

Overview of doctoral theses on Atomic Layer Deposition worldwide - outcome of the Virtual Project on the History of ALD

Atomic Layer Deposition (ALD) is a materials growth technique that has become globally important during the past decades. In 2018 the Finnish inventor of ALD, Tuomo Suntola, received the Millennium Technology Prize.

ALD has been discovered independently twice, under the names Molecular Layering (ML) in the 1960s in the USSR and Atomic Layer Epitaxy (ALE) in 1974 in Finland. The Virtual Project on the History of ALD (VPHA) is a volunteer-based Open Science effort set up in 2013 [2] to clarify the early days of ALD. Especially the ML path has remained poorly known and acknowledged until recently. The core activity of VPHA is to overview early ALD publications up to 1986. VPHA has already resulted in four scientific journal articles [2-5] and several presentations at international conferences.

This poster will overview doctoral theses worldwide related to ALD up to year 2018. The doctoral thesis list has been built by combining the lists of Ref. 4 and the exhibition material 40 Years of ALD in Finland - Photos, Stories (FinALD40) [6], and allowing volunteers to enter missing information (open list in <http://vph-ald.com/VPHAopenfiles.html>). At the time of writing the abstract, the doctoral thesis collection contains close to 500 entries. The list is likely not yet complete and more entries are welcome. More volunteers are also still welcome to join and contribute in the VPHA.

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References:

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