

## CURRICULUM VITAE

**Name:** Dr. Cheerawit Rattanapan  
**Position:** Associate Professor in Environmental Technology  
Program Director of Ph.D in Health and Sustainable Development  
Editor-in-Chief of Journal of Public Health and Development  
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Mahidol University, Salaya, Phutthamonthon,  
Nakhonpathom, Thailand, 73170  
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<b>Academic Background:</b>		
<b>Year of Attendance</b>	<b>University</b>	<b>Degree obtained</b>
1999 - 2003	Prince of Songkla University	B.Sc. in Education (General Science)
2003 - 2005	Prince of Songkla University	M.Sc. (Environmental Management)
2005 - 2009	Prince of Songkla University	Ph.D. (Biotechnology)
1 October 2013- 31 September 2013	Leibniz-Institut für Agrartechnik Potsdam- Bornim e. V. (ATB)	Research Fellowship (Microbial community)
1 January 2014 – 31 March 2014	Vienna University of Economics and Business	Post-doctoral Research (Sustainable development)

<b>Area of Interests:</b>
Environmental Management, Environmental Health, Environmental Biotechnology, Sustainable Development, Occupational Health and One Health

Publications:	
Article	Title
Publications	<ol style="list-style-type: none"> <li>1. <b>Rattanapan C</b>, Arrykul S, Chevakidagarn P. Dephosphorization of Wastewater by Fly Ash from Phuket Incineration Plant. CMU. J. Nat. Sci. 2008; 7:115-125.</li> <li>2. <b>Rattanapan C</b>, Boonsawang P, Kantachote D. Removal of H<sub>2</sub>S in Down-Flow Biofiltration using Sulfide Oxidizing Bacteria from Concentrated Latex Wastewater. Bioresource Techno. 2009; 100:125-130.</li> <li>3. <b>Rattanapan C</b>, Boonsawang P, Kantachote D. Effect of H<sub>2</sub>S and air flow rates on pure and consortium culture of sulfide oxidizing bacteria biofiltration for H<sub>2</sub>S . J. Health Res, 2010; 24(suppl):1-6.</li> <li>4. <b>Rattanapan C</b>, Kantachote D, Yan R, Boonsawang P. Hydrogen sulfide removal using granular activated carbon biofiltration inoculated with <i>Alcaligenes faecalis</i> T307 isolated from concentrated latex wastewater. Int. Biodeter. Biodegr., 2010; (64): 383-387</li> <li>5. Rakkamon T, Chaimay B, Woradet S, <b>Rattanapan C</b>. Health Risk Assessment or Exposure to Heavy Metals in Tap Water: A Case study of Tamla Village Tap Water System, Lankhoy sub-district, Paprayoom district, Phatthalung province. J. Pub Health Develop, 2010, 8(2): 44-54 (in Thai).</li> <li>6. Wijaya S, <b>Rattanapan C</b>, Chompikul J, Factor Effecting Patients' Satisfaction with General Practitioners Consultations at Palembang Health Centers, Indonesia, J. Health Res, 2011 25(2): 77-81.</li> <li>7. Do M, <b>Ratanapan C</b>, Suksaroj T, Health Risk from Exposure to Trihalomethanes in Swimming Pool, J. Pub Health Develop, 2011 9(2): 208-222 (in Thai).</li> <li>8. Honda M, Chompikul J, <b>Rattanapan C</b>, Wood G, Klungboonkrong S. Sharps Injuries among Nurses in a Thai Regional Hospital: Prevalence and Risk Factors. International Journal of Occupational and Environmental Medicine, 2011, 2(4): 215-223</li> </ol>

