

CURRICULUM VITAE



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Education

Date	Title of Award	Subject	Awarding Body
4/9/2002	Doctorate (Ph.D) with Distinction	Novel Design of Broadband Erbium-Doped Fiber Amplifiers for WDM Transmission Systems	Universiti Malaya
31/7/1999	Master's Degree with Distinction	Design and Characterization of High Power Erbium-Doped Fibre Amplifiers	Universiti Malaya
3/8/1996	Bachelor Degree with First Class Honors	Electrical, Electronics and Systems Engineering	Universiti Kebangsaan Malaysia

Areas of Interest

Optical fiber amplifiers, optical fiber lasers, optical communications, optical sensors

Professional Qualification/ Membership/ Affiliation

No.	Professional Affiliation	Status	Year
1.	Institute of Electrical and Electronics Engineers (# 41235654): IEEE Photonics Society	Senior Member	1999 – present
2.	Optical Society of America (# 358277)	Member	2003 – present
3.	International Association of Engineers (# 64016)	Member	2007 – present

Appointments

- 1 October 2008 – present Professor, Universiti Putra Malaysia
- 21 January 2003 – 30 September 2008 Associate Professor, Universiti Putra Malaysia
- 13 August 2001 – 30 November 2002 Optical Design Engineer, IOA Corporation USA
- 1 March 2001 – 12 August 2002 Optical Engineer, Pine Photonics Communications Inc., USA
- 1 August 1996 – 28 February 2001 Research Officer, Telekom Malaysia Bhd.

Journals (30 recent journals)

1. Y.G. Shee, M.H. Al-Mansoori, S. Yaakob, A. Man, A. K. Zamzuri, F. R. Mahamd Adikan, and **M.A. Mahdi**, "Millimeter wave carrier generation based on a double-Brillouin-frequency spaced fiber laser," *Optics Express*, vol. 20, no. 12, pp. 13402-13408, 2012.
2. N.Md. Yusoff, A.F. Abas, S. Hitam, and **M.A. Mahdi**, "Bidirectional-pumped L-band erbium-doped fiber amplifier with pump distribution technique," *Laser Physics*, vol. 22, no. 7, pp. 1252-1256, 2012.
3. M.H. Abu Bakar, F.R. Mahamd Adikan and **M.A. Mahdi**, "Rayleigh-based Raman fiber laser with Passive erbium-doped fiber for secondary pumping effect in Remote L-band erbium-doped fiber amplifier," *IEEE Photonics Journal*, vol. 4, no. 3, pp. 1042-1050, 2012.
4. B.A. Ahmad, A.W. Al-Alimi, A.F. Abas, M. Mokhtar, S.W. Harun and **M.A. Mahdi**, "Compact Brillouin fiber laser based on highly nonlinear fiber with 51 double spacing channels," *IEEE Photonics Journal*, vol. 4, no. 4, pp. 1087-1094, 2012.
5. H.K. Hisham, G.A. Mahdiraji, A.F. Abas, **M.A. Mahdi**, and F.R. Mahamd Adikan, "Characterization of turn-on time delay in a fiber grating Fabry-Perot lasers," *IEEE Photonics Journal*, vol. 4, no. 5, pp. 1662-1678, 2012.
