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GORDON RESEARCH CONFERENCES *frontiers of science*
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Nancy Ryan Gray, Ph.D.
Director

**2012 GORDON RESEARCH CONFERENCE and SEMINAR
on ELECTRON DONOR-ACCEPTOR INTERACTIONS**

**FINAL PROGRESS REPORT
DEPARTMENT OF ENERGY
GRANT NO. DE-SC0008141**

The Gordon Research Conference on ELECTRON DONOR-ACCEPTOR INTERACTIONS was held at Salve Regina University, Newport, Rhode Island, August 5-10, 2012. The Conference was well-attended with 195 participants (attendees list attached). The attendees represented the spectrum of endeavor in this field coming from academia, industry, and government laboratories, both U.S. and foreign scientists, senior researchers, young investigators, and students. Of the 195 attendees, 114 voluntarily responded to a general inquiry regarding ethnicity which appears on our registration forms. Of the 114 respondents, 10% were Minorities – 4% Hispanic, 6% Asian and 0% African American. Approximately 30% of the participants at the 2012 meeting were women.

The Gordon Research Seminar on ELECTRON DONOR-ACCEPTOR INTERACTIONS was held at Salve Regina University, Newport, Rhode Island, August 4-5, 2012. The Conference was well-attended with 53 participants (attendees list attached). The attendees represented the spectrum of endeavor in this field coming from academia, industry, and government laboratories, both U.S. and foreign scientists, senior researchers, young investigators, and students. Of the 53 attendees, 31 voluntarily responded to a general inquiry regarding ethnicity which appears on our registration forms. Of the 31 respondents, 6% were Minorities – 3% Hispanic, 3% Asian and 0% African American. Approximately 30% of the participants at the 2012 meeting were women.

In designing the formal speakers program, emphasis was placed on current unpublished research and discussion of the future target areas in this field. There was a conscious effort to stimulate lively discussion about the key issues in the field today. Time for formal presentations was limited in the interest of group discussions. In order that more scientists could communicate their most recent results, poster presentation time was scheduled. Attached is a copy of the formal schedule and speaker program and the poster program. In addition to these formal interactions, "free time" was scheduled to allow informal discussions. Such discussions are fostering new collaborations and joint efforts in the field.

Thank you for your support of this Conference. As you know, in the interest of promoting the presentation of unpublished and frontier-breaking research, Gordon Research Conferences does not permit publication of meeting proceedings. If you wish any further details, please feel free to contact me. Thank you.

Sincerely,
James M. McCusker, GRC Chairperson
MICHIGAN STATE UNIVERSITY

Allison M. Brown, GRS Chairperson
UPPSALA UNIVERSITY

Electron Donor-Acceptor Interactions

August 5-10, 2012
Salve Regina University
Newport, RI

Chairs:

James K. McCusker & Bo Albinsson

Vice Chairs:

David H. Waldeck & C. Michael Elliott

Related Meeting Information

The Electron Donor-Acceptor Interactions Gordon Research Conference was held in conjunction with the **Electron Donor-Acceptor Interactions Gordon-Kenan Research Seminar**. Please refer to the Electron Donor-Acceptor Interactions GKRS web page for more information.

The Gordon Research Conference on Electron Donor Acceptor Interactions (GRC - EDAI) is one of the premier international forums for the dissemination of cutting-edge research on experimental and theoretical studies of electron and energy transfer. For the past several decades, the GRC - EDAI has been witness to some of the most significant advances in the field ranging from fundamental studies on small molecules to applications in biology, materials, and energy science; enduring themes of this conference include photosynthesis (both natural and artificial), long-range electron transfer, as well as recent advances in molecular electronics, optical switches, and nanoscale materials in which energy and electron transfer processes comprise the conceptual underpinning for molecular and materials design. The diversity of the backgrounds of the conferees - representing all of the traditional sub-disciplines of chemistry as well as materials science, biochemistry, and physics - makes for a stimulating intellectual environment where science at the interface of these areas can be explored.

