



PhD supervisor



Assoc. Prof. Dr. Nguyen Thi Bay

Faculty of Fluid Mechanics Division
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Language(s): English, Vietnamese

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Profession: Head. Faculty of Fluid Mechanics Division. University of Technology, Vietnam National University HCMC

Potential areas for PhD supervision:

- Hydrodynamics modeling in river
- Littoral dynamics modeling in coastal areas
- Sediment transport
- Trend of deposition and erosion
- Riverbank failure
- Shoreline changes
- Artificial Neural Network

Supervising experience:

- 4 PhD students
- 18 MSc students

Employment history in last 5 years:

- 2016 – present: University of Technology, Vietnam National University HCMC

Education – since bachelor degree:

- 1987. Engineer and MSc in Hydrology.
University of Meteorology and Hydrology, Leningrad, Russia
- 1996. PhD in Physics and Mathematics (in oceanology) .
University of Meteorology and Hydrology, Leningrad, Russia

Selected recent papers:

1. Chinh Lieou Kien, Kim Tran Thi, Phung Nguyen Ky, Bay Nguyen Thi. Assessment of impacts of sand mining activities to river bank stability at downstream of My Thuan bridge. Vietnam Journal of Agriculture and Rural Development, Vol.16, No.247, p.46-52, 08/2014.
2. Hang Nguyen Thi Thuy, Bay Nguyen Thi, Phung Nguyen Ky. Calculation and assessment of bottom morphological changes of Soai Rap river if dredging the ship lane by 3D model. Vietnam Journal of Science and Technology, Vol.50, No.4A, p.185-193, 2012.



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3. Bay Nguyen Thi, Toan Tran Thien, Phung Nguyen Ky, Tri Nguyen-Quang. Numerical investigation on the sediment transport trend of Can Gio coastal area (Southern Vietnam). *Journal of Marine Environmental Engineering*, Vol.9, No.3, p.191-210, 2012.
4. Nguyen Q. Y, Nguyen T. Bay, Ha Phuong, Performance testing and comparison of a turbine ventilator, a vent column, and their combination under thermal buoyancy and wind effects, *International Journal of Engineering*, Vol. 6, issue 2, pp.2012, 2012.
5. Hoai Cong Huynh, Bay Nguyen Thi, Ngoc Minh Nguyen, Apply flood model to estimate the reduction of flood water level in Thua Thien-Hue province in case of flood controlled by Ta Trach resevoir, "Wateralong Community Hue, Center for Sustainable Urban Regeneration, The University of Tokyo" , Vol. 08,2011, Japan, pp. 006-007, 2011.
6. Nguyen Ky Phung, Bay Nguyen Thi. Computation of the oil spreading in the Binh Thuan coastal zone. *Journal of Marine Science and Technology – Hanoi*. pp. 18-29. 3 (T. 8) 2008.
7. Nguyen Ky Phung, Nguyen Thi Bay. Assessing self-cleaning ability of the main river Can Gio under the influence of waste water shrimp. *Scientific and Technical Hydro-Meteorological Journal -Hanoi*, 569. Pp. 30-37. , T.5/2008.
8. Nguyen Thi Bay, Nguyen Ky Phung. Computing the pollutant transport on the channel- river network, cases-study on Le Minh Xuan channel network. *Scientific and Technical Hydro-Meteorological Journal -Hanoi*, 566. pp. 40-47. T.2/2008.
9. Nguyen Ky Phung, Nguyen Thi Bay. Research flow and initial calculation of pollution in the Gulf of Thailand. *Scientific and Technical Hydro-Meteorological Journal – Hanoi*, 559. pp. 17-25. T.10/2007.
10. Nguyen Thi Bay, Nguyen Ky Phung. Study on the tendency of accretion and erosion in the can gio coastal zone. *Journal of Marine Science and Technology – Hanoi*. Pp. 50-64. 4 (T. 7) 2007.
11. Nguyen Thi Bay, Mach Quynh Trang. Mathematical model of cohesive sediment transport in the shallow sea basin. *Journal of Science and Technology Development, HCMC National University*. pp. 31-39. V.9 4/2006.
12. Nguyen Ky Phung, Nguyen Thi Bay. Application of Artificial Neural Network for calculation and prediction of outlet water quality from wastewater treatment plant at Holland Dairy of Company. *Scientific and Technical Hydro-Meteorological Journal*. pp. 23-29. 11/2005.
13. Nguyen Thi Bay, Quach Thi Ngoc Tho. A mathematical model of spreading pollutants in river network. Part 1: Mathematical model. Part 2: Application for simulation of dispersion in Thi Vai river network. *Jour. of Science and Technology Development, HCMC National University*. pp. 78-91. V.8. 6/2005.
14. Nguyen Thi Bay, Nguyen Anh Dung. A numerical tidal model for the shallow sea basin-Aplying for simulation of tidal energy in Can Gio sea territorial. *Journal of Science and Technology Development, HCMC National University*. pp. 52-58. . V.8. 4/2004.
15. Nguyen Thi Bay. Calculation of sediment transportation and the bed changes of Tanchau river *Journal of science and technology development. VNU-HCMC*. pp. 15 – 21. V.6,9-10/2003.
16. Nguyen Thi Bay, Nguyen Ky Phung. Research Of Residual Tidal In Tonkin Gulf. *Journal of Marine Science and Technology – Hanoi*. 2/2003 T.3. pp. 13 – 24. 2003.
17. Nguyen Thi Bay, Nguyen Ky Phung. Solve the 2-D problem of sediment transfer and bottom changes in river bend by using curved coordinates. *Scientific and Technical Hydro-Meteorological Journal- Hanoi*. pp. 44-50. 9(489) 2001.