

**GEOSEA 2018**

**15<sup>th</sup> REGIONAL CONGRESS ON GEOLOGY,  
MINERAL AND ENERGY RESOURCES  
OF SOUTHEAST ASIA**

16-17 October 2018



GEOSEA XV  
HANOI-VIETNAM

**ASEAN** Geosciences and Earth resources  
for sustainable development

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PUBLISHING HOUSE FOR SCIENCE AND TECHNOLOGY



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## The material compositions and conditions of lithium formation in La Vi, Duc Pho - Sa Huynh

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The ore bodies are the assemblages of lithium-bearing pegmatite dykes distributed in the area of about 40 km<sup>2</sup> in Lavi, Duc Pho - Sa Huynh. Within the ore, the lithium exists in the group of lithium - bearing mica minerals, is mainly in close paragenesis with albite, topa, casiterite, tantanlite-columbite which characterise the types of industry - genesis deposits are Na-Li type pegmatite granite, pegmatite lepidolite sub-type and 3 types of ore: Li, Li-Sn and Sn.

The study area has undergone several magmatic, tectonic and metallogenic stages, consequently the geological formations were strongly metasomatized and complicated, many stages were stacked in the same ore controlling structures. The study results showed that at least 3 of metasomatic phases have occurred such as alkali metasomatism (albitization, microclinization), greisenization and hydrothermal metasomatism at medium to low temperature (sericitization, quartzitization and chloritization)

The mineralization solution primarily has magmatic origins; however, it has been subsequently mixed with other sources due to tectonic and metasomatic activities which strongly occurred in the study area. The isotope analyzing results showed that the ages of lithium formation and granitoid rocks, Sa Huynh Complex are equivalent, at the same age of Late Permian and early Triassic (P3-T1).

**Keywords:** *Origin, condition formation, lithium, pegmatite dykes, Duc Pho.*





# HA NOI - GEOSEA 2018

ISBN: 978-604-913-751-8



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