

CURRICULUM VITAE		March 2016
		<p>Dr. Siti Nurhidayu Abu Bakar (also known as Ayu) Senior Lecturer (BP: RM6328.02, GP:RM7928.02) Department of Forest Management Faculty of Forestry, Universiti Putra Malaysia 43400 UPM Serdang, Selangor, Malaysia Office Tel. No.: +603-89471379 Mobile Tel. No.: +6011-33502559 Fax: +603-89432514 Email: sitinurhidayu@upm.edu.my/ sitinurhidayu@gmail.com Website: www.forr.upm.edu.my</p>
Field of Interest		
Hydrology processes, water quality, oil palm hydrology, sediment and erosion, time-series modelling		
Formal Education		
1997-1998	Technical Secondary School, Kuantan, Pahang	Civil Engineering
1999-2003	Universiti Teknologi Malaysia Skudai, Johor	B.Eng. (Hons.) Civil Engineering Final year project: Rainfall-runoff modelling using HEC-HMS of Slim River, Perak
2005-2007	Universiti Teknologi Malaysia Skudai, Johor	M.Eng. (Civil Engineering-Hydrology) by research Project: Stormflow quality and NPS pollution loadings in oil palm catchments, Johor
2012	Lancaster University, UK	Ph.D. (Forest Hydrology) Project: Long-term sediment recovery of a selectively logged catchment, Danum Valley, Borneo
Teaching Experience		
2006-2012	Tutor at Faculty of Forestry, Universiti Putra Malaysia, Serdang, Selangor	
2009	Demonstrator at Lancaster Environment Centre, UK	
2012-	Senior Lecturer at Faculty of Forestry, Universiti Putra Malaysia, Serdang, Selangor	
Courses:		
2015-	FHU3211 Catchment Management B.Sc. Forestry, UPM (Coordinator)	
2014-	FHU4204 Forest Hydrology Techniques B.Sc. Forestry, UPM (Coordinator)	
2013-2014	FHK3407 Forest Road B.Sc. Forestry, UPM (Coordinator)	
2012-2014	FHK3403 Forest Engineering B.Sc. Forestry, UPM (Coordinator)	
2009	ENV 2100 Hydrology Processes B.Sc. Environmental Science, Lancaster University, UK	
Research Experience		
2015-2017	Asia-Pacific Forest Adaptation to Climate Change (Malaysia) Phase II, P.I. Dr. Siti Nurhidayu Abu Bakar, Universiti British Columbia, APFNet, USD 25,000.	
2015-2017	Development of Mangrove Quality Index (MQI): Benchmarking mangrove health for Peninsular Malaysia, P.I. Datin Prof. Dr. Faridah Hanum Ibrahim, PUTRA-IBP, RM439,500.	
2015	Flood occurrence reduction measures based on runoff estimation using SCS-CN in Kelantan River Basin, P.I. Dr. Siti Nurhidayu Abu Bakar, FRGS, RM70,000.	
2013-2015	Hydrological Changes in Relation to Climate and Land Use in Klang Valley (Putra Vot 9402800), P.I. Dr. Siti Nurhidayu Abu Bakar, Funded by UPM (Putra Grant), RM48,600.	
2013-2015	A study on Insectivorous Bird Populations in Oil Palm Plantations – Potential Biological Control Agent of Bagworms, P.I. Dr. Norman Kamaruddin, Role: Researcher, Funded by Malaysian Palm Oil Board, RM82,400.	
2011-2014	Economic Valuation of Mangrove Forest and Its Implications to Coastal Community,	

	Leader for Sub-project 'Damage assessment due to flood', P.I. Prof. Dr. Awang Noor Abd. Ghani, Role: Researcher, Funded by Ministry of Science and Technology (E-Science Fund), RM500,000.
2004-2006	Hydrological Quantification of Oil Palm Catchment for an Improved Streamflow Modelling (IRPA Vot 74237), P.I. Prof. Dr. Zukifli Yusop, Role: RA/Masters Student, Funded by Ministry of Science and Technology (IRPA).
2002-2004	Quantification and Management of Cummulative Watershed Effects (IRPA Vot 74026), P.I. Prof. Dr. Zukifli Yusop, Role: RA/Masters Student, Funded by Ministry of Science and Technology (IRPA).