6. F.R. Mahamd Adikan, S.R. Sandoghchi, C.W. Yi, R.E. Simpson, **M. A. Mahdi**, A.S. Webb, J.C. Gates, C. Holmes, "Direct UV written optical waveguides in flexible glass flat fiber chips," *IEEE Journal of Selected Topics in Quantum Electronics*, vol. 18, no. 5, pp. 1534-1539, 2012.
7. W.K.H. Almusafer, M.H. Al-Mansoori, M.Z. Jamaludin, F. Abdullah, M. Ajiya and **M.A. Mahdi**, "Widely tunable C+L bands multiwavelength BEFL with double-Brillouin frequency shifts," *IEEE Photonics Journal*, vol. 4, no. 5, pp. 1720-1727, 2012.
8. H.K. Hisham, G.A. Mahdiraji, A.F. Abas, **M.A. Mahdi**, and F.R. Mahamd Adikan, "Characterization of transient response in fiber grating Fabry-Perot lasers," *IEEE Photonics Journal*, vol. 4, no. 6, pp. 2353-2371, 2012.
9. A.W. Al-Alimi, M.H. Yaacob, A.F. Abas, **M.A. Mahdi**, M.H. Al-Mansoori, and M. Mokhtar, "Realization of a low threshold multiwavelength Brillouin/erbium fiber laser by optimizing the reflected power," *Chinese Optics Letters*, vol. 10, no. 12, art. No. 121401, 2012.
10. B.A. Ahmad, A.W. Al-Alimi, A.F. Abas, M. Mokhtar, S.W. Harun and **M.A. Mahdi**, "Double spacing multi-wavelength L-band Brillouin Erbium fiber laser with Raman pump," *Journal of Modern Optics*, vol. 59, no. 19, pp. 1690-1694, 2012.
11. N.A. Zawawi, A. Ismail, K. Abdan, and **M.A. Mahdi**, "From waste to electronics: Printed circuit boards using renewable resources of oil palm empty fruit bunch," *Advanced Materials Research*, vol. 567, pp. 263-266, 2012.
12. K.S. Yeo, F.R. Mahamd Adikan, M. Mokhtar, S. Hitam and **M.A. Mahdi**, "Gain smoothing filter in two-segment fiber-optical parametric amplifier," *Optics Communications*, vol. 286, no. 1, pp. 353-356, 2013.
13. S.O. Baki, L.S. Tan, C.S. Kan, H.M. Kamari, A.S.M. Noor and **M.A. Mahdi**, "Structural and spectroscopic properties of Er³⁺-Yb³⁺ codoped multicomposition TeO₂-ZnO-PbO-TiO₂-Na₂O glass," *Journal of Non-crystalline Solids*, vol. 362, no. 1, pp. 156-161, 2013.
14. A.H. Sulaiman, A.K. Zamzuri S. Hitam, A.F. Abas and **M.A. Mahdi**, "Flatness investigation of multiwavelength SOA fiber ring laser based on intensity dependent transmission mechanism," *Optics Communications*, vol. 291, pp. 264-268, 2013.
15. M.H. Abu Bakar, A.F. Abas, M. Mokhtar, F.R. Mahamd Adikan, N.H. Mohamad and **M.A. Mahdi**, "Higher-order pump delivery scheme for remotely-pumped L-band EDFA utilizing stimulated Raman scattering effects," *Optics Communications*, vol. 291, pp. 155-161, 2013.
16. A.S.A. Jalal, A. Ismail, A.R.H. Alhawari, M.F.A. Rasid, N.K. Noordin and M.A. Mahdi, "Miniaturized metal mount Minkowski fractal RFID tag antenna with complementary split ring resonator," *Progress in Electromagnetics Research C*, vol. 39, pp. 25-36, 2013.

