This unique workshop is the result of an extensive collaboration between OptimumG and TRE GmbH with the goal of giving students a once-in-a-lifetime opportunity to experience the same vehicle dynamics testing methodology and technology used by the best F1, LMP1, and DTM teams. Participants will receive the complete theory behind 7-Post Rig testing and learn how to process and analyze the test results.

Learn from the best and become one of the few who understand why and how you can put your car at the top of every competition!

**Application of 7-Post Testing to Racecar Stiffness and Damping Development**

September 30, October 1 & 2, 2015
TRE GmbH, Neustadt/Weinstrasse, Germany

**Pricing Information**

Price per student: 250€

Register soon...seats are limited!
(Registration deadline: September 18, 2015)

For more information or to register, contact Susanne at TRE7postworkshop@optimumg.com
Covered Topics

STEADY STATE & TRANSIENT VEHICLE HANDLING FUNDAMENTALS
Understand how suspension kinematics, springs, antiroll bars, dampers, aerodynamics, tire forces, and other parameters influence the driver’s perception of the vehicle balance for both steady-state and transient conditions.

DAMPER FUNDAMENTALS
This chapter begins with a description of fundamentals regarding damper technologies. Then, it will focus on how damper settings have an influence on tire load, tire load consistency, and racecar performance.

DAMPER TESTING
This part of the seminar will review damper testing techniques currently used in test laboratories as well as methods for characterizing dampers. A detailed description of various test procedures will be given—from test preparation to result analysis.

7-POST RIG TESTING THEORY & PREPARATION
Learn how to prepare your vehicle prior to testing in order to extract the most out of the 7-Post Rig test. Learn the most common test procedures performed on a 7-Post Rig. Understand which aspects of the test should be observed and how to make conclusions about the vehicle characteristics from them.

7-POST RIG TESTING IN PRACTICE & APPLICATION
In this section, a 7-Post Rig test will be conducted with a real racecar. Participants will have the opportunity to experience a test procedure, ask questions, and apply the knowledge acquired in the previous chapters.

VIBRATIONAL MODELING & SIMULATION
Learn the most used methods for modeling and simulating a vehicle in order to predict its overall performance. This knowledge will help you to better understand test results as well as optimize the time spent in testing.

ADVANTAGES & LIMITATIONS OF 7-POST RIG TESTS
This section will describe the situations in which the 7-Post Rig test is most useful by presenting a series of case studies. Understand the difference between the 4-Post and 7-Post Rig. Learn exactly what to expect as results when taking a vehicle to a 7-Post Rig.

7-POST RIG “DO’s AND DON’Ts”
This part of the workshop will cover the most common mistakes made by engineers on the 7-Post Rig and how to avoid them. Receive the most useful advice on 7-Post Rig testing from experienced professionals.

MAKING USE OF TEST RESULTS ON TRACK
The last section of the workshop finishes up by explaining how the 7-Post Rig test can make a racecar faster. Learn how to make use of the results to tune the vehicle and win races!