Supervising Experience	
Ph.D	Norlaili Ibrahim: Insectivorous bird populations in oil palm plantations, funded by MPOB, On-going (Co-sv). Ishak Muhammad: Aquatic insects and water quality relationship in oil palm smallholdings within Tanjung Karang, Selangor, funded by JPA, On-going (Co-sv).
M.Sc.	Norsyuhada Abdollah: Optimum Land Usage in Sungai Selangor Reservoir Catchment, On-going (Main-sv) Siti Fatimah Nordin: Water Consumption of National Economical Crop using CROPWAT, On-going (Main-sv) Mohd Husba bin Isa: Hydrology processes in an undulating undisturbed limestone forest, Noth Peninsular Malaysia, partly funded by Penarak Nature Institute, On-going (Main-sv). Mohammad Faizalhakim Ahmad Safuan: Runoff estimation using SCS-CN in Kelantan River Basin, partly funded by FRGS Grant, On-going (Main-sv). Nik Harun Al-Rashid Nik Zaidin: Hydrological Quality Index Development for Different Mangrove Disturbance Levels, partly funded by UPM-IBP Grant, On-going (Main-sv). Mohd. Afendy Abd. Rahman: Storm water quality characterisation in oil palm smallholdings, funded by UPM, On-going (Main sv). Petra Sulai: Water birds and water quality in oil palm smallholdings, funded by JPA, Malaysia, On-going (Co-sv).
B.Sc.	Muhamad Asyraf Zainul: Ulu Muda Reservoir Water Level in relation to Logging in Ulu Muda Catchment, On-going (Main sv). Nur Farrah Marhein: Long term rainfall and temperature changes in relation to land cover, On-going (Main sv) Nik Harun Nik Rasyid: Soil moisture and soil compaction relationship on different oil palm stand ages, Completed (Main sv). Siti Nurfaezah Ahamad: Hydrological changes following land use conversion in Tanjung Karang, Selangor, Completed (Main sv). Azhar Muhammad: Long-term sediment data analysis in Tanjung Karang and Rasa catchments related to land use and climate changes, Completed (Main sv). Amanie Husna: Aquatic insects and water quality relationship in oil palm smallholdings, Completed (Main sv). Nancy Anak Adoh: Flood frequency analysis of Kota Marudu, Sabah, Completed (Main sv). Mohammad Faizalhakim Ahmad Shafuan: Soil moisture variability in relation to distance to drains in oil palm smallholdings, Completed (Main sv). Debbie Anak Injan: Sediment data analysis and comparison between Keroh Catchment and Ayer Hitam FR, Klang Valley. Completed (Main sv). Mohamad Hafizz Dzulkifli: Hydrological comparison between Keroh Catchment and Ayer Hitam FR, Klang Valley. Completed (Main sv).
Intern	Mohd Arifullah: Rainfall-runoff relationship and it's quality variability in an isolated forest and oil palm catchments. (Main sv) Mohd Imran Faiz: Ground water recharge comparison between isolated forest and oil palm plantations catchments. (Main sv)

Publication	
2016	Faizalhakim, M., Nurhidayu, S. , Shamsuddin, I., Hakeem, KR., Ismail A. & Norizah, K. (Accepted). Runoff Potential Simulation based on rainfall intensity and land use change for Kelantan River Basin. <i>American Journal of Environmental Science</i> .