17. K.S. Yeo, F.R. Mahamd Adikan, M. Mokhtar, S. Hitam and **M.A. Mahdi**, "Continuous wave tunable fiber optical parametric oscillator with double-pass pump configuration," *Applied Physics B: Lasers and Optics*, vol. 110, no. 3, pp. 353-357, 2013.
18. N.A. Cholan, M.H. Al-Mansoori, A.S.M. Noor, A. Ismail and **M.A. Mahdi**, "Multi-wavelength generation by self-seeded four wave mixing," *Optics Express*, vol. 21, no. 5, pp. 6131-6138, 2013.
19. H.K. Hisham, A.F. Abas, **M.A. Mahdi**, and A.S.M. Noor, "Linewidth characteristics of un-cooled fiber grating Fabry-Perot laser controlled by the external optical feedback," *Optik*, vol. 124, no. 14, pp. 1763-1766, 2013.
20. A.W. Al-Alimi, M.H. Yaacob, A.F. Abas, **M.A. Mahdi**, M.H. Al-Mansoori, and M. Mokhtar, "Simple multiwavelength Brillouin-erbium-doped fiber laser structure based on short SSMF," *Optics Communications*, vol. 300, pp. 8-11, 2013.
21. N.A. Cholan, M.H. Al-Mansoori, A.S.M. Noor, A. Ismail and **M.A. Mahdi**, "Flattening effect of four wave mixing on multiwavelength Brillouin-erbium fiber laser," *Applied Physics B: Lasers and Optics*, vol. 112, no. 2, pp. 215-221, 2013.
22. G. Mamdoohi, A.R. Sarmani, M.H. Yaacob, M. Mokhtar, A.F. Abas and **M.A. Mahdi**, "20 GHz spacing multi-wavelength generation of Brillouin-Raman fiber laser in a hybrid linear cavity," *Optics Express*, vol. 16, no. 16, pp. 18724-18732, 2013.
23. Z. Abd. Rahman, S. Hitam, M.H. Al-Mansoori, M.H. Abu Bakar, F.R. Mahamd Adikan and **M.A. Mahdi**, "Capacity enhancement of virtual-mirror-based multiwavelength Brillouin-Erbium fiber laser," *Microwave and Optical Technology Letters*, vol. 55, no. 11, pp. 2549-2553, 2013.
24. A.W. Al-Alimi, M.H. Yaacob, A.F. Abas, **M.A. Mahdi**, M. Mokhtar, and M.H. Al-Mansoori, "150-channel four wave mixing based multiwavelength Brillouin-erbium doped fiber laser," *IEEE Photonics Journal*, vol. 5, no. 4, 1501010, 2013.
25. A.H. Sulaiman, M.H. Abu Bakar, A.K. Zamzuri, S. Hitam, A.F. Abas and **M.A. Mahdi**, "Investigation of multiwavelength performance utilizing an advanced mechanism bidirectional Lyot filter," *IEEE Photonics Journal*, vol. 5, no. 6, 7101008, 2013.
26. A.R. Sadrolhosseini, A.S.M Noor, K. Shameli, A. Kharazmi, N. M. Huang, and **M.A. Mahdi**, "Preparation of graphene oxide stabilized nickel nanoparticles with thermal effusivity properties by laser ablation method," *Journal of Nanomaterials*, vol. 2013, 986764, 2013.
27. K.S. Yeo, F.R. Mahamd Adikan, M. Mokhtar, S. Hitam and **M.A. Mahdi**, "Fiber optical parametric amplifier with double-pass pump configuration," *Optics Express*, vol. 21, no. 25, pp. 31623-32631, 2013.
28. A.R. Sadrolhosseini, A.S.M Noor, K. Shameli, G. Mamdoohi, M.M. Moxsin, and **M.A. Mahdi**, "Laser ablation synthesis and optical properties of copper nanoparticles," *Journal of Materials Research*, vol. 28, no. 18, pp. 2629-2636, 2013.
29. G. Mamdoohi, A.R. Sarmani, M.H. Yaacob, M. Mokhtar, and **M.A. Mahdi**, "Multiwavelength Brillouin-Raman fiber laser utilizing enhanced nonlinear amplifying loop mirror design," *Optics Express*, vol. 21, no. 26, pp. 31800-31808, 2013.
30. H.K. Hisham, G.A. Mahdiraji, A.F. Abas, **M.A. Mahdi**, and F.R. Mahamd Adikan, "Linewidth optimization in fiber grating Fabry-Perot laser," *Optical Engineering*, vol. 52, no. 3, 026107, 2014.

