Phụ lục 2.4: Mẫu tóm tắt khóa luận/đồ án tốt nghiệp

Một số yêu cầu bắt buộc đối với Tóm tắt của Khóa luận/Đồ án tốt nghiệp:

1. Nếu ngôn ngữ thực hiện khóa luận/đồ án tốt nghiệp là tiếng Việt, tóm tắt phải được viết bằng tiếng Anh hoặc tiếng Nhật và có độ dài khoảng 02 trang A4.

2. Nếu ngôn ngữ thực hiện khóa luận/đồ án tốt nghiệp là tiếng Anh hoặc tiếng Nhật, tóm tắt được trình bày trong khoảng 300 từ.

3. Từ khóa (3–5 từ khóa hoặc cụm từ) phải phản ánh chính xác và đầy đủ nội dung trọng tâm của khóa luận/đồ án tốt nghiệp.

Từ khóa được đặt ngay sau phần kết thúc toàn bộ nội dung Tóm tắt trước khi chuyển sang phần nội dung khác.

Ví dụ 1: **ABSTRACT**

I. Introduction

- Reason for choosing the topic
- Research objectives
- Research objects
- Scope of research
- Research methods.

II. Main content

- Presentation of the main research contents
- Presentation of and research results achieved.

III. Conclusion and recommendations

- Summary of research results
- Recommendations/proposed solutions

Keywords: nano-titanium dioxide coated on activated carbon, adsorption, adsorption capacity.

Ví dụ 2: **ABSTRACT**

Nowadays, water pollution caused by arsenic is social issues of concern. The removal of arsenic and ammonium ions in water is essential and urgent. Therefore this thesis studied the preparation of nano titanium dioxide coated on activated carbon- a good adsorbent for the removal of arsenic water environment. Starting materials for the preparation of nano titanium dioxide coated on activated carbon(AC-TiO2) are nano titanium dioxide solution of 400

ppm synthesized by neutralizing TiCl4/HCl by diluted ammonia solution to pH = 6-7, and rinse activated carbon with the nano titanium dioxide solutions for 4 hours. The most important factor affecting the efficiency of synthesize process is the rate of TiCl4/HCl neutralization and the concentration of nano titanium dioxide solution. The optimal concentration of nano titanium dioxide solution is 400 ppm. The resulting product was wash by distilled water to remove chloride ions and dehydrated at 80 oC for 24 hours to converse TiO(OH)2 to TiO2. Experiments were conducted to investigate the adsorption capacity of AC-TiO2 for arsenic removal in water: such as determining optimum pH, adsorption equilibrium time, maximum adsorption capacity and influence of interference ions on adsorption capacity. Results showed that arsenic is adsorbed onto the surface of AC-TiO2 best at near-neutral pH (pH 6-7). Time to reach adsorption equilibrium of AC-TiO2 with arsenic is 5-6 hours minutes with arsenic. Maximum adsorption capacity of AC-TiO2 with arsenic, ammonium is 12,51 mg/g and it obeys the Langmuir adsorption isotherm.

Keywords: AC-TiO_2 composite, arsenic adsorption, ammonium adsorption, water treatment, Langmuir isotherm.