ADDRESSING THE OPTICAL DESIGN AND ANALYSIS NEEDS OF CORPORATE, BUSINESS, EDUCATIONAL, GOVERNMENTAL AND INDIVIDUAL USERS.

Optica News

Interface update: As a service to you, we are currently preparing to build a GUI interface and other features not currently present in our software.

Custom features: We are able to modify our software to fit your custom needs. Contact us for any special needs or enhancements that are not currently shown on our website. If you can visualize the application you want, we can put together a customized proposal and plan for you. On our website, visit http://www.opticasoftware.com/products/ to review the software comparison matrix to determine which features and benefits are important to you.

We recently asked for your assistance in completing our website survey. As our way of saying thank you, we are randomly selecting one completed survey each month and awarding a copy of our software to the person who completed it. Our recipient for July 2005 is Charlie Barnes, of Del Mar Photonics. Please continue to fill out the survey for your chance to win.

If you are in Germany and wish to deal directly with a German reseller, contact us to receive a list of companies selling our software in your area.

User Tips

The Rayica™ User Guide PDF version is now available for you to print out, see the support section of our website for details: http://www.opticasoftware.com/support/ where you can click on the link for the Rayica™ user guide.

Coming soon: Optica Software design courses. Sit down with our developer in a small group setting and learn from hands-on experience how to use Rayica™, Wavica™. Our basic course will include an overview and tutorials of Rayica™, Wavica™, and Mathematica®. While our advanced course will cover specific project applications you may be working on. Please contact us at: support@opticasoftware.com to be placed on the waiting list for these 2-day basic courses or 3-day advanced courses.

Need help with projects? Sign up for our annual support plans

Annual Support Plans are becoming increasingly popular. Users have found these plans to be helpful in providing technical assistance for roadblocks they encounter or for a special project they are working on. Users with ASP, also enjoy access to the support and download area of the www.opticasoftware.com website; which enables them free product upgrades over a 12-month period. The bottom right section of our home page shows the latest “build date” for our software. At the time of this newsletter the most current version of our software was July 28, 2005. Make sure you stay updated by referring to this section on a regular basis. Look for Annual Support Plans under the Store tab on our website: http://www.opticasoftware.com/store/ for more details.
Notes from the Developer

One of the most elegant features of the *Rayica-Wavica* work environment is the seamless manner in which *Rayica* and *Wavica* can model both symbolic and numeric solutions of an optical system. In particular, because *Rayica* and *Wavica* share the same language for describing optical systems, you can plug your optical system model into *Rayica* for numeric ray-tracing while using the same model with *Wavica* to symbolically calculate characteristic functions of your optical system. (*Wavica* is one of the first commercial packages in the world to dynamically construct analytic optical models of arbitrary optical systems based on the principles of Hamiltonian optics).

Furthermore, with *Rayica* and *Wavica*, you can specify a symbolic value for nearly any component or light source parameter in your system such as: wavelength, lens curvature, refractive index, and three-dimensional position or orientation. Once specified, *Rayica* can use your symbolic parameters for iterative numeric ray-trace calculations such as optimization and tolerancing while *Wavica* can build equations with your symbolic values to perform global symbolic optimization, Gaussian beam propagation, or determine the symbolic optical path length of your system.

*Donald Barnhart, Ph.D. – Optica Software Lead Developer*

**Events**

Optica Software will have space at the upcoming **89th Annual OSA Meeting**, October 18-19, 2005. Please visit us at **booth #T25** at the OSA Conference Frontiers in Optics 2005, which is held in Tucson, Arizona. You can register online using the following link: [http://www.osa.org/meetings/annual/](http://www.osa.org/meetings/annual/).

We are also scheduled to attend and exhibit at **Photonics West**, January 24-26, 2006 in San Jose, California. The link for the exhibit can be found at: [http://spie.org/app/exhibition/index.cfm?fuseaction=wecome&meeting_id=91](http://spie.org/app/exhibition/index.cfm?fuseaction=wecome&meeting_id=91). Please stay posted for details on a presentation by our developer Donald Barnhart.

Ask about our discounted prices for academic/educational users. Do you have multiple users at your site that could use our software? We have a software site license program for organizations that have a need for multiple licenses and qualify for discounted pricing.

We are listed in the Innovative Products section of the August issue of Photonics Spectra. View this information online at: [http://www.photonics.com/spectra/newprods/](http://www.photonics.com/spectra/newprods/) under the **Lab Equipment and Materials** tab and the **Optical Design Software** tab.

Do you have a topic you would like to recommend? A question? We’d love to hear from you. Please send your comments to [support@opticasoftware.com](mailto:support@opticasoftware.com).

*Donald Barnhart, Ph.D. – Optica Software Lead Developer*

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