CURRICULUM VITAE

SUMIATY BINTI AMBRAN

Personal Detail

Designation: Senior Lecturer

Department: Electrical Systems Engineering

Faculty: Malaysia Japan International Institute of Technology

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Brief Bibliography

Sumiaty Ambran is a faculty member of Malaysia-Japan International Institute of Technology, Universiti Teknologi Malaysia (UTM). She has joined UTM since 2006 as an academic staff. She received the Bachelor's degree in Electronics Telecommunication from Universiti Teknologi Malaysia, in 2005 and the Master's degree from Universiti Teknologi Mara, in 2008. She obtained her PhD in 2013 from the Optoelectronics Research Centre, University of Southampton, United Kingdom in the area of planar integrated optical devices. Her research interests include optical sensor, optical telecommunication and rare-earth-doped optical devices for laser and amplifier application.

Academic Qualification

2009 - 2013	University of Southampton (UoS)
	Doctor of Philosophy in Optoelectronics
2007 - 2008	Universiti Teknologi Mara (UiTM)
	Master in Science of Electrical Telecommunication and Information
2002 - 2005	Universiti Teknologi Malaysia (UTM)
	Bachelor of Engineering (Electrical-Telecommunication)
1999 - 2002	Universiti Teknologi Malaysia (UTM)
	Diploma in Electrical Engineering (Communication)

Professional Membership

2005 – present	IEEE Photonics Society
2009 - 2017	Optical Society of America (OSA)
2013 – Present	The Institution of Engineers, Malaysia (IEM)
2013 – Present	Board of Engineers, Malaysia (BEM)

Career and Administration

2016 – 2018	Executive Committee of IEEE Photonics Society (Malaysia Section)
2016 – 2018	ESE Laboratory Coordinator
2017 – 2018	Head of Laboratory (Digital Laboratory)
2015 – 2016	Task force Committee for Development of Master of Disaster Risk Management Programme
2015 – 2016	Task force Committee for Full Accreditation of Master of Engineering (Electronic Systems Engineering)
2014 – 2016	MJIIT Marketing Committee, MJIIT
2014 – 2015	Look East Policy (LEP) 2.0 Committee, MJIIT
2013 – 2017	Industrial Training Committee, MJIIT
2013 – present	Senior Lecturer, Malaysia Japan International Institute of Technology, UTM
2006 - 2013	Tutor, College Science and Technology, Universiti Teknologi Malaysia, Kuala Lumpur

Teaching

Fundamental of Electrical Circuits
Digital Electronics
Electronics
Circuit and Signals

List of Publications

1. AWS Putra, M Yamada, **S Ambran**, T Maruyama, Theoretical Comparison of Nose Characteristics in Semiconductor and Fiber Optical Amplifiers, IEEE Photonics Technology Letters 30 (8), Page 756-759, 2018
2. NNH Saris, O Mikami, A. Hamzah, **S. Ambran** and C. Fujikawa, "A V-Shape Optical Pin Interface for Board Level Optical Interconnect", Photonics Letters of Poland 10 (1), 20 – 22, 2018
3. NM Yusoff, AH Sulaiman, **S. Ambran**, A. Hamzah, MA. Mahdi, "Performance Improvement for Hybrid L-band Remote Erbium Doped Fiber Amplifier/Raman using Phase Modulator", International Journal of Electrical and Computer Engineering (IJECE) 8 (3), 2018
4. Alexander William Setiawan Putra, Minoru Yamada, Hiroyuki Tsuda, and **Sumiaty Ambran**, "Theoretical Analysis Of Noise In Erbium Doped Fiber Amplifier, IEEE Journal of Quantum Electronics", Vol. 53, No. 4, August 2017
5. Nurul Atiqah Baharudin, Chiemi Fujikawa, Osamu Mitomi, Akinori Suzuki, Shonosuke Taguchi, Osamu Mikami, and **Sumiaty Ambran**, "Tapered Spot Size Converter By Mask-Transfer Self-Written Technology For Optical Interconnection", IEEE Photonics Technology Letters, Vol. 29, No. 12, June 15, 2017
6. Habibah Mohamed, Ninik Irawati, Fauzan Ahmad, Mohd Haniff Ibrahim, **Sumiaty Ambran**, Mohd Azizi Abdul Rahman, Sulaiman Wadi Harun, "Optical Humidity Sensor Based on Tapered Fiber with Multi-walled Carbon Nanotubes Slurry", Indonesian Journal of Electrical Engineering and Computer Science, Vol. 6, No. 1, pp. 97 – 103, April 2017.
7. A Hamzah, NS Rosli, **S. Ambran**, SR Aid, SW Harun, "Investigation on Double Pass Amplification by employing Zr. EDF as a Gain Medium with Different Types of Reflectors", Journal of Telecommunication, Electronic and Computer Engineering (JTEC), volume 9, Issue 3-8, Page 11-15, 2017.
8. Nur Najahatul Huda Saris, Azura Hamzah, **Sumiaty Ambran**, "Investigation On Gain Improvement Of Erbium Doped Fiber Amplifier (Edfa) By Using Dual Pumped Double Pass Scheme Journal Of Advanced Research In Applied Sciences And Engineering Technology", Journal Of Advanced Research In Applied Sciences And Engineering Technology 7, Issue 1 (2017) 11-18

