

Building Simulation 2009, University of Strathclyde, Glasgow. 27 – 30 July

The following organisations will be participating in the conference at the exhibition area, special presentations on the Applications Day, or with training after the conference. programme details at www.bs2009.org.uk

ProCenseo Ltd

Based in Dundee, **ProCenseo Ltd.** provides **Space Manager (Energy)** - an object-orientated database that models a building and all its construction, services and energy attributes.

A dimensionally accurate software model of the building is created from CAD files, plans or sketches. A **patented graphical process** allows energy attributes to be added in real time during an energy assessment survey.

The main features of this **UK accredited** energy system include:

1. Holds a complete building definition with both construction and services attributes added individually or collectively and then checked and verified graphically
2. Outputs from the model can be passed to **building simulation tools** for detailed energy analysis
3. Outputs from the model can be passed to **SBEM** for producing EPC's
4. All entered attributes can be edited and new results produced to provide instant **"What if"** scenarios
5. Reports are automatically produced to document details of the building model

See ProCenseo on Stand 6.

EQUA

SIMULATION TECHNOLOGY GROUP

Post-conference workshop: **Try something new - IDA Indoor Climate and Energy 4.0.** half-day course: 30/7/09 (14.30-18.00)

IDA Indoor Climate and Energy 4.0, which will be launched at BS2009, is a new and different kind of building performance simulation software. Not only is it easy to calculate heating, cooling and energy for complex buildings, but it also allows you to understand what you have done. The models are completely open - you can check every equation and also write your own.

Our workshop will start off with a quick introduction of the software. We will then move on to hands-on exercises, where we will also present some non-standard models (floor slab cooling, double-sheet facade, phase change materials, hybrid ventilation, self-acting valve radiator control etc.).

Each participant will get a three-month Expert version license to be able to continue working after the workshop.

To find additional information:

http://www.equa.se/news/dncenter/Brochure_IDA_ICE%204.0_sep08_v3.pdf

Contact: Per Sahlin: per.sahlin@equa.se

See EQUA on Stand 1. Presentation on 29 July 2009 at 14:00.
Workshop on 30 July 2009.



DesignBuilder Software

Based in Stroud, UK, DesignBuilder Software Ltd specialises in developing high-quality, easy-to-use and affordable simulation software tools for checking building environmental performance (building energy consumption, CO2 emissions, occupant comfort etc). The flagship product DesignBuilder Simulation is the result of considerable investment in user interface technology and illustrates our uncompromising approach to software design.

DesignBuilder is a leading provider of Energy Performance Certificate and Building Regulations Compliance checking software in the UK, Ireland and Portugal.

Version 1 of the product was launched in 2005 as the first Graphical User Interface to the US DOE EnergyPlus simulation engine and 4 years on it is still the most complete EnergyPlus interface. Version 2 was released in May 2009 and adds Building Information Modelling interoperability through a gbXML import facility and integrated 3-D CFD calculations linked to EnergyPlus.

See DesignBuilder on Stand 5. Presentation on 29 July 2009 at 15:40.



INTEGRATED ENVIRONMENTAL SOLUTIONS

IES are delighted to be exhibiting at Building Simulation 2009. IES's software enables true green building design. Our <Virtual Environment> suite of integrated analysis tools empowers building designers and other industry professionals by acting as a comparative 'calculator' of performance, ensuring easy navigation to the optimum design.

Whether you're working on a new build or renovation project our software allows you to test different options, identify best passive solutions, compare low-carbon technologies and draw conclusions on energy use, CO2 emissions, occupant comfort, light levels, airflow, PartL/BREEAM compliance, EPC ratings, and much more.

Our direct links to Google SketchUp™ and Autodesk® Revit®, and our gbXML import function from any BIM/CAD vendor integrates these capabilities across the whole design process.

