



Recent Happenings at VR&D

April 2016

Celebrating 20 Years

VR&D is happy to celebrate the 20 year anniversary of Dr. Brian Watson joining our company. We were able to throw a small party, and present him with a gift to show our great appreciation for his multiple and invaluable contributions and for his big commitment to our company.



Upcoming Events

Vanderplaats R&D is excited to be attending the following events in the next few months.

[April 13th – SAE World Congress](#)

“The SAE 2016 World Congress assembles the best talent in the automotive industry; experts, management teams, engineers, and executives alike gather to collaborate and address current challenges, seek new windows for discovery and exploration, and promote the multitude of opportunities fundamental for a successful future. This year’s theme, Powering Possibilities, represents a world of untapped discoveries in the automotive industry.”

[Apr. 21-24 – GRM’s Optimized Engineering Design 2016](#)

“Join us at the event to learn about the latest developments and applications in the field of design optimization methods. In keeping with GRM’s philosophy of the practical application of optimization technologies, the conference will showcase real-world case studies across a diverse range of industries.”

[May 11th – Great Designs in Steel Conference](#)

“Great Designs in Steel is the premier forum for the latest trends and applications in automotive steel technologies. This multi-track program features technical presentations on new steel technologies including AHSS, automotive safety and manufacturing technologies. “

[May 12-13th - High Performance Engineering Solutions 2016](#)

We plan to attend this conference that celebrates the 25th anniversary of INAS in business. This event will be held at the Hotel International, Sinaia in Romania. INAS started distributing our products last year in Romania.

New Software Releases

ESL Dyna Update

- ESLDYNA users can combine topology optimization along with the other types of optimization that GENESIS supports
- Improved checking for successful completion of the LS-DYNA simulation during the ESLDYNA process
- Several bug fixes/user requests have been added

Genesis Version 15.0 Release

The new version of GENESIS 15.0 has several new enhancements to improve its usability. For example, the topology optimization module in GENESIS has been changed to handle new responses such as reaction forces and strain energy by parts. New fabrication constraints have been added to this module; among them are: periodic, symmetric periodic and cloning.

Design Studio for Genesis 15.0 has been upgraded to work with all new GENESIS data and to respond to user requests.

GSAM Update

GSAM (GENESIS Structural Optimization for ANSYS Mechanical) can perform topology, topography, freeform, shape, sizing and topometry design. Designers benefit by automatically generating innovative designs in a reliable, robust and easy-to-use interface. The extension allows the user to setup the optimization problem, optimize, post-processing, and export optimized geometry all within ANSYS environment.

SMS Version 15.0 Release

SMS v15.0 improves performance and fixes some potential bugs. Typical problems will run 5 to 10% faster.

New Distributors

VR&D would like to welcome our new distributors:



For a complete listing of all our distributors, please visit our [website](#)

New Case Study

Pratt & Miller recently completed a case study using Genesis software to enhance their latest race car body.

If you'd like to read the full case study, please [click here](#)



Vanderplaats Research and Development, Inc.

The Root of the C7R's Success is in its **GENESIS**

By Grant Browning
Pratt & Miller Engineering

Corvette Racing has seen much success over the last 15 years with ten series championships and seven "24 Hours of Le Mans" class championships. Through the end of 2013, there had only been three major redesigns to the cars designated to represent Corvette Racing and GM in the sports car racing world. These were the C5.R, C6.R-GT1, and C6.R-GT2 respectively, and each was designed with enough potential to continue at the top of its class for its generation while competing with the highest level factory-backed sports car racing teams in the world. Each redesign was a step forward from the previous, and in 2013 it was time for the next step, as Pratt & Miller began designing what was to be the new

"Since our introduction to GENESIS, the implementation of optimization to drive our designs has grown"

CASE STUDY

VR&D's Founder Reviews His Career

Recently, Gary Vanderplaats completed a narrative of his experience in developing gradient based optimization algorithms. This is a look into his personal views, motives and experience.

As Gary said, "This narrative is to encourage developers in engineering optimization to treat this technology as a tool for design and not a mathematical exercise. This requires a solid background in optimization theory as well as engineering design. It is concluded that optimization algorithms and software should mimic the thought process of a good designer while taking advantage of the immense power of today's computers."

If you'd like to read the full version, [click here](#).

Employment Opportunity at VR&D

Vanderplaats R&D is actively looking for a Software Sales Executive that would join and help our sales team. If you know of anyone interested, please forward this opportunity and help us with finding the right person.

Software Sales Executive - Optimization Focus

Vanderplaats Research & Development (VR&D) is committed to providing the best technology, software and client support in the Multidiscipline Design Optimization (MDO) and Structural Optimization world. VR&D was founded by a leading expert in the optimization world and we continuously develop and enhance this technology. We have a track record of consistently delivering a competitive advantage to our clients in a broad range of industries worldwide. We are now looking to add a high caliber Sales Executive to our team.

For more information, [click here](#)