

CURRICULUM VITAE



PERSONAL PARTICULARS

Name : Tuti Katrina Binti Abdullah
Date of birth : 29th April 1983
Nationality : Malaysia
Gender : Female
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Engineering Campus,
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ACADEMIC AND PROFESSIONAL QUALIFICATIONS

| Year | Degree | Discipline | University |
|-----------|---------------------------------------|--|---|
| 2002-2006 | Bachelor of Applied Science (Honours) | Industrial Chemistry | Universiti Sains Malaysia |
| 2006-2008 | Master of Science | Advanced Materials Science and Engineering (AMASE) | Luleå Tekniska Universitet, Sweden Institut National Polytechnique de Lorraine, France |
| 2010-2014 | Doctor of Philosophy | Thermodynamic and Corrosion | Universiti Sains Malaysia Université de Lorraine, France |

TITLES OF POSTGRADUATE THESES

Msc : Etude de la corrosion de matériaux métalliques et céramiques dans des verres fondus silicate: détermination de la solubilité de Cr₂O₃.

Study of the corrosion of metallic and ceramic materials in silicate molten glasses: determination of the solubility of Cr₂O₃.

PhD : Study of the redox and acid-base properties of soda-lime silicate glass: application to the high temperature corrosion of nickel-based alloys and ceramic materials.

LANGUAGES

Fluent in Bahasa Malaysia, English and French

RESEARCH AND PUBLICATION

(a) Journal

International

1. Tuti Katrina Abdullah, Carine Petitjean, Pierre-Jean Panteix, Christophe Rapin, Michel Vilasi, Zuhailawati Hussain & Afidah Abdul Rahim. Dissolution equilibrium of chromium oxide in a soda lime silicate melt exposed to oxidising and reducing atmospheres. *Journal of Materials Chemistry and Physics* **142**, 572-579 (2013).
2. Tuti Katrina Abdullah, Carine Petitjean, Pierre-Jean Panteix, Christophe Rapin, Michel Vilasi, Zuhailawati Hussain & Afidah Abdul Rahim. Stability of protective oxide layer against corrosion: solubility measurements of chromium in soda lime silicate melts. *Journal of Oxidation of Metals* **80**, 611-622 (2013).
3. Hichem Khedim, Tuti Katrina, Renaud Podor, Pierre-Jean Panteix, Christophe Rapin & Michel Vilasi. Solubility of Cr₂O₃ and speciation of chromium in soda–lime–silicate melts. *Journal of the American Ceramic Society* **93**, 1347-1354 (2010).

National

1. M. N. Mohamad Ibrahim, M. E. Izat, A. L. Goh, A. Tuti Katrina & Z. Norhidaya. Kesan perubahan masa penyaduran tanpa elektrik aloi nikel-fosforus terhadap struktur mikro substrat dan analisis kekuatan sadurannya. *Jurnal Teknologi* **45(C)**, 43-58 (2006).
2. M. N. Mohamad Ibrahim, M. E. Izat, L. Lau & T. K. Abdullah. Penyaduran nikel tanpa elektrik ke atas plastik ABS bergred tidak boleh disadur. *Jurnal Teknologi* **44(C)**, 43-54 (2006).

(b) Proceeding

International

1. T. K. Abdullah, C. Petitjean, P. J. Panteix, C. Rapin & M. Vilasi. Corrosion of superalloys in molten glasses: study of chromia solubility in soda lime silicate melts. *Proceeding of the European Corrosion Congress (EUROCORR)*, Stockholm, Sweden, 4th - 8th September 2011.

(c) International Conference

Oral presentation

1. Abdullah, T. K., Petitjean, C., Panteix, P. J., Rapin, C., Vilasi, M., Zuhailawati, H. & Rahim, A. A. Challenge for developing new materials for industrial applications in molten silicate glass: corrosion study of Ni-based alloys in molten glass. *2nd Advanced Materials Conference 2014 (AMC 2014)*, Langkawi, Malaysia, 25th - 26th November 2014.
2. Abdullah, T. K., Petitjean, C., Panteix, P. J., Rapin, C., Vilasi, M., Zuhailawati, H. & Rahim, A. A. Strategy for developing new structural materials for industrial applications in molten silicate glass: fundamental study of the mechanisms leading to equilibrium of dissolution of Cr₂O₃. *International Conference on the Advancement of Materials and Nanotechnology 2013 (ICAMN III 2013)*, Penang, Malaysia, 19th - 22nd November 2013.
3. Abdullah, T. K., Petitjean, C., Panteix, P. J., Rapin, C., Vilasi, M., Zuhailawati, H. & Rahim, A. A. Corrosion of chromia/alumina forming alloys in molten glass: correlation with solubility of the protective oxide in the melt. *Colloquium IJL-USM*, Vandoeuvre-les-Nancy, France, 13th - 15th November 2012.
4. Abdullah, T. K., Petitjean, C., Panteix, P. J., Rapin, C., Vilasi, M., Zuhailawati, H. & Rahim, A. A. Stability of protective oxide layer against corrosion: solubility measurements of chromium in soda lime silicate melts. *8th International Symposium on High-Temperature Corrosion and Protection of Materials*, Les Embiez, France, 20th - 25th May 2012.