The four-tier product structure (VE-Ware, VE-Toolkits, VE-Gaia and VE-Pro) provides options suitable for all different design stages and user experience. Visit our stand, vendor session and workshop to find out more!

www.iesve.com

See IES on Stand 4. Presentation on 29 July 2009 at 11:00.
Workshop ["Introduction to VE Pro"](#) 30 July 2009 13:00 – 17:30



www.bre.co.uk

BRE is dedicated to excellence and innovation in the built environment. Our primary goal is to find the best possible solutions for our clients, working closely with them to maximise their ability to be innovative when planning and building life-enhancing homes, inspirational schools, productive offices, healthy hospitals and other high-quality buildings and infrastructure. BRE is the UK's leading centre of expertise working to reduce the environmental impact of buildings. We have an in-depth understanding of the complex inter-related and sometimes conflicting issues associated with sustainable development. This means we can help clients, developers and designers to set and meet environmental targets for individual buildings, large developments and major regeneration schemes. We work to promote sustainable design through our comprehensive set of tools and assessment methods; BREEAM, EcoHomes, BRE Environmental Profiles and energy modelling tools such as Climate Lite.

BRE Scotland
Scottish Enterprise Technology Park
East Kilbride, Glasgow G75 0RD
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See BRE on Stand 7.



Tas and Hevacomp under the Bentley Systems Inc. Building Information Modeling (BIM) umbrella have agreed a worldwide distribution agreement for EDSL's Tas building simulation software. This gives EDSL Tas global outreach, further expanding its global presence and market share.

Bentley combined the strengths of Tas and recently acquired Hevacomp, the UK's leading building analysis and design tools, to give them a global solution. The UK is one of the most demanding countries for built environment CO2 emissions regulation.

Data exchange between Tas and Hevacomp maximises design productivity, whilst ensuring design quality.

Bentley's Energy Performance Series integrates with existing 2D workflows and brings building analysis and simulation to BIM. All of the products work with MicroStation, AutoCAD, and Google SketchUp, and interoperate with Bentley Architecture, Revit, and other BIM programs, facilitating collaborative streamlined workflows.

Bentley Releases U.S. and Canadian Versions of Robust Energy Performance Series for 'Green' Building Design.

www.bentley.com/eps

www.edsl.net

See EDSL Tas on Stand 3. Presentation on 29 July 2009 at 11:20.

Energy Systems Research Unit

The Energy Systems Research Unit (ESRU) is a cross-discipline team concerned with new approaches to built environment energy demand reduction and the introduction of sustainable means of energy supply.

The work of the team includes:

Research activities covering a wide range of topics from global/local energy systems performance to indoor/outdoor health & comfort.

Consultancy services including laboratory testing of new products, performance appraisal of proposed new designs or retrofits, and field monitoring of energy systems in use.

Education & training including undergraduate and postgraduate courses, and training in modelling and simulation for practitioners.

Software Distribution we support a number of open source programs that may be used to examine the performance of traditional or new energy systems at all scales—from a large wind farm to a building-integrated photovoltaic component. We investigate supply and demand options; for successful deployment of renewable energy systems.

www.esru.strath.ac.uk

See ESRU on Stand 3

EnergyPlus

EnergyPlus is the U.S. Department of Energy's (DOE) energy simulation program for modeling building heating, cooling, lighting, ventilating, and other energy flows. Since its introduction in 2001, more than 75,000 copies have been downloaded free in more than 120 countries. Version 3.1 includes many innovative simulation capabilities such as time steps of less than an hour, modular systems and plant integrated with heat balance-based zone simulation, multi-zone air flow, thermal comfort, and photovoltaic systems. EnergyPlus is a stand-alone simulation program without a 'user friendly' graphical interface; it reads input and writes output as text files. In December 2008, DOE released EnergyPlus OpenStudio for SketchUp, Google's intuitive 3-D drawing software popular among architects. OpenStudio adds EnergyPlus functionality to the SketchUp environment. Learn more about EnergyPlus at <http://energyplus.gov>

The US DOE is a major sponsor of BS2009