman, M.Z., **Ahmad, M.B.**, Silong, S. and Jelas, M.J. (1996). Graft Copolymerization of Styrene onto Sago Starch using Ceric Ammonium Nitrate as an Initiator. Proceeding: 9th Malaysian Analytical Chemistry Symposium, USM 14-16<sup>th</sup> August 1996.
157. Lim, W.H., Hamdan, S., Wan Yunus, W.M.Z., and **Ahmad, M.B.** (1996). Interaction of Polymer in Isotropic Solution of Mixed Surfactants. Proceeding: 9th Malaysian Analytical Chemistry Symposium, USM 14-16<sup>th</sup> August 1996.
158. Basri, M., **Ahmad, M.B.** and Wong C. C. (1996). Immobilization of Lipase from *Candida rugosa* on Poly(N-vinyl-2-pyrrolidone-co-2-hydroxyethyl methacrylate) Hydrogel for Use in Organic Synthesis. Abstracts of 4th Industrial Chemistry Seminar, UPM 18<sup>th</sup> April 1996. (Winner of Best Poster).
159. Mohamed, D. and **Ahmad, M.B.** (1996). The Effect of Varying Copolymer Composition on the Properties of Hydrogels. Abstracts of 4th Industrial Chemistry Seminar, UPM 18<sup>th</sup> April 1996.
160. Wan Abdullah, W. N. Z. and **Ahmad, M.B.** (1996). Studies on the Uptake and Release of Plant Nutrient from Hydrogels. Abstracts of 4th Industrial Chemistry Seminar, UPM 18<sup>th</sup> April 1996.
161. Mat Ghani, N. and **Ahmad, M.B.** (1996). Preparation and Characterization of Copolymeric Hydrogels based on N-vinyl-2-pyrrolidone. Abstracts of 4th Industrial Chemistry Seminar, UPM 18<sup>th</sup> April 1996.
162. **Ahmad, M.B.** (1995). Studies on Copolymeric Hydrogels as Release Matrices Abstracts of 3rd Industrial Chemistry Seminar, UPM 23-24<sup>th</sup> April 1995.
163. Tang, K.L., Wan Yunus, W.M.Z. and **Ahmad, M.B.** (1995). Miscibility and Thesile Propeties of Natural Rubber/Modified Poly(Methyl Methacrylate) Blends. Abstracts of 3rd Industrial Chemistry Seminar, UPM 23-24<sup>th</sup> April 1995.
164. Lee, M. H. and **Ahmad, M.B.** (1995). Studies on States of Water in Synthetic Hydrogels by Differential Scanning Calorimetry, Abstracts of 3rd Industrial Chemistry Seminar, UPM 23-24<sup>th</sup> April 1995.
165. Derasid, N., Musa, S. and **Ahmad, M.B.** (1995). Penyediaan dan Pencirian Kopolimer berdasarkan 1-Vinil-2-pirolidon. Abstracts of 3rd Industrial Chemistry Seminar, UPM 23 – 24<sup>th</sup> April 1995.
166. Lizana, R. and **Ahmad, M.B.** (1995). Preparation and Characterization of Copolymeric Hydrogels as Release Matrices. Abstracts of 3rd Industrial Chemistry Seminar, UPM 23 – 24<sup>th</sup> April 1995.

167. **Ahmad, M.B.** (1995). Preparation and Characterization of Copolymeric Hydrogels as Release Matrices for Growth Nutrient, Research Achievements under Sixth Malaysian Plan. FSAS, UPM Serdang, 20 – 21th June 1995.
168. **Ahmad, M.B.** (1995). Evaluation of Copolymeric Hydrogels as Release Matrices, Analytical Sciences Proceedings Vol. 1, (1), 25.
169. **Ahmad, M.B.** and Malcolm B. Huglin (1995) Thermal Analysis on the State of Water in Poly(methyl methacrylate-co-N-vinyl-2-pyrrolidone) Hydrogels. Proceeding of Sixth Asian Chemical Congress, Manila Philippines, 22–25<sup>th</sup> May 1995.
170. Salleh, A.B., Zainuddin, S., **Ahmad, M.B.**, Wan Yunus, W.M.Z., Basri, M., Abdul Razak, C. N. and Ampon, K. (1995). Immobilisation of Bacterial Cells on Hydrogel, Proceeding of 20th Conference of Malaysian Biochemical and Molecular Biology Society, Seremban, 19-20<sup>th</sup> Sept. 1995.
171. Mohd. Esa, N., Salleh, A. B., **Ahmad, M.B.**, Wan Yunus, W.M.Z., Basri, M., Abdul Razak, C. N. and Ampon, K. (1995). Effect of polymer composition in hydrogels on the activity of controlled release of lipase. Proceeding of the 20th Conference Biochemical and Molecular Biology Society, Seremban, 19-20<sup>th</sup> Sept. 1995.
172. Esa, N.M., **Ahmad, M.B.**, Wan Yunus, W.M.Z., Basri, M., Ampon, K., Razak, C. N. A. and Salleh, A.B. (1994). Hydrogel as a polymer for immobilization of lipase. Proceeding of 19th Annual Conference of the Malaysian Biochemical Society. UKM, 31<sup>st</sup> Oct. – 1<sup>st</sup> Nov. 1994.
173. **Ahmad, M.B.** (1994). The Use Differential Scanning Calorimetry in the Studies of the States of Water Hydrogels. Proceeding of 7th Malaysian Analytical Chemistry Symposium, Kuala Lumpur, 27-29<sup>th</sup> Sept. 1994.
174. Yahaya, A. and **Ahmad, M.B.** (1989). Study on the digestion techniques of vegetable samples for heavy metal analysis. Proceeding of 3rd National Analytical Chemistry Symposium, Universiti Teknologi Malaysia, Skudai, Johor, 18 – 20<sup>th</sup> Sept 1989.
175. **Ahmad, M.B.** (1988). Removal of disorder components in reconstituted myoglobin using ion-exchange chromatography. Proceeding of the 2nd National Analytical Chemistry Symposium, Universiti Sains Malaysia, Penang, 6-8<sup>th</sup> Sept 1988.
176. **Ahmad, M.B.** (1988). Nuclear Magnetic Resonance (NMR) Study on Hemeprotein: Disorder in Reconstituted Myoglobin. Proceeding of the First National Seminar on Spectroscopy, Universiti Teknologi Malaysia, Kuala Lumpur 12<sup>th</sup> April 1988.

### c. Books/Chapters in books

1. The Department of Occupational Safety and Health (2011): Guidelines on Occupational Safety and Health Management Systems, The Technical Committee on OSHMS Guidelines, Ministry of Human Resources Malaysia (ISBN 978-983-2014-75-1) 68 pp (as a TC member).
2. MS1722:2011 – Requirement, Malaysian Standard Occupational Safety and Health Management Systems (First revision). Involved as a member of the Technical Committee on Safe System of Work and Practices in Occupational Setting which developed this Malaysian Standard; managed by the Department of Occupational Safety and Health in its capacity as an authorised Standards-Writing Organisation.
3. UPM Co-curriculum Centre (2008). Module for Finishing School (*Modul Keterampilan Graduan*). A member of writing team.
4. Aziz, S.H.A., Sohadi, R.O.R., Tamsi, A., **Ahmad, M.B.** and Konting, M.M. (2007). Implementation of Soft Skills Module for Institutions of Higher Learning, Monograph 1: Teaching & Learning in IPTA: Development of Soft Skills (*Pelaksanaan Modul Pembangunan Kemahiran Insaniah Untuk Institusi Pengajian Tinggi, Monograf 1: Pengajaran & Pembelajaran IPTA: Pembangunan Modal Insan*), Centre for Academic Development (CADE) UPM (ISBN 978-967-960-221-0) 96-105.
5. **Ahmad, M.B.**, Suandi, T., Aziz, S.H.A., Mohamad Amin, J., Bakar, L., Mohamad, Y. and Abdullah, H. (2007). Professional Development Programme: Enhancement of Academic Staff in Institutions of Higher Learning, Monograph 2: Teaching and Learning Strategies and Methods (*Program Peningkatan Profesional: Pemantapan Pegawai Akademik Institusi Pengajian Tinggi, Monograf 2: Strategi dan Kaedah Pengajaran dan Pembelajaran*), Centre for Academic Development (CADE) UPM (ISBN 978-967-960-222-7) 427-435.
6. Konting, M.M., **Ahmad, M.B.**, Ghazali, N.E.A., Abd. Salam, M.A., Ismail, I. (2007). Evaluation of Book Plan Scheme, Monograph 4: Policy and Management of Teaching and Learning (*Penilaian Pelaksanaan Skim Book Plan, Monograf 4: Polisi dan Pengurusan Pengajaran dan Pembelajaran*), Centre for Academic Development (CADE) UPM (ISBN 978-967-960-224-1) 127-159.
7. Sidek Hj. Ab. Aziz, Yusof, K., Sohadi, R.O.R., Konting, M.M., **Ahmad, M.B.**, Kasah, C.Z., Sabran, M.S. and Ibrahim, R. (2007). Implementation Strategy of Soft Skills in Universiti Putra Malaysia, Monograph 6: Issues and Challenges in Higher Education (*Strategi Pelaksanaan Kemahiran Insaniah di Universiti Putra Malaysia, Monograf 6: Isu Dan Cabaran Pendidikan Tinggi*), Centre for Academic Development (CADE) UPM (ISBN 978-983-3168-12-5), 94-109.
8. Kementerian Pengajian Tinggi (2005). Modul Kursus Asas Pengajaran dan Pembelajaran Pensyarah Baru IPTA / Jabatan Pengurusan IPT, Kementerian Pengajian Tinggi Malaysia, Shah Alam: Pusat Penerbitan Universiti (UPENA), UiTM, 289 p. ISBN 9789679582093