<b>Publications (Con.):</b>	
<b>Article</b>	<b>Title</b>
Publications (Con.)	<p>9. <b>Rattanapan C</b>, Sawain A, Suksaroj T, Suksaroj S. Enhanced efficiency of dissolved air flotation for biodiesel wastewater treatment by acidification and coagulation processes. <i>Desalination</i>, 2011; 280(1-3): 370-377.</p> <p>10. <b>Rattanapan C</b>, Boonsawang P, Kantachote D. Hydrogen Sulfide Removal from Biogas using Pure and Mixed Cultures of Sulfide Oxidizing Bacteria Biofiltration. <i>Int J Green Energy</i>, 2011, (8): 1-10.</p> <p>11. <b>Rattanapan C</b>, Ounsaneha W. Removal of Hydrogen Sulfide Gas using Biofiltration - a Review. <i>Walailak Journal of Science and Technology</i>, 2012, 9(1): 9-18.</p> <p>12. <b>Rattanapan C</b>, TS Thunwadee , W Ounsaneha. Development of Eco-efficiency Indicators for Rubber Glove Product by Material Flow Analysis. <i>Procedia Soc Behav Sci</i>, 2012, 40: 99-106.</p> <p>13. S. Charmondusit, K. Bhaktikul, C. Arunlertaree, W. Wisawapipat, <b>C. Rattanapan</b>, K. Charmondusit. Problem Based Training Program on Industrial Ecology and Environment for the Sustainability Management of Industry. <i>Procedia Soc Behav Sci</i>, 2012, 40: 31-36.</p> <p>14. Muadchim, M, Suksaroj TT, <b>Rattanapan C</b>, Suksaroj C. Biogas production and biochemical methane potential of anaerobic co-digestion from pretreated biodiesel processing wastewater and decanter cake. <i>Thai Environmental Engineering Journal</i>, 2012 26(1): 15-23.</p> <p>15. <b>Rattanapan C</b>, Suksaroj TT, Kantachote D, Rakkamond T, Katemai W. Potential from Biogas Production for Co-digestion of Domestic Wastewater and Food Waste. <i>Health and The Environment Journal</i>, 2012, 3(2): 1-9.</p> <p>16. Shrestha N., Mongkolchati A., <b>Rattanapan C.</b> and Wongsawass S. Assessment of patient satisfaction at a traditional medicine hospital in Nepal. <i>J Pub. Health Dev.</i> 2012; 10(3): 17-29</p>

<b>Publications (Con.):</b>	
<b>Article</b>	<b>Title</b>
Publications (Con.)	<p>17. <b>Rattanapan C</b>, Thunwadee TS, Wongsawass S, Ounsaneha W. Measure on Eco-efficiency of Thai Growing-Fishing Pig Farms. <i>Int J Environ Sci Dev</i>, 2013, 4(5): 533-537.</p> <p>18. <b>Rattanapana C</b>, Suksaroj TT, Chumpikul J and Choosong T. Health Risk Assessment of Hydrogen Sulfide Exposure among Workers in a Thai Rubber Latex Industry. <i>Environmentasia</i>, 2014, 7(1): 25-31.</p> <p>19. William C. Phir P, <b>Rattanapan C</b> and Mongkolchat A. Determinants of Postnatal Service Utilisation among Mothers in Rural Settings of Malawi. <i>Health and Social Care in the Community</i> 2015, 22(5): 493-50.</p> <p>20. Akai K, Chompikul J, and <b>Rattanapan C</b>. Rabies preventive behaviors of dog owners in Nakhon Pathom Province of Thailand. <i>J Pub. Health Dev</i>. 2015; 13(1): 17-28.</p> <p>21, Sayavong C, Chompikul J, Wongsawass S and <b>Rattanapan C</b>. Knowledge, attitudes and preventive behaviors related to dengue vector breeding control measures among adults in communities of Vientiane, capital of the Lao PDR. <i>J Infect Public Health</i> 2015; 8, 466—473.</p> <p>22. Soe KT, Laosee O, Limsatchapanich S, and <b>Rattanapan C</b>. Prevalence and Risk Factors of Musculoskeletal Disorder among Myanmar Migrant Workers in Thai Seafood Industries. <i>International Journal of Occupational Safety and Ergonomics</i> 2015; 21(4): 539-546.</p> <p>23. Ounsaneha W and <b>Rattanapan C</b>. Defining the Eco-Efficiency of Rubber Glove Products Manufactured from Concentrated Latex in Thailand. <i>Environmental Progress &amp; Sustainable Energy</i> 2016; 35(3): 802-808.</p> <p>24. Hlaing ZN, Mongkolchati A and <b>Rattanapan C</b>. A Household Level Analysis of Water Sanitation Associated with Gastrointestinal Disease in an Urban Slum Setting of South Okkalapa Township, Myanmar. <i>Environmentasia</i>, 2016, 9(2): 91-100.</p>