Conference Proceedings (30 recent Conference Proceedings)

1. M.H. Al-Mansoori, **M.A. Mahdi**, M.Z. Jamaludin, N.Md Din, and F. Abdullah, "Compact long-wavelength band Brillouin-Erbium fiber laser in a fabry-perot resonator," *International Conference on Photonics*, paper ICP2010-53, Langkawi, July 5-7, 2010.
2. A.W. Al-Alimi, M.H. Al-Mansoori, A.F. Abas, **M.A. Mahdi**, F.R. Mahamd Adikan, and M. Ajiya, "Efficient technique for intracavity loss optimization in a dual-wavelength Erbium-doped fiber laser," *International Conference on Photonics*, paper ICP2010-37, Langkawi, July 5-7, 2010.
3. A.W. Naji, M.A. Mohammed, B. Ahmed, S.W. Harun and **M.A. Mahdi**, "Novel theoretical moeling of quadruple pass erbium-doped fiber amplifier," *International Conference on Computer and Communication Engineering*, paper 5556826, Kuala Lumpur, May 11-13, 2010.

4. A.W. Naji, H.F.H. Ibrahim, B. Ahmed, S.W. Harun and **M.A. Mahdi**, "Theoretical analysis of triple-pass erbium-doped fiber amplifier," *International Conference on Computer and Communication Engineering*, paper 5556844, Kuala Lumpur, May 11-13, 2010.
5. M.H. Abu Bakar, A.F. Abas, M. Mokhtar, and **M.A. Mahdi**, "Bidirectionally-pumped remote L-band EDFA module utilizing stimulated Raman scattering," *2nd International Conference on Photonics*, pp. 319-321, Kota Kinabalu, October 17-19, 2011.
6. N. Md. Yusoff, Z. Abd. Rahman, A.H. Sulaiman, A.F. Abas, S. Hitam, and **M.A. Mahdi**, "Gain-flattened dual-stage L-band EDFA by using pump power distribution," *2nd International Conference on Photonics*, pp. 316-318, Kota Kinabalu, October 17-19, 2011.
7. G. Mamdoohi, S. Saniei, A. F. Abas, K. Samsudin, A. Hidayat, N. H. Ibrahim, and **M.A. Mahdi**, "Enhancement of polarization controller characterization using genetic algorithm," *2nd International Conference on Photonics*, pp. 286-288, Kota Kinabalu, October 17-19, 2011.
8. G. Mamdoohi, S. Saniei, A.F. Abas, K. Samsudin, A. Hidayat, N.H. Ibrahim, and **M.A. Mahdi**, "Fiber Optical parametric amplifier with dispersion flattened photonics crystal fiber as a gain medium," *2nd International Conference on Photonics*, pp. 286-288, Kota Kinabalu, October 17-19, 2011.
9. N.A. Cholan, **M.A. Mahdi**, M.H. Al-Mansoori, A.S.M. Noor and A. Ismail, "Fiber optical parametric amplifier with dispersion flattened photonics crystal fiber as a gain medium," *2nd International Conference on Photonics*, pp. 273-275, Kota Kinabalu, October 17-19, 2011.
10. M.I. Md. Ali, B. Musa, A.S.M. Noor, S.B.A. Anas, A.K. Zamzuri and **M.A. Mahdi**, "Characterization of tapered-Erbium doped fiber in co-propagating amplifier," *2nd International Conference on Photonics*, pp. 257-259, Kota Kinabalu, October 17-19, 2011.
11. B. Musa, A.A. Rozi, A.S.M. Noor, A. Ismail and **M.A. Mahdi**, "Effect of fiber profile parameters on the transmission properties of the tapered optical fibers," *2nd International Conference on Photonics*, pp. 260-263, Kota Kinabalu, October 17-19, 2011.
12. A.W. Al-Alimi, A.F. Abas, **M.A. Mahdi** and M. Mokhtar, "Realization of widely tunable Brillouin Erbium doped fiber laser by using Brillouin stokes lines feedback control," *2nd International Conference on Photonics*, pp. 221-225, Kota Kinabalu, October 17-19, 2011.
13. K.S. Yeo, **M.A. Mahdi**, M. Mokhtar and S. Hitam, "Long wavelength band fiber laser based on four-wave mixing," *2nd International Conference on Photonics*, pp. 226-227, Kota Kinabalu, October 17-19, 2011.
14. A.H. Sulaiman, A.K. Zamzuri, N.Md. Yusoff, S. Hitam, A.F. Abas and **M.A. Mahdi**, "Wavelength-spacing tunable S-band multi-wavelength fiber laser based on Lyot filter," *2nd International Conference on Photonics*, pp. 232-234, Kota Kinabalu, October 17-19, 2011.
15. S.Z. Saniei, G. Mamdoohi, A.F. Abas, **M.A. Mahdi** and M. Saraf, "Variable sensitivity laser range finder receiver," *2nd International Conference on Photonics*, pp. 147-151, Kota Kinabalu, October 17-19, 2011.
16. A. Mohammadi, A. Ismail, **M.A. Mahdi**, R.S.A. Raja Abdullah, M. Isa, A.R. Sadrolhosseini, "Carbon-nanotube-based FR4 patch antenna as a bio-material sensor," *International Symposium on Robotics and Intelligent Sensors 2012 (IRIS 2012)* published to *Procedia Engineering*, vol. 41, pp. 724 – 728, Kuching, September 4-6, 2012.
17. K.S. Yeo, D.M.C. Chow, D.C. Tee, W.R. Wong, S.R. Sandoghchi, **M.A. Mahdi** and F.R. Mahamd Adikan, "Dispersion modeling of solid core photonic crystal fiber," *3rd International Conference on Photonics*, pp. 224-226, Penang, October 1-3, 2012.
18. A.W. Al-Alimi, A.F. Abas, **M.A. Mahdi**, M.H. Al-Mansoori, and M. Mokhtar, "Multiwavelength Brillouin erbium fiber laser in virtual linear cavity," *3rd International Conference on Photonics*, pp. 175-178, Penang, October 1-3, 2012.
19. H.K. Hisham, A.F. Abas, G.A. Mahdiraji, **M.A. Mahdi**, F. R. Mahamd Adikan, "Effect of temperature and external optical feedback on intensity and phase noise characteristics in single-mode fiber grating Fabry-Perot laser," *3rd International Conference on Photonics*, pp. 370-376, Penang, October 1-3, 2012.
20. G. Mamdoohi, B.A. Ahmad, A.W. Al-Alimi, **M.A. Mahdi**, A.F. Abas, M. Mokhtar, and B. Kheradmand, "Characterization of Raman gain for different gain medium," *3rd International Conference on Photonics*, pp. 18-22, Penang, October 1-3, 2012.

