

## User Case Studies

### Using Origin to Analyze and Report on Athlete Performance

Antoine Couturier and Sylvain Dorel, researchers at the Institut National du Sport, de l'Expertise et de la Performance in France, have been using the expanded functionality of the Origin Worksheet to produce clean, professional reports for trainers and athletes to review progress in their training regimens.

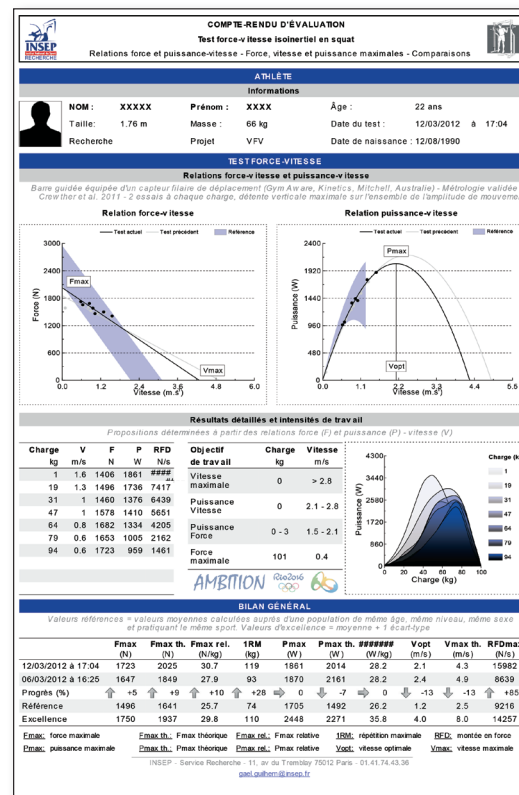
The researchers import all of the relevant data from the ergocycle into a custom Origin Analysis Template. The report sheet then automatically fills with the athlete's information, converts the raw data from the ergocycle to Newtons according to ergocycle calibration, detects cycles and half-cycles and computes mean forces, pedaling rates and powers for each of them. All the data corresponding to forces and power vs. pedaling rate are dynamically plotted and fitted using the Analysis Template.

Antoine Couturier says: "Origin is our number one software for visualizing and analyzing experimental data."

Starting from version 8, with the introduction of analysis templates and custom report, Origin has also become a fantastic tool for scientific coaching of our athletes from the National Institute of Sports, in many disciplines.

Most of the data recorded during the testings are simply drag and dropped into Origin. In a matter of minutes, a database is updated and a complete report is generated for the coaches, including athlete's own progression and comparison to others.

Those unique features have been constantly evolving and allowed us to gain considerable firepower."

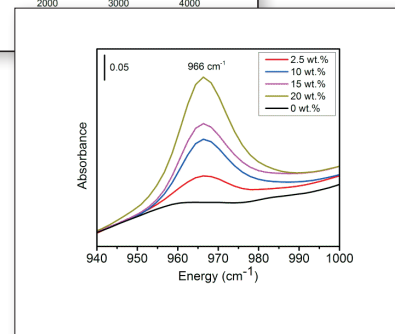
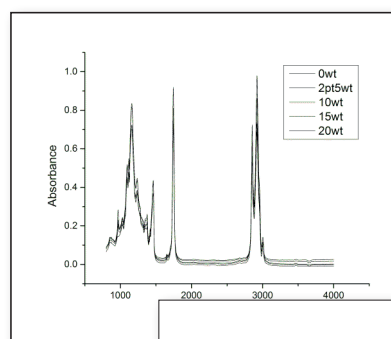


### Using Origin to Teach Data Analysis and Presentation

Jay Deiner, Ph.D. Assistant Professor of Chemistry NYC College of Technology, City University of New York

Dr. Jay Deiner first started using Origin in 1998 as a graduate student; now, as a professor, he uses it for both his research, and to supplement the advanced chemistry classes he teaches. For example, his students use Origin's analysis features such as peak integration, baseline correction and data picking, to process spectroscopic and chromatographic data. In order to present the final results in an accessible manner they customize their graphs using Origin's comprehensive formatting features.

Jay Deiner says: "I believe that using Origin benefits the students because they learn how to use a sophisticated data analysis program that they may encounter in future work in academic research or in industry. It also enables them to extract much more information from the data they generate. Finally, it helps students understand that much of science is thinking and data analysis. Using Origin benefits me as an instructor because I can teach the class in a more rigorous way."



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