<b>Publications (Con.):</b>	
<b>Article</b>	<b>Title</b>
Publications (Con.)	<p>25. Lwin, PM, <b>Rattanapan C</b>, Laosee, O. Nurses' intention to remain employed in hospitals: Understanding the shortage in the context of Myanmar. <i>International Journal of Nursing Practice</i> 2017; 23:e12536.</p> <p>26. Philalai T, <b>Rattanapan C</b>, Laosee O. Alcohol Consumption among Adults in Northern Thailand. <i>J. Health Res</i>, 2017; 31(2): 99-107.</p> <p>27. Klunbut P, Mongkolchati A, Ussawarujikulchai A, Ounsaneha W, <b>Rattanapan C</b>. Appropriate Option of Market Solid Waste Management based on the Stakeholder Perspectives: A Case Study in a Central Market of Agriculture Products, Thailand. <i>Journal of Materials and Environmental Sciences</i> 2017 8(7): 2391-2402.</p> <p>28. Ounsaneha W, <b>Rattanapan C</b> and Suksaroj TT. Enhancement of Eco-Efficiency Performance for Tread Product Process by Clean Technology. <i>The Journal of Industrial Technology</i> 2017 13(2): 49-63 (in Thai).</p> <p>29. Ounsaneha W, Kraisin P, Suksaroj TT, Suksaroj C, Rattanapan C. Health Risk Assessment from Haloacetic Acids Exposure in Indoor and Outdoor Swimming Pool Water, <i>Environmentasia</i>, 2017, 10(2): 177-185.</p> <p>30. Taecharungroj V, Suksaroj TT, <b>Rattanapan, C</b>. The place sustainability scale: measuring residents' perceptions of the sustainability of a town, <i>Journal of Place Management and Development</i>, 2018, 11(4): 370-390.</p> <p>31. Ounsaneha W, Janthaphat P, Suksaroj TT, <b>Rattanapan C</b>. Joint benchmarking and eco-efficiency for the sustainable performance of swine production in Thailand, <i>International Journal of Geomate</i>, 2018, 15(49): 137-142.</p> <p>32. Ounsaneha W, Chotklang N, Laosee O, <b>Rattanapan C</b>. Predictor of behavior intention to develop a green university in the case of an undergraduate university in Thailand, <i>International Journal of Geomate</i>, 2018, 15(49): 162-168.</p>

<b>Publications Con.):</b>	
<b>Article</b>	<b>Title</b>
Publications (Con.)	<p>33. Soe AK, <b>Rattanapan C</b>, Wongsawass S, Laosee O. Use of insecticide-treated nets among pig owners living in Japanese encephalitis endemic area of Northern Myanmar, <i>International Journal of Geomate</i>, 2018, 15(50): 45-50.</p> <p>34. Laosee O, <b>Rattanapan C</b>, Somrongthong R. Physical and cognitive functions affecting road traffic injuries among senior drivers, <i>Archives of Gerontology and Geriatrics</i>, 2018, 78: 160-164.</p> <p>35. Manandhar S, Suksaroj TT, <b>Rattanapan C</b>. The Association between Green Space and the Prevalence of Overweight/Obesity among Primary School Children. <i>International Journal of Occupational and Environmental Medicine</i>, 2019, 10(1): 1-10.</p> <p>36. <b>Rattanapan C</b>, Sinchai L, Suksaroj TT, Kantachote, D, Ounsaneha W. Biogas Production by Co-Digestion of Canteen Food Waste and Domestic Wastewater under Organic Loading Rate and Temperature Optimization. <i>Environments</i>, 2019, 6: 16.</p> <p>37. Ounsaneha W, <b>Rattanapan C</b>. Enhancing Efficiency of Sugar Cane Production Process by Clean Technology. <i>Khon Kaen Agriculture Journal</i>, 2019, 47(SUPPL. 1): 59-66.</p> <p>38. Laosee O, Sritoomma N, Wamontree P, <b>Rattanapan C</b>, Sitthi-Amorn C. The effectiveness of traditional Thai massage versus massage with herbal compress among elderly patients with low back pain: A randomised controlled trial. <i>Complementary Therapies in Medicine</i>, 2020, 48: 102253.</p> <p>39. Ounsaneha W, Buadit T and <b>Rattanapan C</b>. Assessment of human health impact based on life cycle assessment: A case study of Thai retread tire. <i>IOP Conference Series: Materials Science and Engineering</i>, 2020, 773: 012038 .</p> <p>40. Ounsaneha W, Laosee O, Suksaroj TT, Srisamai P, and <b>Rattanapan C</b>. Tourist Behavior of Plastic Waste Reduction in the Coastal Area of Trang Province, Thailand. <i>International Journal of Environmental Science and Development</i>, 2020, 11(4): 165-169.</p>