The upcoming incarnation of the GRC - EDAI will feature sessions on classic topics including proton-coupled electron transfer, dye-sensitized solar cells, and biological electron transfer, as well as emerging areas such as quantum coherence effects in donor-acceptor interactions, spintronics, and the application of donor-acceptor interactions in chemical synthesis. World leaders in all of these areas will be featured as speakers and discussion leaders, making the conference an excellent forum for scientists from different disciplines to meet and initiate new directions; for scientists from different countries to make contacts; and for young scientists to network and establish personal contacts with other members of this scientific community. A particular emphasis at this meeting will be sessions in which experimental and theoretical work are combined in order to illustrate and take advantage of the natural synergy that can exist between these traditionally disparate research efforts. The meeting also features an interactive atmosphere with lively poster sessions (several of which will be selected for oral presentations), as well as the inaugural Electron Donor Acceptor Interactions Gordon Research Seminar being held immediately prior to the main meeting.

Contributors



Chiromics, LLC



SUNDAY

2:00 pm - 9:00 pm	Arrival and Check-in (Office Closed 6:00 pm - 7:00 pm)
6:00 pm	Dinner
7:30 pm - 7:40 pm	Welcome / Introductory Comments by GRC Site Staff
7:40 pm - 9:30 pm	Proton-Coupled Electron Transfer
	Discussion Leader: Leif Hammarstrom (Uppsala University)
7:45 pm - 8:15 pm	James Mayer (University of Washington) "Proton-coupled electron transfer: Fundamentals, nanoparticles, and catalysis"
8:15 pm - 8:20 pm	Discussion
8:20 pm - 8:50 pm	Alexei Stuchebrukhov (University of California at Davis) "Redox-driven proton translocation"
8:50 pm - 8:55 pm	Discussion
8:55 pm - 9:25 pm	Judith Klinman (University of California at Berkeley) "Linking protein motions to C-H activation in enzymes"
9:25 pm - 9:30 pm	Discussion
9:30 pm	Chairs' Reception

MONDAY

- 7:30 am - 8:30 am Breakfast
- 9:00 am - 12:30 pm **Quantum Effects in Donor-Acceptor Interactions**
Discussion Leader: **Mark Ratner** (Northwestern University)
- 9:00 am - 9:30 am **Gregory Scholes** (University of Toronto)
"Ultrafast energy transfer and the role of coherence"
- 9:30 am - 9:45 am Discussion
- 9:45 am - 10:15 am **Alan Aspuru-Guzik** (Harvard University)
"Green Sulfur Bacteria: Nature's photon junkie"
- 10:15 am - 10:30 am Discussion
- 10:30 am Group Photo / Coffee Break
- 11:00 am - 11:30 am **Lin Chen** (Northwestern University)
"Excited state coherence and structural control in interfacial electron transfer in DSSC mimics"
- 11:30 am - 11:45 am Discussion
- 11:45 am - 12:15 pm **Sean Shaheen** (University of Denver)
"Implications of quantum effects for organic photovoltaics: Harnessing coherence to enable higher efficiencies"
- 12:15 pm - 12:30 pm Discussion
- 12:30 pm Lunch
- 1:30 pm - 4:00 pm Free Time
- 4:00 pm - 6:00 pm Poster Session (Group A)
- 6:00 pm Dinner
- 7:30 pm - 9:30 pm **Donor-Acceptor Interactions in Chemical Synthesis**
Discussion Leader: **Paula Diaconescu** (University of California at Los Angeles)
- 7:30 pm - 8:00 pm **David W. C. MacMillan** (Princeton University)
"The application of photoredox catalysis to the development of new chemical reactions of value to organic synthesis and the pharmaceutical industry"
- 8:00 pm - 8:10 pm Discussion
- 8:10 pm - 8:40 pm **Christopher Chang** (University of California at Berkeley)
"Electron transfer probes for imaging chemistry in the brain"
- 8:40 pm - 8:50 pm Discussion
- 8:50 pm - 9:20 pm **Fabrice Odobel** (University of Nantes)
"Molecular array for long-range photo-induced charge separation: How far can we transfer an electron in a single step?"
- 9:20 pm - 9:30 pm Discussion

