



Mrs Nurul Akmal Che Lah

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Jalan Pekan-NE, Kg Ketapang Hilir, 26600 Pekan, Pahang
Current Position: Lecturer (Nanotechnology – Metal Cluster)

Mechanical Engineering Faculty, Universiti Malaysia Pahang (UMP),
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PERSONAL INFORMATION

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Marital Status: Married

EDUCATIONAL OBJECTIVES

Highly self-motivated and goal-oriented professional committed to pursuing a long-term education in materials engineering specifically in nanotechnology field. Possess an excellent management, negotiating and public relation skill. Excellent team-working skill and competencies in making a strong contribution to organization goals based on the continuing professional development skill.

EDUCATIONAL BACKGROUND

2011-2016	University of Oxford (Pass) Dphil in Inorganic Chemistry Department, University of Oxford, UK
2008-2010	University of Malaya (UM), Lembah Pantai, Kuala Lumpur Master of Engineering Science (Materials) (Pass)
2004-2008	University of Malaya (UM), Lembah Pantai, Kuala Lumpur Bachelor of Engineering (Materials) (Honours) CGPA: 3.06
2003-2004	Pusat Asasi Sains University of Malaya (PASUM) CGPA : 3.85
2001-2002	Kolej Tunku Kurshiah (TKC) Sijil Pelajaran Malaysia (5A)
1998-2000	Sek. Men. Kadok Penilaian Menengah Rendah (8A)

PROPOSED TEACHING SUBJECTS

Field of interest: Metal Cluster, Inorganic Chemistry, Metal Nanowires, Materials Science, Materials Technology (Nanotechnology).

RELEVANT COURSEWORK

Title of DPhil Nanotechnology (Metal Cluster) Inorganic Chemistry Project: Conductivity Studies of The *Size-Induced Metal-Insulator Transition (SIMIT)* in Silver Nanoparticles

Title of Master Engineering Science Project: Synthesis & Characterization Studies of Silver Nanoparticles

Title of Undergraduate Project: Silver Nanoparticles synthesis

Material Coursework: Inorganic Chemistry, Electrical Properties of Metal Particles, Basic Materials Science, Applied Mechanics, Materials Production, Thermodynamics of Materials, Polymer Science and Technology, Solid Mechanics, Microstructure and Phase Transformation, Polymer Engineering, Nonferrous Alloys, Fundamentals of Ceramics, Electronic Materials and Devices, Transportation Phenomena, Deformation of Solids, Engineering Alloys, Design Against Failure, Computational Materials Engineering, Capstone Project, Industrial Training, Composite Materials, Corrosion Engineering, Ceramics Processing and Advanced Materials.

Mechanical Coursework: Engineering Drawing and Computer Aided Design, Computer Programming, Applied Engineering Mathematics, Instrumentation and Measurement Techniques.

CONFERENCE ACTIVITIES

DPhil

Participant in *Pfizer Symposium*, University of Oxford, Oxford, United Kingdom (30th October 2014)

Oral Presenter in *2nd International Conference on Bioinspired and Biobased Chemistry and Materials*, Nice, France (15th – 17th October 2014)

Participant in *Prof. Dieter Fenske (MPLS Visiting Professor of Inorganic Chemistry) 'Nanosized Transition Metal Clusters. Synthesis, Structures and Properties'*, University of Oxford, Oxford, United Kingdom (8th August 2014)

Poster Presenter in *The 1st Scientific Symposium of the Islamic Development Bank Scholars Association – UK*, University of Cambridge, United Kingdom (22nd May 2014)

Participant in *Royal Society Discussion Meeting, 'The New Chemistry of the Elements'*, Royal Society London, United Kingdom (12th - 13th May 2014)

Oral Presenter in *One-Day Meeting On A Metal and Metal-Containing Cluster*, University of Oxford, Oxford, United Kingdom (1st April 2014)

Oral Presenter in *Inorganic Chemistry Graduate Symposium 2014*, University of Oxford, Oxford, United Kingdom (25th -27th March 2014)

