



Curriculum Vitae



I. Personal Particulars

Name: DR. NORLIA BINTI BAHARUN

Current position: SENIOR LECTURER

II. A. Academic and Professional Qualifications

Year	Degree	Discipline	University
1986	B. Sc (Hons)	Chemistry	USM
1995	M. Sc (Materials & Mineral Resources Engineering)	Extractive Metallurgy	USM
2000	Ph.D (Materials & Mineral Resources Engineering)	Extractive Metallurgy	USM

B. Titles of postgraduate theses

M.Sc. Thesis : "HYDROMETALLURGY OF TIN EXTRACTION"

Ph.D Thesis : "STUDIES ON THE TREATMENT OF CYANIDE WASTES FROM GOLD EXTRACTION PROCESSES"

III. Work Experience

Year	Position	Field of Work	Place of Work
1988-1989	Research Officer	Corrosion	School of Materials & Mineral Resources Engineering, USM, Perak Branch Campus, Ipoh
1990-1991	Analytical Chemist	Pharmaceutical	Ho Yan Hor Pharmaceutical Sdn. Bhd. Ipoh.
1991-2000	Research Officer	Analytical /Mineral Chemistry/Extractive Metallurgy	School of Materials and Mineral Resources Engg., USM, Engg. Branch Campus, Nibong Tebal
1994-1998	Part time Tutor/Lab Demonstrator for undergraduate and Off Campus students	Analytical/Organic Chemistry	School of Chemical Engineering, USM, Perak Branch Campus, Tronoh, Perak.
1996-1998	Part time Tutor/Lab Demonstrator	Chemistry	Institute of Technology Petronas, Tronoh. Perak.
2000 - 2001	Part time Lecturer	Chemistry	Institute of Technology Petronas, Tronoh. Perak.
2000-2005	Lecturer	Analytical /Mineral Chemistry / Hydrometallurgy	School of Materials and Mineral Resources Engg., USM, Engg. Campus Nibong Tebal
2006 – till present	Senior Lecturer	Analytical /Mineral Chemistry / Hydrometallurgy	School of Materials and Mineral Resources Engg., USM, Engg. Campus, Nibong Tebal

IV. Main Current Research Areas

Chemistry; Hydrometallurgy; Hydrochemical Processing; Environmental Chemistry; Extractive Metallurgy; Hydro-Electrometallurgical Processing; Zeolites and Activated Carbon Synthesis; Treatment of Metallurgical Wastes / Recycling

1.1	Research Publications
(a)	<p>Research Book/Monograph</p> <p>1.Norlia Baharun (1995). “ Hydrometallurgy Of Tin Extraction”. M.Sc Thesis. 72pp</p> <p>2.Norlia Baharun (2000). ”Studies On The Treatment of Cyanide Wastes from Gold Extraction Processes”. Ph.D Thesis. 267 pp</p> <p>3.Norlia Baharun (2005). “Synthesis and Characterisation of Zeolites from Sultan Salahuddin Abdul Aziz Shah Power Plant’s Pulverised Fly Ash in “Research at Universiti Sains Malaysia”, Vol. 5. Materials: From Fundamentals to Applications”, Chapter 17, Mineral Resources, eds. Ahmad Shukri Mustapa Kamal and Poh Bo Long. Pp158-168</p>
(b)	<p>Journal/E-Journal/Journal Proceeding</p> <p><u>INTERNATIONAL</u></p> <p>1. Khangaonkar, P.R., Azizan, A. and Norlia, B. (1994) “Treatment of Complex Materials and Wastes from Tin ore Processing” . <u>Australian Asian Pacific Course and Conference of Pyrometallurgy for Complex Materials and Wastes</u>, eds. Nilmani, N., Lehner, T., and Rankin, W.J. (TMS, Warrendale, PA. USA), 289-299 pp</p> <p>2. Khangaonkar, Azizan, A. and Norlia, B. (1996). “ “Treatment of Wastes from Tin Industry”. <u>Second International Symposium on Extraction and Processing for the Treatment and Minimization of Wastes</u>, eds. Ramachandran, V. And Nesbitt, C.C., (TMS, Warrendale, P.A. USA), 505-513 pp</p> <p>3. Norlia, B., Kheng, L.L., and Kamarudin H. (1999).”Cyanide Removal Using Commercially Available Resins”. <u>National Seminar on “Recent Techniques in Mineral Processing Wastes and Environmental Management” (RETMEM)</u>, Bhubaneswar, India, 207-214 pp.</p> <p>4. Faizul Che’Pa and Norlia Baharun (2005). “ Hydrothermal Synthesis of Zeolites From Sultan Salahuddin Abdul Aziz Shah Power Plant Fly Ash”. <u>Journal of Physical Science (Special Issue)</u> ;Pp 1-7</p> <p>5. Kamar S. Ariffin, Roniza Ismail, Norlia Baharun and Norashid Aziz (2007).”The Effects of “Milk of Lime” Concentration and Gas Flow Rate on the Precipitated Calcium Carbonate Crystallization Mechanism and Morphology”. <u>6th Asean Microscopy Conference: “A Nanoscience Approach in Commercialization”</u>; ESEM Journal.</p> <p>6. Norlia Baharun and Ong Pek Ling (2014). “Characterization and Gold Assaying Methods in the Assessment of Low Grade Gold Ore from Malaysia”. <u>Advanced Materials Research</u>, Vol. 858, pp 243-247.</p> <p>7. H.S. Saidin, S.A.S. Salim, N. Baharun, S.A. Rezan, H.Hashim (2014). “An Assessment of the Carbothermal Reduction of Malaysian Ilmenite by Statistical Design”. <u>Advanced Materials Research</u>. Vol. 858 (2014) pp 221-227.</p> <p>8. A.S.S. Sharifah, H.S. Saidin, N. Baharun, S.A. Rezan, H. Hashim (2014). Microstructural Study Of Reduced Malaysia Ilmenite by Carbothermal Reduction and Nitridation in Nitrogen Atmosphere, <u>Advanced Materials Research</u>. Vol. 858 (2014) pp 265-271.</p> <p>9. Pek Ling Ong, Norlia Baharun, Suhaina Ismail (2015). “Characterization And Process Optimization In The Extraction Of Gold”. <u>Advanced Materials Research</u>, Vol. 1087, pp 236-240.</p> <p><u>NATIONAL</u></p> <p>1. Kheng, L.L., Norlia, B., Azizan, A. and Kamarudin, H. (1999). “Cyanide Recovery Using Strong Base Ion Exchange Resin”. <u>Proceedings on “Research and Development Priorities in the New Millennium”</u>, Malaysian Science and Technology Congress’99, 1-9pp</p> <p>2. Azlina, A., Azizan, A. and Norlia, B. (2000). “A Review on the application of ion exchange resin for the removal of cyanide wastes”. <u>Proceedings of the first Colloquium on Post-Graduate Research</u>. 153-157 pp</p>