TUESDAY

7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	Bridging the Gap between Electron Transfer and Magnetism
	Discussion Leader: Natia Frank (University of Victoria)
9:00 am - 9:30 am	Christiane Timmel (Oxford University) "From bucket to nano - Cavity enhanced detection methods in the study of magnetosensitive radical pair reactions"
9:30 am - 9:45 am	Discussion
9:45 am - 10:15 am	David Shultz (North Carolina State University) "Donor-bridge-acceptor structure-property relationships in metal complexes of semiquinone-bridge-nitronyl nitroxide ligands"
10:15 am - 10:30 am	Discussion
10:30 am	Coffee Break
11:00 am - 11:30 am	Daniel Gamelin (University of Washington) "Spectroelectrochemistry of doped and undoped quantum dots: From luminescence brightening to solar energy conversion"
11:30 am - 11:45 am	Discussion
11:45 am - 12:15 pm	Gemma Clare Solomon (University of Copenhagen) "Calculating inelastic electron tunneling spectra: Exploring chemical space"
12:15 pm - 12:30 pm	Discussion
12:30 pm	Lunch
1:30 pm - 4:00 pm	Free Time
4:00 pm - 6:00 pm	<u>Poster Session</u> (Group B)
6:00 pm	Dinner
7:30 pm - 9:30 pm	Biological and Bio-inspired Systems
	Discussion Leader: Claudia Turro (The Ohio State University)
7:30 pm - 8:00 pm	Karen Brewer (Virginia Technical University) "Intramolecular electron transfer to generate light-activated drugs for DNA photobinding and photocleavage applicable in PDT: Lessons learned in solar energy research"
8:00 pm - 8:10 pm	Discussion
8:10 pm - 8:40 pm	Mary Beth Williams (Pennsylvania State University) "Functional multimetallic structures linked by artificial oligopeptides"
8:40 pm - 8:50 pm	Discussion
8:50 pm - 9:20 pm	Licheng Sun (University of Stockholm) "Artificial Photosynthesis--highly efficient molecular catalysts for water oxidation inspired by Photosystem II"
9:20 pm - 9:30 pm	Discussion

WEDNESDAY

7:30 am - 8:30 am Breakfast

9:00 am - 12:30 pm **Dye-Sensitized Solar Cells**

Discussion Leader: **Curtis Berlinguette** (University of Calgary)

9:00 am - 9:30 am **Anders Hagfeldt** (Uppsala University)
"Going for DSC efficiencies above 15%"

9:30 am - 9:45 am Discussion

9:45 am - 10:15 am **Elena Galloppini** (Rutgers University)
"Control of charge transfer on metal oxide surfaces through synthetic design"

10:15 am - 10:30 am Discussion

10:30 am Coffee Break

11:00 am - 11:30 am **Maria Abrahamsson** (Chalmers University of Technology)
"Multiple charge transfer events at dye-semiconductor interfaces"

11:30 am - 11:45 am Discussion

11:45 am - 12:15 pm **Gerald J. Meyer** (The Johns Hopkins University)
"Making chemical bonds with light for solar energy conversion and storage"

12:15 pm - 12:30 pm Discussion

12:30 pm Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster Session (Group C)

6:00 pm Dinner

7:00 pm - 7:30 pm Business Meeting

Nominations for the next Vice Chair; Fill out Conference Evaluation Forms; Discuss future Site & Scheduling preferences; Election of the next Vice Chair

7:30 pm - 9:30 pm **Mechanism and Dynamics of Donor-Acceptor Interactions**

Discussion Leader: **Antonin Vlcek, Jr.** (Queen Mary, University of London)

7:30 pm - 8:00 pm **Niels Damrauer** (University of Colorado at Boulder)
"Harvesting conformational dynamics for excited state energy conversion"

8:00 pm - 8:10 pm Discussion

8:10 pm - 8:40 pm **Kelly Gaffney** (Stanford University)
"Electron delocalization and spin dynamics in coordination chemistry studied with x-ray and mid-IR spectroscopy"

8:40 pm - 8:50 pm Discussion

8:50 pm - 9:20 pm **Oliver Wenger** (University of Goettingen)
"PCET and long-range electron transfer in hydrogen-bonded molecules"

