The Eighth International Workshop on Bio-Design Automation (IWBDA) at Newcastle upon Tyne in the UK will bring together researchers from the synthetic biology, systems biology, and design automation communities to discuss concepts, methodologies and software tools for the computational analysis and synthesis of biological systems.

The field of synthetic biology, still in its early stages, has largely been driven by experimental expertise, and much of its success can be attributed to the skill of the researchers in specific domains of biology. There has been a concerted effort to assemble repositories of standardized components; however, creating and integrating synthetic components remains an ad hoc process. Inspired by these challenges, the field has seen a proliferation of efforts to create computer-aided design tools addressing synthetic biology’s specific design needs, many drawing on prior expertise from the electronic design automation community.

The IWBDA offers a forum for cross-disciplinary discussion, with the aim of seeding and fostering collaboration between the biological and the design automation research communities.

**TOPICS OF INTEREST**

- Engineering methods inspired by biology
- Domain specific languages for synthetic biology
- Automated assembly techniques
- Design methodologies for synthetic biology
- Standardization of biological components
- Computer-aided modeling and abstraction techniques
- Data exchange standards and models for synthetic biology

**ABSTRACT SUBMISSION**

Abstracts for oral and poster presentations should be two pages long, following ACM SIG Proceedings format. Detailed instructions will be posted online: [www.iwbdaconf.org/2016/](http://www.iwbdaconf.org/2016/)

**BDATHLON COMPETITION**

Teams are given a set of programming challenges and then work to solve these challenges as teams. Judges will examine their solutions and award prizes to the winners at the close of IWBDA.

**TRAVEL SCHOLARSHIPS**

Students and young researchers who have submitted an abstract are invited to apply for travel scholarships. These funds will go towards flight and accommodation costs.

**SBOL WORKSHOP**

An SBOL workshop will be held on August 15, 2016. More information about registering for this workshop will be available online: [www.iwbdaconf.org/2016/](http://www.iwbdaconf.org/2016/)