<b>Publications (Con.):</b>	
<b>Article</b>	<b>Title</b>
Publications (Con.)	<p>41. <b>Rattanapan C.</b> Ounsaneha W. Environmental impact assessment of Thai banana supply chain. <i>International Journal of Environmental Science and Development</i>, 2020, 11(7): 341-346.</p> <p>42. Buadit T, <b>Rattanapan, C.</b> Ussawarujikulchai, Suchiva, K, Papong, S. Ma, H.-W. 2020. Life cycle assessment of material recovery from pyrolysis Process of end-of-life tires in Thailand. <i>International Journal of Environmental Science and Development</i>, 2020, 11(10): 493-498.</p> <p>43. Laosee, O. Sritoomma N. Wamontree P, <b>Rattanapan C</b> Tansuwanond W, Sitthi-Amorn C. 2020. Functional disability and quality of life in older adults with chronic low back pain. <i>Journal of Pain Management</i>, 2020, 13(2): 141-147.</p> <p>44. Ounsaneha W, <b>Rattanapan C</b>, Suksaroj T.T, Kantachote D, Klaweck, W, Rakkamon, T. 2021. Biogas production by co-digestion of municipal wastewater and food waste: Performance in semi-continuous and continuous operation. <i>Water Environment Research</i>, 2021, 93(2): 305-315.</p> <p>45. <b>Rattanapan C.</b> Ounsaneha W. Water Footprint Assessment of Thai Banana Production . <i>International Journal of Environmental Science and Development</i>, 2021, 12(5): 151-156.</p> <p>46. Htun, N.N., Laosee, O., <b>Rattanapan, C.</b> Factors that influence menstrual hygiene management in adolescent girls in Mudon Township, Mon State, Myanmar. <i>Journal of Health Science and Medical Research</i>, 2021, 39(3): 207–217.</p> <p>47. Tanglai, W., Chen, C.-F., <b>Rattanapan, C.</b>, Laosee, O. The Effects of Personality and Attitude on Risky Driving Behaviour Among Public van Drivers: Hierarchical Modeling. <i>Safety and Health at Work</i>, 2022, 13(2), 187–191.</p> <p>48. <b>Rattanapan, C.</b>, Ounsaneha, W. The potential for value-added banana production waste under circular economy concept. <i>International Journal of Environmental Science and Development</i>, 2022, 13(3): 92–96.</p>