	<p>3. Nurhayati, M.N., Azizan, A. and Norlia, B. (2000). "Cyanide Wastewater Treatment Using Argentum-Impregnated resins". <u>Proceedings of the first Colloquium on Post-Graduate Research</u>. 135-137pp.</p> <p>4. Mohd.Zaheruddin, K., Azizan, A. and Norlia, B. (2000). "Application of Activated Carbon in the Treatment of Wastewater from Industries. <u>Proceedings of the first Colloquium on Post-Graduate Research</u>. 158-163 pp.</p> <p>5. Tg. Suhaidi, Tg. I., Norlia, B. and Azizan, A. (2002). "Metal Impregnated Activated Carbon System to remove Cyanide from Dilute Solutions". <u>Materials and Minerals (MAMIP) Proceedings of Post Graduate Research Papers 2001/02</u>. 79- 80 pp.</p> <p>6. Nurhayati, M.N., Norlia, B. and Azizan, A. (2002). "Removal of Free Cyanide using Silver Impregnated Resins". <u>Materials and Minerals (MAMIP) Proceedings of Post Graduate Research Papers 2001/02</u>. 81-82pp.</p> <p>7. Suhaina, I., Norlia, B. and Azizan, A. (2002). "A Review of Zeolite Synthesis by Hdrothermal Treatment of PFA Waste. <u>Materials and Minerals (MAMIP) Proceedings of Post Graduate Research Papers 2001/02</u>. 83-84 pp.</p> <p>8. Nurhayati, M.N., Norlia, B. and Azizan, A. (2003). "Cyanide Removal Using Impregnated Resin". <u>Proceedings ENVIRONMENT 2003</u>. 377-381 pp.</p> <p>9. Siti Aida and Norlia Baharun (2009). "Synthesis and Characterization of Zeolites From Sodium Aluminosilicate Solution". Publication in <u>Journal of Nuclear and Related Technologies (JNRT)</u>, Special Edition 2009.</p>
(c)	<p>Proceedings</p> <p><u>INTERNATIONAL</u></p> <p>1. Azizan, A., Kheng, L. L., Norlia, B. and Kamarudin, H. (1999). "Removal of Free Cyanide from Solution by using Copper Impregnated Resins". <u>Proceedings of the Second International Conference on Recent Advances in Materials and Mineral Resources Engineering (RAMM'99)</u>. USM, Perak Branch campus, Tronoh, Perak. 801-809 pp</p> <p>2. Azizan, A., Mohd. Zaherrudin, K., Norlia, B. and Kamarudin H. (2000). "Removal of Cyanide from solution Using Metal-impregnated Activated Carbon. <u>Asian Pacific Mining and Quarrying 2000 - the 6th International Mining and Mineral Resources Conference 2000</u>. 1-7 pp</p> <p>3. Teuku Andika,RP., Astrawinata, R. Khairun Azizi and Norlia, B. (2003). "Grinding Mill Identification and Control in Size Reduction Process Using Artificial Neural Networks". <u>International Conference on Chemical and Bioprocess Engineering</u>. 827-834</p> <p>4. Siti Aida, I. , Norlia, B. and Azizan, A. (2004). "Mesoporous Aluminosilicate Synthesis Via Sol Gel Technique. <u>International Conference on X-Rays and Related Techniques in Research and Industry (ICXRI 2004)</u>. 1-8 pp.</p> <p>5. Kamar S. Ariffin, Roniza Ismail, Norlia Baharun and Norashid Aziz (2008). Synthesis of Precipitated Calcium Carbonate (PCC) via Sprayed Mist Method". <u>ICYC Conference</u>. Penang.</p> <p>6. Kamar S. Ariffin, Roniza Ismail, Norlia Baharun and Norashid Aziz (2008). "Continuous Synthesis of Precipitated Calcium Carbonate (PCC) via Carbonation route -Tall Column Reactor (2008). <u>International Conference on Xrays and Related Techniques (ICXRI 2008)</u>; 2 – 6 June 2008, Sabah.</p> <p>7. Siti Aida Ibrahim and Norlia Baharun (2008). "Synthesis and Characterization of zeolites from sodium aluminosilicate solution", <u>Proceedings, 4th International Conference on X-rays and Related Technique in Research and Industries 2008 (ICXRI 2008)</u>, Kota Kinabalu, Sabah, Malaysia, 2-3 June 2008.</p>

8. Norlia Baharun, Yeong Jun Kang, Mohd Rosli Azman and Kamarshah Ariffin (2009). "Production and Characterization of Alumina Powder produced from Aluminum Dross via Hydrometallurgical Process Route". In the 3rd International Workshop & Conference on Earth Resources Technology: Stepping Towards Sustainable Mining, Metallurgical and Petroleum Technology Development" organized by "Graduate School of Engineering, Hokkaido University", Japan, 11 – 16 May 2009. OC-3; 29 pp.

9. Farhana Binti Zuraimi and Norlia Baharun (2009). "Hydro- and Electrometallurgical and Electrometallurgical Extraction of Zinc from Metallurgical Wastes" (2009)." In the 2nd Regional Conference on Natural Resources & Materials- Earth Science and Technology: "- Towards World-Class Education and Research in GeoScience and Natural Resources Development", Universiti Gadjah Mada, Yogyakarta, Indonesia, 5-8 August 2009.

10. Ong Pek Ling, Norlia Baharun, Kamar Shah Ariffin, (2011). Chemical Assaying and Diagnostic Leaching Approach In the Assessment of Low Grade Gold Ore, Kick-off Seminar on ASEAN-Japan Build-up Cooperative Education Program for Global Human Resource Development in Earth Resources Engineering, Pathumwan Princess Hotel, Bangkok; 11-12th January 2013.

11. L. K Bankole, S.A. Rezan, N. M. Sharif and N. Baharun (2012). "Evaluation of the Leaching Behavior of Hexavalent Chromium from Malaysian Electric Arc Furnace Steel Slag". XXVI International Mineral Processing Congress 2012.

12. Ong, P.L., and Baharun, N., (2012). Characterization Studies and Gold Assaying Methods in the Assessment of Gold Ore, Asian International Conference on Materials, Minerals, and Polymer (MAMIP 2012), Vistana Hotel, Penang, Malaysia, 23rd – 24th March 2012.

13. Roshaida Arbain and Norlia Baharun , (2014). Characterization of hematite nanoparticles (Fe_2O_3) produced by high energy milling for dye removal catalyst , , International Conference on Functional Materials and Metallurgy 2014 17th - 18th September 2014, Flamingo Hotel, Penang, Malaysia, Flamingo Hotel, Penang, pp 6

14. Noor Izah Shoparwe, Ong Pek Ling, Najwa Nurrasyidah Nazri, Nur Shafiqah Ismail, Sheikh Abdul Rezan, Norlia Binti Baharun, Kamar Shah Bin Ariffin, Hashim Bin Hussin, M.N. Ahmad Fauzi, Sivakumar A/L Ramakrishnan, Muhamad Nazri Murat And Hamdan Bin Ariffin,(2014). "Synthesis of Iron and Titanium Oxycarbonitride (TiO_xCyN_z) from Malaysian Ilmenite Minerals", The International Conference on Functional Materials and Metallurgy 2014 will be held on 17th - 18th September 2014 at Flamingo Hotel, Penang, Malaysia.

15. Nurul Syazwina Binti Che Ibrahim, Sivakumar Ramakrishnan, Sheikh Abdul Rezan, Norlia Binti Baharun, Reza Alizadeh and Parham Roohi, (2014). "Nonisothermal Kinetic Modelling For Hydrogen Reduction of Ferric Oxide Using Matlab", The International Conference on Functional Materials and Metallurgy 2014 will be held on 17th - 18th September 2014 at Flamingo Hotel, Penang, Malaysia.

