

## Personal Information

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**Name and Surname:** LEY JUEN LOOI

**Address:** A-7-3A, Pangsapuri Bougainvilla, Jln Prima Pelangi 1, Segambut Dalam, 51200 Kuala Lumpur

**E-mail:** [leyjuenlooi@gmail.com](mailto:leyjuenlooi@gmail.com);  
[leyjuenlooi@upm.edu.my](mailto:leyjuenlooi@upm.edu.my)

**Profile:** Detail-oriented environmental researcher with expertise in the environmental chemistry and risk assessment, particularly to assess the health status of estuarine and coastal environment (water, sediment, and fish).  
Adept at developing new analytical method, maintaining instrument and providing technical solutions. Excellent track record of research success with several published articles.



## EDUCATION

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08.2011 – 01.2017

**Universiti Putra Malaysia, Serdang, Selangor, Malaysia**

*Doctor of Philosophy – Environmental Pollution and Control Technology (CGPA: 3.938)*

Thesis Title: Metal pollution status of estuarine and coastal water, sediment and fish [*Plotosus canius* (Hamilton, 1822) and *Periophthalmodon schlosseri* (Pallas, 1770)] from Straits of Malacca, Malaysia

Research Project: This project is conducted to fill in such information gaps by providing a more comprehensive understanding on the metal pollution status of tropical coastal waters and sediment as well as the metal associated ecological and human health risks. This work uses environmental forensic approach by combining analytical, modelling, and statistical analyses to trace and interpret the collected data.

2009 - 2011

**Universiti Putra Malaysia, Serdang, Selangor, Malaysia**

Bachelor of Science –Environmental Science First Class honour (CGPA: 3.910)

## EXPERIENCE

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- 06.2017 – 06.2018      **Universiti Putra Malaysia**  
*Post-Doctoral Researcher*  
Responsibilities: Act independently and assist faculty members in planning and designing research project; liaisons with collaborators to ensure success of project; supervise graduate assistant and post-graduate students; writing of research publications and reports
- 01.2015 - 09.2015      **Universiti Putra Malaysia**  
*Data Analyst (Environmental Monitoring and Assessment)*  
Projects: Development of Mercury Pollution Index and Speciation Databases in Coastal Area along Peninsular Malaysia by Integration of Monitoring, Analytical and Modeling Approaches
- 05.2010 - 07.2010      **Forest Research Institute Malaysia (FRIM)**  
*Trainee*  
Projects: 50-ha Trees Re-census; Plot Establishing in Arboretum Pasoh; Carbon Initiative and Functional Traits; Seeds and Seedlings Dynamics

## SKILLS

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Good communication – written and oral skills  
Good laboratory and analytical skills  
Good interpersonal skills

## LANGUAGES

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English        
Malay        
Mandarin      

## SOFTWARE SKILLS

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Microsoft Office - Expert user SPSS -  
Intermediate user XLSTAT -  
Intermediate user Macromedia  
Dreamweaver - Intermediate  
user PHREEQC - Intermediate  
user arcGIS - Intermediate user

## LAB & INSTRUMENTATION

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Metals and methylmercury analyses  
Optimization mercury and methylmercury extraction method  
Ecological & Health Risk Assessment  
Inductively coupled plasma mass spectrometry (ICP- MS)  
Flame atomic absorption spectrometry (AAS)  
Flow injection mercury system (FIMS 400)  
Direct mercury analyser (DMA 80)

## AWARD

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1. Dean's list for 6 semesters (CGPA > 3.75) awarded by UPM
2. JPA scholarship awarded by Public Service Department, Malaysia
3. MyBrain15- MyPhD scholarship awarded by Ministry of Higher Education
4. College's Academic Certificate awarded by Kolej Tun Perak, Univrsiti Putra Malaysia
5. Best Report Writing in ExpertSystem awarded by Faculty of Environmental Sciences, Universiti Putra Malaysia
6. Winner of 2013 Three Minutes Thesis (3MT) competition at Faculty level

