# CONTACT

Kalker's rolling contact model

**www.kalkersoftware.org**

# Course “Contact Mechanics with the CONTACT Software”

## Aims of the course

- To provide a broad understanding of the physics of the elastic contact problem:
  we’ll explore in depth how **creepage** comes about and how it governs the **friction force**;
- To present the modelling employed in CONTACT, the assumptions and equations used:
  what it is, how it works, and what it **can** and **cannot** do;
- To provide practice and experience in the use of the software:
  how to approach a problem, create your own input-files, and explore the output results.

The focus of CONTACT is on understanding what goes on in the contact interface, including the effects of overall motion, elasticity of the contacting bodies and the processes by which friction comes about. The focus of the course is primarily on applications from railway engineering, with steel-on-steel contact and where rolling contact conditions prevail.

The duration of the course is three days. The larger part is devoted to the physical phenomena (rolling and sliding, creepage, friction, applications) and to CONTACT theory (computing geometry and creepages, the contact conditions, etc.). Further, a significant amount of time is assigned for practical work using CONTACT and Matlab, including the new CONTACT library.

## Practical details

The course is organised by VORtech BV. The lectures are given by Dr. Edwin Vollebregt.

- **Date**: November 18–20 (Wed–Fri), 2015.
- **Location**: VORtech BV – Torenhove building, M.Nijhoflaan 2, Delft, The Netherlands.
- **Places:** 12 participants can be accommodated. Admittance is on first-come-first-served basis.
- **Computer:** Participants are asked to bring a laptop with Matlab installed for the practical exercises.
- **Cost**:: Euro 1780,= per person, excl. taxes. A 50% discount is offered for (PhD) students.

Lunches are included as well as a dinner on the second day, handouts of the presentations and practical exercises, and a 3-month license for the premium version of the CONTACT software.

## Registration form

Name: _____

Organisation: _____

Address: _____

_____

Postal code, Town: _____

Country: _____

Telephone nr: _____

Email: _____

Student discount ☐ Brings laptop with Matlab ☐

Signature _____ Date _____

An invoice will be sent upon receipt of the completed form. Payment is due via bank transfer and must be received at least 14 days before the course.

Please send the completed form to:
VORtech BV, attn. mrs. Marieke Dezaire
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