

Masters Student Award in Building Simulation (2015)**Background**

The Building Simulation Group of the Chartered Institution of Building Services Engineers support and encourage the application of advanced building simulation tools for building and system design with the aim of achieving reliability and best performance in terms of energy efficiency, CO₂ emission and environmental quality. In 2012 the Group initiated an annual prize open to postgraduate students from UK and overseas universities who undertake a research project at Master's level or equivalent which includes a major element involving the application of building simulation tools in the research. The aim is to encourage the use of, and develop innovation in, building simulation techniques for research and development. This year's prize is sponsored by Integrated Environmental Solutions Ltd (IES) as described in this announcement. The CIBSE Building Simulation Group is grateful for receiving this support from IES.

Entry Criteria

The 2015 award will focus on projects involving the application and development of advanced simulation techniques and/or software for predicting the performance of buildings and environmental control systems. Topics that are considered for this award can be in the topics below or related areas, with modelling being the focus:

- Building physics
- Compliance and performance
- Dynamic thermal modelling
- HVAC systems
- Computational fluid dynamics
- Daylighting and artificial lighting

The criteria for entering the award are:

- Any individual or a group who are currently or recently studied in a university in the UK or overseas can be nominated.
- The research must directly address a topic in the area of building modelling and simulation and must be undertaken at postgraduate level (excluding PhD research).
- The work must have been completed in the year 2015.
- The application must be endorsed by the course director or equivalent in the department at which the research was carried out.

Entry Procedure

- i. One-page Expression of Interest (EoI) describing the research. This will be used for short-listing those candidates with the relevant research topics.
- ii. Invited applicants will be asked to formally enter the competition by submitting a report not exceeding 3,000 words of text plus images and tables. The report should contain information covering the following headings:
 1. Summary (200 words maximum)
 2. Aims and Objectives
 3. Introduction
 4. Definition of the building and systems
 5. Modelling approach, tools used and limitations
 6. Results and Discussion
 7. Conclusions
 8. References

The submitted EoI and entry report must both be endorsed by the course director or equivalent. A short, hand-signed statement on the submitted documents will be required.

Judging Criteria

The submitted reports will be judged using the following criteria:

- Relevance to the award topic
- Originality of research
- Research approach and methodology
- Technical content and innovation
- Applicability of the research
- Presentation and communication skills

Prizes

This year, there will be three prizes awarded; for the winner and for the two runners-up, as described below:

Winner Prize: £1000 plus 12-month unlimited laptop Licence for the IES VE-Pro software suite and a seat at one of IES public 3 day training courses at a date which suits the winner, worth over £7,000.

Two Runners-up Prizes: £250 each

The winner and the two runners-up will be awarded a certificate which will be presented to them at a subsequent BSG event in 2016.

Timescale

1. Expressions of interest in the form of one page summary outlining the title, name(s) of participants, a brief description of the project and endorsement must be submitted not later than 31 August 2015.
2. Those applicants who will be selected for the entry must submit their full reports not later than 30 October 2015.
3. The Winning entry will be announced in December 2015.

Contact Details

EoI and applications should be submitted by email or post to the address below marked for the attention of the attention of Dr Zsolt Bako-Biro, CIBSE BSG Secretary, with the title of the prize clearly written on the submission documents.

Address: Dr Zsolt Bako-Biro, GT Advanced Ltd., QV Offices, 25-27 Queen Victoria Street, Reading, Berkshire, RG1 1SY, Email: competition@cibsebsg.org