## 3. ตัวอย่างบทคัดย่อของบทความ กลุ่มวิทยาศาสตร์และเทคโนโลยีกายภาพ

**Title**: EFFECT OF TERITIARY AND QUATERNARY AMINE AS EXTRACTANT ON THE REMOVAL OF ARSENIC FROM PETROLEUM OILS PROCESS BY HOLLOW FIBER SUPPORTED LIQUID MEMBRANE.

## **Abstract**

Extraction and recovery of arsenic ions from petroleum oils process was studied by using a hollow fiber liquid membrane. Effect of tertiary amine (TOA) and quaternary amine (Aliquat336) which were used as extractants were examined. Stripping solution was sodium hydroxide. The results indicated that the percentage of arsenic ions extraction for quaternary amines more than tertiary amines because quaternary amines extracted both dissociated and undissociated forms of the arsenic acid, whereas the tertiary amines extracted only the undissociated arsenic acid.

Keywords: Arsenic, Hollow fiber, Supported liquid membrane, Extraction

REFERENCE: (Poonkum, W., & Pancharoen, U. (2009). Effect of tertiary and Quaternary Amine as extractant on the removal of Arsenic from petroleum oils process by hollow fiber supported liquid membrane. *Collection of Abstracts in the 10<sup>th</sup> National Graduate Research Conference*, 279.)

## อธิบายองค์ประกอบ

เป็นบทคัดย่อของบทความวิจัย

ส่วนที่ 1 บอกวิธีการวิจัย <mark>ส่วนที่ 2 บอกผลการวิจัย</mark>