NATIONAL

1. Nurhayati Mohd Nor, Azizan Aziz and Norlia Baharun (2002). "The Study of Silver Impregnation Process on a Strong base Anion Resin For Cyanide Removal". Proceedings of the National Science Fellowship Seminar (NSF) 2002, Vistana Hotel, Kuala Lumpur, 17-18 December 2002, 309-312 pp

2. Nurhayati Mohd Nor, Norlia Baharun and Azizan Aziz (2002). "Cyanide Removal Using Silver Impregnated Resin". Proceedings Environment 2003 : Environmental Management and Sustainable Development For Better Future Growth" Bayview Beach Resort, Penang, 18-19 February 2003, 377-381 pp

3. Ong Pek Ling, Norlia Baharun, Kamar Shah Ariffin, (2011). Mineralogical Studies And Physical Processing of Complex Iron Ore, Proceedings of 2nd Symposium of USM Fellowship, Vistana Hotel, Penang; 23-24 Nov 2011.

(d)	<p>Conference Presentation (oral and poster)</p> <p><u>INTERNATIONAL</u></p> <p><u>ORAL</u></p> <p>1. Norlia Baharun (2009). “Incorporating the Knowledge of Environmental Chemistry in the Mining and Minerals Engineering Practice”. <u>RAMM & ASMP 2009</u>” organised by School of Materials & Mineral Resources Engineering, USM, Bayview Beach Resort, Batu Feringgi, Peneng, 1-3 June 2009.</p> <p><u>POSTER</u></p> <p>1.. Kamarshah Ariffin, Khairun Azizi Azizli, Tg. Rabeah Tg. Omeear, Norlia Baharun, Ros Fatihah Muhammad (2009). "Genesis and Industrial characteristics of feldspatic kaolin clay of in-situ weathered Keneras' Felsic Volcanics, Gua Musang, Kelantan, Malaysia". In the <u>3rd International Workshop & Conference on Earth Resources Technology: Stepping Towards Sustainable Mining, Metallurgical and Petroleum Technology Development</u>” organized by "Graduate School of Engineering, Hokkaido University", Japan, 11 – 16 May 2009. P-1; 47pp.</p> <p>2. P.L. Ong, R.Goyal, B. Norlia dan Ariffin K.S (2010). "Development of a Pyro-hydrometallurgical Method in the Production of Iron Oxide Powder from Complex Iron Ore". In the <u>"3rd RC-NRM 2010 - Regional Conference Interdisciplinary on Natural Resources and Materials Engineering"</u> di Bayview Hotel, Langkawi, Malaysia. Dari 25 – 26 Okt 2010.</p> <p><u>NATIONAL</u></p> <p>1. Mohd Rosli Bin Azman and Dr Norlia Baharun. (2008). 'Production and Characterization of Alumina Powder Produced from Different Thermal Decomposition Temperature". <u>NRIC 2008</u>, USM, Penang.</p> <p>2. Shahrizam, S. And Norlia, B. (2004). "Optimization of Metal-Impregnated Activated Carbon for Cyanide Removal. <u>Regional Conference for Young Chemist (RCYC '04)</u>. Poster Presentation .</p> <p>3. Faizul Che Pa and Norlia, B. (2004). "Hydrothermal synthesis of Zeolites from Sultan Salahuddin Abdul Aziz Shah Power Plant Fly Ash". <u>Regional Conference for Young Chemist (RCYC '04)</u>. Poster Presentation.</p> <p>4. Suhaina, I. and Norlia, B. (2004). "Synthesis and Characterization of Zeolite from Pulverized Fly Ash (PFA)". <u>Regional Conference for Young Chemist (RCYC '04)</u>. Poster Presentation .</p> <p>5. Nurul Ain, J. and Norlia, B. (2004). "Characterisation of Activated Carbon Prepared from Coconut Shell by Zinc Chloride Impregnation at Different Stages". <u>Regional Conference for Young Chemist (RCYC '04)</u>. Poster Presentation.</p> <p>6. Norwanis, H. and Norlia, B. (2004). "Removal of Copper in Aqueous Solutions by Granular Activated Carbon. <u>Regional Conference for Young Chemist (RCYC '04)</u>. Poster Presentation .</p> <p>7. Siti Aida, I. and Norlia, B. (2004). "Synthesis and Characterization of Zeolites from Na Aluminate Solutions and Gel". <u>Regional Conference for Young Chemist (RCYC 04)</u>. Poster Presentation .</p> <p>8. Faizul Che Pa and Norlia, B. (2004). "Hydrothermal Synthesis of Zeolites From Fly Ash". <u>National Quarry Conference and Exhibition</u>. Poster Presentation.</p> <p>9. Suhaina, I and Norlia, B. (2004). "Synthesis and Characterization of Zeolites From Fly Ash". <u>National Quarry Conference and Exhibition</u>. Poster Presentation.</p> <p>10. Nurul Ain, J. and Norlia, B. (2004). "The Production of Granular Activated Carbon from Agricultural Wastes in Malaysia. <u>National Quarry Conference and Exhibition</u>. Poster Presentation.</p>
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1.2	TEACHINGS
(a)	<p>(i) Teaching Modules</p> <ol style="list-style-type: none"> 1. Laboratory Manual and Worksheet for Chemistry I – prepared for Institute of Technology Petronas students (1996/97) 2. EBB 160 - MATERIALS PHYSICAL CHEMISTRY 3. EBS 325 - MINERAL CHEMISTRY LABORATORY 4. EBS 336 - ANALYTICAL CHEMISTRY 5. EBS 315 - HYDROMETALLURGY 6. EBS 341 - MINERAL PROCESSING ENGINEERING LABORATORY 7. EBS 432 - ENVIRONMENTAL CHEMISTRY FOR ENGINEERING PARCTICE
(b)	<p>(i) CAI/ Multimedia/Installer/Software/Coswer Each materials will be awarded 1-3 marks</p> <p>Guided Course Materials:</p> <ol style="list-style-type: none"> 1. EBS 325 - Course Review Notes for Mineral Chemistry Lab 2. EBS 325- Laboratory Worksheets for Mineral Chemistry Lab

1.3	Research Grant
(a)	<p>International</p> <p>(i) Project Head</p> <ol style="list-style-type: none"> 1. Collaborative Research Grant JICA Project for AUN/SEED-Net for JFY 2010/2nd batch CR Grant Amount: 7,000 USD Main Supervisor; Dr. Norlia Baharun Co-supervisor: AP Dr. Kamar Shah bin Ariffin.
(b)	<p>National</p> <p>(i) Project Head</p> <p>1. TechnoFund: “ Development of Hydrometallurgical Extraction Technology for Toxic Aluminum Dross Wastes Treatment to Zero Level Safe Disposal and Recovery of Useful Commercial By-Product of aluminum Oxide” Industry: Ultimate Engineering Technique Sdn Bhd. Amount obtained: RM 3,984,135.00 Principal Investigator: Dr. Norlia Baharun Co-Researchers : Dr. Sunara Purwadaria , PM Dr. Azizan Aziz and Dr. Kamarshah Ariffin; Duration: 2 years. Effective Date: 1 December 2008 End of Project: June 2010</p>

