

## <u>Internship / Dipl. Thesis</u>:

### Flip-Over Noise – Optimization Reference FON/0802

# BELGIUM

Company: Robert Bosch Produktie N.V., Tienen, Belgium

**Department:** EAB4, advanced development / calculation / simulation wiper blade

**Description of the company**: the name Robert Bosch stands world-wide for innovation and quality. With about 195.000 associates we are represented in more than 140 countries world-wide. In Tienen/Belgium is located the wiper blades R&D centre for fundamental research in the domains of Aerodynamics/Structures/Noise, development of new products, applications on real cars.



Duration: 6 months

#### Start Date: as soon as possible

**Allowance:** 700 Euro/month (possibility to receive "Leonardo Da Vinci" financial support from EU, besides Bosch allowance)

#### Short Description:

- Sensitivity studies and Rubber profile optimization for Flip-over noise reduction
  - $_{\odot}$   $\,$  Improve sensitivity study and optimization used techniques
  - Design of Experiments on FEM transient model for identification of critical noise-related parameters
  - Perform sensitivity studies and optimizations
  - o Improve automation of simulation procedure
  - Correlation with experimental results

#### **Required skills:**

- Last year Dipl./Master degree mechanical/Mechatronics engineering / Physics
- Analytical skills / Basics of optimization theory / Basics of acoustics and vibration / experience with FEM/ Good knowledge of Matlab mandatory.
- Ability to work independently and good communication skills
- Proficient English (written and spoken), German is a plus.
- Applicant having a EU-country nationality

#### Contact:

• Mr. Marcello Bubba (EB-WS/EAB4, Tel. +32 16 804-288, Marcello.Bubba@be.bosch.com)

For more info, visit: www.bosch.be www.tienen.be / www.leuven.be http://ec.europa.eu/education/programmes/llp/leonardo/index\_en.html