



Dr. Aiman bin Mohd Halil

Senior Lecturer,
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Date: 26th January 2018

Academic Qualification:

1. Doctor of Philosophy in Engineering (Materials and Manufacturing Science),
Osaka University, Japan, 28th March 2016.
Scholarship: Kementerian Pendidikan Tinggi (KPT) Malaysia.
(Ohmic Contact Formation of Gallium Nitride and Electrical Properties Improvement)
2. Master of Engineering (Materials and Manufacturing Science),
Osaka University, Japan, 25th March 2013
Scholarship: Kementerian Pendidikan Tinggi (KPT) Malaysia.
(Control of Nanostructures and Electrical Properties of the Interface between p-type Gallium Nitride and Contact Materials)
3. Bachelor of Engineering (Mechanical Engineering),
Kinki University, Japan, 19th March 2011.
Scholarship: Yayasan Pelajaran Mara (YPM) Malaysia.
(Contact Properties between p-type Gallium Nitride and Titanium-Silicon-Carbon Ternary Alloy Film)

Research Interest:

Wide Bandgap Semiconductor, Electronic Packaging, Welding and Joining, Brazing, Laser Surface Modification

Working Experiences:

1. May 2016 – Current Senior Lecturer – Universiti Malaysia Pahang

Appointment:

1. Website Lead Coordinator FKM, UMP (2018)
2. Paper reviewer for IOP Conference Series: Materials Science and Engineering, Volume 238, Joining and Welding Symposium (2017)
3. Publication Coordinator FKM, UMP (2017)

Teaching/Academic:

1. Sem 1 2017/2018 **BMM1312** - Computer Programming (e-PAT 83.5%)
 BMM1821 - Mechanical Laboratory 2 (e-PAT 87.45%)
 BHA2342 - Technical Informatics 1
2. Sem 2 2016/2017 **DMM1423** - Electrical & Electronic Technology (e-PAT 88.01%)
 BMM1312 - Computer Programming (e-PAT 82.06%)
3. Sem 1 2016/2017 **DMM1312** - Computer Programming (e-PAT 86.7%)

Book and Module:

1. Workbook Strength of Materials 1 BMM1533 (Publisher, Universiti Malaysia Pahang, Kuantan, 2017)

Publication:

1. Characterization of heat-treated gas metal arc-welded boron steel sheets, K. I. Yaakob, M. Ishak, S. R. A. Idris, **M. H. Aiman** and M. M. Quazi, The International Journal of Advanced Manufacturing Technology, 94, 1-4, 2017, 827 – 834.
2. Study of Dissimilar Welding AA6061 Aluminium Alloy and AZ31B Magnesium Alloy with ER5356 Filler Using Friction Stir Welding, M I I Mahamud, M Ishak and **A M Halil**, IOP Conference Series: Materials Science and Engineering, 238, 2017, 012002.
3. Hardness variation of welded boron steel using continuous wave (CW) and pulse wave (PW) mode of fiber laser, K I Yaakob, M Ishak, S R A Idris **M H Aiman** and N Z Khalil, IOP Conference Series: Materials Science and Engineering, 238, 2017, 012007.
4. Investigation on the Effect of Pulsed Energy on Strength of Fillet Lap Laser Welded AZ31B Magnesium Alloys, M N M Salleh, M Ishak, **M H Aiman**, S R A Idris and F R M Romlay, IOP Conference Series: Materials Science and Engineering, 238, 2017, 012009.
5. Effect of Copper-based Fillers Composition On Spreading and Wetting Behaviour, W N W M N Hissyam, **A M Halil**, T Kurniawan, M Ishak and T Ariga, IOP Conference Series: Materials Science and Engineering, 238, 2017, 012020.
6. A study on bead-on-plate welding of AA7075 using low power fiber laser, M.N.M. Salleh, M. Ishak, F.R.M. Romlay and **M.H. Aiman**, Journal of Mechanical Engineering and Sciences (JMES), 10, 2, 2016, 2065-2075.

