

CURRICULUM VITAE



Dr. Khatijah Aisha Yaacob
 Material Engineering Programme
 School of Materials & Mineral Resources Engineering
 14300 Nibong Tebal, Pulau Pinang

Tel: 04-599 5267
 Fax: 04-594 1011
 Email: mraisha@usm.my

ACADEMIC QUALIFICATION

1. Doctor of Philosophy and Diploma of the Imperial College, 2011, Imperial College London
2. M.Sc., Materials Engineering, 2002, USM
3. B. Eng., Materials Engineering, 1999, USM

AREAS OF INTEREST

1. Nanomaterials
2. Electronic materials
3. Semiconductor devices

TEACHING EXPERIENCE

No.	Course Code	Course Name	Year
1.	EBB 113/3	Materials Engineering	2012 – to date
2.	EBB 160/3	Physical Chemistry of Engineering Materials	2011 – 2013
3.	EBB 215/3	Semiconductor Materials	2004 - to date
3.	EBB 202/3	Crystallography and X-ray Diffraction	2004 – 2006
4.	EBB 224/3	Design of Material Engineering	2004 – 2006
5.	EBB 323/3	Semiconductor Fabrication Technology	2003 – to date
6.	EBB 424/4	Semiconductor Devices & Optoelectronics	2003 – 2005
7.	EBB 526/3	Electronic Packaging	2003 – to date

PROFESSIONAL QUALIFICATION / MEMBERSHIP

1. Member, Institute Of Materials Malaysia
2. Member, The Institute of Materials, Mineral & Mining, UK
3. Graduate Engineer, Board Of Engineers Malaysia
4. Member, Electron Microscopy Society Malaysia

PUBLICATIONS

(Publications: 2013-2015)

1. Khatijah A. Yaacob, Jason D. Riley, Formation of MUA (mercaptoundeonic acid) Capped CdSe Nanoparticle Films by Electrophoretic Deposition, Ceramic International, 39 (2013) 8797-8803
2. Khatijah A. Yaaco, Gooi Wyn Gyn, Formation of Gold Nanoparticles Film on Silicon Wafer by Self-Assembled Method, Advanced Materials Research (Trans Tech Pub), Vol. 795 (2013) pp 726 – 731.
3. K. A. Yaacob, M.N. Ishak & N. N. Alias, Quantum Dots Sensitized Solar Cells: Effect of CdSe Nanoparticles Purification Procedure of QD Sensitized Photoanodes, IOP Journal of Physics: Conference Series , Vol. 431 (2013) 012019.
4. Khatijah A. Yaacob, Jason D. Riley, Study on the Influence of Synthesis Temperature of Anatase TiO₂ Nanoparticles for Electrophoretic Deposition, Advanced Materials Research (Trans Tech Pub), Vol. 620 (2013) 161-165.
5. Khatijah A. Yaacob, D. Jason Riley, Anodic Electrophoretic of TiO₂ Nanoparticles Synthesized using Sol Gel Method, Advanced Materials Research (Trans Tech Pub), Vol. 832 (2014) 633-638.
6. M. Nizam Ishak, K. A. Yaacob, Synthesis of CdSe Nanoparticles: Control of Reaction Temperature, Advanced Materials Research (Trans Tech Pub), Vol. 1024 (2014) 68 – 70.
7. Khatijah A. Yaacob, Mohamad Syahir Borhanuddin, Formation and Characterisation of TiO₂ Scattering Layer Deposited by Spray Pyrolysis for DSSC, Advanced Materials Research (Trans Tech Pub), Vol. 1024 (2014) 95 - 98.
8. M. Nizam Ishak, K. A. Yaacob & Ahmad Fauzi M. N, The Effect of Ligands on CdSe Nanoparticle Films Deposited by EPD, Advanced Materials Research (Trans Tech Pub), Vol. 1087 (2015) 304 – 308.
9. A. L. Quah, K. A. Yaacob, Formation and characterization of PbxCd1-xS interlayer for PbS/CdS/ZnS quantum dot sensitized solar cells, Advanced Materials Research (Trans Tech Pub), Vol. 1087 (2015) 316 – 320.

RESEARCH GRANTS

(As Project Leader)

No.	Project Title	Amount (RM)	Year	Source
1.	Multilayer of CdSe Nanoparticles On Conductive Substrate For Quantum Dots Sensitised Solar Cell Photoanode	241,615	2012-2015	RUI/USM
2.	Development of Biosensor Device using Silicon Nanowire Arrays Fabricated by AFM lithography	242,035	2012-2015	RUI/USM
3.	Formation and Characterization of MUA Capped CdSe Nanoparticles on TiO ₂ Porous Structure by Electrophoretic Deposition.	39,999	2011 - 2013	Short term USM
4.	The Development of Electron Transport Analysis Techniques in the Quantum	1,945,240	2004-2007	MOSTI

5.	Dots/Wires. Study on the effect of dopant atom to CoSi ₂ layer subjected to temperature increase	18,906	2004-2006	Short term USM
----	--	--------	-----------	-------------------

POSTGRADUATE STUDENT SUPERVISION

PhD (Main Supervisor)

No.	Name	Title	Status
1.	Mohd Nizam Ishak	Multilayer of CdSe Nanoparticles On Conductive Substrate For Quantum Dots Sensitised Solar Cell Photoanode	Ongoing
2.	Siti Noorhaniah Yusof	Development of Biosensor Device using Silicon Nanowire Arrays Fabricated by AFM lithography	Ongoing

MSc – (Main Supervisor)

No.	Name	Title	Status
1.	Nurain Najihah Alias	Fabrication of Vertical Nanowires Using AFM	Ongoing
2.	Quah Ai Li	Formation and Characterization of Pb _x Cd _{1-x} S Interlayer for PbS/CdS/ZnS Quantum Dot Sensitized Solar Cells.	Graduated
2.	Mohd Nizam Ishak	CdSe Quantum Dots Sensitised TiO ₂ Electrodes: Effect of Purification of CdSe Nanoparticles and Mode of Attachment.	Graduated

AWARDS / RECOGNITION

No.	Type	Title	Awarding Authority	Level/Medal	Year
1.	Academic Award	Anugerah Sanggar Sanjung, Kategori Penerbitan Jurnal 2013	USM	University	2013
2.	Academic Award	Hadiah Sanjungan 2007, Kategori Penerbitan Jurnal 2007.	USM	University	2007
3.	Academic Award	Anugerah Sanggar Sanjung 2005, Kategori Produk Penyelidikan 2005	USM	University	2005

PROFESSIONAL SERVICES / CONSULTATION

Selected Major Activities

No.	Year	Title	Company
1.	2014	Scanning probe microscopy (AFM topography).	IPPT, USM
2.	2013	Teaching EEE 553 Microelectronic Engineering	TalentCorp
3.	2005	Physical Analysis on Telecommunication Wire	Per nec Advanced Network Sdn. Bhd. Sg Petani