Title : Petrography of Intrusive and Country Rocks at Phayuha Khiri District, Nakhon Sawan Province

Author(s) : **1.** Praewa Chatchaisitthikul **Student ID :** 650510422

2. **Student ID :**

3. **Student ID :**

Major : Geology

Advisor(s) : **1.** Assistant Professor Dr. Patcharin Kosuwan Jundee

2.

3.

Type of presentation* *(choose 1)* **:**

- ☐ **Oral Presentation** (เฉพาะ ตัวแทนนศ.ที่สาขาเลือกให้นำเสนอแบบบรรยาย)
- ☑ **Poster** (กรณี นำเสนอผลงานปัญหาพิเศษ/การค้นคว้าอิสระ)
- ☐ **Cooperative Education** (กรณี นำเสนอผลงานสหกิจศึกษา)

ABSTRACT

The petrographic characteristics of intrusive igneous rocks and country rocks in Phayuha Khiri District, Nakhon Sawan Province were investigated with the objective of classifying mineral composition, rock texture, and rock types. The study was conducted through field investigations and thin section analysis under a polarizing microscope on fifteen rock samples. The results indicate that the rocks can be classified into three groups: monzogranite, granodiorite, and green schist. The monzogranite group exhibits coarse- to medium-grained textures and is composed mainly of quartz, plagioclase, and alkali feldspar, with biotite as the principal accessory mineral and minor zircon and opaque minerals. The granodiorite group displays medium- to coarse-grained textures and consists predominantly of plagioclase, alkali feldspar, and quartz, with biotite as the main accessory mineral. Some samples show weak mineral alignment. Secondary minerals such as sericite and chlorite are present, indicating alteration processes. The green schist group is characterized by fine- to medium-grained textures with well-developed foliation defined by the alignment of platy minerals. It is composed mainly of chlorite, quartz, plagioclase, epidote, biotite, and opaque minerals. The texture and mineral assemblage indicate low-grade metamorphism under greenschist facies

**Type of presentation must be matched with an option you choosing on student upload system.*

***The abstract can be more than one page and must be approved by project advisor before upload.*

conditions. This study reflects that the intrusive rocks in the area belong to the granite to granodiorite group, which intruded into the country rocks and caused low-grade metamorphism, resulting in the formation of green schist facies rocks.

**Type of presentation must be matched with an option you choosing on student upload system.*

***The abstract can be more than one page and must be approved by project advisor before upload.*

Title name guide.

ADVISOR title name / แปลไทย	
Professor Dr.	ศาสตราจารย์ ดร.
Professor	ศาสตราจารย์
Associate Professor Dr.	รองศาสตราจารย์ ดร.
Associate Professor	รองศาสตราจารย์
Assistant Professor Dr.	ผู้ช่วยศาสตราจารย์ ดร.
Assistant Professor	ผู้ช่วยศาสตราจารย์
Dr.	ดร.
Lecturer	อาจารย์
Mrs.	นาง
Ms.	นางสาว
Mr.	นาย

Major name guide.

SCIENCE MAJOR name / แปล	
Biology	ชีววิทยา
Microbiology	จุลชีววิทยา
Zoology	สัตววิทยา
Biochemistry and Biochemical Technology *or* Biochemistry and Biochemical Innovation	ชีวเคมีและชีวเคมีเทคโนโลยี *หรือ* ชีวเคมีและชีวเคมีนวัตกรรม
Chemistry	เคมี
Industrial Chemistry	เคมีอุตสาหกรรม
Materials Science	วัสดุศาสตร์
Physics	ฟิสิกส์
Computer Science	วิทยาการคอมพิวเตอร์
Data Science	วิทยาการข้อมูล
Mathematics	คณิตศาสตร์
Statistics	สถิติ

**Type of presentation must be matched with an option you choosing on student upload system.*

***The abstract can be more than one page and must be approved by project advisor before upload.*

Gemology	อัญมณีวิทยา
Geology	ธรณีวิทยา
Environmental Science	วิทยาศาสตร์สิ่งแวดล้อม

**Type of presentation must be matched with an option you choosing on student upload system.*

***The abstract can be more than one page and must be approved by project advisor before upload.*