## PUBLICATIONS - JOURNALS

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Researcher	Particular
Name: Ley Juen Looi	Other formats: Looi, Ley Juen; Looi, L.J.
Researcher ID ( <a href="http://www.researcherid.com/rid/R-9171-2017">http://www.researcherid.com/rid/R-9171-2017</a> )	R-9171-2017
SCOPUS ID	55879368600
<i>h</i> Index (SCOPUS)	3
<i>h</i> Index (Google Citations)	4
Number of Citations	29 (SCOPUS) and 62 (Google Citations)
Chapter in Book	4
Cumulative Impact Factors	15.240
Non-Science Citation (CSI) Index Journal	1
Other Academic Writings	4

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\*as of 19<sup>th</sup> of June 2018

### List of Journals:

1. Nordiani Sidi, Ahmad Zaharin Aris, Ferdaus Mohamat Yusuff, Ley Juen Looi, Nor Farhanna Mokhtar (2018). Tape seagrass (*Enhalus acoroides*) as a bioindicator of trace metal contamination in Merambong shoal, Johor Strait, Malaysia. *Marine Pollution Bulletin*, 126, 113-118. (Journal Citation Reports 2016 Impact Factor: 3.146/Q1; Top 10 in Marine & Freshwater Biology)
2. Nor Nasyitah Sobihah Nasri, Ahmad Zaharin Aris, Khairul Nizam Mohammad, Ley Juen Looi, Kyoung-Woong Kim, (2018). Bioaccumulation of Heavy Metals in Maricultured Fish, *Lates calcarifer* (Barramudi), *Lutjanus campechanus* (Red Snapper) and *Lutjanus griseus* (Grey Snapper). *Chemosphere*, 197, 318-324 (Journal Citation Reports 2016 Impact Factor: 4.208/Q1; Top 15%)
3. Hazzeman Haris, Ley Juen Looi, Ahmad Zaharin Aris, Nor Farhanna Mokhtar, Nur Ain Ayunie Ayob, Fatimah Md Yusoff, Abu Bakar Salleh, Sarva Mangala Praveena (2017). Geo-accumulation index and contamination factors of heavy metals (Zn and Pb) in urban river sediment. *Environmental Geochemistry and Health*, 1-13. (Journal Citation Reports 2016 Impact Factor: 2.616/ Q1)
4. Ley Juen Looi, Ahmad Zaharin Aris, Hazzeman Haris, Fatimah Md Yusoff, Zailina Hashim (2016). The levels of mercury, methylmercury, and selenium and the selenium health benefit value in grey-eel catfish (*Plotosus canius*) and gaint mudskipper (*Periophthalmodon schlosseri*) from the Strait of Malacca. *Chemosphere*, 152, 265-273. (Journal Citation Reports 2015 Impact Factor: 3.698/Q1)
5. Nurul Hafiza Ab Razak, Ahmad Zaharin Aris, Mohammad Firuz Ramli, Ley Juen Looi, Hafizan Juahir (2016). Temporal flood incidence forecaasting for Segamat River (Malaysia) using autoregressive integrated moving average modelling. *Journal of Flood Risk Management*, doi:10.1111/jfr3.12258 (Journal Citation Reports 2015 Impact Factor: 1.377/ Q3)
6. Ley Juen Looi, Ahmad Zaharin Aris, Fatimah Md Yusoff, Zailina Hashim (2015). Mercury contamination in the estuaries and coastal sediments of the Strait of Malacca. *Environmental Monitoring and Assessment*, 187, 1-15. (Journal Citation Reports 2015 Impact Factor: 1.633/ Q3)
7. Ley Juen Looi, Ahmad Zaharin Aris, Tzu Shan Ng, Fatimah Md Yusoff, Zailina Hashim (2015). Geochemical modeling of element species in selected tropical estuaries and coastal water of the Strait of Malacca. *Procedia Environmental Sciences*, 30, 109-114. (Indexed Journal)