9. Modul Kursus Asas Pengajaran dan Pembelajaran, Pensyarah Baru IPTA (2005), Jabatan Pengurusan IPT, Kementerian Pengajian Tinggi, Shah Alam: Pusat Penerbitan Universiti, UiTM. Modul 2: Rekabentuk Kurikulum.
10. MS1722: Part 1: 2005, Occupational Safety and Health Management Systems – Part 1: Requirement (Malaysian Standard). Involved as a member of the Technical Committee on Safe System of Work and Practices in Occupational Setting which developed this Malaysian Standard; managed by the Department of Occupational Safety and Health in its capacity as an authorised Standards-Writing Organisation.
11. MS 1722: Part 2: 2003, Occupational Safety and Health Management Systems – Part 2: Guidelines (Malaysian Standard). Involved as a member of the Technical Committee on Safe System of Work and Practices in Occupational Setting which developed this Malaysian Standard; managed by the Department of Occupational Safety and Health in its capacity as an authorised Standards-Writing Organisation.
12. Salleh, A.B., Esa, N. M., Basri, M., Ab. Razak, C.N. , Wan Yunus, W.M.Z. and Ahmad, M.B., (2001). Immobilization of Lipase on Hydrogels (in Methods in Biotechnology, Vol. 15: Enzymes in Non Aqueous Solvents - Method and Protocols; E. N. Vulfson, P.J. Halling and H. L. Holland (eds.) Humana Press Totowa, NJ 2001, Volume 15, Part I, 41-48, DOI: 10.1385/1-59259-112-4:41.
13. Dewan Bahasa dan Pustaka (1994). Glossary of Mineral Science, Ceramic, Glass and Metallurgy: English-Malay Language Terminology Dictionary. Mineral Science, Ceramic, Glass and Metallurgy Terminology Committee. Publisher: DBP, Kuala Lumpur (1994). 137 pages.
14. Ahmad, M.B. and Desa, M. Z. eds. (1989). Module for Local Low-Cost Laboratory Apparatus Assembly Workshop, Chemistry Department UPM.

#### **d. Others**

1. **Ahmad, M.B.** (1993). Preparation and Characterization of Copolymeric Hydrogels based on N-vinyl-2-pyrrolidone, Ph.D. Thesis, Salford University, UK 299pp.
2. **Ahmad, M.B.** (1982). Reconstitution of Modified Haem into Myoglobins, M.S. Thesis, University of Kentucky, Lexington USA, 120pp.

## 15. CONSULTATION

1. **Malaysian National Expert** of ASEAN Sub-Committee on Infrastructure in Research and Development (SCIRD) Project on Public-Private Collaboration in Science and Technology: Policy Development, Training and Awareness 2003-2004. The project sponsored by ASEAN secretariat and Japan-ASEAN Exchange Program (JAEP). (Selected by Ministry of Science, Technology and the Environment to represent Malaysia).
2. **Steering and Think Tank Committee** for the Direction and Development Science and Technology for the State of Selangor (*Ahli Kumpulan Pemikir Pendidikan Sains dan Teknologi Negeri Selangor di bawah Jawatankuasa Tetap Sains dan Teknologi Negeri Selangor*), 1997-1999.
3. **Assesor** for the Development of Examination Questions, Matriculation Program, Ministry of Education, Malaysia, 1999 - 2001
4. **Panel Member**, Intensification of Research in Priority Areas (IRPA), UPM for Manufacturing Sector, 1998 – 2001
5. **Trainer**, Academic Enhancement Program (AEP), Universiti Teknologi MARA, 1999/2000
6. **Consultant** to Advanced Packaging Technology Sdn Bhd, Bandar Baru Bangi on Polymer Analysis, July 1996
7. **Chairman** of the seminar ASEAN SCIRD Public-Private Collaboration in Science and Technology: Policy Development, Training and Awareness di Hotel Istana, Kuala Lumpur, Malaysia, 24 – 26 June 2003. Presenting by 65 participants from ASEAN country and Japan.
8. **Technical Committee Member**, Safe System of Work and Practices in Occupational Setting for preparation Malaysian Standards, Ministry Human Resources Malaysia. 2003-present

## 16. CONFERENCES, WORKSHOPS AND SEMINARS ATTENDED

### a. As a Paper Presenter

1. Gel Permeation Chromatography Workshop, Faculty of Science UPM, 9 April 2013, organized by Malaysian Institute of Chemistry & Lab Science Solution (Application of Gel Permeation Chromatography in Polymer Separation) – as an invited speaker
2. International Seminar of Analytical Sciences 2012, Medan, Indonesia, 12-13 Nov. 2012 (Synthesis and Antibacterial Activity of Silver Nanoparticles prepared in Polyethylene Glycol Media by Green Method)
3. Cambodia-Malaysia Chemical Conference, Siem Reap, Cambodia, 19-21 Oct. 2012 (Antibacterial Activity of Silver Nanoparticles in Chitosan, Gelatin and Chitosan/Gelatin Bionanocomposites)

4. 17th Malaysian Chemical Congress 2012, Institut Kimia Malaysia, Kuala Lumpur, 15-17 Oct. 2012 (Preparation and Characterization of Hydrogels based on Carboxymethylcellulose and Poly(vinyl pyrrolidone))
5. 4th Fundamental Science Congress 2012 (FSC2012) 17-18 July 2012 (Synthesis and Characterization of Polyethylene Glycol Mediated Silver Nanoparticles by the Green Method) – Invited speaker
6. 24<sup>th</sup> Regional Symposium of Malaysia Analytical Sciences (SKAM24), Langkawi, Malaysia, 21-23 Nov. 2011 (Preparation of Inorganic Polymer Membrane with Clay for Metal Separation Application by Hybridization of Adsorption-Microfiltration Technology)
7. Malaysia Polymer International Conference 2011 (MPIC 2011), Bangi, Selangor, 18-20 Oct. 2011 (Preparation and Properties of Ceramic Microfiltration Membranes from Montmorillonite KSF)
8. Invention, Research and Innovation Exposition 2011 (*Pameran Rekacipta, Penyelidikan dan Inovasi*, PRPI), 19-21 Jun 2011 (Synthesis and Characterization of Silver/Montmorillonite/Chitosan Bionanocomposites by Chemical Reduction Method and Their Antibacterial Activities)
9. Invention, Research and Innovation Exposition 2011 (*Pameran Rekacipta, Penyelidikan dan Inovasi*, PRPI), 19-21 Jun 2011 (Synthesis of Silver/ Montmorillonite Nanocomposites Using  $\gamma$ -Irradiation)
10. 2nd Workshop & Conference on Nanotechnology, Universiti Kebangsaan Malaysia (UKM), Bangi, Selangor, 12-13 March 2011 (Comparison of In Situ Polymerization and Solution-Dispersion Techniques in the Preparation of Polyimide/ Montmorillonite)
11. Fundamental Science Congress 2010, Kompleks Mahasiswa Universiti Putra Malaysia, 18-19 May 2010
12. 16th Malaysian Analytical Chemistry Symposium (SKAM-16), Holiday Inn Damai Beach Resort, Kuching Sarawak, 9-11 Sept. 2003.
13. National Symposium on Polymeric Materials 2002 UTM, Skudai Johor Bahru, Johor, 30 – 31 Dec. 2002
14. 4th Kedah State School Principals Convention 2002, Hotel Park Avenue, Sungai Petani Kedah, 6 Oct. 2002.
15. National Polymer Seminar 2001, National Institute of Occupational Safety and Health (NIOSH) Bandar Baru Bangi, 2-3 Oct. 2001 (*and as a Session Chairman*)
16. Cellucon International Conference 2001 on Lignocellulose: Materials of the Millennium; Technology and Application”, Hotel Paradise Sandy Beach Penang, 20-22 Mac 2001
17. 13th Malaysian Analytical Chemistry Symposium (SKAM-13), Port Dickson, Negeri Sembilan, 6 – 7 Sept. 2000
18. Malaysian Chemical Congress, Kuching Sarawak 8 – 10 Nov. 1999

19. 12th Malaysian Analytical Chemistry Symposium (SKAM-12), Universiti Kolej Terengganu, Kuala Terengganu, 7-8 Sept. 1999
20. 11th Malaysian Analytical Chemistry Symposium, Universiti Teknologi Malaysia, Skudai, Johor, 4-5 Nov. 1998
21. Research Seminar, Faculty of Science and Environmental Studies, (Fakulti Sains dan Pengajian Alam Sekitar) 1997, UPM, 17 Dis. 1997
22. 9th Malaysian Analytical Chemistry Symposium, Universiti Sains Malaysia, Penang, 1996
23. Sixth Asian Chemical Congress, Manila Philippines, 22 – 25 May 1995
24. 8th Malaysian Analytical Chemistry Symposium, Universiti Pertanian Malaysia, Serdang, 1995
25. Seminar on Research Achievements under the Sixth Malaysian Plan, UPM, Jun 1995
26. 3rd Industrial Chemistry Seminar, UPM, 23 – 24 April 1995
27. Seminar on Research Achievements under the Fifth Malaysian Plan, UPM, 17 - 18 Jun 1991
28. 3rd National Analytical Chemistry Symposium, Universiti Teknologi Malaysia, Skudai, Johor, 18 – 20 Sept 1989
29. 2nd National Analytical Chemistry Symposium, Universiti Sains Malaysia, Pulau Pinang, 6 – 8 September 1988