2015	<p>Tuan Ibrahim, T.M., Shahwahid, M.O., Abdul Azis, Y., Nurhidayu, S., Ashhari, Z.M., Kamaruddin, N., Farah, M.S. (2015). Cost-benefit analysis of ecological corridor Belum-Temenggur Forest Complex (BTFC) in Gerik, Perak. Forestry Department Peninsular Malaysia. ISBN 978-967-0539-24-9</p> <p>Faizalhakim, M., Nurhidayu, S., Shamsuddin, I., Hakeem, KR., Ismail A. & Norizah, K. (2015) Runoff Estimation Using SCS CN Method For Kelantan River Basin. Presented in International Conference on Water Resource. 24 November – 25 November 2015. Bayview Hotel, Langkawi, Kedah, Malaysia.</p> <p>Nik Harun, NR., Nurhidayu, S., Faizalhakim, M., Seca, G., Roslan, M. & Ismail A. (2015) Water Quality Characteristics In Different Mangrove Disturbance Levels, Matang Mangrove Forest Reserve, Peninsular Malaysia. Presented in International Conference on Water Resource. 24 November – 25 November 2015. Bayview Hotel, Langkawi, Kedah, Malaysia.</p> <p>Sulai, P., Nurhidayu, S., Aziz, N., Zakaria, M., Barclay, H. & Azhar, B. (2015) Effects of historical land cover and water quality in oil palm waterways on tropical waterbirds. <i>Ecological Research</i>.30: 941-949.</p> <p>Azhar, B., Saadun, N., Puan, C. L., Kamarudin, N., Aziz, N., Nurhidayu, S., & Fischer, J. (2015). Promoting landscape heterogeneity to improve the biodiversity benefits of certified palm oil production: Evidence from Peninsular Malaysia. <i>Global Ecology and Conservation</i>. 3: 553-561.</p> <p>Nurhidayu, S., Azhar, M. and Shafuan, M. F. 2015. Long-Term Sediment Pattern of the Selangor River Basin, Malaysia Impacted by Land-Use and Climate Changes. Presented in 36th International Association Hydro-Environment Engineering and Research World Congress. 28 June – 3 July 2015. Delft, The Hague, the Netherlands.</p> <p>Nurhidayu, S., Adoh, N., Yip, H. W., Shafuan, M. F., and Ghani, A. N. 2015. Flood Occurrence in Relation to Climate Cycles in Kota Marudu District, Sabah. Presented in 36th International Association Hydro-Environment Engineering and Research World Congress. 28 June – 3 July 2015. Delft, The Hague, the Netherlands.</p>
2014	<p>Nurhidayu, S., Chappell, N. A. And Tych, W. 2014. Use of UC-DHR model to identify sediment recovery following tropical selective logging given the affect of climate dynamics and data gaps. <i>Proceedings of Asia-Pacific Workshop on Water and Forests-Beyond Traditional Forest Hydrology</i>, 23-25th September 2013, Forest Research Institute, Dehradun, India.</p> <p>Siti Aisah, S., Yusop, Z., Noguchi, S., Marryanna, L., Nurhidayu, S. and Abd Rahman, K. 2014. Influence of <i>Hopea odorata</i> forest plantation establishment on the water yield of small forested catchment in Peninsular Malaysia. <i>Proceedings of Asia-Pacific Workshop on Water and Forests-Beyond Traditional Forest Hydrology</i>, 23-25th September 2013, Forest Research Institute, Dehradun, India.</p>
2013	<p>Lai, F. S., Halis, R., Nurhidayu, S., Ramachandran, S. and Puan, C. L. 2013. Editors. <i>Proceedings of the International Forestry Graduate Students' Conference</i>, 2-4 July 2013, Kuala Lumpur. Pp. 188-192.</p> <p>Afendy, M., Nurhidayu, S., Azhar, B., Sulai, P. and Shamsuddin, S. A. 2013. An investigation on water quality of water course in oil palm smallholdings converted from peat swamp and mangrove forests. <i>Proceedings of the International Forestry Graduate Students' Conference</i>, 2-4 July 2013, Kuala Lumpur. Pp. 188-192.</p> <p>Sulai, P., Azhar, B., Nurhidayu, S., Afendy, M. and Shamsuddin, S. A. 2013. An investigation on water birds and their relation with flood-control drain water quality in oil palm smallholdings. <i>Proceedings of the International Forestry Graduate Students' Conference</i>, 2-4</p>

	July 2013, Kuala Lumpur. Pp. 36-40.
2012	Nurhidayu, S. , and Chappell, N. A. 2013. Long-term sediment recovery from a managed tropical forest catchment in Danum Valley, Sabah. <i>Proceedings of the Seminar on Long-term Ecological Research in East Asia Pacific Region (EAP-LTER)</i> . 4-5th July 2012. Kuala Lumpur. Pp. 13-20.
