

On the history of ALD and the VPHA project

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[Atomic Layer Deposition \(ALD\)](#), based on the repeated, self-terminating gas—solid reactions of at least two gaseous compounds on a solid substrate, has become a disruptive key enabling materials manufacturing method. By its inventors, this method was given the name [Molecular Layering](#) (1960s, Soviet Union) and [Atomic Layer Epitaxy](#) (1970s, Finland). While the original names still live on, gradually since the 1990s, “ALD” has evolved to be the mostly commonly used name for the technique.

[Virtual Project on the History of ALD \(VPHA\)](#) was set up in summer 2013 as an open effort, in which volunteered scientists from all around the world work together in an atmosphere of openness, respect and trust to better understand the early days of ALD (“early” is defined here to end in 1986). VPHA has already resulted in joint publications, a tutorial, two essays, an exhibition, [Wikipedia](#) updates, and a blog; see <http://vph-ald.com> and [VPHA publication plan](#) for details.

This presentation at the 14th International Baltic Conference on Atomic Layer Deposition aims to be the last organizational talk of VPHA. The presentation has two goals. First, it will overview of the activities and results of VPHA. Second, it will---on the basis of the new big picture developed in VPHA---summarize the major steps of advancement, which have taken place in the early research and technology of ALD around the world.

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