**b. As a Member of the Organizing Committee**

1. Cambodia-Malaysia Chemical Conference, Siem Reap, Cambodia, 19-21 Oct. 2012
2. The 17th. Malaysian Chemical Congress 2012, Institut Kimia Malaysia, Kuala Lumpur, 15-17 Oct. 2012.
3. Conference on Teaching and Learning at Higher Education 2007 (Persidangan Pengajaran dan Pembelajaran di Peringkat Pengajian Tinggi), Palace of Golden Horses Hotel, Sri Kembangan Selangor, Malaysia, 12-14 December 2007.
4. ASEAN SCIRD Public-Private Collaboration in Science and Technology: Policy Development, Training and Awareness Seminar 2: Business and technology partnership development and Intellectual property Management. Kuala Lumpur, Malaysia 24 – 26 June 2003 (as the chairman of the Organizing Seminar).
5. Advanced Technology Congress 2003 (ATC2003), Putrajaya Marriott Hotel, Putrajaya; 20-21 May 2003.
6. Asia Pacific Symposium on Information and Communication Technology in Chemical Education, Research and Development 2002 (ICTinCERD 2002), Corus Hotel, Jalan Ampang Kuala Lumpur, 28-30 March 2002.

7. Workshop on Science and Technology for Selangor State Secondary Schools Principals, Grand Blue Wave Hotel, Shah Alam, 24-25 October 2001
8. 13<sup>th</sup> Malaysian Analytical Chemistry Symposium (SKAM-13), Port Dickson, 6 – 7 September 2000
9. Industrial Chemistry Seminar V, IDEAL UPM, 23 – 24 April 1997
10. 10<sup>th</sup> Malaysian Analytical Chemistry Symposium (SKAM-10), Universiti Kebangsaan Malaysia, Bangi, 1997.
11. Industrial Chemistry Seminar IV, IDEAL UPM, 18 April 1996
12. 8<sup>th</sup> Malaysian Analytical Chemistry Symposium (SKAM-8), Universiti Putra Malaysia, 22 -24, Aug. 1995
13. 3<sup>rd</sup> Industrial Chemistry Seminar (SKI III), IDEAL UPM, 23 – 24 March 1995
14. 7<sup>th</sup> Malaysian Analytical Chemistry Symposium (SKAM-7), Kuala Lumpur, 1994
15. Seminar on Teaching and Learning Development (Perkembangan Pengajaran dan Pembelajaran Akademik), Universiti Pertanian Malaysia, Sarawak, 22<sup>nd</sup> February 1986
16. National Conference on Pepper in Malaysia, Kuching Sarawak, 16 – 17 December 1985

**c. As a Participant**

1. ANGKASA Cooperative Enhancement Programme (Program Memperkasa Jawatankuasa Perhubungan ANGKASA) for Central and South zones, Langkawi, Malaysia, 7-9 Dec. 2012
2. Transformational Leadership for Future Leaders (Persidangan Himpunan Bakat), Faculty of Biotechnology and Biomolecule Science, UPM, 22-23 Nov. 2012
3. Intellectual Discourse (Wacana Intelek): Towards Nurturing a Balanced Academia (Akademia Pemangkin Akademik Seimbang), Academic Development Centre (Pusat Pembangunan Akademik), UPM, 21 Nov. 2012
4. NanoMalaysia Summit and Expo 2012, Kuala Lumpur Convention Center (KLCC), 5-7 Nov. 2012
5. Training for Master Trainers - Modular Approach, AKEPT Campus, Ministry of Higher Education, Malaysia, 29-30 Oct. 2012
6. UPM Succession Planning, Faculty of Engineering, UPM, 3/8/2012
7. Educate12- Transformation in Higher Education Conference: Assessing Learning Assessment, Continental Hotel Kuala Lumpur, 3-4/7/2012
8. Scientific Educational Seminar, Saintis Gemilang Room, UPM, 21/5/2012



9. University Aspirational Program: Towards the Internationalisation of Academic Scholars, Saintis Gemilang Room, UPM, 21/5/2012
10. Workshop to set up Questions for National Chemistry Quiz, K2M 2012, Awana Genting, Malaysia, 20-22/4/2012
11. Transnational Education - Opportunity and Challenge in 21st Century : Malaysian and European Perspectives
12. Key Performance Indicators Workshop, Faculty of Science, UPM, Palm Garden, Putrajaya, Malaysia, 16/2/2012
13. Science Colloquium 2012, Saintis Gemilang Room, UPM, 15/2/2012
14. Cooperatives Assessment and Performance Evaluation Course (Kursus Penilaian dan Pengurusan Prestasi Koperasi KL2), Sepang, Malaysia 30-31/1/2012
15. UPM Research Policy Workshop (Bengkel Pemurnian Polisi Penyelidikan UPM), Colmar Bukit Tinggi, Pahang, Malaysia, 30-31/1/2012
16. Nano Malaysia Summit 2011, PWTC Kuala Lumpur, 14-16 Dec. 2011
17. Malaysian Analytical Chemistry Symposium (Simposium Kimia Analisis Malaysia SKAM-24), One Hotel Helang Langkawi, 21-23/11/2011
18. Regional Fundamental Science Congress 2011, UPM Serdang, Selangor, 5-6/7/2011
19. Workshop on Strengthening Students-Centred Learning (SCL) and Soft Skills (Bengkel Pementapan Pembelajaran Berpusatkan Pelajar dan Kemahiran Insaniah KI), Series No 2, 2011, UPM Serdang, 15 August 2011
20. Dialogue on Promotional framework For Occupational Safety and Health Act (OSHA 1994) Convention, Putrajaya International Convention Centre (PICC), 10<sup>th</sup> May 2011
21. Basic Course on "Family Financial Management" and "Understanding Financial Statement of Cooperatives", Tanahmas Hotel, Sibu, Sarawak, 23-24 April 2011
22. Understanding Learning and Teaching in Higher Education: Improving the Quality of Student Learning, Concorde Hotel, Shah Alam, 11<sup>th</sup> November, 2010
23. Workshop on Assessment of KPI for Social Sciences in Public Universities, Faculty of Human Ecology, UPM, 26<sup>th</sup> October, 2010
24. Analytical Chemistry Symposium (Simposium Kimia Analisis Malaysia SKAM-23), Permai Inn Kuala Terengganu, 4-6<sup>th</sup> October, 2010
25. Seminar on Safety and Occupational Health in Educational Institutions (Keselamatan dan Kesihatan Pekerjaan di Institusi Pendidikan), Universiti Malaysia Pahang (UMP), Kuantan Pahang, 5<sup>th</sup> July, 2010
26. Fundamental Science Congress 2010, Kompleks Mahasiswa UPM, 18-19<sup>th</sup> May, 2010

27. Seminar on Understanding Learning and Teaching In Higher Education : Improving The Quality of Student Learning, Hotel Concorde, Shah Alam Selangor, 11<sup>th</sup> November 2010
28. Technical Committee Workshop on Safe System of Work and Practices In Occupational Setting, PNB ILHAM Resort, Port Dickson, Negeri Sembilan, 18-21<sup>th</sup> October 2010
29. Seminar *EDUCATE10* “Transforming In Learning And Teaching In Higher Education : A Paradigm Shift”, Nikko Hotel, Kuala Lumpur, 7<sup>th</sup> October 2010
30. Workshop on the Development of Procedures for the Disposal of Waste, UPM Serdang, 7<sup>th</sup> September 2010
31. UPM 2011-2015 Strategic Planning Workshop, Universiti Putra Malaysia, Hotel Renaissance, Melaka, 23-25<sup>th</sup> April 2010
32. 14<sup>th</sup> Industrial Chemistry Seminar, UPM Serdang, Selangor, 10<sup>th</sup> April, 2010
33. Training of Master Trainer Program (Program Latihan Untuk Jurulatih Utama) on “Quality Teaching For Learning In Higher Education”, Swiss Garden Hotel, Kuala Lumpur, 23-25 February 2010
34. Institutional Briefing on Master Trainer in Teaching and Learning by AKEPT, Ministry of Higher Education (Taklimat Master Trainer Dalam Bidang Pembelajaran Dan Pengajaran), UPM Serdang, 4<sup>th</sup> February 2010
35. National Seminar and Dialogue on the Development of the 1Malaysia Culture, Universiti Malaya Kuala Lumpur, 22-23<sup>rd</sup> December 2009
36. 2<sup>nd</sup> Workshop on Strengthening and Enhancing Academic Excellence, by the Malaysian Academic Associations Council (MAAC), Avillion Legacy Hotel , Melaka, 21-24<sup>th</sup> December 2009
37. The 9<sup>th</sup> National Symposium on Polymeric Materials 2009, Residence Hotel, UNITEN Kajang, 14-16<sup>th</sup> December 2009
38. International Conference On Teaching And Learning In Higher Education 2009 “Quality In Higher Education”, The Legend Hotel Kuala Lumpur, 23-25<sup>th</sup> November 2009
39. Course on “Building High Performance Teams To Achieve KPI Targets”, PNB Darby Park Kuala Lumpur, 4-5<sup>th</sup> August 2009
40. Seminar on “Global Economic Crisis: Origin, Effect and Policy Responses”, Residence Hotel UNITEN Putrajaya, 15-16<sup>th</sup> June 2009
41. Training Program on “Creative Thinking In Leadership Change & Six Thinking Hats”, by AKEPT, Ministry of Higher Education, Sunway Resort Petaling Jaya, 3-4<sup>th</sup> June 2009
42. Training Program on “Lead Without Title; Get To World Class” by AKEPT, Ministry of Higher Education, Marriort Hotel, Putrajaya, 13<sup>th</sup> May 2009

