



SPIE is the international society for optics and photonics.

SEARCH

- HOME
- CONFERENCES + EXHIBITIONS
- PUBLICATIONS
- EDUCATION
- MEMBERSHIP
- INDUSTRY RESOURCES
- CAREER CENTER
- NEWS + VIDEOS

Photonics West 2015



Search Open Calls

Enter keywords to find conferences with open calls for papers and submit an abstract.


Search Program

- BiOS
- TRANSLATIONAL RESEARCH
- LASE
- OPTO
- GREEN PHOTONICS
- 3D PRINTING
- Photonics West Exhibition
- BiOS Expo
- Photonics West Sponsors
- BiOS Sponsors
- For Authors/Presenters
- For Chairs/Committees
- For Photonics West Exhibitors
- For BiOS Expo Exhibitors



SPIE BiOS
1 - 02-February 2014
San Francisco, California, United States

Kinetic River Corp.



BOOTH NUMBER: 8639

[View Floor Plan](#)

Address
Kinetic River Corp
661 South Baywood Avenue
San Jose, CA
United States

Website
www.kineticriver.com

Email
[Request Information](#)

Company Description

Featured Product: BeamWise - software and services for automating the design of biophotonic systems (www.beamwise.net)

Kinetic River is a design and product development company with a passion for creating innovative tools for the life sciences. We are introducing BeamWise: design automation software that captures an optical layout and generates a detailed optical system design. Outputs include a 3D CAD model for visualization, annotated dimensioned drawings, and a complete bill of materials. BeamWise runs on Design++, a design automation platform for capturing engineering knowledge for automatic re-use.

Product Demonstrations

BeamWise - Automating the Design of Biophotonic Systems
Giacomo Vacca, Kinetic River Corp.

BeamWise is a design automation software tool that captures an optical layout and generates detailed system design. Outputs include: a 3D CAD model, dimensioned drawings, a complete Bill of Materials.

Date: Saturday 01 February 2014
Time: 12:30 PM
Location: BiOS Demo Area

Product Announcements

22 November 2013
BeamWise - software and services for automating the design of biophotonic systems

Automating Optical System Design

BeamWise is a set of software tools and related services for the design of biophotonic and other complex optical systems. BeamWise is implemented using Design++, a knowledge-based engineering platform that significantly simplifies the capture of in-house engineering expertise and streamlines integration of legacy systems into design automation and product configuration solutions.

Cost and Time of Development Cycle

Just like in other design domains, the cost and time of development cycle is a significant problem in optical system design; making sure the development is completed on time and budget while still meeting system specifications. The problem is a result of:

- Poor predictability of instrument performance
- Inefficient design rework
- Costly prototype iteration
- Time consuming documentation of design history

BeamWise was developed to address these problems by automating the creation of 3D CAD model and design documentation (drawings and parts list) for optical system design. The underlying Design++ model supports exploration of design options with efficient change management, making design iterations instantaneous.

Working with BeamWise

With BeamWise, an instrument developer can intuitively and concisely define an optical system; the software captures an optical layout and generates a detailed optical system design. Outputs include a 3D CAD model for visualization, annotated dimensioned drawings, and a complete bill of materials. Furthermore, BeamWise lets developers immediately review the design, before a prototype is created, and any changes they want can be implemented instantly.

BeamWise as a Service

BeamWise is offered as a service through a partnership of Kinetic River Corp., Design Parametrics, Inc., and Plan Energy Ltd. A service engagement provides an easy, risk-free evaluation of BeamWise capabilities.

We start by working together on your optical system design to define input data for BeamWise using your:

- Optical simulator results
- Functional flow diagram
- Optomechanical component data

Next, we will run BeamWise on your input data to automatically generate:

- 3D CAD model in your favorite CAD format
- Fully annotated and dimensioned 2D drawings
- Parts list (bill of materials) for implementation

Finally, we will review BeamWise produced results together. Any changes are fed back to BeamWise to update the results instantly.

Press Releases

22 November 2013 **Biophotonic System Design Optimized Through New Technology BeamWise from Design Parametrics, Kinetic River, and Plan Energy**
SAN JOSE, Calif., Sept. 13, 2013 /PRNewswire/ – Design Parametrics, Incorporated, Kinetic River Corporation, and Plan [show more](#)