<2012	Chappell, N. A., Bidin, K., Thang, H. C., Douglas, I., Sinun, W., Walsh, R. P. D., Nurhidayu, S. , and Hanapi J. 2008. Malaysian forestry guidelines for mitigating water quality impacts in rainforests: implications from 20 years of local hydrological science. <i>Proceedings of 10th BHS National Hydrology Symposium: Sustainable Hydrology for the 21st Century</i> , Exeter, UK. Yusop, Z., Chong, M. H, Nurhidayu, S. , Mohamed, M. and Mohd. Nasir, K. A. and Nik, A. R. 2007. Hydrological Quantification of Oil Palm Catchments for An Improved Streamflow Modelling. Project Report. Faculty of Civil Engineering, Universiti Teknologi Malaysia, Skudai, Johor. Nurhidayu, S. and Yusop, Z. 2007. Stormwater quality behaviours in oil palm catchment. <i>Proceeding of Research Colloquium</i> , Faculty of Forestry, UPM on 26th-28th June 2007. 78-81pp. Nurhidayu, S. and Yusop, Z. 2005. Stormwater quality and non point source pollution loadings from oil palm catchments. <i>Proceedings of Seminar Kebangsaan Pengurusan Persekitaran ke 4</i> , Universiti Kebangsaan Malaysia, Bangi, Selangor, Malaysia on 4-5th July 2005. 99-108pp. Nurhidayu, S. and Yusop, Z. 2005. Water quality from oil palm catchments. <i>Proceedings of International Scientific Congress (ISC)</i> , Putra World Trade Centre, Kuala Lumpur. 205-212pp.
Invited Presentation	
2016	Nurhidayu, S. Tropical forest hydrology and oil palm hydrology module, Workshop on Comparative Studies of Applying Ehydrology and IRWM for Upscaling Water Security in Asia and Africa through UNSCO Category 2 Water Centre, 7-9th March 2016, Berjaya Hotel, Kuala Lumpur, Malaysia.
2015	Nurhidayu, S. Oil palm agriculture: What has changed hydrologically?, International Seminar on Gearing Oil Palm Breeding and Agronomy for Climate Change, 5th October 2015, Kuala Lumpur Convention Centre (KLCC), Kuala Lumpur, Malaysia. Nurhidayu, S. Hydrological processes related to climate and land use changes, Friends of Flood Seminar, 14th May 2015, Faculty of Forestry, UPM Serdang, Malaysia.
2014	Nurhidayu, S. , Chappell, N. A. and Tych, W. Sediment recovery determination by separating the climate and land use influences using Dynamic Harmonic Regression model. Presented in International Expert Meeting on Forest and Water: Research to Application at Chinese Botanical Institute, March 2014, organized by CIFOR, Food and Agriculture Organization (FAO): Mountains and Hydrology Unit, World Agroforestry Center (WAO) at Kunming, China Nurhidayu, S. , Chappell, N. A. and Tych, W. 2014. UC-DHR modelling on 20 years hydrological data in the Baru catchment, Borneo. Presented in the Third International Tropical Hydrology Workshop, Hydrological change in the humid tropics: Identification, processes and forecasting. 9-14 February 2014, Borneo.
Consultancy Experience	
2015	Hydrological Quantification from Forest and Oil Palm Agriculture Catchment, Humid Tropics Center-UNESCO, April 2015 to March 2016. Lead: Dr. Siti Nurhidayu Abu Bakar, USD12,800 (RM44,800) through project 'Research and Water Management for Upscaling Water Security to Meet Local, Regional and Global Challenges', On-going.
2014	Biodiversity Assessment Project, Veolia Water JV Hatimuda (Sungai Terip Water Treatment Plant), January-June 2014. Lead: Dr. Puan Chong Leong, RM80,000.00, Completed.
2013	Cost-Benefit Analysis of the Ecological Corridor in Central Forest Spine (CFS), Gerik, Perak, Jabatan Perhutanan Semenanjung Malaysia, August-December 2013. Lead: Prof. Dr. Mohd

Shahwahid Othman, RM 164,876.66, Completed.

Professional Experience

Feb 2016	Participate in Aisa Pacific Forestry Week (APFW) 2016. 22n-28th February 2016, Clark, the Phillipines
Aug 2015	Coordinator for Forest Camp Module 2014 (Water Conservation Module) for 147 students, 24th Aug-5th Sept 2015, Ayer Hitam Forest Reserve, Selangor, Malaysia Participated and chairperson for the IG03: Tropical Hydrology and Ecology session in 7th Asia Pacific Association of Hydrology and Water Resources Conference organized by Asia Oceania Geoscience Society (AOGS), 2-7th August 2015, Singapore
Jul 2015	Participated in the 4th International Conference on Forests and Water in a Changing Environment, July 6-9, 2015, Kelowna, BC, Canada
Jun 2015	Participated and chairperson for the Floodrisk Assessment session in the 36th IAHR World Congress, Deltas of the Future and what happens upstream. 29th June to 4th July 2015. The Hague, Netherlands
Feb 2015	Simfoni Alam Documentary: Ayer Hitam Forest Reserve: The Lung of Klang Valley, TV2, RTM
Nov 2014	Module lecturer/Instructor of Water Quality and Water Quantity Modules for National Environmental Educational Camp (KEMPAS 2014) organized by UPM, ExxonMobil, Kementerian Pelajaran Malaysia and Berita Harian
Oct 2014	Participate International Symposium and Exhibition on Geoinformation (ISG 2014), 14-15 October 2014 Putra World Trade Center, Kuala Lumpur.