9:20 pm - 9:30 pm Discussion

THURSDAY

7:30 am - 8:30 am Breakfast

9:00 am - 12:30 pm **OPVs, BHJs, and Advanced Techniques for Device Characterization**

Discussion Leader: **Garry Rumbles** (NREL)

9:00 am - 9:30 am **Michael Strano** (Massachusetts Institute of Technology)
"Charge transport and separation in nano-carbon based photovoltaic devices"

9:30 am - 9:45 am Discussion

9:45 am - 10:15 am **Dirk Guldi** (University of Erlangen)
"Low dimensional carbon allotropes in solar energy conversion schemes"

10:15 am - 10:30 am Discussion

10:30 am Coffee Break

11:00 am - 11:30 am **Allison Walker** (University of Bath)
"Linking morphology to performance in DA devices with a mesoscopic model"

11:30 am - 11:45 am Discussion

11:45 am - 12:15 pm **John Marohn** (Cornell University)
"Using cantilevers to spectroscopically and spatially probe electronic energy levels and charge generation at the nanoscale in films of π -conjugated molecules"

12:15 pm - 12:30 pm Discussion

12:30 pm Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster Session (Group D)

6:00 pm Dinner

7:30 pm - 9:30 pm **Poster Talks and Keynote Lecture**

Discussion Leader: **Michael Wasielewski** (Northwestern University)

7:30 pm - 7:45 pm TBA (Poster Presentation)

7:45 pm - 7:50 pm Discussion

7:50 pm - 8:05 pm TBA (Poster Presentation)

8:05 pm - 8:10 pm Discussion

8:10 pm - 8:25 pm TBA (Poster Presentation)

8:25 pm - 8:30 pm Discussion

8:30 pm - 9:15 pm **Thomas A. Moore** (Arizona State University)
"Bio-inspired EDA systems - there's plenty of room in biology (with apologies to R. Feynman)"

9:15 pm - 9:30 pm Discussion

FRIDAY

7:30 am - 8:30 am Breakfast

9:00 am Departure

Electron Donor-Acceptor Interactions
Gordon-Kenan Research Seminar
The Role of Fundamental Science in our Energy Future

August 4-5, 2012
Salve Regina University
Newport, RI

Chair:
Allison M. Brown

Associate Chair:
J. Andrew Kouzelos

Related Meeting Information

The Electron Donor-Acceptor Interactions Gordon-Kenan Research Seminar was held in conjunction with the **Electron Donor-Acceptor Interactions Gordon Research Conference**. Please refer to the Electron Donor-Acceptor Interactions GRC web page for more information.

The Gordon Research Seminar on Electron Donor-Acceptor Interactions is a unique forum for graduate students, post-docs, and other scientists with comparable levels of experience and education to present and exchange new data and cutting edge ideas.

The inaugural session of the Electron Donor-Acceptor Interactions Gordon Research Seminar will focus on the role electron and energy transfer play in addressing issues associated with energy science. Topics to be addressed include, but are not limited to, proton-coupled electron transfer, spin effects, molecular solar energy conversion, single molecule charge transfer, biological and biomimetic systems, ultrafast reactions, and technological advancements as they relate to fundamental progress in energy capture, conversion, and storage.

Contributors



KENAN INSTITUTE
ENGINEERING, TECHNOLOGY & SCIENCE

Seed funding for this new Gordon Research Seminar has been provided by the Kenan Institute for Engineering, Technology and Science at North Carolina State University.