43. Seminar on “The Future Of Marketing” by Professor Dr.Philip Kotler, Kuala Lumpur Convention Center (KLCC), 29<sup>th</sup> May, 2009
44. Workshop on Strengthening the implementation of Induction Courses in Public Higher Learning Institutions in Malaysia, Riverside Majestic Hotel, Kuching Sarawak, 24-26<sup>th</sup> April 2009
45. Dialogue on Contemporary Issues between the Malaysian Academic Association Council with the Minister of Higher Education, Prince Hotel & Residence Kuala Lumpur, 19-20<sup>th</sup> July, 2009
46. Seminar on Innovation In Teaching And Learning For Higher Education by Tony Buzan (UK), Concorde Hotel, Shah Alam, 15<sup>th</sup> April 2009
47. The 5<sup>th</sup> Regional Workshop on Institutional Restructuring In Higher Education In Asia, Universiti Malaysia Sabah (UMS), 28 July-1<sup>st</sup> August 2009, (as UPM Representative)
48. International Conference on Teaching and Learning in Higher Education, Legend Hotel Kuala Lumpur, 23-25<sup>th</sup> November, 2009
49. Transformational Practice Programme: Linking Teaching & Research, 3-4<sup>th</sup> November, 2009
50. 10<sup>th</sup> Asian Conference on Analytical Sciences, Putra World Trade Centre (PWTC) Kuala Lumpur, 11-13<sup>th</sup> August, 2009
51. Course on Building High Performance Team to Achieve KPI Targets, Kuala Lumpur, 4-5<sup>th</sup> August, 2009
52. Invention, Research and Innovation Exposition 2009, UPM Serdang, 28<sup>th</sup> July, 2009
53. Regional Workshop on Institutional Restructuring in Higher Education, Universiti Malaysia Sabah (UMS) Kota Kinabalu, Sabah, 28<sup>th</sup> July to 1<sup>st</sup> August, 2009
54. Training and Workshop on the Use of Quality Tools and Initiatives in Teaching & Learning, Kuala Lumpur, 23<sup>rd</sup> July, 2009
55. National Seminar on the Development of Safety and Occupational Health in the Institutes of Higher Learning in Malaysia, Grand Blue Wave Hotel, Shah Alam, 14-16<sup>th</sup> July, 2009
56. Course on Safety and Occupational Law for Senior Management and Professional Officers in Institutes of Higher Learning, organized by the Registrar Office, UPM, 23<sup>rd</sup> June 2009.
57. Seminar on Six Thinking Hats by Edward De Bono, Sunway Resorts & Spa, Malaysia, 4<sup>th</sup> June, 2009
58. Seminar on Innovation in Teaching and Learning for Higher Education, Shah Alam, Selangor 14<sup>th</sup> April, 2009
59. 13<sup>th</sup> Industrial Chemistry Seminar, Palm Garden Hotel Putrajaya, 15<sup>th</sup> April, 2009

60. Web-Based Teaching and Learning System in Education and Training, organised by Clombo Plan National Institute of Technical Teachers' Training and Research Taramani, Chennai, India, 9-20th March 2009
61. Regional Programme on Web-based Teaching & Learning System in Teaching & Training at NITTTTR Chennai, India 9-20 March 2009
62. International Symposium on ICT in Education: Challenges and Innovations, Chennai, India, 12<sup>th</sup> March, 2009
63. Conference on Teaching & Learning in Higher Education 2007 (CTLHE07), Palace of Golden Horses, Malaysia, 12-14<sup>th</sup> December, 2012
64. National Conference on Educational Management, (NATICOME'08), Crown Princess Hotel, Kuala Lumpur, 2-3<sup>rd</sup> December 2008
65. Workshop on Improving One's Own Practice Through Action Research, University Malaya Kuala Lumpur, 25<sup>th</sup> August 2008
66. Seminar on Challenges and Opportunities of Cooperative Movement in the ASEAN Region and the Signing of MOU between ANGKASA, Iran & Brunei, Hotel Quality, Shah Alam Selangor, 8-9<sup>th</sup> August 2008
67. Scholarship of Teaching & Learning Seminar, University of Malaya, 27<sup>th</sup> June 2008
68. Seminar on Managing Complex Change: Strategic Leadership in Higher Education, The Legend Hotel Kuala Lumpur, 12<sup>th</sup> June 2008
69. Workshop on Preparing Guidelines for the Direct Appointment of Senior Lecturers (Grade 51), Concorde Hotel, Shah Alam Selangor, 16-18<sup>th</sup> May 2008
70. Strategic Planning Workshop for Universiti Putra Malaysia (UPM), Renaissance Hotel Melaka, 3-5<sup>th</sup> April 2008
71. Editorial Workshop for University's Annual Report 2007, Guamon Hotel, Port Dickson, 28-30<sup>th</sup> March, 2008
72. Workshop on e-Learning Technology, UPM Serdang, 26-27<sup>th</sup> March 2008
73. Workshop On e-Lecture and e-Bibliography for Academics, Faculty of Science Universiti Putra Malaysia, 21<sup>st</sup> March, 2008
74. Course on Safety and Occupational Law for Senior Management and Professional Officers in Institutes of Higher Learning, organized by the Registrar Office, UPM, 17<sup>th</sup> March 2008
75. Workshop on Competency-Level Assessment Guidelines for Staff in Public Institutions of Higher Learning, Impiana KLCC Hotel & SPA Kuala Lumpur, 26-28<sup>th</sup> Februari 2007
76. Outcome-based Approach Workshop: Monitoring and Assessment, Equatorial Hotel Kuala Lumpur, 20-21<sup>st</sup> November, 2007
77. Seminar on Credit System in the Malaysian Qualifications Framework (MQF), CAde Faculty of Engineering UPM, 9<sup>th</sup> October 2007

78. International Symposium on Innovations in Chemical Education (ICE) 2007, Putra World Trade Centre (PWTC) Kuala Lumpur, 23-25<sup>th</sup> August, 2007
79. Open Presentation on Radiation Processing of Natural Polymer for Agriculture, Healthcare and Environment, Nuclear Agency Malaysia, Seri Pacific Hotel, Kuala Lumpur, 26<sup>th</sup> March 2007
80. International Problem-based Learning (PBL) Symposium, Republic Polytechnic Singapore, 7-9<sup>th</sup> March, 2007
81. International Conference of the Asia-Pacific Qualification Network (APQN), National Accreditation Board (LAN) Malaysia, PWTC, Kuala Lumpur 5-7<sup>th</sup> February 2007
82. Workshop on Learning Outcomes and Malaysian Qualification Framework (MQF) of Public Institutions of Higher Learning, Ministry of Higher Education Malaysia, 13-14<sup>th</sup> September 2006
83. Providing Quality Postgraduate Supervision Workshop, School of Graduate Studies and Faculty of Modern Languages and Communication, 5-6<sup>th</sup> June 2006
84. Workshop to develop Key Performance Indicators for Public Institutions of Higher Learning, Pan Pacific Hotel, KLIA, 12-14<sup>th</sup> April 2006
85. UPM Training Module Workshop 2006, Equatorial Hotel, Bangi, 23<sup>rd</sup> January 2006
86. Seminar on Devolution of National Higher Education, Grand Wave Hotel, Shah Alam Selangor, 15<sup>th</sup> December 2005
87. Workshop on Effective College Teaching in Conjunction with Regional Conference on Engineering Education (RCEE 2005), Universiti Teknologi Malaysia (UTM) Skudai Johor, 14-15<sup>th</sup> December, 2005.
88. The 6<sup>th</sup> Trainers' Workshop on Improving Training Quality (ITQ-6) through Interactive Learning Technologies and Distance Mentoring, organized by USM, RECSAM and isitQ, May-August 2005
89. Workshop on Effective University Teaching Series 2, Ministry of Higher Education, Hilton Petaling Jaya, 18-19<sup>th</sup> April, 2005
90. Workshop on Effective University Teaching Series 1, Ministry of Higher Education, Hilton Hotel, Petaling Jaya, 11-13<sup>th</sup> April, 2005
91. Leadership Camp; Perdana Programme 13<sup>th</sup> Series, National Civics Bureau (Biro Tatanegara), Ulu Sepri Camp, 24-27<sup>th</sup> March 2005.
92. UPM Strategic Planning Workshop for 9<sup>th</sup> Malaysian Plan (Bengkel Hala Tuju UPM Ke Arah RMK 9), Century Mahkota Hotel Melaka, 21-24<sup>th</sup> December 2004
93. Research Workshop on Design of Interactive Web-Based Instructional Systems, Concorde Inn, KLIA Sepang, 27-29<sup>th</sup> February 2004
94. Workshop on Science and Mathematics Curriculum in English for Form 5 (Bengkel Pemurnian Huraian Sukatan Pelajaran Matematik & Sains Elektif KBSM Tingkatan 5

dalam Bahasa Inggeris, PPSMI), Curriculum Development Division, Ministry of Education, Hotel Capitol, Kuala Lumpur, 27th September-1st October 2004