Sep 2014	Participate in 13th IAHR/IWA International Conference of Urban Drainage, Urban Drainage in Context of Integrated Urban Water Management: A Bridge Between Developed and Developing Countries, 7th to 12th September 2014, Kuching, Sarawak.
Aug 2014	Coordinator for Forest Camp Module 2014 (Water Conservation Module) for 130 students, 25th Aug-6th Sept 2014, Ayer Hitam Forest Reserve, Selangor, Malaysia Seminar on Certified Professional in Erosion and Sediment Control (CPESC), 25-30th August 2014, Kuala Lumpur
Jul 2014	Advisor for research project titled 'Mudskipper fish richness in relation to water quality in newly planted mangrove forest of Kuala Selangor, Malaysia' by Prem Kumar Selvarajan, 11th International Junior Forestry Contest (IJFC), Moscow and Khanty-Mansiysk, Russia-won the best presenter.
Jun 2014	Judge for 3-Minutes Thesis (3MT) Competition organized by Faculty of Forestry, UPM Internal examiner for MSc Student, Muhammad Ekhzarizal Bin Mohamed Eusop, The impact of Land Use Change on Water Quality in Bertam River by Using Remote Sensing. Faculty of Forestry, Universiti Putra Malaysia.
Mar 2014	International Expert Meeting on Forest and Water: Research to Application at Chinese Botanical Institute, March 2014, organized by CIFOR, Food and Agriculture Organization (FAO): Mountains and Hydrology Unit, World Agroforestry Center (WAO) at Kunming, China
Feb 2014	Third International Tropical Hydrology Workshop, Hydrological change in the humid tropics: Identification, processes and forecasting. 9-14 February 2014, Borneo.
Nov 2013	Module lecturer/Instructor of Water Quality and Water Quantity Modules for National Environmental Educational Camp (KEMPAS 2013) organized by UPM, ExxonMobil, Kementerian Pelajaran Malaysia and Berita Harian
Sep 2013	Asia-Pacific Workshop on Water and Forests-Beyond Traditional Forest Hydrology, 23-25th September 2013, Dehradun, India Advisor for research project titled 'Frog Composition and Water Quality of Ayer Hitam Forest Reserve' by Marion Robert Dass, 10th International Junior Forestry Contest (IJFC), 8-14th September 2013, Moscow and Khanty-Mansiysk, Russia, won Second Prize. CS4-Expert meeting on the Environment Sector for National Water Resource Policy, Sept

	2013 at PWTC, Kuala Lumpur
Aug 2013	Simfoni Alam Documentary: Sumber Air dari Ayer Hitam Forest Reserve, TV2, RTM Internal examiner for MSc Students Dayang Sakinah, Universiti Putra Malaysia
Jul 2013	Editor for Proceedings of the International Forestry Graduate Students' Conference, 2-4 July 2013, Kuala Lumpur organized by Faculty of Forestry, Universiti Putra Malaysia. Other editors: Lai, F. S., Ramachandran, S., Halis, R. and Puan, C. L.
Jun 2013	CS4-Expert meeting on Water Demand Management for National Water Resource Policy, Jun 2013 at DID Ampang, Kuala Lumpur Module lecturer/Instructor of Water Quality and Water Quantity Modules for Forestry Camp 2013 organized by Faculty of Forestry, UPM
Apr 2013	Jugde for Nobel Laurete Outreach Camp (NLOC 2013) organized by UPM and MARA.
Nov 2012	Module lecturer/Instructor of Water Quality and Water Quantity Modules for National Environmental Educational Camp (KEMPAS 2012) organized by UPM, ExxonMobil, Kementerian Pelajaran Malaysia and Berita Harian
Jul 2012	Presenter and participate Seminar on Long-term Ecological Research in East Asia Pacific Region (EAP-LTER). 4-5th July 2012., Kuala Lumpur