

Thomas Allmendinger: Biography

I was born on August 15th 1947 in Zurich (Switzerland) where I have gone through the Swiss school and education system followed with studies at the ETH (Eidgenössische Technische Hochschule, i.e. Swiss Federal Institute of Technology) and a Master degree (Diploma) in organic and general chemistry in 1971. However, my life cannot be understood as a conventional career being based on fixed initial conditions and solely taking place inside established institutions. Rather it alternated between those institutions on the one hand – also as a teacher in chemistry at different schools -, and independent activities such as the performance of own research & development work, on the other hand, leading to a permanent education and self-improvement. Meanwhile, times were changing to a considerable degree: e.g. at the time of my graduation, the pc and all the more internet were unknown, and the climate problem didn't exist while environmentalism was just arising. Thus, from the professional point of view, it was an advantage to undertake my doctoral research study only twenty years later, namely in the context of an own project, carried out at the PSI (Paul Scherrer Institute) and at the ETH about a methanol/air fuel cell, and tackling another professional field (electrochemistry). This project became possible only thanks to a serious preparation which was based on the experience reached during my previous work in an environmental laboratory and, subsequently, by the independent development of an indicator for deep-frozen foods. However, since none of these projects could be realized commercially although viable results had been achieved, my further activities were first focussed on a research service with an own laboratory at the Technopark in Zurich (in association with the AFIF = Arbeitsgemeinschaft für Industrielle Forschung) concerning electrochemistry and alternative energies, and, later, on electroplating as an employee of an industrial firm (Collini AG). Thereby, again and again I had to deal with physical characterization methods for surfaces. They have recently been published. And after my retirement in 2012, I have tackled climate physics as a novel research field which has, after a settling-in period but based on a life-long experience, delivered some significant contributions to the global climate problem. Besides, after many years my part-time occupation with quantum mechanics has led to a considerable result which could be possibly pioneering for future physics.

The here presented contributions solely concern recent work while the former publications, mainly concerning electrochemistry, are quoted in Orcid (<https://orcid.org/0000-0002-3340-3063>). The earliest published article dates from my time as teacher in chemistry. It already had to do with atomic models and was entitled „Die Van der Waals-Kräfte im Lichte des Kugelwolkenmodells“, *PdN-Ch.* 3/34 (1985), 31-39.