9. Alexander William Setiawan Putraa, Kazuki Makinoshimab, Minoru Yamadaa,B, Takayoshi Takashimab, **Sumiaty Ambran**, "Investigation Of Frequency Noise And Spectrum linewidth In Semiconductor Optical Amplifier", Jurnal Teknologi, 78:3 (2016) 155–165
10. Osamu Mikami, Yuzafirah Yaacob, Nurul Atikah Baharudin, Sumiaty Ambran, and Chiemi Fujikawa, "Optical Pin Interface for Surface Coupling to Printed Wiring Board", Frontier of Applied Plasma Technology, Volume 9 No. 1, January 2016
11. Norliza Mohamed, **Sumiaty Ambran**, Nor Hafizah Ngajikin and Suriani Mohd Sam, "Downlink Remote Optical Local Oscillator (ROLO) for Millimeter-Wave Radio Over Fiber" , Book Chapter - Communication Informatics, ISBN No. 978-983-52-1228-4, Page no. 1 – 7, 2016.
12. Kyriacos Kalli, Christos Riziotis, Andreas Posporis, Christos Markos, Charalambos Koutsides, **Sumiaty Ambran**, Andrew S. Webb, Christopher Holmes, James C. Gates, Jayanta K. Sahu, Peter G.R. Smith, "Flat Fibre And Femtosecond Laser Technology As A Novel Photonic Integration Platform For Optofluidic Based Biosensing Devices And Lab-On-Chip Applications: Current Results And Future Perspectives", Sensors And Actuators B: Chemical, 1030 – 1040, 2015
13. **S. Ambran**, C. Holmes, J. C. Gates, A. S. Webb, L. G. Carpenter, F. R. M. Adikan, P. G. R.Smith, J. K. Sahu, "Fabrication Of A Multimode Interference Device In A Low-Loss Flat-Fiber Platform Using Physical Micromachining Technique", Journal Of Lightwave Technology 2012, Vol.30(17) Pp.2870-2875.
14. H. L. Rogers, **S. Ambran**, C. Holmes, P. G. R. Smith, J. C. Gates, "In Situ Loss Measurement Of Direct UV Written Waveguides Using Integrated Bragg Gratings", Optics Letters 2010, Vol.35(17), Pp.2849-2851