U.S. DEPARTMENT OF
ENERGY



Bowling Green State University Foundation



SATURDAY

- 1:00 pm - 5:00 pm Arrival and Check-in
- 3:30 pm - 3:45 pm Introductory Comments by GRC Site Staff / Welcome by the GRS Conference Chair
- 3:45 pm - 4:30 pm **Solar Energy Conversion**
Discussion Leader: **Annie Butler-Ricks** (Michigan State University)
- 3:45 pm - 4:15 pm **Dan Nocera** (MIT)
"The Artificial Leaf"
- 4:15 pm - 4:30 pm Discussion
- 4:30 pm - 6:00 pm Poster Session I
- 6:00 pm Dinner
- 7:30 pm - 9:30 pm **Light Control and Detection**
Discussion Leader: **Darren Achey** (Johns Hopkins University)
- 7:30 pm - 7:50 pm **Kristen Brown** (Northwestern University)
"Implications for Artificial Photosynthesis: Probing the Vibrational Dynamics of Perylene-based Systems with Femtosecond Stimulated Raman Spectroscopy"
- 7:50 pm - 8:00 pm Discussion
- 8:00 pm - 8:20 pm **Tomoyasu Mani** (University of Pennsylvania)
"Magnetic Field Effects on Phosphorescence: Energy and Electron Transfer Dynamics in Dyads Containing Triplet Emitter"
- 8:20 pm - 8:30 pm Discussion
- 8:30 pm - 8:50 pm **Matthias Wenninger** (Ludwig Maximilians University Munich)
"Charge Transfer Exciplex States for Light-Induced Enantioselective Organocatalysis"
- 8:50 pm - 9:00 pm Discussion
- 9:00 pm - 9:20 pm **Emily Mclaurin** (University of Washington)
"Dual-Emitting Semiconductor Nanocrystals"
- 9:20 pm - 9:30 pm Discussion

SUNDAY

- 7:30 am - 8:30 am Breakfast
- 9:00 am - 11:00 am **Utilizing Abundant Materials**
Discussion Leader: **Laura Vogt** (Yale)

- 9:00 am - 9:20 am **Catherine Mccusker** (Bowling Green State University)
"Copper(I) Bis-Phenanthroline Complexes as First Row Sensitizers for Upconversion Photochemistry"
- 9:20 am - 9:30 am Discussion
- 9:30 am - 9:50 am **Anusree Mukherjee** (Argonne National Lab)
"Design and Synthesis of Cobaloxime Based Supramolecular Assemblies for Light-Driven Hydrogen Production"
- 9:50 am - 10:00 am Discussion
- 10:00 am - 10:20 am **Elham Ghadiri** (EPFL)
"Time resolved diffuse reflectance spectroscopy to study the electron transfer in dye sensitized solar cells and organic photovoltaic devices under operational condition"
- 10:20 am - 10:30 am Discussion
- 10:30 am - 10:50 am **Shane Ardo** (Cal Tech)
"Photoinduced Two-Electron-Transfer Iodide Oxidation at Silicon Microwire Arrays"
- 10:50 am - 11:00 am Discussion
- 11:00 am - 12:30 pm Poster Session II
Coffee will be served in the poster area from 11:00 am - 11:30 am
- 12:30 pm Lunch
- 1:30 pm - 2:30 pm **Electron Transfer**
Discussion Leader: **Thorston Hanson** (Lund University)
- 1:30 pm - 1:50 pm **Andrew Sirjoosingh** (Pennsylvania State University)
"Proton-Coupled Electron Transfer Theory: Generating Charge-Localized States and Quantifying Electron-Proton Nonadiabaticity"
- 1:50 pm - 2:00 pm Discussion
- 2:00 pm - 2:20 pm **Melina Gilbert** (Chalmers)
"Controlling Electron Transfer By Selective Excitation Of Conformers In Pn-C60 Systems"
- 2:20 pm - 2:30 pm Discussion
- 2:30 pm - 3:00 pm Evaluation Period
Fill out GRS Evaluation Forms
- 3:00 pm **Gordon Research Seminar ends. For those attending the associated Gordon Research Conference, please check in at the GRC Office beginning at 4:00 pm.**

Electron Donor-Acceptor Interactions (2012)