21. R. Sonee Shargh, M.H. Al-Mansoori, S.B.A. Anas, R.K.Z. Sahbudin, M.H. Abu Bakar and **M.A. Mahdi**, "Effect of Raman pump direction on conventional multiwavelength Brillouin-Raman fiber laser," 3rd International Conference on Photonics, pp. 184-186, Penang, October 1-3, 2012.
22. G. Mamdoohi, **M.A. Mahdi**, A.F. Abas, M. Mokhtar, and B. Kheradmand, "Effect of double-pass and single-pass architecture in Brillouin-Raman fiber laser," 3rd International Conference on Photonics, pp. 192-194, Penang, October 1-3, 2012.
23. B.A. Ahmad, G. Mamdoohi, A.F. Abas, M. Mokhtar and **M.A. Mahdi**, "Effect of Erbium doped fiber location on double spacing multiwavelength Brillouin-erbium fiber laser performance," 3rd International Conference on Photonics, pp. 195-198, Penang, October 1-3, 2012.
24. A.W. Al-Alimi, M.H. Yaacob, A.F. Abas, **M.A. Mahdi**, M.H. Al-Mansoori, and M. Mokhtar, "Widely tunable multiwavelength hybrid Brillouin-erbium fiber laser utilizing virtual mirror," 4th International Conference on Photonics, pp. 36-38, Melaka, October 28-30, 2013.
25. A.R. Sadrolhosseini, A.S.M Noor, **M.A. Mahdi**, A. Kharazmi, A. Zakaria, W.M.M. Yunus and N. M. Huang, "Laser ablation synthesis of silver nanoparticle in graphene oxide and thermal thermal effusivity of nanocomposite," 4th International Conference on Photonics, pp. 54-57, Melaka, October 28-30, 2013.
26. N.A. Cholan, M.H. Al-Mansoori, A.S.M. Noor, A. Ismail and **M.A. Mahdi**, "Impact of four wave mixing on OSNR of multiwavelength Brillouin-erbium fiber laser," 4th International Conference on Photonics, pp. 79-81, Melaka, October 28-30, 2013.
27. M.S.Z. Abidin, A.S.M. Noor, A.A. Rashid and **M.A. Mahdi**, "Frequency modulation optimization of nonlinear optical Z-scan by high repetition rate femtosecond laser," 4th International Conference on Photonics, pp. 88-90, Melaka, October 28-30, 2013.
28. F. Khosravi, M. Mokhtar, A.F. Abas, G. Mahdiraji and **M.A. Mahdi**, "Investigation of three level code division multiplexing performance over high speed optical fiber communication system," 4th International Conference on Photonics, pp. 127-129, Melaka, October 28-30, 2013.
29. A.H. Sulaiman, N.Md. Yusoff, S. Hitam, A.F. Abas and **M.A. Mahdi**, "Investigation of continuously adjustable extinction ratio in a multiwavelength SOA fiber laser based on intensity dependent transmission effect," 4th International Conference on Photonics, pp. 146-148, Melaka, October 28-30, 2013.
30. A.A. Shabaneh, P.T. Arastu, S.H. Girei, S. Paiman, **M.A. Mahdi**, M.H. Yaacob and N.M. Huang, "Reflectance response of optical fiber sensor coated with grapheme oxide towards ethanol," 4th International Conference on Photonics, pp. 264-266, Melaka, October 28-30, 2013.

