

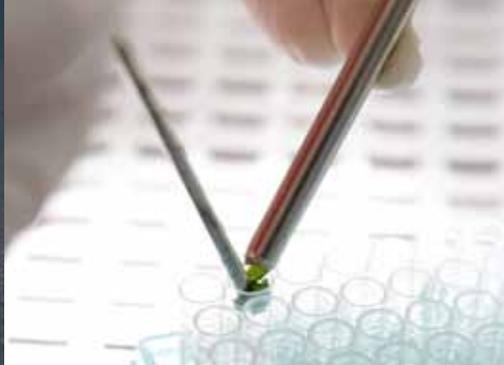


Inaugural Fraunhofer – Delaware Technology Summit

# ENERGY AND LIFE SCIENCES – SOLUTIONS FOR SUSTAINABILITY

March 5 and 6, 2013 | Clayton Hall at the University of Delaware | Newark, Delaware, USA





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## About the Technology Summit

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The first Fraunhofer – Delaware Technology Summit, as the inaugural event of an annual conference with changing scientific emphases, is focused on “Energy and Life Sciences – Solutions for Sustainability.”

It will bring together leaders in basic research, translational sciences and industrial applications to discuss the current challenges of both pharmaceutical product development and future energy systems. The Technology Summit will provide attendees with a unique opportunity to meet and network with Energy and Life Science thought leaders from academic, business and government agencies to address these challenges in the rapidly changing global environment.

Two Keynote Speakers will set the stage by giving an overview, highlighting challenges and discussing the path ahead for converting laboratory-based scientific discoveries into new applications with the potential to significantly impact our lives, our environment, and our future.

After the joint program for all attendees in the morning, the afternoon agenda features two parallel sessions – Session A will focus plenary talks and panel discussions on “Life Sciences Solutions,” while Session B will address “Sustainable Energy Concepts.” An international group of experts from Fraunhofer, academia, the private and the public sector will discuss key challenges and promising solutions to these critical areas.

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## Who attends the Technology Summit?

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- Scientists and researchers
- Industry executives
- Governmental and Foundation Programm officers and decision makers

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## Five reasons for you to attend the Summit:

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1. Meet scientific leaders from the Delaware region and international Fraunhofer experts.
2. View poster presentations and discuss the latest research results with experts.
3. Exhibit/Share your own scientific findings in a poster presentation.
4. Use the spacious conference setting for face-to-face interaction and networking.
5. Customize your conference. Visit exactly the session that you are most interested in.

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## Coordinating Contact Addresses:

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### Dale Ervin

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### Anke Hellwig

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## Conference Co-Chairs:

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### Karl V. Steiner

Research Development Office  
University of Delaware  
ksteiner@udel.edu

### Vidadi Yusibov

Fraunhofer USA – Center for Molecular Biotechnology  
vyusibov@fraunhofer-cmb.org

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## Registration

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Attendance is free-of-charge, but registration prior to February 25, 2013 is required to attend the sessions and the lunch. Please use the Summit web site to register and submit applications for poster submissions. <http://www.udel.edu/FraunhoferUDSummit/index.html>

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## Call for Posters

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Experts from science, industry and governmental agencies are encouraged to submit posters related to this conference. If you wish to submit a poster, please register for the conference and click on <https://secure.dbi.udel.edu/registration/fraunhofer/> on the Technology Summit web page and provide poster title and list of authors by February 25, 2013.

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## Accommodation

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Marriott Courtyard Newark Hotel  
Official Hotel of the University of Delaware  
400 David Hollowell Drive  
Newark, DE 19716  
Phone: +1 302-737-0900  
Fax: +1 302-737-0990  
<http://www.udel.edu/hotel/>  
*Please mention "Technology Summit" when making hotel reservations to receive the conference rate.*

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## Driving Directions from Philadelphia/Airport:

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Take I-95 South to Delaware Exit 1-B – Route 896 North, which becomes South College Avenue at the intersection of Route 4. Continue straight on South College Avenue for approx. two miles until you reach the Visitors Parking Lot.  
Train information: <http://www.amtrak.com/home>  
Parking and Bus information: [http://www.udel.edu/transportation/unicity\\_route/](http://www.udel.edu/transportation/unicity_route/)

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## Venue

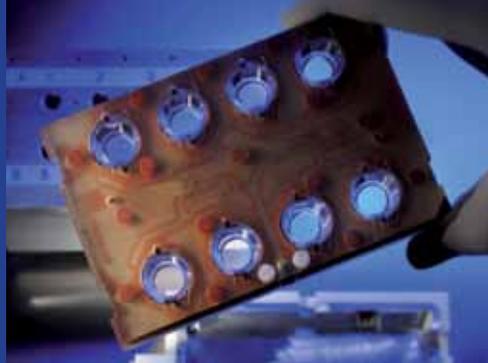
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Clayton Hall Conference Center  
at the University of Delaware  
100 Pencader Drive  
Newark, DE 19716, USA  
<http://www.udel.edu/conferences/locations/newark.html>

