

Pongsakon Punpukdee

Environmental Engineering and Management, Asia Institute of Technology
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Education

Aug 2019 – May 2021	M.Eng. in Environmental Engineering and Management Studied in Environmental Engineering and Management, Major in Water and Wastewater Engineering with GPA of 3.31/4.00. Master Thesis entitled “Monitoring and Assessing Water Quality using Remote sensing” Advisor: Asst. Prof. Wenchao Xue and Asst. Prof. Salvatore G.P. Virdis	AIT, Thailand
2015 - 2019	B.Eng. (First Class Honors) in Environmental Engineering and Disaster Management Studied in Environmental Engineering and Disaster Management with GPA of 3.60/4.00. Senior Project entitled “Manganese adsorption onto alum sludge derived from the water treatment plant”. Advisor: Dr. Thuangsit Denpetkul.	Mahidol University, Thailand

WORKING EXPERIENCES

2020 - 2021	Research Associate (Cooperation with the department of Bangkok) Worked with Project entitled “Integrated Assessment of SDGs Using Big Earth Observation Data in Bangkok Metropolitan Region: MBR”. The main responsibility was using the images from Sentinel-2 and neural network from ESA to study the possible predicting water quality in Chao Phraya River.	AIT, Thailand
2020	Research Assistant Worked with Project entitled “Heavy Metal in Chao Phraya watershed” The main responsibility was using the images from satellite to analyze the types of land use and analyze the changed areas in Chao Phraya watershed using ArcGIS and Erdas program.	AIT, Thailand
2019	Research Assistant Worked with Project entitled “Manual for Use of Biological Indexes in Detection of Chemical Remaining in Environment” The main responsibility was survey and selection of an introductory study area, study of the effects of pesticides, and creating a simple manual for farmers and individuals.	Prince of Songkla University, Thailand
2019	Teacher Assistant Teaching supplementary calculus courses to first-year students in the second semester. It also teaches other subjects such as physics and chemistry.	Mahidol University, Thailand
2018	Trainee of Bangchak Talent Internship Program Worked in Environment Division at Bangchak Pub Co., Ltd. Working with air pollution, solid waste, and solid management. Also, learned about Promoting activities related to environment, teamwork ,collaborating with other parties and training social business.	Bangchak Pub Co., Ltd
2017 - 2018	Research Assistant	Chulalongkorn University Thailand

WORKING EXPERIENCES

	Worked with Project entitled "Developing Product from Water Treatment Sludge" The main responsibility was developing water treatment sludge for manganese adsorption and development of cement blocks with water treatment sludge.	
2017	Research Assistant Studied with Possible Project "Improving Wastewater Treatment System of Prachuap Sugar Industry Co, Ltd.	Mahidol University, Thailand
2016 - 2018	student association committee The main responsibility was to help co-ordinate activities across departments, support the organization of university activities and the evaluation of the activities.	Mahidol University, Thailand
2016 - 2018	Teacher Assistant The main assistant teachings are chemical laboratory about water quality analysis and basic knowledge of engineering for first year students.	Mahidol University, Thailand

Training and Workshop

2020	Joined "Remote Sensing Course" at Asian Institute of Technology	
2020	Joined and Presented "Spatial and Temporal Trends of Optically Active Water Quality Parameters in Chao Phraya River between 2018 and 2020: Preliminary Results" in the 2nd Asian Institute of Technology and Beijing Normal University Joint Virtual Workshop.	
2018	Joined "Improvement of water supply", organized by Metropolitan Waterworks Authority and Pathum Thani water Co., Ltd.	
2018	"Training Teamworking and Fire Response", organized by Bangchak Pub Co., Ltd., Fuel & Fire training Co., Ltd., and the Pine resort.	
2018	"Social Business Training" organized by Bangchak Pub Co., Ltd. and Asian Institute of Technology	
2016	"Emergency fire and Chemical Incident Management Training" organized by NPC Safety and Environmental Service Co., Ltd (PTT Group).	
2015	"First Aid and Rescue training" organized by National Institute for Emergency Medicine.	

RESEARCH OF INTERESTS

- Application of remote sensing for monitoring water quality and other related with environments
- Improving waste or hazardous waste for other application
- Geoinformatics
- Analysis chemical transportation in case of emergency
- Wastewater treatment using wetland with a media such as water treatment sludge

SKILLS

Computational modeling and programing skills:

- Chemical transport models from wastewater treatment plant: TANKS4.0 and WATER9.0
- Air Emission model: ALOHA (response for emergency response) and AERMOD
- Geoinformatics Software: ArcMap and ERDAS
- Statistical analysis: SPSS and Python using pandas
- Computer programing: Python
- Other: Google sketchup

Languages:

- Quite good writing and command in English

Teching skills

- Environmental Engineering Laboratory
- Environmental Unit Operations

AWARDS

2019	Received "Good student award" represented the most outstanding student in Environmental Engineering and Disaster Management, Mahidol University
2018	Received "Qualified 1 of 10 teams, Bangchak YY Contest 2018" organized by Bangchak Pub Co., Ltd. collaboration with Asian Institute of Technology
2018	Received " The Winner of Social Business Contest from Bangchak Talent Internship 2018" organized by Bangchak Pub Co., Ltd.