95. A National Dialogue on “A Developed Kedah State 2010” between the chief minister of the Kedah and Kedahan, Shangri-La Hotel, Kuala Lumpur, 18<sup>th</sup> June 2003
96. Singapore International Symposium On Chemical Education 1, Frontiers In Chemical Education : The Big Ideas, Singapore, 3<sup>rd</sup> August 2002
97. 5th ASEAN SCIRD Public-Private Collaboration in Science and Technology: Policy Development, Training and Awareness **Seminar 5**: Phnom Penh, Cambodia 20 – 22nd April 2004 (representing Malaysia as *National Expert*).
98. 4<sup>th</sup> ASEAN SCIRD Public-Private Collaboration in Science and Technology: Policy Development, Training and Awareness **Seminar 4**: Acquisition and Assimilation of Foreign Technology, and Firm Strategies for Global Competition; Bangkok Thailand 1 – 4th December 2003 (representing Malaysia as *National Expert*).
99. 3<sup>rd</sup> ASEAN SCIRD Public-Private Collaboration in Science and Technology: Policy Development, Training and Awareness **Seminar 3**: Firm Strategies for Global Competition, and Intellectual Property Management; Hanoi Vietnam 4 – 5th September 2003 (representing Malaysia as *National Expert*).
100. 2<sup>nd</sup> ASEAN SCIRD Project Seminar on Public - Collaboration In Science and Technology: Policy, Training and Awareness Seminar 2: Business and Technology Partnership Development and Intellectual Property Management; Hotel Istana Kuala Lumpur, 24-26<sup>th</sup> June 2003, (Local Organising Chairman and Representing Malaysia)
101. 1<sup>st</sup> ASEAN SCIRD Public-Private Collaboration in Science and Technology: Policy Development, Training and Awareness **Seminar 1**: Research and Development (R&D) Planning and Management, and Intellectual property management; Manila Philippines, 24 – 26th March 2003 (representing Malaysia as *National Expert*).
102. ASEAN SCIRD Project Seminar on Public-Private Collaboration in Science & Technology: Policy, Training and Awareness, **Project Inception Meeting**, Manila Philippines, 18-19<sup>th</sup> February 2003, (Representing Malaysia)
103. Intensive Workshop on MS ISO 9001:2000 FSAS, Melaka Century Mahkota Hotel, 19-21st April 2002.
104. Singapore International Symposium on Chemical Education 1: Frontiers in Chemical Education: The Big Ideas, Civil Service College, Singapore 3rd August 2002 (presenting Malaysian Chemistry of Institute and support by UNESCO).
105. Research Exhibition Faculty of Science and Environmental Studies and Institute of Mathematic Studies (INSPEM), FSAS UPM, 13th August, 2002.
106. 15<sup>th</sup> Malaysian Analytical Chemistry Symposium, Paradise Beach Hotel, Penang, 10-12<sup>th</sup> September, 2002.
107. Application Online Lecture Seminar Multimedia and Software (IMP) UPM, 11 – 12th April, 2002.

108. The 1st Malaysia-Japan Plastic Conference, Equatorial Hotel, Penang. 8-9th January 2002.
109. Research Seminar on 7<sup>th</sup>. Malaysian Plan (Seminar Penyelidikan RM-7) for the Faculty of Science and Environmental Studies, Institute of Distance Education and Learning (IDEAL) UPM, 27<sup>th</sup> September 2001
110. The 8<sup>th</sup> Industrial Chemistry (SKI-8) organised by Department of Chemistry UPM, Institute of Distance Education and Learning (IDEAL ), 19<sup>th</sup> September 2001
111. The 14<sup>th</sup> Malaysian Analytical Chemistry Symposium (SKAM-14), Hotel Century Mahkota, Melaka, 11 – 13<sup>th</sup> September 2001
112. National Science Convention 2001: Strengthening Knowledge through Research in Space Science, Universiti Teknologi Malaysia (UTM), Palace of Golden Horses Hotel, The Mines, Seri Kembangan, 4 – 5<sup>th</sup> July 2001. (Representing the Dean of Faculty)
113. Seminar on Sun Energy Technology (Teknologi Suria), organized by the Selangor State's Science and Technology Committee, Concorde Hotel Shah Alam, 30<sup>th</sup> May, 2001.
114. Workshop on ISO 9000-2000 for the Faculty of Science and Environmental Studies, Putra Environmental Laboratory UPM, 14<sup>th</sup> April, 2001.
115. Workshop on Academic Advising for the Faculty Science and Environmental Studies, Second College UPM, 11<sup>th</sup> April, 2001.
116. Regional Conference for Young Chemists (RCYC), Universiti Sains Malaysia Pulau Pinang, 3 – 4<sup>th</sup> April, 2001.
117. International Conference on Public Understanding of Science and Technology 2000 (PUSAT 2000) organised by Malaysian Scientific Association (MSA), Ming Court Vista Hotel, Kuala Lumpur 24 – 27<sup>th</sup> April, 2000.
118. Young Malay Professional Congress (Kongress Profesional Muda Melayu) PWTC, 26-27<sup>th</sup> February, 2000.
119. Workshop on Module Writing, Institute of Distance Learning and Education (IDEAL) UPM, 11<sup>th</sup> May, 1999.
120. Seminar on Education Excellence (*Seminar Pembeda Pendidikan*), Universiti Putra Malaysia, 5 – 6<sup>th</sup> April, 1999.
121. Academic Duty Colloquium, Faculty of Science and Environmental Studies, UPM, 17<sup>th</sup> July, 1999.
122. National Seminar on Chemistry Education 1999, Holiday Inn Shah Alam, 31<sup>st</sup> October – 4<sup>th</sup> November, 1999.
123. National Seminar on Product Finishing Using UV/EB Technology, PWTC Kuala Lumpur, 2<sup>nd</sup> June, 1998.
124. 6th Industrial Chemistry Seminar (SKI-6) organised by Department of Chemistry UPM, 13<sup>th</sup> October, 1998.

125. Workshop on Introduction to Internet, HTML and Homepage Design, UPM 13-15<sup>th</sup> February, 1996.
126. Workshop on Computer Software and Handling of Workstation, UPM 10 February 1996
127. Workshop on In-Country Program on Network Installation, Administration and Maintenance, Colombo Plan Staff College and Computer Science Department UPM, 3-15 June 1996
128. Conference on Using IT to Build a Better Future '96, PWTC Kuala Lumpur 5 November 1996
129. Malaysian Institute of Chemistry Seminar on Internet for Chemists, Kuala Lumpur, 30 March 1996
130. 1995 International Chemical Congress of Pacific Basin Societies, Honolulu, Hawaii, 17–22 December 1995
131. Asian Development Bank Training Attachment at The Department of Food Science and Human Nutrition, Iowa State University, Ames Iowa USA, 16 October 1995–14 January 1996
132. 3<sup>rd</sup> International Conference on Frontiers of Polymers and Advanced Materials, Kuala Lumpur 16–20<sup>th</sup> January 1995
133. Workshop on Corporatisation, FSAS UPM 27<sup>th</sup> April 1995
134. Sapura's IT Conference, Kuala Lumpur 3<sup>rd</sup> October 1995
135. Workshop on to the Internet UPM 11<sup>th</sup> September 1995
136. 3<sup>rd</sup> Industrial Chemistry Seminar, UPM. 23 – 24<sup>th</sup> March, 1995 (as a participant and the Chairman of the oral presentation session)
137. Seminar on Radiation Synthesis of Polymer: Biomaterial Application, MINT, Bangi 25<sup>th</sup> August, 1995.
138. Intellectual Discourse on The Role of Post Graduate Scholars in the Development and Implementation of the National Education Philosophy, Malaysian Students Department, London UK, 22 – 24<sup>th</sup> February 1991
139. 1<sup>st</sup> National Seminar on Spectroscopy, Universiti Teknologi Malaysia, Kuala Lumpur, 12<sup>th</sup> April, 1988
140. 3<sup>rd</sup> Seminar and Workshop on the Development of the Academic Advisory System, UPM, 17<sup>th</sup> June, 1987
141. Conference on Educational Computing (EDUCOMP '87), National Educational Management Institute, Sri Layang Genting Highlands Pahang, 24 – 26<sup>th</sup> November 1987



142. Counselling Workshop, Universiti Pertanian Malaysia, Sarawak Branch, 10<sup>th</sup> January 1987
143. Malaysian Chemical Congress '86, Regent Hotel, Kuala Lumpur 17 – 20<sup>th</sup> November, 1986
144. Workshop on Academic Advising (Bengkel Dialog Penasihatn Akademik), Faculty of Science and Environmental Studies, UPM, 1<sup>st</sup> March 1986
145. 1<sup>st</sup> ASEAN Science and Technology Week Conference, PWTC Kuala Lumpur 24 – 29<sup>th</sup> April, 1986