Research Grants

Completed Research Grants (as Project Leader)

No.	Project Title	Funding Source	(RM)	Duration
1.	Optical Fiber Amplifier	Telekom Malaysia	1,194,516	Feb. 1997 – Dec. 1999
2.	Power Amplifier for Cable TV	Telekom Malaysia	778,690	Sept. 1997 – Dec. 2000
3.	Analysis of Stimulated Raman Scattering of WDM Signals in Optical Fibers	New Lecturer's Scheme, UPM	10,000	May 2003 – April 2004
4.	Design and Development of Fiber Break Detector (09-02-04-0875-EA001)	EA, IRPA	164,000	May 2004 – Sept. 2006
5.	Brillouin Effect Study in Optical Fibres for Multi-wavelength Generation	Australian Government	22,080	17/11/2006 – 31/5/2007
6.	Development Of A Scalability Solution To Source Specific Multicast For Mobile Ipv6 (01-01-04-SF0710)	ScienceFund, MOSTI	124,000	Dec. 2006 – Sept. 2008

7.	Theoretical Modeling of Nonlinear Brillouin Scattering Effect in Multiwavelength Linear-cavity Fiber Laser (02-0L-07-216FR)	Fundamental Research Grant, MOHE	29,899	Feb. 2007 – Feb. 2008
8.	Generation of Cascaded Brillouin Stokes Lines Incorporating Nonlinear Amplified Loop Mirror in Laser Cavity (05-01-07-0186RU)	Research University Grant Scheme, UPM	149,900	June 2007 – June 2009
9.	Hybrid Remotely-pumped EDFA/Raman Amplifier for L-band Transmission Window (01-01-04-SF0908)	ScienceFund, MOSTI	223,100	Jan. 2008 – June 2009
10.	Nonlinear Optical Parametric Amplification in Raman Oscillator (01-01-04-SF0935)	ScienceFund, MOSTI	249,350	March 2008 – August 2009
11.	Widely Tunable Brillouin Fiber Laser for Multiwavelength Application (05-04-08-0549RU)	Research University Grant Scheme, UPM	128,000	Sept. 2008 – August 2010
12.	All-optical Millimeter Wave Generation for Radio over Fiber Systems (05-01-09-0783RU)	Research University Grant Scheme, UPM	299,700	Sept. 2009 – Dec. 2011
13.	Generation of Millimeter Wave Based on Nonlinear Interaction of Stimulated Brillouin Scattering (MOSTI/BGM/R&D/19(3))	Brain Gain Malaysia Program, MOSTI	232,500	Jan. 2010 – Dec. 2010
14.	Remotely-pumped L-band Erbium-doped Fiber Amplifier with Enhanced Loss and Dispersion Compensation Techniques (05-01-10-0894RU)	Research University Grant Scheme, UPM	274,100	February 2010 – January 2012

On-going Research Grants (As Project Leader)

No.	Project Title	Funding Source	(RM)	Duration
1.	Design and Development of Femtosecond Fiber Laser Incorporating Carbon Nanotubes Saturable Absorber (09-180 RG/ENG/AS_C ; UNESCO FR: 3240231223)	TWAS-COMSTECH	32,000 (\$ 10,000)	25 May 2010 – present
2.	Multiple Rare-earth-doped Low Phonon-Heavy Metal Oxide Multi-composition Glasses (01-01-12-1106FR) (FRGS/01/2012/ST05/UPM/01/7)	Fundamental Research Grant Scheme, MOHE	109,600	1 May 2012 - present
3.	Biophotonics Sensor for Dengue Virus Detection Incorporating Tapered Optical Fiber (ERGS/1/2012/STG08/UPM/01/29)	Exploratory Research Grant Scheme, MOHE	86,000	1 August 2012 - present
4.	All-optical Tunable Mach-Zehnder-based Comb Filter (PRGS/1/12/TK06/UPM/01/1)	Prototype Research Grant Scheme, MOHE	240,000	1 August 2012 - present
5.	Nano-photonics Microfiber Sensors for Low Concentration Volatile Organic Compound Detection (05-02-12-2015RU)	Research University Grant Scheme, UPM	233,950	1 October 2012 - present
6.	Development of All-optical Tunable Comb Filter (05-02-12-2024RU)	Research University Grant Scheme, UPM	350,000	10 October 2012 - present

Awards/Recognition (Current)

