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Professional Experience

- **May 2002-Present**. Chemical Engineer – Fuel Cell Engineering group at Argonne National Laboratory.
- **September 2001-May 2002**. Research Assistant, Department of Chemical Engineering, Royal Institute of Technology, Stockholm, Sweden

Education

- Ph.D., Chemical Engineering, Royal Institute of Technology, Stockholm, Sweden, 2001.
- Master's Degree, Chemical Engineering, Royal Institute of Technology, Stockholm, Sweden, 1996.

Career Activities & Highlights

- Research interests in reactor design, fluid flow, catalysis and heat and mass-transfer
- Activities centered on fuels cells and fuel processor modeling and design for hydrogen production
- Current research is on the hydrogen quality work to determine hydrogen production quality requirements for fuel cell vehicles

Select Publications

- Papadias, D., Ahmed, S., Kumar R. and Joseck F. (2009). Hydrogen quality for fuel cell vehicles – A modeling study of the sensitivity of impurity content in hydrogen to the process variables in the SMR-PSA system. *International Journal of Hydrogen Energy*, 34, 6021-6035.
- Adachi, H., Ahmed, S., Lee, S.H.D., Papadias, D., Ahluwalia, R.K., Bendert, J.C., Kanner, S.A. and Yamazaki, Y. (2009). A natural-gas fuel processor for a residential, *Journal of Power Sources*, 188, 244-255.
- Hu, Y., Chmielewski, D.J. and Papadias, D. (2008). Autothermal reforming of gasoline for fuel cell applications: A control-oriented dynamic model. *Industrial & Engineering Chemistry Research.* 47, 9437-9446.
- Papadias, D., Lee, S.H.D and Chmielewski, D.J. (2006). Autothermal reforming of gasoline for fuel cell applications: A transient reactor model. *Industrial & Engineering Chemistry Research*, 45, 5841-5858.