	<p>2. E-Science Fund: <u>“Production of Precipitated Calcium Carbonate (PCC) with Various Morphology and Characteristics using local Limestone-Based Materials Via Continuous Production Techniques”</u> Amount obtained : RM 171,895. 00 Leader: Dr. Norlia Baharun Co-Researchers: Dr. Kamarshah Ariffin and Dr Norashid Aziz Duration: 2 years (Dec 2006 - Nov 2008)</p> <p>3. Contract Research from Agency: <u>“Extraction of Fe and PGM from Ores via Hydrometallurgical Process Route”</u> Amount obtained : RM 25,000. 00 Company’s Name: D’Nonce Technology Sdn Bhd. Leader: Dr. Norlia Baharun Co-Researchers: Ms Ong Pek Ling, Dr. Kamarshah Ariffin and Dr Syed Fuad Sayid Hashim Status: Completed (from January 2010)</p> <p>4. FRGS: <u>“Thermodynamic and Kinetic studies of Titanium Oxycarbonitride Formation in Malaysian Ilmenite Ore”</u> Amount obtained: RM71,000.00 Leader: Dr. Norlia Baharun Co-researchers: Dr Sheikh Rezan Duration: 2 years (2013-2014)</p>
(c)	<p>University</p> <p>(i) Project Manager</p> <p>1. Development Of Hydrometallurgical Route In The Extraction Of Fe And Precious Metal” Postgraduate Research grant (PRGS) Amount: RM 16 700 Main Supervisor: Dr.Norlia Baharun Duration: 3 years</p> <p>2. Incentive Grant (Postgraduate Students –Ong Pek Ling) Amount: RM 5,000 Main Supervisor: Dr.Norlia Baharun</p> <p>3. Incentive Grant (Postgraduate Students –Nur Hazirah Binti Harun) Amount: RM 5,000 Main Supervisor: Dr.Norlia Baharun</p> <p>4. “Production of Precipitated Calcium Carbonate (PCC) with Various Morphology and Characteristics using local Limestone-Based Materials Via Continuous Production Techniques” Amount obtained : RM 171,895. 00 Leader: Dr. Norlia Baharun Co-Researchers : Dr. Kamarshah Ariffin and Dr Norashid Aziz Duration: 2 years (Dec 2006 - Nov 2008)</p> <p>5. “ Hydro-Electrometallurgical Extraction of Zinc from Zinc Bearing industrial Wastes”. USM Short Term Grant. Amount: RM 18,388.32 Leader: Dr. Norlia Baharun Co-Researchers : Dr. Sunara Purwadaria and Dr. Kamarshah Ariffin Date : 1 April 2006 - 31 Mac 2008 Duration: 2 years.</p>

	<p>6. “Synthesis of Zeolites by Hydrothermal Treatment of PFA Wastes” (Head) . USM Short Term Grant. Amount: RM 16,818.00. Leader : Dr. Norlia Co-Researchers : PM Dr. Azizan Aziz and Dr. Kamarshah Ariffin Date: 1 Mac 2002 Duration: 2 years.</p> <p>(ii) Co-researcher</p> <p>1. “Application of Neural Network in a Grinding Circuit” (Co-Researcher) . USM Short Term Grant. Amount: RM 14, 360.00 Head: P.M. Dr. Rizal Astrawinata Date: 18 Oct 2001 Duration: 2 years. Completed</p> <p>2. USM Short Term Grant- ”Investigation of Weathered Granitic Crust and Clay Sediment Associated with Tin as Potential Rare Earth (REE) – enriched Resources ”. <i>Main Researcher:: AP Dr Kamar Shah Ariifin</i> Co-Researcher: AP Akira Mai (Kyushu Universiti of Japan), Dr Norlia Baharun Amount: <i>RM 38, 404.00</i></p>
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1.4	Other Publications
(a)	<p>Mass Media</p> <p>1. Norlia Baharun and Azizan Aziz (2000). “Studies on the Treatment of Cyanide Wastes From Gold Extraction Processes”. In <u>ENJINIER Bulletin</u>, Pusat Peng.Kej.Bahan & Sumber Mineral, Tahun Penyelidikan USM, ISSN No: 1511-5275.</p> <p>2. Suhaina,I; Norlia, B. And Kamar Shah Ariffin (2006) “Surface Modification of PFA By Alkaline Fusion”. In <u>ENJINIER Bulletin</u>, Pusat Peng.Kej.Bahan & Sumber Mineral, Tahun Penyelidikan USM, ISSN No: 1511-5275. Jilid 07- BIL. 02, pp 11-13</p> <p>3. Faizul Che Pa, Suhaina Ismail, Norlia Baharun, Kamar Shah Ariffin (2007).“Utilization of Fly Ash in the Synthesis of Zeolites” In <u>ENJINIER Bulletin</u>, Pusat Peng.Kej.Bahan & Sumber Mineral, Tahun Penyelidikan USM.</p>
(b)	<p>Report</p> <p><u>TECHNICAL REPORT :</u></p> <p>1. Technical Report (2000). “ Control of Cyanide Waste From Gold Extraction Plants” - A brief technical report on RM-7 IRPA grant. Project No.: 08-02-05-6002</p> <p>2. Technical Report (2005). “Hydrometallurgical Extraction of Zinc from Metallurgical Wastes by using Hydrometallurgical Method” - A Summary Report based on lab scale studies submitted to LABZinc Co. Sdn. Bhd. Ipoh.</p> <p>3. Technical Report (2005). “Hydrometallurgical Extraction of Aluminum from Metallurgical Wastes by using Hydrometallurgical Method” - A Summary Report based on lab scale studies submitted to LABZinc Co. Sdn. Bhd. Ipoh.</p>

- 4. Technical Report (2005) . “ Production of Precipitated Calcium Carbonate [PCC] from Various Limestone Deposits and Industrial Wastes – Final USM Short Term report**
(Project A/C No: 304/PBAHAN/ 6035031)
- 5. Technical Report (2005) . “Synthesis of Zeolite By Hydrothermal Treatment of PFA Wastes” – Final USM Short Term Research Report**
(Project A/C No: 304/PBAHAN/ 6035032)
- 6. “Occupational Safety and Health Guidelines in the Laboratory for Undergraduate and Postgraduate Research” – Academic Session 2006/07**
- 7. E-Science fund Report First Technical Presentation (2007).”Production of Precipitated Calcium Carbonate (PCC) with various Morphology and Characteristic Using Local Limestone – based Materials Via Continuous Production Technique”. 17 December 2008.**
- 8. Technofund Second Technical Presentation (2008)- 2nd Application. “Development of Hydrometallurgical Extraction Technology for Toxic Aluminum Dross Wastes Treatment to Zero Level Safe Disposal and Recovery of Useful Commercial By-Product of aluminum Oxide”. 18 September 2008**
- 9. E-Science fund 2nd Technical Presentation (2008).”Production of Precipitated Calcium Carbonate (PCC) with various Morphology and Characteristic Using Local Limestone – based Materials Via Continuous Production Technique”. 6 November 2008**
- 10. Milestone Achievement Report (2009): “ Development of Hydrometallurgical Extraction Technology for Toxic Aluminum Dross Waste, Treatment to Zero Level safe Disposal, Recovery and Conversion to Commercial Grade Aluminum Oxide Powders”**
Investigator: Dr Norlia Baharun
Company: Ultimate Engineering Technique Sdn Bhd. Batu Caves, Selangor. 3 April 2009

