Title : Micromorphology of Theropod Dinosaur Teeth from Khok Kruat Formation, Nakhon Ratchasrima and Ubon Ratchathani Provinces

Author(s) : **1.** Worapol Buttree **Student ID :** 640510456

Major : Geology

Advisor(s) : **1.** Assistant Professor Dr. Yupa Thasod

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

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

ABSTRACT

This study aims to study the diversity of theropod tooth fossil micromorphology discovered in the Khok Kruat Formation of Nakhon Ratchasima and Ubon Ratchathani Provinces. These findings date back to the early Cretaceous period, approximately from the Aptian to the Albian stages. The microstructures of teeth provide insights into the living and feeding behaviors of dinosaurs. The study methods focused on the comparative study of morphological and micromorphological characteristics of theropod teeth, examining 20 fossils. They are categorized into two main types: 1) Ziphodont type, which consists of three blade-shaped teeth that are flat, narrow, and have saw-like serrations and braided enamel texture. These were classified into the Allosaurs theropod group. All samples were from Nakhon Ratchasima Province; and 2) Conidont type, which consists of 17 pieces of conical teeth, with multiple ridges on the side of the tooth and no serrations. The enamel texture of these types is smooth. The fossils were classified into the Spinosaur theropod group, which was present in both locations. The ziphodont type is better suited for slicing, cutting, and tearing larger meats, while the conidont type is ideal for holding and piercing through meats before swallowing, a characteristic of piscivores. The study indicates that the Khok Kruat Formation once provided diverse food and water sources for theropod dinosaurs while revealing a better understanding of the living and feeding behaviors during the Cretaceous Period.

**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.*