

## INFORMATION ON DOCTORAL THESIS

1. Full name: **Nguyen Thi Thuy Hang**

2. Sex: Female

3. Date of birth: 07/07/1981

4. Place of birth: Ninh Binh

5. Admission decision number: 265/SDH, issued on 05/11/2003 by the President of Vietnam National University, Hanoi.

6. Changes in academic process: Decision of the Rector of College of Science number 1188/SDH dated of 01/10/2007 on 12-month extending and thesis defending (up to 05/11/2008); number 2735/QD-SDH-TN dated 31/12/2009 on returning PhD student to local are or working institute.

7. Official thesis title: ***Study of landscape structure for spatial organization of resources' rational use and environment protection in Ninh Binh province with the help of remote sensing and geographical information system.***

8. Major: Utilization and Protection of Environment Resources

9. Code: 62 85 15 01

10. Supervisors: **Prof. Dr. Truong Quang Hai**

**Assoc. Prof. Dr. Pham Van Cu**

11. Summary of the new findings of the thesis

- Establishing a landscape map of Ninh Binh at a scale of 1: 100 000 in 1992 and 2009;
- Analyzing and establishing landscape change map of Ninh Binh in 1992-2009 period at a scale of 1:100 000;
- Evaluating Ninh Binh's landscape metrics for horizontal structure
- Remote sensing and GIS approaches in landscape study for provincial level

- Providing scientific fundamentals and orientation map of spatial organization of natural resources's rational use and environment protection based on the spatial analysis of landscape structure

**12. Practical applicability:**

The thesis results of the spatial organization of resources's rational use and environmental protection in Ninh Binh province are meaningful references, could be use as the scientific base for research on territorial organization of developing socio-economics of the province, helping local authorities to deploy development plans of different economic sections matching with natural resources's rational use and environment protection.

**13. Further research directions:**

Promoting the use of landscape metrics in landscape studies applied in spatial organization of natural resources's rational use and environment protection at larger scale (1: 50 000, 1:25 000, 1:10 000).

Promoting landscape change studies based on application of remote sensing and geographical information system.

**14. Thesis-related publications:**

1. Nguyen Huu Tu, Truong Quang Hai, Nguyen Thi Thuy Hang (2006), "Natural plants in Ninh Binh", *Proceeding of Geography- Land Administration Conference, Faculty of Geography, College of Science, Vietnam National University, Hanoi 9/2006*, pp. 147-160.

2. Truong Quang Hai, Nguyen An Thinh, Nguyen Thi Thuy Hang (2008), "A Vietnamese monsoon tropical landscape ecology model and its application on studying landscape diversity", *Journal of Earth Sciences* 30 (4) PC, pp. 545 -554.

3. Truong Quang Hai, Nguyen An Thinh, Nguyen Thi Thuy Hang (2010), "Landscape evaluation for agriculture, forestry and tourism development in the limestone mountainous region of Ninh Binh province", *The 5<sup>th</sup> Conference of Association of Vietnamese Geographers*, pp. 39-49.