2.0	SUPERVISION
(a)	<p>Graduate Supervision</p> <p><u>Graduate Supervision 2010/2011</u></p> <p>1. Name: Abdullahi Alafara Baba (2010) International Student from Nigeria Programme: TWAS-USM Post Doctoral Fellowship Programme Research Title: "Leaching and Solvent Extraction of some Nigerian Minerals" Supervisor: Dr Norlia Baharun Status: New</p> <p>2. Name: Ong Pek Ling (2009). PhD Research Project Title: Development of Hydrometallurgical Process Route in the Extraction of Fe and Precious Metals' Supervisor: Dr Norlia Baharun Status: On- going</p> <p>(i) Master Degree (Research)</p> <p><u>MSc Supervision 2010/2011</u></p> <p>1. Name: Cik Farhanawati Binti Zuraimi MSc Research Project Title: Hydro-electrometallurgical Extraction of Zinc from Zinc bearing Wastes Supervisor: Dr Norlia Baharun Status: Submitted 10 copies</p> <p>2. Name: Ciki Nur Hazirah Binti Harun MSc Research Project Title: Chemical factors affecting the dissolution of Al in the scale-up production of alumina from Al dross Supervisor: Dr Norlia Baharun Status: On-going</p> <p>3. Name: Mr. Sangkhone Panhyavisy International Student from Laos (AUN/SEED-Net) MSc Research Project Title: "Characterization and Potential Utilization of gypsum Laos PDR" Supervisor: Dr Norlia Baharun</p> <p>4. Name: Nidzamuddin Bin Md Mukhtar MSc Research Project Title: "Industrial Mineral Evaluation "Genesis, Characterisation and Beneficiation of Kaolin Clay from Malaysia for Industrial Usage" Co- Supervisor: Dr Norlia Baharun Status: On-going</p> <p><u>Graduated Postgraduates: (MSc by Research)</u></p> <p>1. Roniza Binti Ismail – "Production of Precipitated Calcium Carbonate (PCC) Using Malaysian Limestone Based Materials via Continuous Production Technique" (Graduated August 2010) Co- Supervisor : Dr. Norlia Baharun</p> <p>2. Shahrizam Bin Saad – "Optimization of Metal Impregnated Activated Carbon for Cyanide Removal" . (Graduated 2008) Main Supervisor: Dr. Norlia Baharun</p> <p>3. Siti Aida Bt. Ibrahim. "Synthesis and Characterisation of Zeolites from Sodium Aluminosilicate Solutions" - (Graduated 2007) Main Supervisor: Dr. Norlia Baharun</p>

	<p>4. Nurul Ain Bin Jabit – “The Production and Characterisation of Activated Carbon Using Local Agricultural Waste Through Chemical Activation Process” - (Graduated 2007) Main Supervisor: Dr. Norlia Baharun</p> <p>5. Norwanis Bt. Hassan – “The Effect of Surface Modification on Activated Carbon Using Citric Acid and Nitric Acid For Copper Removal” - (Graduated 2007) Main Supervisor: Dr. Norlia Baharun</p> <p>6. Faizul Che'Pa - “Synthesis of Zeolites By Hydrothermal Treatment of PFA Wastes” - (Graduated 2006) Main Supervisor: Dr. Norlia Baharun</p> <p>7. Suhaina Binti Ismail (2005). “Sintesis dan Pencirian Zeolit daripada Abu Terbang” (Graduated 2005) Main Supervisor: Dr. Norlia Baharun Co-Supervisor: PM Dr.Ahmad Fauzi Mohd Nor</p> <p>8. Tengku Shuhaidi Tengku Ismail (2004). “The Usage of Copper Impregnated Activated Carbon in Cyanide Removal” - (Graduated 2004) Main Supervisor: Dr. Norlia Baharun Co-Supervisor: PM Dr.Khairun Azizi Mohd Azizli (1)</p> <p>9. Teuku Andika Rama Putra (2004). “Application of Neural Network in Size Reduction (Grinding Process)” – Student from Indonesia. (Graduated 2004) Main Supervisor: PM Dr. Rizal Astrawinata Co-Supervisor: Dr.Norlia Baharun (1)</p>
(b)	<p>(ii) Master's Dissertation (Mixed Mode)</p> <p>1. Name: Ong Pek Ling (2009). MSc Research Project Title: Hydrothermal Process Route in the Synthesis of Zinc Oxide Powder. Status: Graduated August 2..</p>
(c)	<p>Undergraduate Supervision</p> <p>(i) Final Year - <u>Graduate Supervision 2010/2011</u></p> <ol style="list-style-type: none"> NADIATUL AKMAR MOHD JEFFERY- “The use of Diagnostic Leaching in the Characterization of Visible Gold in Complex Ores SITI MARIAM JELANI - Development of gold extraction for sulphide bearing gold CHONG HUI YEE - Recovery Methods of Fine Placer Gold DARREL LIM TIAN WEN - Assaying Methods for Complex Gold Ores <p>From Graduating year 2001 -2010:</p> <p><u>Graduated - Year 2010</u></p> <ol style="list-style-type: none"> Muhammad Salehin Bin Rozlan (2010). “Alkaline Leaching of Aluminum Dross using Feed Materials from Ball Milling and Plasma Converter”. Yogeswharee Chandrasekaran (2010). “Bacterial Leaching of Gold Ores”. Jexson Philip (2010): “Design of Electrowinning Cell for Gold Extraction”. <p><u>Graduated - Year 2009</u></p> <ol style="list-style-type: none"> Jayaraman a/l Chelvom (2009). “Microbial Leaching of Refractory Ore ”. Yeong Jun Kang (2009). “Effect of Higher Concentration of NaOH on the Morphology, Particle Size & Purity of Alumina Powder produced from Aluminum Dross”. Khor Gee Kit (2009). “Precipitation Studies and the Factors affecting the Synthesis of Zinc Oxide Powders” Chia Lee Theen (2009). “ Effects of Operating Temperature and Additives on the Precipitation of Calcium Carbonate (PCC) via Continuous Process”

Graduated - Year 2008

1. Ong Pek Ling (2008). "Pembangunan Proses Pelarutlesapan Atmosfera Klorida dalam Penghasilan Serbuk Zink Oksida daripada Abu Zink".
2. Mohd Rosli Bin Azman (2008). "Sintesis dan Pencirian Serbuk Alumina Hasil daripada Dross Aluminium pada suhu penguraian Terma yang Berbeza".
3. Zuraida Binti Awang Omar (2008). "Kaedah Cerakinan dan Analisis ke atas Sampel bijih Emas Penjom Gold Mine, Pahang"
4. Wong See Yin (2008). "Kajian tentang Pelbagai Keadaan Pelarutlesapan Alkali Bertekanan Tinggi untuk Sisa Aluminium".
5. Mahzan Bin Hamdan (2008). "Pencirian Jermang Timah bagi Pembangunan Proses dalam Pengekstrakan Logam Berharga"