Name	Organization	Participation	Status
ABRAHAMSSON, MARIA	CHALMERS UNIVERSITY OF TECHNOLOGY	Speaker	Registered
ACHEY, DARREN C	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered
ALBINSSON, BO	CHALMERS UNIVERSITY OF TECHNOLOGY	Chair	Registered
ARADHYA, SRIHARSHA V	COLUMBIA UNIVERSITY, NEW YORK	Poster Presenter	Registered
ARDO, SHANE A	CALIFORNIA INSTITUTE OF TECHNOLOGY	Poster Presenter	Registered
ARMSTRONG, GAVIN R	NATURE CHEMISTRY	Attendee	Registered
ASPURU-GUZIK, ALAN	HARVARD UNIVERSITY	Speaker	Registered
AULIN, YAROSLAV V	TU DELFT	Poster Presenter	Registered
BAO, DUODUO	UNIVERSITY OF CALIFORNIA, RIVERSIDE	Poster Presenter	Registered
BEAULAC, REMI	MICHIGAN STATE UNIVERSITY	Attendee	Registered
BERLIN, YURI A	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
BERLINGUETTE, CURTIS P	UNIVERSITY OF CALGARY	Discussion Leader	Registered
BETTIS, STEPHANIE E	UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL	Poster Presenter	Registered
BORGES, ANDERS C.	UNIVERSITY OF COPENHAGEN	Poster Presenter	Registered
BRAUNSCHWEIG, ADAM B	NEW YORK UNIVERSITY	Poster Presenter	Registered
BREWER, KAREN	VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY	Speaker	Registered
BRIGHAM, ERINN C	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered
BROWN, KRISTEN E	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
BROWN, ALLISON M	UPPSALA UNIVERSITY	Poster Presenter	Registered
BUHBUT, SOPHIA	BAR-ILAN UNIVERSITY	Poster Presenter	Registered
BUTLER RICKS, ANNIE	MICHIGAN STATE UNIVERSITY	Poster Presenter	Registered
CAMPOS, LUIS M	COLUMBIA UNIVERSITY	Poster Presenter	Registered
CANZI, GABRIELE	UNIVERSITY OF CALIFORNIA, SAN DIEGO	Poster Presenter	Registered
CARRASQUILLO, ARNALDO	UNIVERSITY OF PUERTO RICO AT MAYAGUEZ	Attendee	Registered
CASTELLANO, FELIX N	BOWLING GREEN STATE UNIVERSITY	Attendee	Registered
CHAKRABORTY, DEBAYAN	TATA INSTITUTE OF FUNDAMENTAL RESEARCH	Poster Presenter	Registered
CHANG, CHRISTOPHER J	UNIVERSITY OF CALIFORNIA, BERKELEY	Speaker	Registered
CHEN, LIN	NORTHWESTERN UNIVERSITY	Speaker	Registered
CONRON, SARAH M	UNIVERSITY OF SOUTHERN CALIFORNIA	Poster Presenter	Registered
CURRY, RICHARD J	UNIVERSITY OF SURREY	Poster Presenter	Registered
DAMRAUER, NIELS H	UNIVERSITY OF COLORADO	Speaker	Registered
DEMPSEY, JILLIAN L	UNIVERSITY OF NORTH CAROLINA	Poster Presenter	Registered
DIACONESCU, PAULA L	UNIVERSITY OF CALIFORNIA, LOS ANGELES	Discussion Leader	Registered
DIETZEK, BENJAMIN	UNIVERSITAT JENA	Poster Presenter	Registered
DINOLFO, PETER H	RENSELAER POLYTECHNIC INSTITUTE	Poster Presenter	Registered
EICHBERGER, RAINER	HELMHOLTZ ZENTRUM BERLIN	Poster Presenter	Registered
ELLIOTT, C. MICHAEL	COLORADO STATE UNIVERSITY	Vice Chair	Registered
FECKO, CHRISTOPHER J	UNIVERSITY OF NORTH CAROLINA	Poster Presenter	Registered
FERNANDEZ, LAURA E	PENNSYLVANIA STATE UNIVERSITY	Poster Presenter	Registered
FORBES, MALCOLM D.E	NATIONAL SCIENCE FOUNDATION	Attendee	Registered