Poster presentation

1. Abdullah, T. K., Petitjean, C., Panteix, P. J., Rapin, C., Vilasi, M., Zuhailawati, H. & Rahim, A. A. Corrosion of superalloys by molten glass: behaviour of chromia in soda lime silicate melts. *The European Corrosion Congress (EUROCORR)*, Istanbul, Turkey, 9th - 13th September 2012.
2. Abdullah, T. K., Petitjean, C., Panteix, P. J., Rapin, C. & Vilasi, M.. Corrosion of superalloys in molten glasses: study of chromia solubility in soda lime silicate melts. *The European Corrosion Congress (EUROCORR)*, Stockholm, Sweden, 5th - 8th September 2011.

(d) National Conference

Oral presentation

1. Abdullah, T. K., Petitjean, C., Panteix, P. J., Rapin, C., Vilasi, M., Zuhailawati, H. & Rahim, A. A. Solubility of chromium oxide in soda lime silicate melts: a kinetic point of view. *43ièmes Journées d'Etude sur la Cinétique hétérogène (JECH43)*, Vandoeuvre-les-Nancy, France, 29th - 30th March 2012.
2. Abdullah, T. K., Petitjean, C., Panteix, P. J., Rapin, C. & Vilasi, M.. Corrosion of superalloys in molten glasses: study of chromia solubility in soda lime silicate melts. *Jounee L'Ecole Doctorale Lorraine*, Vandoeuvre-les-Nancy, France, 25th May 2011.

REVIEWING ARTICLES IN ACADEMIC JOURNALS

1. The Influence of ECAP Pass Through Bc Route on Mechanical Properties of 6061 Aluminium Alloy (Trans Tech), Assoc. Prof. Dr. Zuhailawati Hussain, 2014.
2. Leaching of Low Grade Manganese Ore Using Bamboo Saw Dust as Reducing Agent: An Optimization Study Using Response Surface Methodology (Trans Tech), Assoc. Prof. Dr. Zuhailawati Hussain, 2014.

UNDERGRADUATE TEACHING

1. Corrosion and Degradation, EBB 316/3
2. Transport Processes, EBB 333/3
3. Materials Thermodynamics, EBB 236/3
4. Physical Chemistry of Engineering Materials, EBB 160/3
5. Materials Processing Laboratory, EBB 317/2
6. Microscopy Laboratory, EBB 325/2
7. Hubungan Etnik, SHE 101/2

SEMINAR / WORKSHOP / SHORT COURSES

1. Seminar on "Kesedaran Peningkatan Kualiti Pengajaran dan Pembelajaran (P&P)", 13th February 2015, Engineering Campus Universiti Sains Malaysia.
2. Seminar on "How to Get Publish in Higher Impact Factor Journal?", 24th March 2014, School of Materials and Mineral Resources Engineering, Universiti Sains Malaysia.
3. Seminar on "Pengajaran CDAE 2014", 21st March 2014, Kompleks Cahaya, Universiti Sains Malaysia.
4. Seminar on "Particle Size Analyzer", 14th February 2014, School of Materials and Mineral Resources Engineering, Universiti Sains Malaysia.
5. Seminar on "Prevention des Risques et Securite", 20th May 2011, Institut Jean Lamour, France.
6. Workshop on "Basic Metallurgy", 15th - 16th December 2010, School of Materials and Mineral Resources Engineering, Universiti Sains Malaysia.
7. Summer school on "Corrosion et Protection des Matériaux à Haute Température", 30th May - 4th June 2010, Porquerolles, France.
8. Workshop on "Kenegaraan Sistem Saraan Malaysia PTK1", 3rd - 7th December 2009, Balik Pulau, Penang.

9. Workshop on "Kaedah Penyelidikan", 7th - 11th December 2009, Kompleks EUREKA, Universiti Sains Malaysia.

REFEREES

1. Prof. Michel Vilasi
Head of Department CP2S (Chimie et Physique des Solides et des Surfaces)
Institut Jean Lamour UMR 7198
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