<b>Publications (Con.):</b>	
<b>Article</b>	<b>Title</b>
Publications (Con.)	<p>49. Ounsaneha, W, Parunawin, W, Laosee, O, Isoda, N, <b>Rattanapan, C.</b> Household environmental practice for prevent and control dengue fever toward one health framework in an endemic area of central region, Thailand. <i>EnvironmentAsia</i>, 2022, 15(2): 34-44.</p> <p>50. Ounsaneha, W., Laosee, O., Suksaroj, T.T., <b>Rattanapan, C.</b> Preventive Behaviors and Influencing Factors among Thai Residents in Endemic Areas during the Highest Epidemic Peak of the COVID-19 Outbreak. <i>International Journal of Environmental Research and Public Health</i>, 2023, 20(3), 2525.</p> <p>51. Ounsaneha, W, Parunawin, W, Laosee, O, Isoda, N, <b>Rattanapan, C.</b> Combined Impact of Omicron Vaccination and Environmental Risk Exposure: A Thailand Case Study. <i>Vaccines</i>, 2023, 11(2), 297.</p> <p>52. Buadit, T., Ussawarujikulchai, A., Suchiva, K. Ma, H.-W., <b>Rattanapan, C.</b> Environmental impact of passenger car tire supply chain in Thailand using the life cycle assessment method. <i>Sustainable Production and Consumption</i>, 2023, 37, 156–168</p> <p>53. <b>Suksaroj, C.</b>, Jearat, K., Cherypiew, N., Rattanapan, C., Suksaroj, T.T. Promoting Circular Economy in the Palm Oil Industry through Biogas Co-digestion of Palm Oil Mill Effluent and Empty Fruit Bunch Pressed Wastewater. <i>Water (Switzerland)</i>, 2023, 15(12), 2153.</p> <p>54. Buadit, T., Ussawarujikulchai, A., Suchiva, K., <b>Rattanapan, C.</b> Green productivity and value chain analysis to enhance sustainability throughout the passenger car tire supply chain in Thailand. <i>Journal of Open Innovation: Technology, Market, and Complexity</i>, 2023, 9(3), 100108.</p> <p>55. Trisnasari, Laosee, O., <b>Rattanapan, C.</b> Janmaimool, P. Assessing the Determinants of Compliance with Contribution Payments to the National Health Insurance Scheme among Informal Workers in Indonesia. <i>Journal of Environmental Research and Public Health</i> 2023, 20, 7130.</p>



<b>Publications (Con.):</b>	
<b>Article</b>	<b>Title</b>
Publications (Con.)	56. Laosee, O., Sritoomma, N., <b>Rattanapan, C.</b> , Wamontree, P. Effect of Fitness-To-Drive and Metacognition on Road Traffic Injury Among Older Taxi Drivers: Hierarchical Modeling. Journal of Applied Gerontolog, 2024, 10.1177/07334648241241008.  57. Ounsaneha, W., Laosee, O., <b>Rattanapan, C.</b> Influence of Environmental Risk Exposure on the Determinants of COVID-19 Booster Vaccination in an Urban Thai Population. International Journal of Environmental Research and Public Health, 2024, 21, 745.

<b>Scholarships during study:</b>		
<b>Years</b>	<b>Types</b>	<b>Sources</b>
2004	Research Grant	The Education of Shell 100 Years Foundation
2006	Research Grant	The Education of Shell 100 Years Foundation
2007	Student Exchange	Commission of Education, Thailand.
2007	Graduate Study Scholarship	Prince of Songkla University Graduate Studies

<b>Research Internship:</b>		
<b>Courses</b>	<b>Places</b>	<b>Times</b>
Biofiltration Modeling	Institute of Environmental Science and Engineering, Nanyang Technological University, Singapore	3 months
Biogas System Research	Institute of Environmental Biotechnology Department of Agrobiotechnology - IFA Tulln, BOKU - University of Natural Resources and Life Sciences, Vienna, Austria.	1 months