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## PROGRAM

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### Tuesday, March 5 – FORUM

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**08:00 – 08:30 am**

Registration

**08:30 – 09:30 am**

**Opening Ceremony:**

Governor Jack Markell (invited),  
State of Delaware,  
President Pat Harker, University of Delaware,  
Chairman Hans-Joerg Bullinger, Fraunhofer  
USA

**09:30 – 10:30 am**

**Keynote Presentation:** “Life Sciences  
Addressing Global Challenges”

Douglas Muzyka, Executive Vice President  
and Chief Innovation Officer, E.I. DuPont de  
Nemours

**10:30 – 11:00 am**

Coffee Break & Poster Session

**11:00 – 12:00 am**

**Keynote Presentation:** “From Fossil to  
Photons: An Energy Company’s  
Transformation”

Lee Davis, Senior Vice President, NRG Energy

**12:00 – 01:30 pm**

**Lunch**

**04:15 – 04:45 pm**

**Coffee Break & Poster Session**

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### Wednesday, March 6

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**08:30 – 12:00 am**

Laboratory Tours and Opportunities for  
Follow-up Discussions

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### Tuesday, March 5 – LIFE SCIENCES

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**01:30 – 6:00 pm Session A:**

**Life Sciences Solutions**

**01:30 – 02:00 pm**

**Plenary Talk A.1:** “Step Ahead Together:  
Creative Collaborating as an Approach  
to Building and Sustaining a Pharma R&D  
Pipeline”,

John Cantello, GlaxoSmithKline

**02:00 – 02:45 pm**

**Panel Discussion A.1:**

Moderator Robin Morgan, Animal Food  
Sciences, UD

Jessica Chichester, Fraunhofer CMB

Jack Gelb, Animal Food Sciences, UD

Jung-Youn Lee, DBI, Plant & Soil Sciences,  
UD

Ryan Zurakowski, Electrical & Computer  
Engineering, UD

**03:00 – 03:30 pm**

**Plenary Talk A.2:** “Advances in Bio-  
pharmaceutical Manufacturing”, Jürgen  
Drossard, Fraunhofer IME

**03:30 – 04:15 pm**

**Panel Discussion A.2:**

Moderator Vidadi Yusibov, Fraunhofer CMB

Arthur Elliott, Biological Consultants

Kristi Kiick, Materials Science, UD

Holger Ziehr, Fraunhofer ITEM

**04:45 – 05:15 pm**

**Plenary Talk A.3:** “From Bedside to Bench:  
TGN1412”

Zoe Waibler, Paul Ehrlich Institute

**05:15 – 6:00 pm**

**Panel Discussion A.3:**

Moderator Uwe Heinrich, Fraunhofer ITEM

Johannes Boltze, Fraunhofer IZI

Armin Braun, Fraunhofer ITEM,

Xinqiao Jia, Materials Science, UD

Liyun Wang, Mechanical Engineering, UD

**06:00 – 6:30 pm**

**Reception and Poster Session**

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### Tuesday, March 5 – ENERGY CONCEPTS

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**01:30 – 6:00 pm Session B:**

**Sustainable Energy Concepts**

**01:30 – 02:00 pm**

**Plenary Talk B.1:** “Challenges and Solutions  
for a Renewable Energy Economy”  
Christopher Hebling, Fraunhofer ISE

**02:00 – 02:45 pm**

**Panel Discussion B.1:**

Moderator David Weir, OEIP, UD

Lee Davis, NRG Energy

Willett Kempton, Marine Science&Policy, UD

John Ranieri, DuPont Industrial Biosciences

Dion Vlachos, Chem Biomolecular Engg, UD

**03:00 – 03:30 pm**

**Plenary Talk B.2:** “Clean Energy: Flash  
without Fame”

Yushan Yan, Chem Biomolecular  
Engineering, UD

**03:30 – 04:15 pm**

**Panel Discussion B.2:**

Moderator Bob Birkmire, IEC, UD

Christian Hoepfner, Fraunhofer CSE

Michael Mackay, Materials Science, UD

Ajay Prasad, Mechanical Engineering, UD

**04:45 – 05:15 pm**

**Plenary Talk B.3:** “Infrastructure-Ready  
Biomass-Derived Oils: Incentives, Options and  
Process Models”

Michael Klein, UDEI, Chem Biomolecular  
Engineering, UD

**05:15 – 6:00 pm**

**Panel Discussion B.3**

Moderator Görgo Deerberg, Fraunhofer  
UMSICHT

Dieter Bryniok, Fraunhofer IGB

Andreas Hornung, Fraunhofer UMSICHT

Wolfgang Schuch, Fraunhofer CSB Chile

Bryan Tracy, Elcriton

**06:00 – 6:30 pm**

**Reception and Poster Session**