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1. AA Ibrahim, **S. Ambran**, F. Ahmad, O Mikami and C. Fujikawa, "Doppler Velocity Measurement with Self-Mixing Effect of Direct Modulated Laser Diode Enabling Velocity Direction", Conference on Optical Sensing and Detection V, 2018
2. C. Fujikawa, O. Mikami, NA Baharudin, YY Yaacob, AA Ibrahim, **S Ambran**, "Optical Coupling Devices Fabricated using UV-curable resin for Board Level Optical Interconnect", Conference on Mirco-Structured and Specialty Optical Fibers V, 2018
3. Habibah Mohamed, Nabihah Hussin, Fauzan Ahmad, **Sumiaty Ambran**, Sulaiman Wadi Harun, Optical Based Relative Humidity Sensor Using Tapered Optical Fiber Coated With Graphene Oxide, AIP Conference Proceedings, 2016
4. Nurul Atiqah Baharudin, **Sumiaty Ambran**, Chiemi Fujikawa, Osamu Mikami, " Self-Written Waveguide (SWW) Optical Pin For High Optical Coupling In Multi-Layer Printed Wiring Board", 2016 IEEE 6th International Conference On Photonics (ICP 2016)
5. **Sumiaty Ambran**, Christo Pher Holmes, James C. Gates, Siti Rahmah Aid, Azura Hamzah, Osamu Mikami, Minoru Yamada, Peter G. R. Smith, And Jayanta K. Sahu, Refractive Index Sensing in an Optically Integrated Flat - Fiber Substrate, The 6th Asia Pacific Optical Sensors Conference, Shanghai, China 2016
6. O Mikami, Y Yaacob, NA Baharudin, **S Ambran**, C Fujikawa, "Optical Pin Interface For 90-Deg Optical Path Conversion Coupling To Printed Wiring Board", Region 10 Conference (TENCON), 2016 IEEE, 2278-2280

7. NA Baharudin, **S Ambran**, O Mikami, C Fujikawa, A Suzuki, S Taguchi Spot Size Converter Using Mask-Transfer Self-Written Waveguide Method For Optical Interconnection, CPMT Symposium Japan (ICSJ), 2016 IEEE, 163-164
8. Y Yaacob, NA Baharudin, **S Ambran**, O Mikami, C Fujikawa Optical Coupling For Multi-Layered Optical Printed Wiring Board Using Micro Lens Array, , Photonics (ICP), 2016 IEEE 6th International Conference On, 1-3, 2016
9. Nurul Atiqah Baharudin, Chiemi Fujikawa, Osamu Mitomi, Shonosuke Taguchi, Akinori Suzuki, Osamu Mikami and **Sumiaty Ambran**, "Spot Size Converter using Mask-Transfer Self-written Technology for Optical Interconnection", Contemporary Optics Research Group (CORG) Conference, Tokyo, Japan, 2016.
10. Yuzafirah Yaacob, Chiemi Fujikawa, Osamu Mikami and **Sumiaty Ambran**, "Fabrication of Micro Lens For Optical Printed Wiring Board", Contemporary Optics Research Group (CORG) Conference, Tokyo, Japan, 2016
11. Habibah Mohamed, Ninik Irawati, Fauzan Ahmad, Mohd Haniff Ibrahim, **Sumiaty Ambran**, Mohd Azizi Abdul Rahman, Sulaiman Wadi Harun "Tapered Fiber Coated With Multi-Walled Carbon Nanotubes Slurry Based Optical Humidity Sensor", International Conference On Electrical, Electronic, Communication And Control Engineering, Johor, 2016
12. Nur Najahatul Huda Saris, Azura Hamzah, **Sumiaty Ambran**, "Investigation on Gain Improvement of Erbium Doped Fiber Amplifier (Edfa) By Using Dual Pumped Double Pass Scheme", Malaysia-Japan Joint International Conference, Kuala Lumpur, 2016
13. Alexander William Setiawan Putra, Minoru Yamada, Hiroyuki Tsuda, and **Sumiaty Ambran**, "Investigation of Relative Intensity Noise In Erbium Doped Fiber Amplifier", Malaysia-Japan Joint International Conference, Kuala Lumpur, 2016
14. Osamu Mikami, Yuzafirah Yaacob, Nurul Atiqah Baharudin, Chiemi Fujikawa and **Sumiaty Ambran,** "Optical Pin Interface for Opto-Electronic Printed Wiring Board", Malaysia-Japan Joint International Conference, Kuala Lumpur, 2016
15. Alexander William Setiawan Pura, Kazuki Makinoshima, Minoru Yamada, Takayoshi Takashima and **Sumiaty Ambran**, "Investigation of Frequency Noise and Spectrum Linewidth in Semiconductor Optical Amplifier", International Laser Technology & Optics Symposium (LATOS), 2015
16. Nurul Atiqah Baharudin, **Sumiaty Ambran**, Osamu Mikami and Chiemi Fujikawa, "Optical Coupling for Multi-Layer Printed Wiring Board by Self-Written waveguide", Malaysia-Japan Joint International Conference, Japan, 2015.
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18. Nurul Atiqah Baharudin, Chiemi Fujikawa, Osamu Mitomi, Akinori Suzuki, Shonosuke Taguchi, Osamu Mikami, and **Sumiaty Ambran** "Spot Size Converter By Mask-Transfer Self-Written Technology Uisng Uv-Curable Resin", The 16th International Symposium On Advanced Organic Photonics (Isaop-16), Kanazawa, Japan, 2015
19. Alexander William Setiawan Pura, Kazuki Makinoshima, Minoru Yamada, Kazuki Makinoahima and **Sumiaty Ambran**, "An Improved Model For Noise Analysis In Semiconductor Optical Amplifier", Malaysia-Japan Joint International Conference, Japan, 2015.