Graduated - Year 2007

1. Nik Nur Azza Binti Nik Adik (2007). "Pengekstrakan Aluminium Daripada Sisa Aluminium melalui Kaedah Pelarutlesapan Bertekanan Tinggi dengan Bes Natrium Hidroksida".
2. Yap Yu Heng (2007). "Penghasilan alumina daripada aluminium Dross daripada Pelbagai Keadaan Pelarutlesapan Beralkali Bertekanan Tinggi".
3. Suhalinda Binti Saibon (2007). "Kajian Kesan Sisa Bendasing dalam Sisa Aluminium ke atas Pelarutlesapan Beralkali Tekanan Tinggi".
4. Ho Chan Wen (2007). "Pembangunan Kaedah Pemendakan untuk Perolehan Alumina dari Larutan Natrium Aluminat selepas Pelarutleapan Alkali Bertekanan".
5. Lim Huey Min (2007). "Kajian Mikroskopi dalam Pencirian sisa Aluminium untuk Pengekstrakan aluminium secara Hidrometalurgi".
6. Jacob Ooi (2007). "Kaedah Fisio-kimia dalam Pencirian Produk Sisa mengandungi Zink dalam merekabentuk Kaedah bagi Penyingkiran Bendasing"

Graduated - Year 2006

1. DG. Harba Aini Binti Abdul Halim (2006). "Pelarutan Kimia Aluminium Oksida Dalam Sisa Aluminium (PAVAL) Bagi Penghasilan Alumina – Kajian Awal"
2. Sharifah Mona Binti Abdul Aziz Abdullah (2006). "Kajian Kecekapan Pelarutlesapan Asid Sulfurik dalam Pelarutan Zink daripada Sisa Tuangan Zink"
3. Wan Shamsidar Nazira Binti Wan Salim (2006). "Pemprosesan Hidrokimia bagi Pelarutan Zink daripada Sisa Penggalvanian Zink"
4. Mohammad Ghazi Bin Ismail (2006). "Kajian Keberkesanan Penyingkiran Logam Berat dalam Larutlesapan diTeluk Kitang Menggunakan Bahan Penjerap Berkos Rendah "
5. Hajjah Talha (2006). "Kajian Mineralogi Dalam Pencirian Sisa Metalurgi Bagi Pengekstrakan Logam Berharga"

Graduated - Year 2005

1. Nurhafiza binti Kamaruddin (2005). "Kajian Awal Penggunaan Abu Terbang Dalam Perawatan Air Sisa yang Mengandungi Kuprum"
2. Lee Siew Wee (2005). "Kajian Awal Penggunaan Gentian Kelapa Sawit Dalam Penyingkiran Kuprum"
3. Ng Heng Hooi (2005). "Kajian Awal Perolehan Zink Dari Sisa Metalurgi Dengan Menggunakan Kaedah Hidrometalurgi"
4. Heng Chooi Long (2005). "Kajian Awal Perolehan Aluminium Dari Sisa Metalurgi Dengan Menggunakan Kaedah Hidrometalurgi"
5. Tan Choon Thai (2005). "Kajian Keberkesanan Nisbah NaOH Kepada Abu Terbang Dalam Pesintesis Zeolit"
6. Teoh Cheng See (2005). "Penyingkiran Kuprum Menggunakan Zeolit Yang Disentisiskan Daripada Abu Terbang"

Graduated - Year 2004:

1. Zaiton Binti Abdullah (2004). "Sintesis Zeolite Daripada Abu Terbang Melalui Proses Hidroterma"
2. Lee Pei feng (2004). "Penyediaan dan Pencirian Karbon Teraktif Secara Pengaktifan Kimia daripada Tempurung Kelapa Sawit Terbuang"

3. Lee Chin Pin (2004). " **Pencirian Arang Batu Merit Pila**"
4. Koay Lye Kooi (2004). " **Penyediaan dan Pencirian KArbon teraktif dari Tempurung Kelapa**"
5. Gan Szu Min (2004). " **Penyingkiran Besi daripada Abu Terbang dalam Sintesis Zeolite**"
6. Normaliza Bt.Muhammad (2004). " **Pencirian Abu terbang Bagi Tujuan Komersial**"
7. ChenChee Siung (2004). " **Kegunaan Karbon Teraktif dan Resin Dalam Merawat Air Sisa Menggunakan Kaedah kolum**"
8. Nur'Alliya Ferdaus Binti Kamudin (2004). " **Kajian Keupayaan Penjerapan Karbon Teraktif Daripada Tempurung Kelapa Dalam Penyingkiran Kuprum**"
9. Ramachandran a/L Angusamy (2004). " **Kajian Awal Mensintesis Zeolite secara Hidrotermal daripada Abu Kayu**"
10. Mas Ayu Dollah (2004). " **Pencirian Abu Kayu bagi Kegunaan Komersial**"

Graduated - Year 2002:

1. Chan Chee Ling (2002). " **Perawatan air Sisa yang mengandungi Logam Berat menggunakan Resin Penukar Ion dan Karbon Teraktif**"
2. **Amirul Farabi (2002).** " *Kajian Penyingkiran Sianida menggunakan Karbon Teraktif Terjerapisi Argentum*"
3. Noor Mariamadzliza (2002). " **Rawatan Sisa Sianida Dari Loji Pengekstrakan Emas menggunakan Karbon Teraktif Terjerapisi Kuprum**"
4. Tor Kah Wai (2002). " **Kajian Awal penyingkiran Sianida dengan Menggunakan Resin Terjerapisi Argentum**"
5. Choo Jen Ling (2002). " **Penyingkiran Logam Berat Dari Air Sisa industri Menggunakan Penukar Ion**"
6. Chin Kim Feng (2002). " **Kajian Ke atas Beberapa Faktor Mempengaruhi Kadar Penjerapan Sianida menggunakan Karbon Teraktif Terjerapisi Kuprum**"

Graduated - Year 2001

1. Sanisah Hanem Binti Yahya (2001). " **Kajian Perbandingan di antara Karbon dengan Resin dalam Penjerapan Emas dan Kesan Kehadiran Logam-Logam Asas ke atas Penjerapan Emas.**"

(d) Industrial Training/Practicum/Community:

1. Name: Ms. Nazirah Baharin (No. Matrik: UK 17906)

Universiti Malaysia Terengganu
Programme: Chemical Science
Year : 2010

2. Name: Ms.Nurul Bahirah Talib (No.Matrik: UK 16891) Universiti Malaysia Terengganu

Programme: Chemica Analysis and Environment.
Year : 2010

3. Name: Mr Rohit Goyal

Country: India
Programme: Bachelor of Technology (B.Tech) from "Department of Environmental Science & Engineering, Indian School of Mines.
Year: 2010

(e) Professional Service

Please list place/location, frequency and year.
Each service will be awarded - 1 mark.