## 17. PUBLIC AND COMMUNITY SERVICES

1. **Member**, UPM Curriculum Sub-Committee (Jawatankuasa Kecil Kurikulum UPM), 2012-2015
2. **Member**, UPM Post-Graduate Curriculum Sub-Committee (Jawatankuasa Kecil Kurikulum Pengajian Siswazah UPM), 2012-2015
3. **Member**, the Faculty of Science Examination Committee, UPM, 2012.
4. **Member**, the New Student Orientation Committee, Faculty of Science, Universiti Putra Malaysia, 2012/2013
5. **Member**, Key Performance Indicators (KPI) Workshop Committee, Faculty of Science, UPM 2012
6. **Member**, Utility Cost Saving Initiative Committee, Faculty of Science, UPM 2012
7. **Panelist**, Talkshow on the Implementation of the New Remuneration Scheme for the Civil Service in Malaysia, UPM 2012
8. **Deputy Chairman**, Parent-Teacher Association (PTA), Kuala Selangor Science Secondary School (KUSESS) – an Elite Full-Boarding School 2012-2013
9. **Facilitator**, Speechcraft Program organized by CADE and Putra Toastmaster UPM, 2012
10. **Expert Panel**, Teaching and Learning for the Centre of Academic Development, UPM, 2012
11. **Head of Jury**, Invention and Innovation Exposition for Malaysian Secondary Schools - 2012 UPM/KPT/KPM/MARA
12. **Invited Speaker**, Fundamental Science Congress, Faculty of Science June 2012
13. **Judge**, Invention, Research and Innovation Exposition (PRPI) Malaysia 2012, A National Level Competition for Malaysian Secondary Schools, UPM, 2012
14. **Board Member and Panel**, Human Development Committee, Faculty of Science, UPM 2012

15. **Assessor**, Mind Transformation Program for Newly Appointed Academic Staff, Faculty of Science, UPM 2012
16. **Assessor**, Student Intership for Industrial Chemistry program (CHM4901), Faculty of Science, UPM 2012
17. **Facilitator**, Workshop on Student Learning Outcomes (SLO) and Student Centred Learning (SCL), Faculty of Education, UPM Serdang, 5th May 2011 and 10th August 2011
18. **Facilitator**, Workshop on Learning Outcome, UPM Serdang, 5th April 2011
19. **Facilitator**, Workshop on Student Centred Learning (SCL), Ministry of Higher Education, Malaysia, Kota Kinabalu Sabah, 24-25th March 2011
20. **Judge**, Poster Competition at the Fundamental Science Congress 2011, UPM Serdang, 5-6th July 2011
21. **Judge**, Poster Competition at the 15th Industrial Chemistry Seminar, UPM Serdang, 11th May 2011
22. **Facilitator**, Information Day, Faculty of Science, UPM 2011-2012
23. **Chairman and Chief Editor**, UPM Annual Report Editorial Board (Sidang Redaksi Buku Laporan Tahunan UPM) 2008-2010
24. **Judge**, Fundamental Science Congress 2011 Best Poster Competition, 5-6 July 2011
25. **Advisor**, Student Motivation Program, Faculty of Science, UPM, 8<sup>th</sup> Oktober 2011
26. **Speaker**, Malaysian Chemistry Carnival (Karnival Kimia Malaysia) for Sabah State 2011, Malaysian Institute of Chemistry (IKM), 19-20<sup>th</sup> May 2011
27. **Chairman**, Parents-Teachers Association (PTA), Section 9 Secondary School, Shah Alam Selangor 2002 – 2005; 2009-2011
28. **Expert Panel**, Project Development Module on "Training of Trainers" (TOT) for post graduate supervision, Ministry of Higher Education and Universiti Malaya, 2011
29. **Member**, UPM Excellence Teaching Award Committee 2010 (Anugerah Pengajaran 2010 (APP10))
30. **Student Academic Advisor**, Universiti Putra Malaysia, 2010-2011
31. **Speaker and Panel**, Staff Competency Workshop for Management and Professional Groups, Series 2/2010, UPM Serdang, 30th November – 6th December 2010
32. **Member**, ANALIS 2010 Award Judging Panel, Kuala Terengganu, 3rd - 4th October 2010
33. **Speaker**, Motivational and Career in Sciences (*Kerjaya Dalam Bidang Sains & Kimia*), SMK Seksyen 9, Shah Alam, 5th August 2010

34. **Speaker**, Workshop on Learning Outcome and Soft Skills (PDU1213), UPM Serdang, 22nd June 2010
35. **Speaker and Panel**, Academic Staff Competency Level Course for Management and Professional Groups, Series 1/2010 ,UPM Serdang, 21-25th June 2010
36. **Assessor**, Academic Staff Competency Level Course for Management and Professional Groups, Series 1/2010, UPM Serdang, 21-25th June 2010 and 19th July 2010
37. **Speaker**, Fundamental Science Congress 2010 (FSC 2010), UPM Serdang, 18-19 May 2010
38. **Speaker**, Competency Course for Supporting Staff on Occupational Health and Safety (PCU 1104), UPM Serdang, 11-12th May 2010
39. **Moderator**, Selangor Economic Convention, Shah Alam Convention Centre, Selangor, 7th April 2010
40. **Speaker**, Post Graduate Preparatory Workshop for Academic Staff, UPM Serdang, 23rd March 2010 and 14th June 2010
41. **Chairman**, Conference on Advanced Materials 2005 (CAM2005), IOI Marriot Hotel Putrajaya, 6-8<sup>th</sup> December 2005
42. **Committee Member**, Health and Occupational Safety, UPM 2005-present
43. **Committee Member**, Directory of Experts and Research Facilities, Faculty of Science UPM, 2010
44. **Committee Member and Expert Panel**, Curriculum Development of Science Courses in Secondary School Education, Ministry of Education Malaysia, 2010
45. **Moderator**, Selangor State Convention 2010, organised by Universiti Teknologi Mara Shah Alam, Malaysia
46. **Facilitator**, Course on Procedure and Safety of Laboratory (PCU1104), UPM OSH Office, 2010
47. **Facilitator**, Post Graduate Preparatory Workshop for Academic Staff, Centre for Academic Development (CADe) 2010-2011
48. **Facilitator**, Learning Outcome (LO) Workshop for UPM Support Staff, 2010
49. **Facilitator**, Learning Outcome and Soft Skills (PDU1213), Centre for Academic Development (CADe), 2010
50. **Assesor**, Student Industry Attachment program, UPM 2010
51. **Examiner**, Postgraduate Seminar (SPS6903, CHM 6903, SPS5903, CHM5903), 2010
52. **Deputy Chairman**, Roundtable Meeting and Discussion for e-Learning for Malaysian Universities, 27<sup>th</sup> April 2009

53. **Chairman of the Secretariate Committee**, National Seminar on Using Technology and Innovation in Teaching and Learning 2009 (SKTIP09), Hotel Palm Garden IOI Resort Putrajaya, 28-29<sup>th</sup> April 2009
54. **Facilitator**, Workshop on Teaching and Learning Evaluation, organized by Universiti Teknikal Malaysia Melaka (UTeM), Renaissance Hotel Melaka, 16<sup>th</sup> December 2009
55. **Moderator**, Intellectual Discourse by National Academic Award Recipients 2007: Trials and Tribulation of An Excellent Academic, UPM Serdang, 4<sup>th</sup> December 2009
56. **Facilitator**, Training of Trainers (TOT) for University's Book Plan Initiative 2009/2010, UPM Serdang, 24<sup>th</sup> June 2009
57. **Facilitator**, Course on Competency Assessment for Management and Professional Groups, Series 1/2009, Universiti Putra Malaysia, Seri Kembangan Selangor, 15-19<sup>th</sup> June 2009
58. **Facilitator**, Competency Level Course (PTK) for Public Universities, UPM Serdang, 26-28<sup>th</sup> May 2009
59. **Facilitator**, Basic Course on Teaching and Learning, Series 1/2009, UTeM, Malacca, 30<sup>th</sup> March 2009
60. **Facilitator**, Workshop and Curriculum Review of Post Graduate Program, Faculty of Science, UPM Serdang, 4<sup>th</sup> September 2009
61. **Deputy Chairman**, Residence Representatives Council, Zone 2, Shah Alam City, 2009-2011
62. **Committee Member**, Council of Academic Excellence (Majlis Gemilang Akademia Putra) UPM, 2009
63. **Facilitator**, Publication Workshop for Non-Thesis Post Graduate Program, UPM Serdang, 6<sup>th</sup> July 2009
64. **Chairman**, Workshop and Meeting for the Preparation of UPM Annual Report for 2008, 2009 and 2010, 2009-2011
65. **Assessor**, Course on Competency Assessment for Management and Professional Groups Grade DS45-51, Series 2/2009, 16-20<sup>th</sup> November 2009.
66. **President**, UPM Academic Staff Association (Persatuan Pegawai Akademik - PPAUPM), 2002-2004, 2009-2011
67. **Chairman**, National Seminar on Technology and Innovation for Teaching & Learning 2009
68. **Committee Member** of the University Curriculum Committee, UPM, 2009
69. **Panel**, Research Grant Application for the Tropical Agriculture Institute, UPM Serdang, April 2009
70. **Head of Delegation** to Australian Universities' Academic Development Centres, Sydney and Melbourne Australia, 16<sup>th</sup> – 22<sup>nd</sup> July 2005.