Master

Publicity Committee Members for *TECHPOS Conference 2008*, Malaysia (14th December 2008)

Oral Presenter in *International Conference on Nanotechnology – Research and Commercialization, ICONT 2009*, Malaysia (14th-17th December 2009)

Oral Presenter in *5th International Conference on Surfaces, Coatings and Nanostructured Materials, NANOSMAT-5th* (19th-21th October 2010)

Oral Presenter in *2nd International Conference on Science and Technology, ICSTIE 2008*, Malaysia (12th-13th December 2008)

PROCEEDING AND JOURNAL ACHIEVEMENTS

Journal

Lah, N.A.C, Slocombe, D., Kuznetsov, V. L., Edwards, P. P., Measuring the Critical Size-Induced Metal-Insulator Transition in Individual Colloidal Ag via a Microwave Perturbation Technique – *will be submitted to Science Journal (IF 31.0)*

Singho, N.D., Johan, M.R., **Lah, N.A.C.**, Temperature Dependent Properties of Silver – Poly (Methyl Methacrylate) Nanocomposite Synthesized by *In-Situ* Technique, *Nanoscale Research Letter*, 9, 1- 6 (2014)

Singho, N.D., Johan, M.R., **Lah, N.A.C.**, Ahmad, R., FTIR Study on Silver – Poly (Methyl Methacrylate) Nanocomposite via *In-Situ* Polymerization Technique, *International Journal of Electrochemical Science*, 7, 5598 – 5603 (2012)

Singho, N.D., Johan, M.R., **Lah, N.A.C.**, Ahmad, R., Enhancement of the Refractive Index of Silver Nanoparticles in Poly (Methyl Methacrylate), *International Journal of Research in Engineering and Technology*, 1, 231 – 234 (2012)

Lah, N.A.C., Johan, M.R., Optical and Thermodynamic Studies of Silver Nanoparticles Stabilized by Daxad 19 Surfactant, *International Journal of Materials Research*, 102, 340- 347 (2011)

Lah, N.A.C., Johan, M.R., Facile Shape Control Synthesis and Optical Properties of Silver Nanoparticles Stabilized by DAXAD 19 Surfactant, *Applied Surface Science*, 257, 7494 – 7500 (2011)

Proceeding

Proceeding in 2nd International Conference on Science and Technology, ICSTIE 2008 (12-13 December 2008) entitled ‘Synthesis and characterization of silver nanoparticles in polyethylene glycol (PEG)’ : page 982.

Proceeding in 2nd AUN/SEED- Net Regional Conference on Materials Engineering 2009 (19-20 November 2009) entitled ‘ Synthesis and UV-Vis Spectroscopic Study of Silver Nanoparticles Stabilized by Daxad 19’ : page 12.

Proceeding in International Conference on Nanotechnology – Research and Commercialization, ICONT 2009 (14-17 December 2009) entitled ‘ Optical Studies on Gibbs Free Energy of Silver Nanoparticles stabilized by Daxad 19’: in progress.

SKILLS/ QUALITIES

Proficient in English and Bahasa Malaysia (writing and speaking). Creative, Inovative, Team Skill, Hard work, Enthusiastic, Persuasive, Have Initiative, Strong research abilities & persistence, A fast learner person and can think analytically.

SPECIAL SKILLS

Microwave Measurement Skill

Computer skills: Phyton, Origin, Working knowledge of Windows and have been certified by Microsoft Profesional, Microsoft Office (MCDST Certificate) and AutoCad.

EMPLOYMENT BACKGROUND

Internship training (Jabatan Kerja Raya Sdn Bhd, Malaysia) Specialized in mechanics practical	Mei 2007-July 2007
Permanent Tutor (Mechanical Engineering Department) Materials Engineering Programme	July 2008- July 2010
Dphil Student of Inorganic Chemistry Department in University of Oxford	October 2011- Feb 2016

REFEREES

Current University:

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Former University:

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Former University:

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