1. **Anugerah Ahli Akademik Harapan (Anugerah Akademik Negara), Ministry of Education (2011)**
 - 1 award is given annually to Malaysian academician (age below 40 years old) who has shown outstanding contributions in academic by the Ministry of Education.
2. **Member of Young Scientist Network, Academy of Science Malaysia (2011)**
 - A platform for outstanding young Malaysian scientists from diverse scientific background and expertise to interact, coordinate, organize and rise to national and international challenges.
3. **Top Research Scientist Malaysia, Academy of Science Malaysia (2011)**
 - Recognition for outstanding research achievement and performance of Malaysian scientists by the Academy of Sciences Malaysia.
4. **Young Scientist Award, COMSTECH (2009)**
 - 1 award is given to the outstanding researcher in the OIC region for excellence in science and technology, the age of researcher is below than 40 years old.
5. **Leading Scientists and Engineers of OIC Member States, COMSTECH (2008)**
 - Study to identify some of the best and most productive scientists and engineers in OIC countries who publish a large number of research articles in leading international journals based on the Thomson ISI Database. Inducted as one of 27 leading scientists in Malaysia and one of 381 leading scientists in OIC countries.
6. **TWAS Young Affiliate Fellow (2007)**
 - Excellent young scientists are awarded with the TWAS (The Academy of Sciences for the Developing World) Young Affiliate Fellow status for five years.
7. **Australia-Malaysia Institute Fellowship: Research Award (2006-2007)**
 - 2 research awards are given annually by the Australian Government to spur research collaboration between Malaysia-Australia research institutes. The research project entitled "Brillouin Effect Study in Optical Fibres for Multi-wavelength Generation" has been carried out between Universiti Putra Malaysia and Monash University, Australia.
8. **Excellent ICT Teacher Award (2003)**
 - The award is given for overall contributions and achievement throughout individual's professional career. The award is to encourage the development and the study of the discipline of Information and Communications Technology (ICT) by the Ministry of Energy, Communications and Multimedia, Maxis Communications Berhad and Malaysian National Computer Confederation.
9. **IEEE LEOS Graduate Student Fellowship (2000)**
 - Twelve recipients around the globe for significant research contributions in photonics area. This award has engraved another milestone in Malaysian photonics research directory whereby a young Malaysian researcher has been recognized in this research area. The award is given to the breakthrough research in L-band EDFA especially on the issue of L-band gain enhancement.
10. **IEEE LEOS Best Student Paper Award (2000)**
 - The award is given to the best paper presented in IEEE conferences throughout the year. Selection of the award is based on significance of the contribution to the field, originality and clarity.

Professional Services/Consultation

International Companies

No.	Project Title	Company	Year
1.	Splicing parameters for Erbium-Doped Fibers EDF-EXC-Band001	Highwave Fiber Inc., France	1/9/2001 – 31/5/2002
2.	Impacts of Four Wave Mixing in Optical Fibers	LightBit Inc., USA	1/12/2001 – 31/1/2002
3.	Ultra Long-Haul Optical Transmission using Mid-Span Spectral Inverter	MCI Worldcom Inc., USA	1/10/2002 – 30/11/2002
4.	Erbium-Doped Fiber Amplifier Design Issues	Arasor Corporation, USA	1/7/2004
5.	Band Optical Amplifier	Matisse Networks, USA	2005-2007

Local Companies/Institutions

No.	Project Title	Company	Year
1.	Design and Development of Erbium-Doped Fiber Amplifier	Photronix (M) Sdn. Bhd.	1999 – 2001
2.	Gain and Loss Characterization of Erbium Doped Waveguide Amplifier	Advanced Materials Research Center (AMREC)	Aug. 2006 – Aug. 2008
3.	Intelligent Broadband Polarization Mode Dispersion Management System	TM Research & Development Sdn. Bhd.	1/11/2006 – 31/10/2008
4.	Advanced Amplification Schemes for Repeaterless Transmission System	Telekom Research & Development Sdn. Bhd.	16 - 18 July 2012
5.	Fabrication of Highly Doped Active Optical Fiber for Laser Application	Fiber Optic Solution Sdn. Bhd.	1 Sept. 2012 - present

