Review of OriginPro 8.5 Student Personal Use

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OriginLab offers a limited time student personal use license for OriginPro 8.5 ($50 1-year and $100 2 years), the latest version of their data analysis and graphing software. This is a fully-functional download from their website (www.OriginLab.com), requiring an online activation step to generate the license file for the individual student user. OriginPro 8.5 is compatible with Microsoft Windows XP, Windows Vista and Windows 2007, and requires a minimum of 1 GHz Pentium compatible processor, 1024 MB of RAM and 500 MB of disk space. The download, installation, and activation processes are quick and straightforward, although the activation does require verification of student status via email.

The learning curve when upgrading to OriginPro 8.5 is minimal, as the Workbook interface, and location of the plotting features is relatively unchanged. This is helpful in adjusting the new version without having to relearn the mechanics of the software. Overall the enhancements made to the interface for basic plotting functions are very useful, and facilitate the efficient production of publication-ready graphics. In particular, the organization of the Plot Details window is much improved over earlier versions. The ability to customize the group formats in terms of color order and symbol order allows for more cohesive plots without having to change the defaults for the entire program. Additionally, the Theme Organizer, which allows for the ready conversion of bulk formatting options, such as converting all color lines and symbols to distinguishable black and white options, resizing the plot, and changing the font and tick label orientations. These theme options have the potential to save considerable amounts of time as it is no longer necessary to modify each plot individually. Maintained from Origin 8, the customizable heading fields which link to the axis in the plots make data organization much simpler, and the Sparklines feature is also particularly nice as it provides an easy way to preview the data in the Workbook form.

Of all the plotting improvements made in OriginPro 8.5, the most prominent is the enhanced 3D features. This includes the addition of 3D vector plots and error bars as well as the ability to plot a 3D contour directly from the Workbook. Waterfall plots have also been converted to 3D format, and now feature in-plane axis titles and ticks. These features enhance the overall versatility of the software by adding more options for customizing the plot, and providing better control over the aesthetics while maintaining graphing functionality.

In terms of data analysis, improvements have been made in the Peak Analyzer Wizard, allowing for more control over the baseline and peak selection options. This, combined with the improved fitting options from Origin 8, provide a facile means to analyze and fit multiple peaks without an additional fitting program. While Origin products already exhibited some compatibility with the Microsoft Office Suites, OriginPro 8.5 expands this by allowing all graphs to be directly exported into PowerPoint and for Word, Excel, and Equation objects to be embedded within Origin graphs and layouts. Along these lines, the Excel worksheet feature within the Project Workbooks is substantially improved in terms of stability.

Previously it was advantageous to do larger scale calculations in a separate Excel document, however with the improved stability; the need to work in multiple programs is greatly reduced. Overall, these improvements make Origin a truly comprehensive software package.

OriginPro 8.5 is an efficient, comprehensive software program that far exceeds other graphing options. In particular, the improvements to the formatting options and compatibility with the Microsoft Office Suite make the OriginPro Student Personal Use license particularly valuable to the student user.

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Keith J. Stevenson is a Professor of Chemistry at the University of Texas at Austin and is a well-recognized expert in electrochemistry, spectroscopy, surface analysis and materials characterization. His research concentrates on the creation of advanced functional materials, as well as new spectroscopic and microscopic tools for their characterization. From a more applied standpoint, this research is useful for the design and optimization of superior chemical technologies associated with the areas of chemical sensing, energy storage/conversion, separations, photonics, and device miniaturization. He has over 100 peer-reviewed publications, five patents, and two book chapters. He is a recipient of a NSF CAREER award (2002), the Conference of Southern Graduate Schools New Scholar Award (2004), and the Society of Electroanalytical Chemistry (SEAC) Young Investigator Award (2006). He is acting director of the Center for Nano- and Molecular Science and Technology and serves as a steering committee member of the Texas Materials Institute and an as an executive member of the Center for Electrochemistry.