20. Siti Rahmah Aid, Azura Hamzah, **Sumiaty Ambran**, Satoru Matsumoto, Zaharah Johari and Genshu Fuse, "Effect of Pulse Number on Dopant Activation in Silicon during Shallow p+/n Junction Formation by Non-Melt Excimer Laser Annealing", MATEC, 26, 03008, 2015
21. J. C. Gates, S. G. Lynch, P. L. Mennea, P. A. Cooper, **S. Ambran**, H. L. Rogers, L. G. Carpenter, C. Sima, D. J. Wales, C.Holmes, P. G. R. Smith, "UV Written Planar Bragg Grating Sensors - An Overview Of Fabrication, Geometries And Applications", Advanced Photonics Congress © OSA 2013. Optical Sensors Rio Grande, Puerto Rico United States, July 14-17, 2013
22. **S. Ambran**, C. Holmes, J. C. Gates, A. S. Webb, M. F. R. Adikan, P. G. R. Smith, J. K. Sahu, 'Flat-Optical Fibre For A Faster Future', SET For Britain 2012, House Of Commons London, 12 March 2012.
23. H. L. Rogers, L. G. Carpenter, **S. Ambran**, C. Sima, D. J. Wales, R. M. Parker, C. Holmes, J. C. Gates, P. G. R. Smith, "Direct Grating Writing: Single-Step Bragg Grating And Waveguide Fabrication For Telecommunications", IONS NA-3 Stanford USA 13-15 Oct 2011.
24. H. L. Rogers, L. G. Carpenter, **S. Ambran**, C. Sima, B. D. Snow, R. M. Parker, C. Holmes, J. C. Gates, P. G. R. Smith, "Direct Grating Writing: Single-Step Bragg Grating And Waveguide Fabrication For Telecommunications And Sensing Applications", IONS-9 Salamanca Spain 7-9 Apr 2011.
25. **S. Ambran**, C. Holmes, J. C. Gates, A. S. Webb, J. K. Sahu, P. G. R. Smith, "UV-Written Bragg Gratings In A Flat-Fiber Platform As A Bending And Twisting Sensor", CLEO/Europeeqec Munich 22-26 May 2011
26. **S. Ambran**, C. Holmes, J. C. Gates, A. S. Webb, P. G. R. Smith, J. K. Sahu, "Micromachined Multimode Interference Device In Flat-Fiber", Photonics Global Conference ,Singapore Dec 14 – 16 2010
27. **S. Ambran**, H. L. Rogers, A. S. Webb, J. C. Gates, C. Holmes, P. G. R. Smith, J. K. Sahu, "A Loss Comparison Of Flat-Fibre And Silica-On-Silicon Direct UV Written Waveguides Using A Novel Bragg Grating Measurement Technique", Photon 10, Southampton, 23-26 Aug 2010
28. H. L. Rogers, J. C. Gates, **S. Ambran**, P. G. R. Smith, "New Technique For Loss Measurement Of A Direct UV Written Silica-On-Silicon Waveguide Using Integrated Bragg Grating Structures", ECIO 2010, Cambridge, 7-9 Apr 2010.

Referees

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