71. **Deputy Chairman**, Putra Satria Award Committee, Universiti Putra Malaysia, 2009
72. **Subpanel Member**, Curriculum Review of Academic Staff Competency Evaluation, 2009
73. **Chairperson**, Technical and Advisory Committee of KKP, UPM 2008
74. **Facilitator**, Course on Competency Assessment for Management and Professional Groups Grade DS45-51 (with Ph.D), 21st August – 9th September 2008
75. **Panel**, Teaching Evaluation for Lecturers with Grade DS45-51, Universiti Putra Malaysia, Serdang, 9th September 2008
76. **Scientific observer**, 40<sup>th</sup> International Chemistry Olympiad, Budapest, Hungary, 12-21th July 2008
77. **Panel**, Course on Competency Assessment for Management and Professional Groups Grade DS45-51 of Universiti Putra Malaysia, Residence Hotel, UNITEN Kajang, 9-17th June 2008
78. **Facilitator**, Research Methodology Course (SLAB/SLAI) for UMP lecturers, AnCasa Hotel & Spa, Kuala Lumpur, 11-17th May 2008
79. **Facilitator**, Workshop on e-Learning, Centre of Academic Development (CADE), UPM, Serdang, Selangor, 26-27th March 2008
80. **Speaker**, Workshop on Learning Outcome for Supporting Staff (PDU 1101), UPM Serdang, 26th August 2008 and 11-12th February 2010
81. **Facilitator**, Course on Advanced Building Technology, Series 1, INSPEN Kajang Selangor, 17th June 2008
82. **Facilitator**, Course on Competency Assessment for Management and Professional Groups Grade DS/DU45-51, No1/2008, Universiti Putra Malaysia, Residence Hotel, UNITEN Kajang, 11th June 2008
83. **Panel**, Putra Teaching Excellence Award, UPM 2008
84. **Secretary**, Teaching and Learning at Institutions of Higher Learning, 2007 (CTLHE07), Palace of the Golden Horses Hotel, Selangor, 12-14th December 2007
85. **Facilitator**, Training of Trainers Orientation Week for academic session 1 2007/2008, UPM Serdang, 15th June 2007
86. **Committee Member**, UPM Family Day Organizing Committee 2007
87. **Advisor**, Technical Committee for Safety and Occupational Health, UPM, 2006-2008
88. **Committee Member**, Putra Teaching Award, Universiti Putra Malaysia 2007-2010
89. **UPM Representative**, Safety and Occupational Health Council IPT/IPP, 2007

90. **Panel**, NSF Research Grant Assessment 1/2007, Ministry of Science & Innovation (MOSTI), 2007
91. **Editor**, Teaching and Learning Monograph IPTA 6: Issues and Challenges of Higher Education, Centre of Academic Development, UPM 2007
92. **Editor**, Teaching and Learning Monograph IPTA 5: Issues and Challenges of Higher Education, Centre of Academic Development, UPM 2007
93. **Editor**, Teaching and Learning Monograph IPTA 4: Policy and Management, Centre of Academic Development, UPM 2007
94. **Editor**, Teaching and Learning Monograph IPTA 3: Technology and Innovation in Teaching and Learning, Centre of Academic Development, UPM 2007
95. **Editor**, Teaching and Learning Monograph IPTA 2: Strategies, Techniques and Methods in Teaching and , Centre of Academic Development, UPM 2007
96. **Editor**, Teaching and Learning Monograph IPTA 1: Human Capital Development, Centre of Academic Development, UPM 2007
97. **Internal Examiner**, Oral Examination for Final Year Project (EOH 4999B), Bachelor of Science (Environmental and Occupational Health), UPM Serdang, 8-10th May 2007
98. **Facilitator**, Learning Outcomes Programme Initiative 2006, UPM, 6th February 2006
99. **Facilitator**, Workshop on Learning Outcomes Initiative for Support Staff, UPM Serdang, 4-5th December 2006
100. **Facilitator**, Workshop on Soft Skills for Malaysian Institution of Higher Learning, Ministry of Higher Education, UPM, 22-24th August 2006
101. **Facilitator**, Training of Trainers for Book Plan Initiative for New Students 2006/2007, UPM Serdang, 16th June 2006
102. **Committee Member**, Workshop on Advanced Materials and Nanotechnology 2005 (WAMN 2005), Putrajaya Marriott Hotel, 8-10 December 2005
103. **Committee Member**, Conference on Advance Materials International Advanced Technology Congress 2005, Putrajaya Marriott Hotel, 6-8 December 2005
104. **Chairperson**, Parallel Session International Conference on Knowledge Management 2005, Putra World Trade Centre (PWTC) Kuala Lumpur, 7-9 July 2005
105. **President**, Executive Council of Academic Association PPAUPM 2005/06
106. **Chairman**, Graduate Entrepreneurship Symposium, UPM Serdang, 27th July 2004
107. **Judge**, Invention Competition for Secondary Schools during the Invention, Research and innovation Exposition UPM 2003, UPM Serdang, 8-10th July 2003
108. **Committee Member**, First IPTA Dean and Director Conference, Hotel Pan Pacific KLIA, 21-22 July 2004.

109. **Treasurer**, Universiti Putra Malaysia Cooperative, 2002 -2004
110. **Secretary**, Organizing Committee of Advance Technology Congress 2003 (ATC2003), Institute of Advanced Technology.
111. **Vice President**, UPM Academic Staff Association (PPAUPM), 2001-2002
112. **Committee Member and Internal Auditor**, Alumni of Dato' Abdul Razak School (SDARA), Seremban 1999-2003
113. **Head of Laboratory**, Advanced Material Laboratory Technical, Institute of Advanced Technology (ITMA), 2001-2003
114. **Chairman**, Social and Welfare Committee, Institute of Advanced Technology (ITMA), 2002.
115. **Chairman**, Conference and Seminar Committee, Institute of Advanced Technology (ITMA), 2002.
116. **Member**, Departmental Council (MBJ) and Representing Academic Staff in meeting with Management of UPM, 2002.
117. **Committee Member**, 45<sup>th</sup> Independence Month Celebration, Universiti Putra Malaysia, 2002.
118. **Committee Member**, Evaluation of Teaching Practice and Counselling Practicum, Faculty of Education Studies UPM, 2002.
119. **Member**, Management Committee, Institute of Advanced Technology (ITMA),2002
120. **Member**, Graduate Student Studies Committee, Institute of Advanced Technology (ITMA).
121. **Member and Principal Researcher**, Institue of Advanced Technology (ITMA), 2002.
122. **Deputy Chairman**, Parents Teachers Association (PIBG), Section 9 Secondary School, Shah Alam Selangor 1999 - 2002
123. **Vice President**, Organising Committee UPM Dinner 2001, Hotel Renaissance Palm Garden, 29<sup>th</sup> September 2001
124. **Member and Organising Committee**, Long Service Appreciation Awards (Majlis Jasa Putra dan Setia Putra) UPM 2001, Panggung Percubaan UPM, 29<sup>th</sup> December 2001.
125. **Chairman**, Committee to Build the PTA Mosalah (Small Mosque), Section 9 Secondary School, Shah Alam Selangor, 2001
126. **UPM Representative**, Selangor State Science and Technology Committee.2001
127. **Committee member**, Selangor State Science and Technology Support Program, 2001.
128. **Committee member**, Promotion of Science and Technology Program (PPST) for the State of Selangor, Kuala Kubu Baru, 23 August 2001.

129. **Chairman of Committee**, 2001 Selangor K-Society for Secondary School Principals in Selangor, Grand Blue Wave Hotel, Shah Alam, 25-27 October 2001.
130. **Secretary and Committee Member**, Science and Technology Convention for Secondary Schools in Selangor, De Palma Inn, Kuala Selangor, 5-7<sup>th</sup> September 2001
131. **Secretary**, UPM Academic Staff Association (PPAUPM) 1998-2001
132. **Member**, Sports and Recreation, representing Academic Staff Association (PPA) UPM, 2001.
133. **Member**, Technical co-operation between UPM and Malaysian Institute of Nuclear Technology (MINT), 2001.
134. **Chairman**, Social and Ethic Committee, ITMA, Universiti Putra Malaysia, 2001-2003
135. **Member**, Digital Committee, Faculty of Science and Environmental Studies, UPM Serdang, 1997–2001
136. **Chairman**, Exhibition Committee, Faculty of Science and Environmental Studies, UPM Serdang, 1995–2001
137. **Member**, Faculty Publicity Committee, Faculty of Science and Environmental Studies, UPM Serdang 1995–2001
138. **Co-ordinator**, Departmental Computer & IT Facilities, UPM 1995-2000
139. **Webmaster**, the Department of Chemistry Homepage, UPM 1995-2001
140. **Advisor**, UPM Undergraduate Chemistry Club, 1995-2001
141. **Committee Member**, Selangor State Committee on the Promotion of Science and Technology Program (PPST), 1995-2001
142. **Member**, Negeri Sembilan Committee for Science, Technology dan Alam Sekitar Camp, 2001.
143. **Advisor**, Dinner and Chemistry Club UPM, The Palace of Golden Horses, The Mines Seri Kembangan, 27<sup>th</sup> January 2002
144. **Member**, Selangor State Committee on Recycling: A Pioneer Program, 2000.
145. **Chairman**, Science Camp Sub-Committee, Selangor State Program on the Promotion of Science and Technology (PPST) 2000.
146. **UPM Representative**, Negeri Sembilan State Science Camp Sub-Committee for the Promotion of Science and Technology Program (PPST) 1999
147. **Organising Committee Member, Module Writer and Facilitator**, Course for Academic Enhancement Program (AEP) Facilitators organised by Student Affairs Division, UiTM Shah Alam, 6-8<sup>th</sup> July 1999
148. **Assessor**, Teaching Practice for Bachelor of Science with Education Programme, 1999-present



