

## Press Release

**Presse contact:**

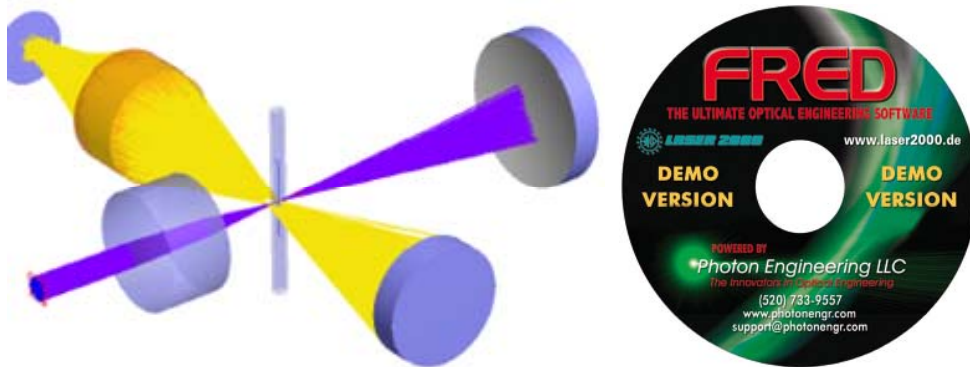
Jan Brubacher  
Marketing & Communication

**Define and optimize your biomedical elements:  
Raytracing Software for bio photonic applications**

**FREDOptimum 3D CAD**

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***Wessling, 28-Aug-08, FREDOptimum now with optimization algorithms. Define and optimize your biomedical elements without the trial and error principle.***



*Capillary Electrophoresis simulation with illumination and fluorescence paths.  
Order now your DEMO-CD for FREDOptimum and have a look at the online videos!*

FRED optical engineering software from Photon Engineering is the essential tool for your software toolbox! A virtual workbench where you can study how your system will really work, FRED is intended for everyone from the infrequent user to the experienced engineer who faces real-world optical engineering problems.

Whether you import your optical design from your favourite lens design program or CAD (STEP and IGES) program or start from scratch, you're ready to do virtual prototyping. Every license of FRED software includes the ability to import and export in both the CAD IGES format and the CAD STEP format. FRED's user-friendly interface lets you add mounting and baffles, and coatings in a flash. Insert off-the-shelf lenses from vendor catalogs. Organize your system model into real-world assemblies and sub-assemblies. Move assemblies effortlessly from one coordinate system to another. With real-time visualization, you know exactly what your hardware looks like at all times.

FRED can be applied to a very broad range of applications including but not limited to: illumination systems, lightpipes, reflectors, imaging systems, projection systems, LEDs, scanners, thermal imaging systems; stray light analyses; laser and interferometric systems; ghost analyses; coherent beam propagation; prototype and experimental system layout; diagnostic analyses; and virtual prototyping. FRED is not just another optical design or analysis program. FRED is the future of optical engineering software!

FREDOptimum, Photon Engineering, LLCs newest edition of FRED, is due to the development of new optimization algorithms able to optimize your optical elements regarding your requirements, like for e.g. LEDs.

Furthermore it takes advantage of the high performance capabilities of today's multi-cpu systems containing more than 2 cores. FREDOptimum tested systems include the AMD Opteron, Intel Xeon, Itanium, and Pentium IV Hyper-Threading CPU technologies.

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FREDOptimum has been tested on these CPUs with typical benchmark results showing an average ray trace speed increase of 3x for a two CPU Opteron Dual Core system (4 cores) over a single CPU in our beta version. Our new Turbo edition dramatically increases ray trace speed by breaking up the raytracing task across multiple CPUs without user intervention. The only CPU with poor benchmarks has been the Hyper-Threaded (HT) CPU type which is a pseudo PCU that does not multitask similar CPU tasks well.

Who should use our FREDOptimum edition? Everyone who is interested in optimizing his optical elements – something that you weren't able to do before. If you have very expensive multi-core-equipment, than you can really take advantage of it, with FREDOptimum. With the purchase of FREDOptimum you will get full 12 months technical support and updates.

Decide soon for Fred and save 37.5%

You can get the FREDOptimum version until the End of September for the price of the "old" Turbo-Version.

Do you need trainings and support for using this software quick and effective?  
Be informed regarding the dates of our next trainings by our website [www.laser2000.de](http://www.laser2000.de) und use the high-quality online chat-tool and the knowledge base. Of course you are welcome to contact your specialists at Laser 2000 any time.

### **About Laser 2000**

Since 1986 Laser 2000 GmbH is a supplier of high technology in the field of lasers, micromachining equipment, optics, and fiber optic equipment. Our products are designed to meet the challenges of both research and industrial production as well as your actual or future requirements of your applications.

Laser 2000 is headquartered in Munich, Germany and operates local offices in all major business areas of the European market. In order to support your application we deliver top-level service and products and meet the highest standard of quality. With an installed base of thousands of applications around the world, Laser 2000 has shown the ability to provide onsite-support in time. More information: [www.laser2000.de](http://www.laser2000.de)

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