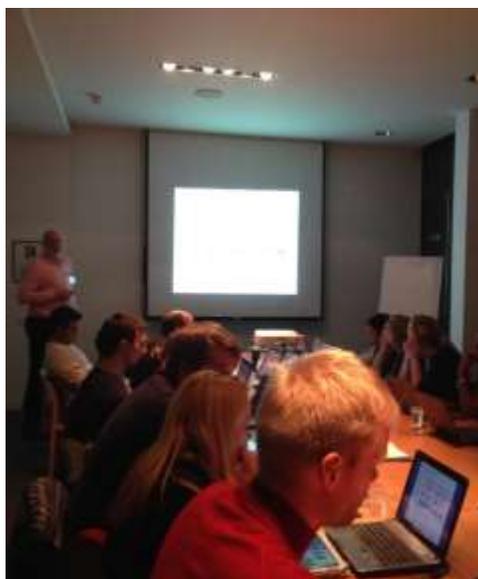




## Who Are We?

C1net is the new BBSRC NIBB dedicated to the development and scalable production of C1 gas fermentation for the whole IB community. C1net provides a cross-sector forum with the goals to foster and enhance collaboration between industry and academia; develop skills and expertise; share best practice; define common research priorities; and target funding opportunities in C1 gas fermentation. The management board is currently 12 strong, with Professor Nigel Minton (University of Nottingham) as PI and Professor Davis Fell (Oxford Brookes) as Col.



## Progress

Membership currently stands at 194. We have recently widened our net to welcome members from Europe, India and the USA and we can now boast 112 followers on Twitter.

Three POC awards of £50,000 have now been made. So congratulations go to the PIs and their teams:  
Andrezek Kierzek (University of Surrey)  
Phillip Wright (University of Sheffield)  
Ying Zhang (University of Nottingham)

We look forward to some exciting outcomes in the New Year.

***Please note, the first POC call has now closed but the Seed Fund call and BIV call remain open.***  
***See <http://www.c1net.co.uk/Funding.html>***

## First Workshop – Oxford 15-19 December 2014

Our first workshop “Metabolic Modelling”, held at St Anne's College, Oxford was a great success. Course leader David Fell and his team of 5 tutors offered expert tuition to a total of 25 NIBB scientists.

The course offered theoretical and practical training on structural modelling of metabolic networks, introduced techniques such as elementary modes analysis and flux balance analysis that can be used design changes in metabolic outputs.

***“Nice group and learning a lot” tweeted course attendee Annette Alcasabas of BioSyntha.***



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## CALENDER (C1net Other)

### IB Catalyst Round 3

13 January 2015

Applicant briefing webinar. Register at [https://connect.innovateuk.org/web/technologystrategyboard/events-view/-/events/19743006?p\\_p\\_auth=qTJQ0UMt](https://connect.innovateuk.org/web/technologystrategyboard/events-view/-/events/19743006?p_p_auth=qTJQ0UMt)

Expression of interest

Registration deadline: 25 February 2015

Application deadline: 4 March 2015

Feasibility studies

Registration deadline: 13 May 2015

Application deadline: 20 May 2015

<https://interact.innovateuk.org/>  
<http://www.bbsrc.ac.uk/business/collaborative-research/tsb-competitions/ib-catalyst.aspx>

### 14 January 2015

Launch Event BBSRC/EPSC  
Synthetic Biology Research Centre  
Nottingham

<http://www.c1net.co.uk/Events-conf-1.html>

### 14-16 January 2015

C1net Conference, Nottingham

<http://www.c1net.co.uk/Events-conf-1.html>

### 22 January 2015

The Industrial Biotechnology Innovation  
Centre (IBiIC) Annual Conference,  
Glasgow

<http://www.ibiic.com/>

### 11-12 February 2015

Industrial Biotechnology Showcase,  
London <http://ibts.meeting-mojo.com/>

### 25-26 March 2015

ACI Gasification Conference, Prague,  
Czech Rep.

<http://www.wplgroup.com/aci/conferences/eu-ecq4.asp>

### 5-9 July 2015

Synthetic and Systems Biology  
Summer School -, Sicily, Italy

<http://www.taosciences.it/ssbss2015/>



The Hilton Hotel Nottingham

## C1net – CHEMICALS FROM C1 GAS CONFERENCE 14 - 16 January 2015

Hosted by C1net (BBSRC-NIBB) this FREE two-day, conference will bring together academic and industrial partners to identify and address key challenges in the study of those organisms able to grow on C1 compounds and commercially exploit them as platforms for chemical manufacture. The programme will include talks from selected submitted abstracts, as well as from key academics and industry representatives.