FRANK, NATIA L	UNIVERSITY OF VICTORIA	Discussion Leader	Registered
FRASER, MICHAEL G	UNIVERSITY OF OTAGO	Poster Presenter	Registered
GAFFNEY, KELLY J	STANFORD UNIVERSITY	Speaker	Registered
GAGLIARDI, CHRISTOPHER J	UNIVERSITY OF NORTH CAROLINA	Poster Presenter	Registered
GALOPPINI, ELENA	RUTGERS UNIVERSITY - NEWARK	Speaker	Registered
GAMELIN, DANIEL R	UNIVERSITY OF WASHINGTON	Speaker	Registered
GARDNER, DANIEL M	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
GHADIRI, ELHAM	ECOLE POLYTECHNIQUE FEDERAL DE LAUSANNE	Poster Presenter	Registered
GILBERT, MELINA	CHALMERS UNIVERSITY OF TECHNOLOGY	Poster Presenter	Registered
GLOVER, STARLA D	UPPSALA UNIVERSITY	Poster Presenter	Registered
GLUSAC, KSENIJA	BOWLING GREEN STATE UNIVERSITY	Poster Presenter	Registered
GORCZAK, NATALIE	DELFT UNIVERSITY OF TECHNOLOGY	Poster Presenter	Registered
GROZEMA, FERDINAND C	DELFT UNIVERSITY OF TECHNOLOGY	Poster Presenter	Registered
GRUMSTRUP, ERIK M	UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL	Poster Presenter	Registered
GULDI, DIRK M	UNIVERSITY OF ERLANGEN	Speaker	Registered
GUNBAS, DENIZ D	DELFT UNIVERSITY OF TECHNOLOGY	Poster Presenter	Registered
HAGFELDT, ANDERS	UPPSALA UNIVERSITY	Speaker	Registered
HAMMARSTROM, LEIF	UPPSALA UNIVERSITY	Discussion Leader	Registered
HANNESTAD, JONAS K	CHALMERS UNIVERSITY OF TECHNOLOGY	Poster Presenter	Registered
HANSEN, THORSTEN	LUND UNIVERSITY	Poster Presenter	Registered
HANSON, CHRISTINA J	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	Poster Presenter	Registered
HARDY, CHARLIE	3M COMPANY	Attendee	Registered
HEDBERG, JOACHIM	CHALMERS UNIVERSITY OF TECHNOLOGY	Poster Presenter	Registered
HENDERSON, JANE S	UNIVERSITY OF CALIFORNIA, SAN DIEGO	Poster Presenter	Registered
HEYDUK, ALAN F	UC IRVINE	Poster Presenter	Registered
HODGKISS, JUSTIN M	VICTORIA UNIVERSITY OF WELLINGTON	Poster Presenter	Registered
HOLDER, PATRICK G	MIT	Poster Presenter	Registered
HOLMES, STEPHEN M	UNIVERSITY OF MISSOURI-ST. LOUIS	Poster Presenter	Registered
HOPKINS, MICHAEL D	UNIVERSITY OF CHICAGO	Poster Presenter	Registered
HU, KE	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered
HUANG, JIER	ARGONNE NATIONAL LAB	Poster Presenter	Registered
HUIJSER, ANNEMARIE J.M.	UNIVERSITY OF TWENTE	Poster Presenter	Registered
HUTCHISON, GEOFFREY R	UNIVERSITY OF PITTSBURGH	Poster Presenter	Registered
JAGER, WOLTER F	DELFT UNIVERSITY OF TECHNOLOGY	Poster Presenter	Registered
JAKUBIKOVA, ELENA	NORTH CAROLINA STATE UNIVERSITY	Poster Presenter	Registered
JI, ZHIQIANG	THE OHIO STATE UNIVERSITY	Poster Presenter	Registered
JOHANSSON, PATRIK	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered
JONES, MARCUS	UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE	Poster Presenter	Registered
KERN, MEGHAN	UNIVERSITY AT BUFFALO	Poster Presenter	Registered
KHNAYZER, RONY S	BOWLING GREEN STATE UNIVERSITY	Poster Presenter	Registered

