



California Fuel Cell Partnership

May 1, 2018

AVL, an engineering solutions provider, head quartered in Graz, Austria with global operations throughout the world, including Plymouth, Michigan, represented by Jim Beyer – Director of Fuel Cell Business Development, applies to join the California Fuel Cell Partnership.

AVL Powertrain Engineering is an expert partner to the global automotive and mobility industry for the development of innovative powertrain systems. From diesel engines to electric drives, from alternative fuels, to control software, from transmissions to batteries and fuel cells, we have been working in partnership with companies all over the world for more than 60 years.

Fuel cell and electrification has become another unique product line for AVL. Over the past 20 years AVL has provided fuel cell engineering support to (1) many global automotive OEM's, (2) numerous commercial vehicle manufacturers, and (3) non-transportation customers supporting unique stationary fuel cell markets. AVL has approximately 200 engineers, scientist, test technicians, and support personnel developing solutions around PEM and SOFC technologies, including simulation software for stack and vehicle level validation, complete PEM vehicle projects, SOFC APU/range extender projects, and SOFC stationary power generator projects. We also have a full range of test systems for cell level testing, stack level testing, powertrain testing and chassis testing.

Knowing that the California Fuel Cell Partnership is a consortium of companies dedicated to the advancement of fuel cell technology, AVL is ready to support and work with partners to help expand fuel cell technology throughout the world.

The value brought by AVL includes the knowledge and experience of individuals who have taken up the challenge to commercialize fuel cell technology. AVL fuel cell offerings include the full development of SOFC Auxiliary Power Units for range extender and auxiliary power for heavy duty trucks and special purpose applications. A SOFC-CHP unit for numerous stationary applications. AVL projects also include the complete development of PEM Fuel Cell concept cars.

AVL seeks to gain additional core fuel cell knowledge, but we also seek to grow our business by working jointly with California Fuel Cell Partners to solve the engineering problems that are preventing fuel cells from becoming mainstream. I am not entirely sure what membership level best suits AVL, but since AVL has made over twenty years of commitment to advancing fuel cell products, I believe an executive or full membership is warranted.

I kindly ask that the California Fuel Cell Partnership consider AVL for membership.

Thank you.

A handwritten signature in blue ink that reads "James A. Beyer". The signature is fluid and cursive, with the first name "James" being the most prominent part.

Jim Beyer

Director of Business Development – Fuel Cells