(i) Continuous Education (per presentation)

1. Technical Presentation to In-house Training of Technical Staff (PPKBSM) for Mineral Chemistry Lab (2007)
2. Laboratory Training to Technical Staff in Mineral '

	<p>Chemistry Lab (2007)</p> <p>3. Technical Presentation 1. “ Undergraduate Research Project Management” Final Year Project Monitoring Committee. Academic Session 2006/07 to 2009/10</p> <p>4. Technical Presentation 2 . “ Undergraduate Research Guidelines” - “Chemical & Safety Briefings - Occupational Safety and Health Guidelines in the Laboratory” Academic Session 2006/07 to 2009/10 Final Year Project Monitoring Academic Session 2006/07</p> <p>5. Technical Presentation 3. “ Undergraduate Research Guidelines – How to give an Oral Presentation” . Final Year Project Monitoring. Academic Session 2006/07 to 2009/10</p> <p>6. Technical Presentation 3. “ Undergraduate Research Guidelines – THESIS WRITING’. Final Year Project Monitoring. Academic Session 2006/07 to 2009/10</p>
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3.0	ACADEMIC RECOGNITION AND LEADERSHIP
(a)	<p>Academic Awards</p> <p><u>NATIONAL</u></p> <p>1. Anugerah PerkhidmatanCemerlang (2009) by Universiti Sains Malaysia.</p>
(b)	<p>Assessor / Examiner</p> <p>(i) Academic Assessor/External Examiner/ Member of Board of Studies</p> <p>1. Industrial Training Report Assessor (2009)</p> <p>(ii) External Examiner for Thesis:</p> <p><u>External Examiner for Master’s Thesis</u></p> <p>1. MD SOHRAB HOSSAIN (2008): “SIMULTANEOUS EXTRACTION AND SEPARATION OF Cu(II), Zn(II), Ni(II) and Fe(II) FROM THE LEACH LIQUOR OF PRINTED CIRCUIT BOARD USING MICROCAPSULES COATED WITH CYANEX 272” University: School of Materials Engineering, University Malaysia Perlis, Perlis. Degree: MSc (Material’s Engineering)</p> <p>(iii) Internal Examiner for Thesis:</p> <p><u>Doctor of Philosophy:</u></p> <p>1. Mohd Suffian Bin Yusoff (2006). “ The Effectiveness of Limestone as a Filter Media to Remove COD and BOD from Leachate - A Case Study at Semi-Aerobic Solid Waste Landfill, Pulau Burung”.. Ph.D Thesis - School of Civil Engineering, USM, Penang</p>

2. Ahmed EL-Arabi Mohammed Abu Foul (2007). “ **Physical-Chemical Treatment of Stabilized Leachate Using Limestone, Activated Carbon and Zeolite. Ph. D Thesis** - School of Civil Engineering, USM, Penang
3. Azhar Bin Abdul Halim (2008). “**Olahan Larutlesapan Semi Aerobik menggunakan Penjerap Komposit Berkos Rendah**”. **Ph D Thesis** - School of Civil Engineering, USM, Penang
4. Nasehir Khan Bin E M Yahaya (2010). “ **Development of Rice Husks based Activated Carbon for Improving Urban Dry Weather Flow Quality at sungai Pinang River Basin**”. **PhD Thesis** - School of Civil Engineering, USM, Penang.

Master’s:

1. Balasubramaniam A/L Perumal (2005). “ **Optimization of Cyanide and Arsenic Removal for Effective Industrial Wastewater Treatment**”. **MSc. Thesis** - School of Materials & Mineral Resources Engineering, USM, Penang.
2. Houg A Loune Seng Pa Sith (2010). “ **Evaluation and Processing Optimization of Different Limestone Resources for Industrial Applications. MSc Thesis** - School of Materials & Mineral Resources Engineering, USM, Penang.

Masters (M.Sc. - Mix Mode)

1. Hariati Binti Mohd Taib @ Taib (2003). “**Effects of Butyl Methacrylate (BMA) Content Variation in PSA: Characterization Study**”.
2. Rosniza Binti Hussin @ Isa (2003). ‘ **Sintesis dan Pencirian Nanokristalit Stanum Dioksida (SnO₂)**
3. Shamheeza Bt. Suhatta (2002). “**Penghasilan Plumbum Titanat Halus Melalui Kaedah Pemprosesan Sol-Gel**”

(c)	<p>(i) Reviewing Articles in Academic Journals / Assessor of Working Papers / Reviewing Books</p> <p><u>International:</u></p> <p>For Reviewing papers for International Journal of Environment and Waste Management (IJEWM):</p> <p>1. Application of Combined Filtration and Coagulation for Semi-Aerobic Leachate Treatment” Authors: Zawawi Daud, Hamidi Abdul Aziz*, Mohd Nordin Adlan and Yung-Tse Hung.</p> <p>2. The use of Alum, Ferric chloride and Ferrous sulphate as coagulants in removing suspended solids, colour and COD from semi-aerobic landfill leachate at controlled pH Authors: Hamidi Abdul Aziz¹, Salina Alias², Faridah Assari³, Mohd Nordin Adlan⁴,</p> <p>3. On Sol Gel Approach to GeoPolymerisation.</p> <p><u>National:</u></p> <p>Reviewer for manuscript for Journal of Physical Science:</p> <p>1. FABRICATION AND CHARACTERIZATION OF POWDER METALLURGY Fe-Cr-Al₂O₃ COMPOSITES SPECIFIED BY REINFORCEMENT CONCENTRATION</p> <p>Reviewer for manuscript conference for International Conference on X-Rays and Related Technique in research and Industry (ICXRI 2010):</p> <p>2. STABILIZATION OF MAGNETITE NANO IRON OXIDE WITH A SERIES OF NOVEL SURFACTANTS</p> <p>3. HYDROTALCITE FROM MODIFIED COMBUSTION METHOD</p>
(d)	<p>Keynote/Invited Speaker (Conference / Seminar / Symposium and other similar academic forums)</p> <p>Please list authors, year, title, organiser and venue.</p> <ul style="list-style-type: none"> ● International - 6 - 8 marks ● National - 3 - 5 marks <p><u>INTERNATIONAL</u></p> <p>1. Norlia Baharun (2009), "International Conference on Recent Advances in Materials, Minerals & Environmental and Asian Symposium on Materials & Processing (RAMM & ASMP 2009)" organized by School of Materials & Minerals Resource Engineering, USM , Bayview Beach Resort, Batu Feringgi, Pulau Pinang, 1 – 3 June 2009.</p>

