

## Experience note

- Name: Rho, Joo Hyun
- Institutions: Seoul National University (Republic of Korea)
- Research themes: Multidisciplinary Design Optimization and Experimental Test
- Period of Internship: May, 11, 2009 - Oct., 5, 2009

First of all, I would like to express my sincere gratitude to Prof. Shigeru Obayashi and Prof. Shinkyu Jeong for the opportunity to study in IFS.

In Tohoku University I made some experiments about Optimal Shape Design and 3-D printer for rapid prototyping. Tohoku University is in the forefront in my field, moreover great computational resources are good test facilities available.

Specially, I had good chance to use both system for CFD simulation and EFD wind tunnel test. I got a good result and I submitted some journal papers and conference papers with these results.

### ● *Journal papers*

1. J.H. Rho, et al., "Application of Functional Design Method to Road Vehicle Aerodynamic Optimization in Initial Design Stage" Selected SAE International Paper (SP-2226, 2009-01-1166)
2. J.H. Rho, et al., "Development of a Vehicle Modeling Function for Three-Dimensional Shape Optimization" Journal of Mechanical Design (Vol.131, Iss.12)

### ● *Conference papers*

1. Y. Lee, J.H. Rho, et al., "Aerodynamic Characteristics of High Speed Train Pantograph with the Optimized Panhead Shape" The 7th IASME / WSEAS Int. Conf. on FLUID MECHANICS and AERODYNAMICS (Moscow, Russia, August 20-22, 2009)
2. J.H. Rho, et al., "Rapid Prototyping with Vehicle Modeling Function and 3D Printer" Conference of KSAE (Republic of Korea, Nov. 25-27, 2009)

About my impressions of Sendai and Japan during my stay I have been very impressed by kindness and helpful of Japanese people, so, even if our culture is very different, I enjoyed my stay there a lot. And I never forget the spectacular firework display in Sendai festival.

Finally, I warmly thank to research students in IFS and staffs in GCOE program.

I hope this International program to be useful for co-understanding and future Collaborations between Japan and Korea.