### Confirmed expert speakers include:

**Sean Simpson (LanzaTech),  
Peter Duerre (University of Ulm),  
Steve Martin (BioSyntha),  
Philippe Soucaille (INSA),  
Alex Toftgaard Nielsen (Biosustain),  
Auxiliadora Prieto (National Spanish Research Council),  
Josh Silverman (Calysta)  
Lionel Clarke (UK SBLC)  
Stephen Chambers (SynbiCITE, UK)**

There will also be plenty of opportunity for networking.

What: Free participation and full board for two days.

When: 14 January – 16 January 2015

Where: The Hilton Hotel Nottingham, NG1 3PZ

Registration now closed



## OUTREACH

### Big Biology Day – 15 October 2014

University of Nottingham PhD students and C1net members Bart Pander and James Millard helped engage fifty Year 10 and 11 local school students at a “Big Biology Day”. Part of Biology Week run by the Society of Biology and organised by UNotts Outreach Officer Louise Dynes, this involved a mini-lecture, microscopy and a practical session. Pupils used state of the art equipment and were tutored by “real” research scientists. The aim of the day was to inspire the study of life sciences at post-16 and beyond, as well as raise awareness of GHG and the need for renewable fuels. This event, was part of the University of Nottingham’s ‘Curriculum Links’ programme with the Mansfield Learning Partnership.

### Pub PhD – 22 October 2014

Vat and Fiddle regulars in Nottingham, enjoyed a pint while C1net member Bart Pander explained his PhD research as part of the Pub PhD programme (<https://pubhd.wordpress.com/tag/pubhd/>). In his 30 minute slot to 35 people, he explained how bacteria can help us make biofuels. First he discussed evolution and how clostridial acetogens give us a glimpse of how early life could have had carbon and energy metabolism. He followed on by suggesting the current problem of rising carbon dioxide levels in air could be partly solved by using *Clostridium autoethanogenum* to turn wastes in to valuable chemicals. Finally he spoke about how scientists try, using synthetic biology techniques, to optimise the bacterium to do this.

**“The concept of using of clostridial acetogens in industry to produce valuable chemicals from waste, seemed new to the entire audience” said Bart.**

### NUAST – 12 November 2014

Young people of Nottingham were encouraged to study science and technology at the Nottingham University Academy of Science & Technology Open Evening. About 90 prospective Year 11 students and their parents got to hear straight from the young scientist’s themselves how and why they got into science. It provided a great opportunity to engage and educate both pupils and parents on the great C1 science going on at Nottingham and in the C1network.

More details can be found here <http://nuast.org.uk/open.php>



**“Plenty more to come in 2015!” said Louise Dynes, Outreach Officer, University of Nottingham**

## LanzaTech - Hottest Company in Bioenergy

Biofuels Digest announced that C1net member LanzaTech was voted the No.1 hottest company in Bioenergy and the No. 5 in Renewable Chemicals and Materials, in the annual Biofuels Digest Hot Rankings. The annual rankings, which recognize innovation and achievement in Biorefinery development, are based 50 % on votes from an invited panel of distinguished international selectors and 50 % on votes from subscribers. More than 100,000 individual company ratings were received from panellists and voters.

“We are absolutely thrilled with these results ” said Jennifer Holmgren, CEO of LanzaTech. “The Digest Rankings, one of the most cited ranking sets for any industry, are a powerful way to highlight companies who are challenging the status quo and working to meet our Global carbon challenge. Utilization of atmospheric carbon as a feedstock for fuels and Chemicals production will enable a circular carbon economy. It is an honor to be recognized by the Digest voters and panellists for our work in this sector.”

<http://www.biofuelsdigest.com/>



## OTHER NIBB NEWS

### AD net

14-15 April 2015: ADBA R&D Forum at Southampton University.

30 June 2015: Early Career Researcher Event at Warwick University, 30<sup>th</sup> June 2015.

More details at:

<http://www.anaerobicdigestionnet.com/>

### HVCfP Network

23-24 March 2015: Residential workshop, York: Communicating reliably and effectively about plants.

28th-29th April 2015: Residential workshop, Leeds: Getting value from plants: extracting and purifying high value chemicals.

More details at: <https://hvcfp.net>

### P2P

(Techno)economic modelling call now open, and closes 16:00hrs on 9 February 2015.

Up to £100k funding available with expected duration of up to 12 months.

More details at: <http://www.nibbp2p.org>

### NPRONET

29th January, 2015 :How to tackle antimicrobial resistance? Residential workshop, Manchester, More details at: <http://npronet.com/>



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