8. Ley Juen Looi, Ahmad Zaharin Aris, Wan Ying Lim, Hazzeman Haris (2014). Bioconcentration and translocation efficiency of metals in paddy (*Oryza sativa*): a case study from Alor Setar, Kedah, Malaysia. *Sains Malaysiana*. (Journal Citation Reports 2015 Impact Factor: 0.350/ Q3)
9. Ahmad Zaharin Aris, Nadzhratul Husna Ahmad Puad, Nur Aliaa Shafie, Ley Juen Looi, Sarva Mangala Praveena, Mohammad Firuz Ramli, Mohd Kamil Yusoff (2014). The chemometric approach as a useful tool in the identification of metal pollution sources of riverine-mangrove sediment of Kota Marudu, Sabah, Malaysia. *EnvironmentAsia*, 7, 70-78. (Indexed Journal)
10. Ley Juen Looi, Ahmad Zaharin Aris, Fatimah Md Yusoff (2014). Metals concentrations (Co, Ni, Pb, Zn) in the estuarine and coastal waters from western part of Johor Strait. *Malayan Nature Journal*, 66, 86-96. (Indexed Journal-Scopus)
11. Ley Juen Looi, Ahmad Zaharin Aris, Wan Lutfi Wan Johari, Fatimah Md Yusoff, Zailina Hashim (2013). Baseline metal pollution profile of tropical estuaries and coastal waters of the Straits of Malacca. *Marine Pollution Bulletin*, 74, 471-476. (Journal Citation Reports 2016 Impact Factor: 3.146/Q1; Top 10 in Marine & Freshwater Biology)

## **PUBLICATIONS – CONFERENCE PROCEEDINGS**

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1. Looi Ley Juen, Ahmad Zaharin Aris, Fatimah Md. Yusoff, (2014). Mercury Concentration in Selected Estuaries and Coastal Sediments along the Straits of Malacca. Malaysian International Biological Symposium Sustainable Bioresources for Bioeconomy (i-SIMBIOMAS 2014), Putrajaya, Malaysia, 28th-29th October 2014.
2. Ahmad Zaharin Aris, Looi Ley Juen, Fatimah Md. Yusoff, Ahmad Ismail (2013). Metals Pollution Profile in the Estuarine and Coastal Systems of the Strait of Johore, Malaysia. NRCT-JSPS Joint International Seminar on Coastal Marine Science in Southeast Asia. Chiang Mai, Thailand, 15th – 17th November 2013.
3. Ley Juen Looi, Ahmad Zaharin Aris, Fatimah Md. Yusoff (2013). Factor Controlling the Total Exchangeable Cation of Estuaries and Coastal Sediment. International Conference on Environmental Forensics (iENFORCE 2013), Putrajaya, Malaysia, 12th -13th November 2013.

## **PUBLICATIONS – CHAPTER IN BOOK**

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1. Ahmad Zaharin Aris, Wan Ying Lim, Ley Juen Looi (2015). Natural and anthropogenic determinants of freshwater ecosystem deterioration: an environmental forensic study of the Langat River Basin, Malaysia. In Mu. Ramkumar et al. (eds). Environmental Management of River Basin Ecosystems, Springer International Publishing, Switzerland. pp 455-476. DOI: 10.1007/978-3-319-13425-3\_21
2. Ahmad Zaharin Aris, Ley Juen Looi (2015). Estuaries Ecosystems Health Status-Profilng the Advancements in Metal Analysis. In: Charles W. Finkl and Christopher Makowski (Eds.) Environmental Management and Governance. Springer International Publishing, Switzerland. pp 429-453. (ISBN 978-3-319-06304-1). DOI 10.1007/978-3-319-06305-8\_16
3. Ley Juen Looi, Ahmad Zaharin Aris, Fatimah Md. Yusoff (2014). Factor Controlling the Total Exchangeable Cation of Estuaries and Coastal Sediment. In: Ahmad Zaharin Aris, Tengku Hanidza Tengku Ismail, Rosta Harun, Ahmad Makmom Abdullah and Mohd Yusoff Ishak (Eds.). From Sources to Solution. Springer, Germany. pp 111-115. DOI 10.1007/978-981-4560-70-2\_21
4. Faradiah Md. Dali, Hafizan Juahir, Ahmad Zaharin Aris, Mohd Ekhwan Toriman, Ai Phing Lim, Ley Juen Looi, Syed Badruz-Zaman Syed Sagoff, Faradiella Mohd Kusin (2014). Assessment of Water Quality Using Environmetric Techniques at Johor River. In: Ahmad Zaharin Aris, Tengku Hanidza Tengku Ismail, Rosta Harun, Ahmad Makmom Abdullah and Mohd Yusoff Ishak