(e)	<p>Member in Professional / Academic Associations</p> <p>(i) Member (per society)</p> <p><u>INTERNATIONAL :</u></p> <ol style="list-style-type: none"> 1. The Minerals, Metals & Materials Society (TMS). Associate Member since 2008 2. Institute Of Nanotechnology, UK Associate Member since 2008 <p><u>NATIONAL:</u></p> <ol style="list-style-type: none"> 1. Institute of Materials Malaysia Committee Member since 2002 Treasurer for Northern Region (2004) Secretary for Northern Region (2006- present) 2. "Revitalization of Gold Dinar Unit Research Project" Technical Committee Member (2003) 3. NanoMig Society, SMMRE, USM Member since 2006 4. Institute of Minerals Engineering Malaysia Ordinary Member since 2008 5. Committee member and Speaker for " Workshop on Advanced Mineral Characterization" – 27 -29 October 2009. 6. Committee member, MC and Moderator for the "1st Regional Conference in Geo-disaster Mitigation and Waste Management" di Hotel Corus,Kuala Lumpur Kuala Lumpur – 1- 5 Mac 2009. 7. Co-ordinator for Module Development – Cluster - " Responsible Research Conduct" - Professional Development Courses (Institute of Postgraduate Studies) <p>(ii).Committee Member (Conference / Seminar /Workshop)</p> <p><u>International :</u></p> <ol style="list-style-type: none"> 1. Joint Committee Member for International Conference organised with Institute technology Bandung (2005) 2. Committee Member for International Conference (RAAM2003) 3. Committee Member for International Conference (RAAM2009) <p><u>National:</u></p> <ol style="list-style-type: none"> 1. Chairman for Nano Research Seminar at USM, 2006 2. Project Initiative Advisor for "Students Annual Year Book 2005/06 for PPKBSM 3. Committee Leader for Hari Warga Staf 2005, (Food) 4. Committee Member for Professoral Talk 2003 5. Chairman for Quality Day (2001) PPKBSM 6. Deputy Coordinator for Industrial Training Poster Presentation 2000. 7. Evaluation Committee Member for Industrial Training Poster Presentation 2000- 2008.
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4.0	CONSULTANCY
(a)	<p>Consultancy With Monetary Reward (University / School / Personal)</p> <p><u>International:</u> Research</p> <p><u>Title of Project:</u></p> <p>“Bio-Mining Technology – Enhancement of Gold Extraction” – Development of Bacterial Leaching Processes for Carbonaceous Gold Ores. A joint Contract Research and Development with Avocet Mining (London) - Penjom Gold Mine and Malaysian University of Science & Technology. Group Leader/Main Researcher:Dr. Norlia Baharun Co-Researchers (USM team): Dr. Kamar Shah Ariffin, Prof Dr Khairun Azizi Mohd Azizli</p>
(b)	<p>Commercialization of Research Product (per product)</p> <p>1. Alumina product (TechnoFund)</p>
(c)	<p>Consultation Without Monetary Rewards (with appointment letter / consultation report)</p> <p><u>NATIONAL</u></p> <p>1.Consultation work with Labzinc Industries (M) Sdn. Bhd. on the ““ Hydrometallurgical Extraction of Zinc from Metallurgical Wastes for the Production of nano-size Zinc Oxide” (2008) Project leader: Dr Norlia Baharun Co-Researchers : Dr. Sunara Purwadaria, Dr. Kamarshah Ariffin, PM Dr. Azizan Aziz</p> <p>2. Research Collaboration with Ultimate Engineering Technique (M) Sdn. Bhd. For the set-up of An Aluminum Recovery Plant using Aluminum Recycling Process Wastes as the Raw Material. (2004-2007) Project Leader: Dr. Norlia Baharun Co-Researchers : Dr. Sunara Purwadaria, Dr. Kamarshah Ariffin</p>

5.0	SERVICE TO THE UNIVERSITY
(a)	<p>University Committee Please list membership, committee and duration/year. Candidate must be appointed as a member not by virtue of position. Each appointment will be awarded 1 - 2 marks.</p> <p>1. Active Member of ALUMNI USM.</p> <p>2.Moderator for 1st Regional Conference on Geo-Disaster Mitigation and Waste Management in Asean 2009</p> <p>3.Co-ordinator for Professional Development Module: Responsible Research Conduct (Institut Pengajian Siswazah, USM) from October 2009</p>

	<p>4. Co-ordinator for Module Development in the Personal Development and Professional Courses for Cluster- “ Responsible Research Conduct” - Professional Development Courses (Insitute of Postgraduates (IPS), USM) from 1 October 2009 – 30 September 2011.</p> <p>5.Head of Development Module in “Personal and Professional Development Programme Cluster: Responsible Research Conduct” by Institute of Postgraduates (IPS), USM, from 11 October 2010.</p> <p>6.Conference Chairman for the 3RC-NRM 2010 - 3rd Regional Conference Interdisciplinary on Natural Resources & Materials Engineering. Theme “Sustainable Development In Asean Through Networking In Natural Resources and Materials”.</p> <p>7. Committee (Editor and Protocol) of The 1st Regional Conference on Geo-Disaster Mitigation and Waste Management, Kuala Lumpur, Malaysia (3-4 March 2009)- Engineering Campus.</p> <p>8. Ahli Jawatankuasa Perlaksanaan Dasar Bahasa Malaysia (2007-2010)</p>
(b)	<p>School Committee</p> <ol style="list-style-type: none"> 1. School Board Member (PPKBSM) 2. School Representative for Dasar Perlaksanaan Bahasa Malaysia (2005-present) 3. School Representative for P.P. Aeroangkasa Board (2000-2006) 4. School Representative for Library (2000-2005) 5. Committee Member for Safety and Health PPKBSM (2000-present) 6. Committee Member for Chemicals Safety, PPKBSM(2000-present) 7. Chairman/Committee Member for Final Year Project Monitoring, PPKBSM 8. Chairman for Nano Research Seminar at USM, 2006 9. Project Initiative Advisor for “Students Annual Year Book, 2005/06 for PPKBSM 10. Member of NanoMIG Research Group at PPKBSM 11. Committee Leader for Hari Warga Staf 2005, (Food) 12. Committee Member for RAAM 2003 13. Committee Member for Professoral Talk 2003 14. Chairman for Quality Day (2001) PPKBSM 15. Committee Member for RAAM 2001 16. Deputy Coordinator for Industrial Training Poster Presentation 2000 17. Evaluation Committee Member for Industrial Training Poster Presentation 2000 18. Working Committee for RAAM & ASMP 2009. 19. Working Committee on Advanced Mineral Characterization Workshop 2009 20. Emcee and Working Committee of “1st Regional Conference in Geo-disaster Mitigation and Waste Management” 2009 21. Committee of Higher Degree and Research (Ijazah Tinggi & Penyelidikan-JIT&P) 2010 22. Working Committee Occupational Safety and Health, School of Materials and Minerals Resources Engineering 2004 23. Co-ordinator of Occupational Safety and Health, School of Materials and Minerals Resources Engineering 2010 24. Committee of Chemicals Approval, School of Materials and Minerals Resources Engineering 2004 25. Chairman, Committee of Approval, School of Materials and Minerals Resources Engineering 2010 26. Working Committee of Technical Evaluation for ICP/OES & AAS Instrumentation (2009) 27. Working Committee of Technical Evaluation for Multipoint Surface Area Instrumentation (2010) 28. Working Committee for Metallurgy Research Group, School of Materials and Mineral Resources Engineering (2010).

(c)	<p>University Representative (Sports and Non-Academic Activities)</p> <p>1. Kejohanan Tertutup Futsal Piala Prof. Madya Dr. Azhar Abu Bakar 2009, Kompleks Sukan Kampus Kejuruteraan USM, 25th July 2009</p>
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6.0 SERVICE TO THE COMMUNITY	
(iii)	<p>State</p> <p>1. Member of Penang ICT Technopreneurship (ICT Penang network)- 2008</p>
(iv)	<p>District / Village / Institution</p> <ol style="list-style-type: none"> 1. Committee member for the School's Sports and Recreational Club at the School level (2001- present) 2. Committee for PIBG , Sekolah Kebangsaan Saujana Indah, Nibong Tebal. Session 2005/06. 3. Committee for PIBG , Sekolah Kebangsaan Saujana Indah, Nibong Tebal. Session 2008/09.