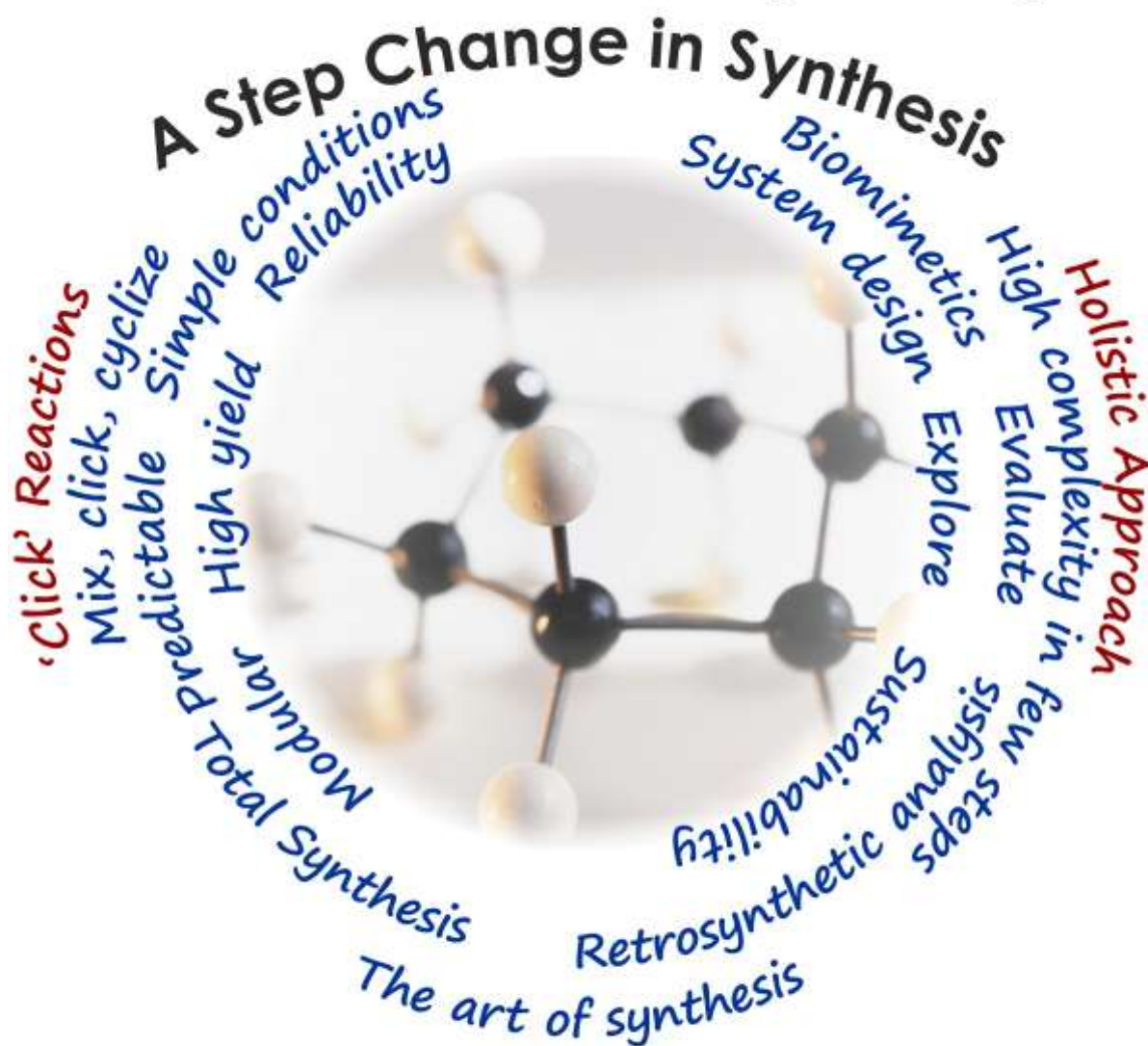




# Dial-a-Molecule

An EPSRC Grand Challenge network

An EPSRC Dial-a-Molecule Grand Challenge theme meeting



**2-3 August 2011**

**AstraZeneca, Macclesfield, Cheshire, UK**

**EPSRC**

Engineering and Physical Sciences  
Research Council

AstraZeneca 

Register online:

[www.dial-a-molecule.org/events/](http://www.dial-a-molecule.org/events/)

email: [dialamol@soton.ac.uk](mailto:dialamol@soton.ac.uk)



# A Step Change in Synthesis

## An EPSRC Dial-a-Molecule Grand Challenge theme meeting

**Dial-a-Molecule** is a Grand Challenge network funded by EPSRC to promote research aimed at promoting a step change in our ability to deliver molecules quickly and efficiently.

### How can we make molecules in DAYS not YEARS?

Central to **Dial-a-Molecule** is the ability to prepare molecules reliably using reaction sequences and strategies that are utterly reliable. The community has identified two approaches to date. One involves the development of many '*perfect reactions*' which always work that can be sequenced to address any synthetic challenge. At its heart is the idea that with access to '*1000 click reactions*' any problem in synthesis could be tackled. The approach demands the development of high yielding and robust chemistries as the constraint imposed by step-count is removed as an important criteria. The second approach is more holistic, demanding that transformations achieve more. The aim here is to identify from the outset the best method of preparing a given molecule, through the reliable generation of complexity in multiple bond forming transformations.

The 'A Step Change in Molecular Synthesis' theme of the EPSRC **Dial-a-Molecule** Grand Challenge will be running a 2-day meeting at **AstraZeneca, Macclesfield, Cheshire, UK** on 2-3 August 2011 focussed on how best to progress the '1000 Click Reactions' and 'Holistic Approach to Synthesis' areas.

Topics to be discussed include:

- What constitutes a Click reaction?
- A set of criteria that a 'Click' reaction must fulfill
- Identification of the key bond-forming reactions needed to tackle any synthetic problem
- What are the barriers to achieving our goal and how might they be overcome?
- How can the 'best synthesis' of a molecule be identified?
- Can we identify short and medium term goals for the 'Holistic Approach to Synthesis'?
- What should be included in the road map?

The meeting will involve presentations on the themes as they have developed to date. Small group sessions will be used to develop answers to the questions posed above, and to propose ways of taking them forward. The outputs from the meeting will form an important part of the **Dial-a-Molecule** roadmap. We also expect a strategy for achieving our goal to emerge.

Due to space issues, attendance at the meeting is restricted to ca. 40 delegates. Applications for the meeting are now invited by completing the attached form or by on-line registration.

We particularly welcome applications from people outside the synthetic chemistry community - please circulate this advert to any colleagues within your companies or institutions who you feel may be interested. If oversubscribed successful applicants will be selected so as to maintain a balance between industry and academia, and between the various disciplines and universities represented.

The closing date for applications is **Friday 15<sup>th</sup> July 2011** but we encourage you to apply early as places are limited.

**Please note** that although there is no registration fee for the meeting and **Dial-a-Molecule** will arrange and cover the costs of overnight accommodation, delegates will be responsible for their own travel expenses.



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## Personal Details

First Name:

Last Name:

Email:

Phone:

Organization:

Department:

Position:

Address:

Please tell us why you are interested in the meeting (<100 words)

Briefly outline any particular areas of expertise/interest relevant to the meeting (<200 words)

I would be willing, if asked, to present a short (10 minute) summary on a topic of my choice relevant to the meeting

Topic Title:

☐ Yes

☐ No

I require overnight accommodation

☐ Yes

☐ No

Please return by Friday **15<sup>th</sup> July 2011** to:

Bogdan Ibanescu, Dial-a-Molecule Network Assistant Coordinator.

Email: [dialamol@soton.ac.uk](mailto:dialamol@soton.ac.uk)

Post: School of Chemistry, University of Southampton, Highfield, Southampton, SO17 1BJ.

AstraZeneca, Macclesfield, Cheshire, UK  
2-3 August 2011