149. **Committee Member**, Parents Teachers Association (PIBG), Section 9 Secondary School, Shah Alam Selangor 1997-1999, 2008/2009
150. **Member, Organising Committee and Facilitator** of Hulu Langat Young Scientists Camp, UPM Serdang, March 1998.
151. **Member, Organising Committee and Facilitator** of Federal Territory Young Scientists Camp, International Youth Center, Cheras Kuala Lumpur, 23-26 July 1997
152. **Chairman**, the oral presentation session at the 10<sup>th</sup> Malaysian Analytical Chemistry Symposium, UKM Bangi, 1997.
153. **Instructor**, Basic Course on Powerpoint: Training for Department of Chemistry Staff, UPM, 29<sup>th</sup> October 1997
154. **Co-ordinator And Facilitator**, Career Talk on Science & Technology for 300 Secondary School Students (an activity of 1997 Selangor State Science and Technology Week). UPM Serdang 17-19<sup>th</sup> November 1997.
155. **Co-ordinator And Facilitator**, Information Technology Awareness Workshop for 150 Teachers and Education Officers (an activity of 1997 Selangor State Science and Technology Week). UPM Serdang 14<sup>th</sup> & 16<sup>th</sup> October, and 20<sup>th</sup> November 1997.
156. **Instructor**, Basic Course on Computer and Microsoft Words for Children of Department of Chemistry Staff, UPM 5-6<sup>th</sup> December 1996
157. **UPM Representative and Co-ordinator**, UPM Exhibition at the Second Selangor Scout's Jamboree 1996, Kem Temasya Rimba Templer, Rawang, Selangor, 9-15<sup>th</sup> December 1996
158. **Committee Member & Facilitator**, Negeri Sembilan Young Scientists Camp, Kem Bina Negara, Ulu Sepri Rembau, Negeri Sembilan 25-29<sup>th</sup> October 1996.
159. **Facilitator**, Basic Course on Internet and Homepage Design Training for Staff of Physics Department UPM, 22-25<sup>th</sup> May 1996
160. **Member**, UPM Academic Staff Association (PPAUPM) since 1996
161. **Organiser and Facilitator**, Basic Course on Handling Workstation and Homepage Design Training for Staff of Chemistry Department UPM, 16-17<sup>th</sup> May 1996
162. **Facilitator**, Basic Course on Internet, HTML and Homepage Design for Staff of Faculty of Science and Environmental Studies UPM, 6-7<sup>th</sup> May 1996
163. **Instructor**, Basic Course on Computer and Microsoft Words: Training for Staff of Chemistry Department UPM, 24-25<sup>th</sup> April 1996
164. **Supervisor**, Department of Chemistry UPM Students Industrial Training at Pharmed Malaysia Sungai Petani, Kedah 28-29<sup>th</sup> May 1996
165. **UPM Representative and Co-ordinator**, UPM Exhibition at the Star Education Fair 1996, PWTC Kuala Lumpur, 29-31<sup>th</sup> March 1996

166. **UPM Representative**, Selangor State Promotion of Science and Technology Week (PPST) Seminar and Workshop Sub-Committee, 1995-2000.
167. **Chairman**, oral presentation session at the 3<sup>rd</sup> Industrial Chemistry Seminar, UPM. 23-24<sup>th</sup> March 1995
168. **Co-ordinator**, UPM Exhibition at the Launching of 1995 Selangor State Science and Technology Week, 1995-2000
169. **UPM Representative and Co-ordinator**, UPM Exhibition at the Mindex-Innotex '95, Petaling Jaya Civic Center, 10–13<sup>th</sup> August 1995
170. **Chairman**, Manchester Malaysians Representatives Council, UK (1992)
171. **Founding Chairman**, Malaysian Community of Cheetham Hill (MCCH), Manchester, UK (1992)
172. **Interview Panel**, Intake to Diploma Program, Universiti Pertanian Malaysia for Kota Bahru, Kelantan, 1989.
173. **A player representating UPM**, Volleyball at the Inter-University Staff Sport Competition, 1983 and 1988
174. **Coach**, Students Volleyball Team UPM Sarawak Branch, 1983 – 1987
175. **Member**, Alumni of Sekolah Dato' Abdul Razak, Seremban since 1987
176. **Interviewer**, Intake to Diploma Program, Universiti Pertanian Malaysia for Sibul, & Miri, Sarawak, 1986
177. **President**, Staff Sports and Recreation Club, UPM Sarawak Branch, 1985- 1986

## 18. CO-CURRICULUM ACTIVITIES

1. **Council Member** and **Chairman** of the Physical and Theoretical Chemistry Section for 2013/2014, Malaysian Institute of Chemistry.
2. **Committee Member**, Cambodia-Malaysia Chemical Conference Organizing Committee, organized by the Malaysian Institute of Chemistry and Cambodian Chemical Society, 19-21 October 2012, Siem Reap Cambodia
3. **Committee Member**, 17th Malaysian Chemical Congress Organizing Committee and **Chairman**, Physical and Polymer Chemistry Session, 17th Malaysia Chemical Congress, organized by the Malaysian Institute of Chemistry, 15-17 October 2012, PWTC Kuala Lumpur
4. **Council Member** and **Joint Chairman** of the Polymer and Materials Chemistry Section for 2012/2013, Malaysian Institute of Chemistry
5. **Facilitator**, IKM Brainstorming Session on University Polymer Syllabi, Malaysian Institute of Chemistry (Institut Kimia Malaysia - IKM), 2012
6. **Committee Member**, Malaysian Chemistry Carnival (K2M) Organizing Committee, 2012, Malaysian Institute of Chemistry
7. **Facilitator**, Workshop for Students Centred Learning (SCL) Sabah Zone, Ministry of Higher Education, 2011
8. **Expert Panel**, Student Supervision Module Development, AKEPT, Ministry of Higher Education, 2011-present
9. **Technical Committee**, Malaysian Institute of Chemistry (IKM), National Chemistry Quiz Malaysia (K3M), 2011-2013
10. **Committee Member and Technical Committee**, Development of Guidelines on OSHMS, 2011
11. **Committee Member**, Panel of Experts for input on Chemistry Curriculum, Ministry of Education Malaysia, 2011-2013
12. **Facilitator**, Malaysian Chemistry Carnival (K2M) for State of Sabah, Malaysian Institute of Chemistry (IKM), 2011
13. **Reviewer**, Malaysian Journal of Chemistry, Malaysian Institute of Chemistry, 2011 & 2012
14. **Assessor**, Award for best thesis by the Association of Analytical Scientists Malaysia (ANALIS) 2010
15. **Committee Member**, Preparation of Guidelines on OSHMS, Department of Occupational Safety and Health (DOSH) 2010
16. **Committee Member**, Development of Key Performance Indicators (KPI) for Kolej Poly-Tech Mara (KPTM) for the year 2010, October 2009

17. **Committee Member**, Development of Basic Module for Teaching & Learning (PGCert), Ministry of Higher Education, 2009
18. **Deputy President**, Roundtable Discussion for Lead Coordinators, e-Learning Module for Public Institutions of Higher Learning (IPTA) Malaysia, 2009
19. **Technical Committee (TC)**, Development of Malaysian Standard (MS1722) 2011, SIRIM Berhad, 2009
20. **Member**, Technical Committee and Advisory Panel for Safety and Occupational Health, UPM, since 2006
21. **Instructor** for Program Promotion Initiative, Faculty of Science and Environmental Studies for Matriculation Students, Sal College, Kuala Lumpur, UPM 23 October 2001
22. **Instructor** for Program Promotion Initiative, Faculty of Science and Environmental Studies for Matriculation Students, Penang Matriculation Centre, Pongsu Seribu, Pulau Pinang, 8 September 2001
23. **Committee member**, Science and Technology Convention for Secondary School Teachers, State of Selangor, Malaysia, De Palma Inn Kuala Selangor, 5-7 September 2001.
24. **Technical Committee**, Safety at Work Place , DOSH Malaysia for the Development of MS 1722 since 2003
25. **Malaysian National Expert**, ASEAN Sub-Committee on Infrastructure in Research and Development (SCIRD) Project on Public-Private Collaboration in Science and Technology: Policy Development, Training and Awareness. The project sponsored by ASEAN secretariat and Japan-ASEAN Exchange Program (JAEP). (**Selected by the Ministry of Science, Technology and the Environment to represent Malaysia, 2002-2004**).
26. **Reviewer**, Journal of Polymer Engineering, UTM Skudai, 2003
27. **Chairman**, ASEAN SCIRD Public-Private Collaboration in Science and Technology Seminar: Policy Development, Training and Awareness, Istana Hotel, Kuala Lumpur, Malaysia, 24 – 26th June 2003.
28. **Technical Committee**, Safe System of Work and Practices in Occupational Setting for preparation Malaysian Standard, Ministry Human Resources Malaysia. 2003- present
29. **Member**, Technical Committee of Malaysia National Chemistry Quiz (K3M), Malaysian Institute of Chemistry, 2002 - present
30. **Assistant Secretary**, Malaysian Analytical Science Society (ANALIS) 1994-1997, 2009-2012
31. **Member**, Education and Community Services of the Malaysian Institute of Chemistry, 1997-present.
32. **Jury**, Science Invention Contestant between Secondary Schools, Pameran Penyelidikan dan Rekacipta UPM 2003, UPM, 8-10 July 2003.

33. **Member, Editorial Board** Malaysian Journal of Analytical Sciences,2001.
34. **Member,** Biocomposite Technology Center (BTC) Institute Bioscience, UPM since 1998-2003
35. **Member,** Computer Chemistry Committee of the Malaysian Institute of Chemistry, 1995-1997.

## 19. ACADEMIC REFEREES:

1. **Professor Dato' Dr. Abu Bakar Salleh**  
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