7. Heat Treatment with Current Flow for Removing Hydrogen from p-type GaN and the Electric Properties Improvement, Keisuke Tsuchida, **Aiman bin Mohd Halil**, Masakatsu Maeda and Yasuo Takahashi, MATE 2016, 22, **2016**, 193-198.
8. Improvement of Electrical Properties of p-type GaN and Au Contact Interface, **Aiman bin Mohd Halil**, Keisuke Tsuchida, Masakatsu Maeda and Yasuo Takahashi, Quarterly Journal of the Japan Welding Society, 33, 2, **2015**, 84s-87s.
9. Microstructures Observation of N-type GaN Contacts and the Electrical Properties, **Aiman bin Mohd Halil**, Kota Kimura, Masakatsu Maeda and Yasuo Takahashi, Transactions of JWRI, 44, 1, **2015**, 19-22.
10. Ni Nano Level Thin Film Formation on p-GaN and Improvement of Electrical Properties by Hydrogen Release Enhancement, **Aiman bin Mohd Halil**, Keisuke Tsuchida, Masakatsu Maeda and Yasuo Takahashi, Journal of Smart Processing, 4, 2, **2015**, 109-114.
11. Effect of crystal orientation on ohmic contact formation for n-type gallium nitride, Kota Kimura, **Aiman bin Mohd Halil**, Masakatsu Maeda and Yasuo Takahashi, IOP Conference Series: Materials Science and Engineering, 61, **2014**, 012033.
12. Effect of Ti₃SiC₂ formation on p-type GaN by vacuum annealing on the contact properties, **Aiman bin Mohd Halil**, Masakatsu Maeda and Yasuo Takahashi, IOP Conference Series: Materials Science and Engineering, 61, **2014**, 012034.
13. Interfacial Nanostructure and Electrical Properties of Ti₃SiC₂ Contact on p-type Gallium Nitride, **Aiman bin Mohd Halil**, Masakatsu Maeda and Yasuo Takahashi, Materials Transactions, 54, 6, **2013**, 890-894.
14. Electrical properties and structure of contact interface between Ti₃SiC₂ and p-type GaN, **Aiman bin Mohd Halil**, Masakatsu Maeda and Yasuo Takahashi, Journal of Physics: Conference Series, 379, **2012**, 012021.

Grant:

1. **RDU1703309** Effect of Nano reinforced structural adhesive for joining Aluminum alloy on Mechanical Properties 20/09/2017 19/09/2019, RM25,500.00, **Ongoing**.
2. **UIC170703** time saving solutions for the production of shredded meat 15/05/2017 15/02/2018, RM30,000.00, **Ongoing**.
3. **RDU170389** Investigation of Fillers On Welding Properties Between Aluminium Alloy and Magnesium Alloy Weld by Metal Inert Gas (MIG) Welding 15/05/2017 14/05/2019, RM23,000.00, **Ongoing**.
4. **RDU171113** Observation of Aluminum Alloy Base Metals Temperature Profile During Laser Welding 25/01/2017 24/01/2018, RM5,500.00, **COMPLETE**.
5. **FRGS 2014-1** Dissimilar metal joining of Aluminum and Magnesium based alloy by gas metal arc spot welding technique 01/07/2014 31/10/2017, RM135,000.00, **COMPLETE**.

Supervision:**PSM**

1. HB13008 Ahmad Jamil Sulaiman bin Hanifah
2. MA14193 Muhamad Adam bin Kamaludin
3. MH14025 Wan Nurhafizah binti Wan Mohd Nor Hissyam

MSD

1. Design and fabrication of coconut cutting and peeling machine.
2. Development of nut's skin peeling machine.

PTA

1. MB15072 Mohamad Taufik bin Mohamad Fauzi
2. MB15078 Afiq Izzudin bin Mohd Nazri

Awards:

1. CITREX 2017 Gold Medal and Special Award
2. PECIPTA 2017 Bronze Medal