Student Supervision

Ph.D Students as Main Supervisor

No.	Name of Student	Title of Thesis	Status
1.	Ahmed Wathik Naji	Enhancement of the Optical Transmission System Utilizing a Dual-Function Remotely Pumped Erbium-Doped Fiber Amplifier	Graduated in 2007
2.	Mohammed Hayder Al-Mansoori	All-Optical Generation of Multiwavelength Brillouin-Erbium Fiber Laser in Long-Wavelength Band	Graduated in 2008
3.	Muhammad Zamzuri Abdul Kadir	Raman-Assisted Multi-Brillouin Stokes Laser in Dispersion Compensating Fiber	Graduated in 2009
4.	Mohammed Ajiya	Multiple Wavelengths Laser Utilizing Hybrid Erbium and Brillouin Gains in Dispersion Compensating Fiber	Graduated in 2010
5.	Nor Azura Malini Ahmad Hambali	Single-Wavelength Ring-Cavity Fiber Laser Based with Improved Tunability on Nonlinear Stimulated Brillouin Scattering	Graduated in 2011
6.	Shee Yu Gang	All-optical Generation of Millimeterwave Carrier Based on Stimulated Brillouin Scattering	Graduated in 2011
7.	Md. Shafiqul Islam	New Tunable All-Fiber Optical Comb Filter Based on Mach-Zehnder Interferometer	Graduated in 2011
8.	Hamid Ali Abed Al-Asadi	Analytical Modeling, Experimental Investigation and Its Applications of Stimulated Brillouin Scattering in Optical Fibers	Graduated in 2011
9.	Ramzia Abdulmalik Salem Al-Areqi	Multiwavelength Brillouin-erbium Fiber Laser utilizing Bismuth-oxide Erbium-doped Fiber incorporating High and Low Nonlinear Fibers	Graduated in 2011
10.	Muhammad Hafiz Abu Bakar	New Pump Delivery Scheme for Remotely-pumped Erbium-doped Fiber Amplifier	Graduated in 2012
11.	Raheleh Sonee Shargh	Multiwavelength Brillouin-Raman Fiber Laser Assisted By Rayleigh Scattering	Graduated in 2013
12.	Sharudin Omar Baki	Physical Characterization and Optical Spectroscopy of Er ³⁺ /Yb ³⁺ -doped Multicomposition Tellurite Glass for Broadband Amplifiers	Graduated in 2013
13.	Nelidya Md. Yusof	Enhanced Structure for Discrete and Remote L-band Erbium-doped Fiber Amplifiers	Graduated in 2013
14.	Yeo Kwok Shien	Nonlinear Optical Parametric Amplifiers and Lasers with Idler Removal Filter	Graduated in 2013
15.	Bilal A. Ahmad	Enhanced Configurations for Double Spacing Brillouin Fiber Laser	Awaiting Senate Letter
16.	Baktiar Musa	All-optical Saturable Absorber based on Single-walled Carbon Nantoube for Ultrafast Fiber Lasers	On-going
17.	Abdul Hadi Sulaiman	All-optical Wavelength Conversion incorporating Semiconductor Optical Amplifier	On-going
18.	Lim Lien Tze	Optical Parametric Oscillator	On-going
19.	Noran Azizan Cholan	Multiwavelength Fiber Lasers based on Optical Parametric Effect	On-going
20.	Mas Izyani Md. Ali	Tapered Fiber-based Filters for Optical Fiber Communications	On-going
21.	Ghazaleh Mamdoohi	Double-spaced Multiwavelength Brillouin-Erbium Fiber Laser	On-going

22.	Siti Azlida Ibrahim@Ghazali	Optical Sensors based on Optical Fiber Nanowires and Microwires	On-going
23.	Ali Abdulkhaleq Abdulhadi	Nano-photonics-based Optical Sensor for Hydrogen Gas Sensing	On-going

MS Students as Main Supervisor

No.	Name of Student	Title of Thesis	Status
1.	Tarak Ali Haddud	Design and Development of a Multi-Wavelength Brillouin/Erbium Long-Band Fabry-Perot Fiber Laser	Graduated in 2004
2.	Mohd Shahnan Zainal Abidin	Design and Development of Remotely Pumped Amplifier Transmission Systems	Graduated in 2005
3.	Azlinda Ramli	Free-Space Microwave Characterization of Composites of Natural Rubber Filled with Carbon Black for Microwave Application	Graduated in 2005
4.	Nor Azura Malini Ahmad Hambali	Development of Satellite Propagation Effects Tool for Ku-Band, Ka-Band and Q/V-Band Links	Graduated in 2005
5.	Ahmad Zaki Shaari	Analysis and Fabrication of Fused Fiber Optic Couplers for Communication Systems	Graduated in 2006
6.	Mohammad Shahrazel Razalli	Design and Development of Wireless RFID Reader Communication System at UHF Band	Graduated in 2006
7.	Mas Izyani Md. Ali	Design and Development of Double-Pass Raman Amplifier	Graduated in 2007
8.	Annie Thomas	Face Recognition System Using Principal Component Analysis and Moment Invariant	Graduated in 2007
9.	Asmahanim Ahmad	Discrete Raman Amplifier for Dispersion and Loss Compensation in Optical Transmission Systems	Graduated in 2007
10.	Abdul Aziz Rozi	All-optical Bio-chemical Sensors	On-going