<b>Principle Investigator of Project Research:</b>		
<b>Years</b>	<b>Title</b>	<b>Sources</b>
February 2010- February 2011	Health Risk Assessment of Exposure to Hydrogen sulfide of staff in Concentrated latex industry	The Asthma Foundation of Thailand
May 2011- May 2013	The Optimization of Biogas Production from Domestic Wastewater by Co-digestion with Food Waste	The Thailand Research Fund
August 2011- April 2012	Enhancement of Concentrated Latex Production Process for Rubber Glove Product by Eco-Efficiency	The Thailand Research Fund
August 2012- July 2012	Enhancing Performance of Tread Product Process and Condom Product Process from Concentrated Latex by Eco-Efficiency	National Research Cousin of Thailand and The Thailand Research Fund
September 2012- July 2013	Strengthening the Sustainable Development of Pig farms using Eco-efficiency	The Thailand Research Fund
1 October 2013- 30 November 2013	Microbial community structure in anaerobic co-digestion of domestic wastewater and food waste in the laboratory continuously stirred tank and modified anaerobic baffled reactors	The German Academic Exchange Service
3 January 2014- 31 March 2014	Eco-efficiency Evaluation of pig farm in Thailand Using Data Envelopment Analysis	Austrian Agency for International Cooperation in Education and Research
May 2014- December 2015	Appropriate Model for Solid Waste Management of Taladd Thai Phatumthani Province	The Thailand Research Fund

<b>Principle Investigator of Project Research (Con):</b>		
<b>Years</b>	<b>Title</b>	<b>Sources</b>
August 2014- July 2015	Eco-efficiency Best Practice of Sugar Cane Production Industry for Sustainable Development by Benchmarking	National Research Cousin of Thailand and The Thailand Research Fund
December 2014- September 2015	Direction Determination of Economic Crop Plantation in the Southern of Thailand toward Sustainable Development by Eco-efficiency with Ecological Footprint	Mahidol University
January 2016- December 2016	Enhancement of Green Productivity for Sustainable Supply Chain Management of Dairy Cooperatives in the Central of Thailand by Value Chain Analysis	The Thailand Research Fund
May 2016- September 2017	A framework development to promote collective action in community within One Health principle of household environment practice to prevent and control dengue fever in Central region of Thailand.	United States Agency for International Development (USAID)
June 2017	Biogas Production by Co-digestion of Municipal Wastewater and Food Waste in Semi-continuous Operations	Austrian Agency for International Cooperation in Education and Research and Office of the Higher Education Commission, Thailand
June 2017- May 2018	Enhancement of Green Productivity for Sustainable Supply Chain Management of Tire Industry in Thailand by Value Chain Analysis	The Thailand Research Fund

<b>Principle Investigator of Project Research (Con):</b>		
<b>Years</b>	<b>Title</b>	<b>Sources</b>
June 2017- May 2018	Enhancement of Green Productivity for Sustainable Tire Production and Used Tire Management in Thailand by Value Chain Analysis	The Thailand Research Fund
June 2017- May 2018	Option of Sustainable Food Waste Management for Large Fresh Markets of Thailand	The Thailand Research Fund
December 2018- November 2019	An examination of the factors that influence young drivers' willingness to speed and text while driving for sustainable encouragement of safety driving in Thailand.	Mitsui Sumitomo Insurance Welfare Foundation
January 2019- December 2019	Appropriate Model for Plastic Waste Management in Coastal Province toward Stakeholder integration and Sustainability : a Case Study of Trang Province.	National Research Cousin of Thailand
November 2020- July 2021	Sustainable Supply Chain Management of the Tyre Industry in Thailand by Enhancing Green Productivity with Value Chain Analysis	National Research Cousin of Thailand
October 2022- March 2023	Risk Reduction for Epidemics of the COVID-19 in Thai Urban Cites by Environmental Risk of Exposure Assessment	Mahidol University
October 2023- November 2024	Critical Success Factors for Epidemics of COVID-19 Prevention and Control in Thai Urban Cities by Environmental Risk of Exposure Assessment	Mahidol University

<b>Principle Investigator of Project Research (Con):</b>		
<b>Years</b>	<b>Title</b>	<b>Sources</b>
January 2024- December 2024	Effectiveness Program of Road Safety Literacy for Foreign Visitor Cyclists in a World Heritage Site of Thailand.	Mitsui Sumitomo Insurance Welfare Foundation
April 2024- March 2024	Circular Economy Approach in the Optimization of Biogas Production by Co-digestion between Solid and Liquid Wastes from Thai Fresh Markets	National Research Cousin of Thailand and Mahidol University

**Updated on September 1<sup>st</sup>, 2024**