

Virtual Project on the History of ALD: overview and current status

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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 grown into a world-changing 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.

The 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 can work together in an atmosphere of openness, respect and trust to better understand the early days of ALD. The VPHA initiated from discussions started in May 2013 in the “[ALD – Atomic Layer Deposition](#)” LinkedIn group [1]. A LinkedIn group “[ALD History](#)” [2] and an open file “[ALD-history-evolving-file](#)” [3] were generated to enable the international collaboration. The original [Introduction and invitation to participate](#) was published 25 July 2013 [4], and the VPHA was announced at the [AVS ALD 2013](#) conference in San Diego, 28-31 July 2013. The first VPHA Publication Plan was set up in October 2013. In fall 2014, a dedicated website was set up, vph-ald.com [5], to serve as a central information hub for VPHA and ALD history in general. The VPHA has already resulted in several joint publications, a tutorial, an essay and an exhibition; see the current [Publication Plan](#) [6] for details.

As of July 2015, the VPHA continues. The plan is to complete the central work during fall 2015, namely the listing, reading and commenting on early ALD works (there are over 300 ALD publications to read up to year 1986); and to create joint publications and finish the VPHA in summer 2016. Finally, Wikipedia will also be updated.

With this abstract at the ALD Russia conference, Moscow-Dolgoprudny, 21-23 September 2015 (<http://ald-conf.ru/>), organized by Moscow Institute of Physics and Technology in collaboration with AVS, we would like to invite more volunteered contributors to join the VPHA. People from all backgrounds and skills are warmly welcome to contribute. The greatest need currently is of people who understand both English and Russian languages.

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