## RESEARCH PROJECTS

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Project 1	Developing Holistic Approach for Policy and Risk Management of Pharmaceutical Pollutants in Drinking Water
Project 2	Development of Mercury Pollution Index and Speciation Databases in Coastal Area by Integration of Monitoring, Analytical and Modelling Approaches
Project 3	Occurrence, Fate, and Risk Assessment of Pharmaceuticals and Hormones in Urban River Malaysia
Project 4	Development of Hydrochemical Profiles in Groundwater Aquifer by Integrating the Environmental Forensics Approaches
Project 5	Monitoring of Pharmaceuticals and Hormones in Drinking Water System Using Holistic Environmental Forensics Approach

## RESEARCH GRANTS

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Grant Type	Project Title	Total Allocation	Year	Role: Leader/Member	Sponsor
Internal Grant (Grant Putra)	Occurrence, Fate and Risk Assessment of Pharmaceuticals and Hormones in Urban River Malaysia	RM 50,000.00	2017-2019	Member	Universiti Putra Malaysia
Internal Grant (Grant Putra-IPM)	Development of Hydrochemical Profiles in Groundwater Aquifer by Integrating the Environmental Forensics Approaches	of RM 60,000.00	2018-2020	Member	Universiti Putra Malaysia
External Grant IERI Research Grant 2018	Monitoring of Pharmaceuticals and Hormones in Drinking Water System Using Holistic Environmental Forensics Approach	of KRW 20,000,000.00 (RM71,152.00)	2018-2019	Member	Gwangju Institute of Science and Technology

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## TEACHING EXPERIENCES

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ESC 3010 Soil and Water Sciences

ESC 3009 Instrumentation and Environmental Analysis

## SUPERVISION

No.	List of Student Names	Degree	Year	Thesis Name	Supervision Team
1	Ku Noor Asma Husna Binti Ku Azizi	Bachelor	2013	Mudskipper ( <i>Boleophthalmus boddarti</i> ) As Bio-Indicator for Heavy Metals Accumulation in Kuala Kedah	Ahmad Zaharin Aris, Ley Juen Looi (mentor)
2	Roslah Binti Awang Tahrin	Bachelor	2013	Determination of Heavy Metal in Coastal Water of Port Dickson	Ahmad Zaharin Aris, Ley Juen Looi (mentor)

## ACADEMIC APPOINTMENT – Article Reviewer

Journal Name	Title of Paper Work	Year
Environmental Geochemistry and Health	Environmental Media Transformation in Mercury Vapor and Flow in a Reservoir Area in Northern Taiwan	2018
Marine Pollution Bulletin	Bisphenol A and Alkylphenols Concentrations in Selected Mariculture Fish Species from Pulau Kukup, Johor, Malaysia	2017
Environmental Geochemistry and Health	The Effects of Biological and Environmental Factors on Mercury and Selenium Concentrations in the Cartilage, Meniscus and Anterior Cruciate Ligament	2017
Environmental Geochemistry and Health	Risk Assessment of Fluoride Intake from Tea Consumption in Fluorosis Endemic Area of the Macaronesia Region	2017

## CONSULTATION

Agency /Company	Total Allocation	Engagement Level	Year	Duration	Job Scope/ Consultation
CUCKOO	RM 3,677,000.00	Team member	2017-2022	5 years	Research Project Consultation

## SERVICE TOWARDS SOCIETY

Administration Post	Involvement Level	Year	Department
Facilitator	National	2012	Nobel Laurates Outreach Camp (NLOC) 2012, “Scientists of Tomorrow”
Facilitator	National	2013	UPM & Majlis Amanah Rakyat National Science Challenge 2013, “Prime Minister’s Challenge Trophy” Semi Final Level ExxonMobil Exploration and Production Malaysia Inc. & Academy of Sciences Malaysia