KHON, ELENA	BOWLING GREEN STATE UNIVERSITY	Poster Presenter	Registered
KIRK, MARTIN L	THE UNIVERSITY OF NEW MEXICO	Poster Presenter	Registered
KITTLSTVED, KEVIN R	UNIVERSITY OF MASSACHUSETTS AMHERST	Attendee	Registered
KLAUSEN, REBEKKA S	COLUMBIA UNIVERSITY	Poster Presenter	Registered
KLINMAN, JUDITH	UNIVERSITY OF CALIFORNIA, BERKELEY	Speaker	Registered
KNOWLES, KATHRYN E	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
KOO, BON JUN	MIT	Poster Presenter	Registered
KOUZELOS, J. ANDREW	MICHIGAN STATE UNIVERSITY	Poster Presenter	Registered
KRICK CALDERON, RAFAEL M	UNIVERSITY ERLANGEN-NUREMBERG	Poster Presenter	Registered
LARSEN, CHRISTOPHER B	UNIVERSITY OF OTAGO	Poster Presenter	Registered
LEAR, BENJAMIN J	PENN STATE	Poster Presenter	Registered
LI, GUANGQI	NORTHWESTERN UNIVERSITY, NERC	Poster Presenter	Registered
LOCKARD, JENNY V	RUTGERS UNIVERSITY	Poster Presenter	Registered
LOU, SYLVIA	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
LUTTERMAN, DANIEL A	OAK RIDGE NATIONAL LABORATORY	Poster Presenter	Registered
LYKKEBO JORGENSEN, JACOB	UNIVERSITY OF COPENHAGEN	Poster Presenter	Registered
MACMILLAN, DAVID	PRINCETON UNIVERSITY	Speaker	Registered
MAGYAR, JOHN S	BARNARD COLLEGE	Poster Presenter	Registered
MANI, TOMOYASU	UNIVERSITY OF PENNSYLVANIA	Poster Presenter	Registered
MARKLE, TODD F	UPPSALA UNIVERSITY	Poster Presenter	Registered
MARKOVIC, VESNA	UNIVERSITY OF GENEVA	Poster Presenter	Registered
MAROHN, JOHN A	CORNELL UNIVERSITY	Speaker	Registered
MARTINSON, ALEX B F	ARGONNE NATIONAL LABORATORY	Poster Presenter	Registered
MATYUSHOV, DMITRY	ARIZONA STATE UNIVERSITY	Poster Presenter	Registered
MAYER, JAMES M	UNIVERSITY OF WASHINGTON	Speaker	Registered
MCCAFFREY, VANESSA P	ALBION COLLEGE	Poster Presenter	Registered
MCCUSKER, CATHERINE E	BOWLING GREEN STATE UNIVERSITY	Poster Presenter	Registered
MCCUSKER, JAMES K	MICHIGAN STATE UNIVERSITY	Chair	Registered
MCLAURIN, EMILY J	UNIVERSITY OF WASHINGTON	Poster Presenter	Registered
MEYER, GERALD J	JOHNS HOPKINS UNIVERSITY	Speaker	Registered
MEYLEMANS, HEATHER A	NAWCWD	Poster Presenter	Registered
MILLER, ADAM D	3M	Poster Presenter	Registered
MOORE, GARY F	JOINT CENTER FOR ARTIFICIAL PHOTOSYNTHESIS	Poster Presenter	Registered
MOORE, ANA L	ARIZONA STATE UNIVERSITY	Poster Presenter	Registered
MOORE, THOMAS A	ARIZONA STATE UNIVERSITY	Speaker	Registered
MOROZ, PAVEL	BOWLING GREEN STATE UNIVERSITY	Poster Presenter	Registered
MORRIS, LARRY	MICHIGAN STATE UNIVERISTY	Poster Presenter	Registered
MORRIS-COHEN, ADAM J	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
MUKHERJEE, ANUSREE	ARGONNE NATIONAL LABORATORY	Poster Presenter	Registered
MULFORT, KAREN L	ARGONNE NATIONAL LABORATORY	Poster Presenter	Registered
MULHERN, KACIE R	UNIVERSITY AT BUFFALO	Poster Presenter	Registered
NIKLAS, JENS	ARGONNE NATIONAL LABORATORY	Poster Presenter	Registered
NOCERA, DANIEL G	MIT	Attendee	Registered

O'DONNELL, RYAN M	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered
ODOBEL, FABRICE	UNIVERSITY OF NANTES	Speaker	Registered
PARK, HEECHUL	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	Attendee	Registered
PIZANO, ARTURO A	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	Poster Presenter	Registered
POLUEKTOV, OLEG G	ARGONNE NATIONAL LABORATORY	Poster Presenter	Registered
POLYANSKY, DMITRY E	BROOKHAVEN NATIONAL LABORATORY	Poster Presenter	Registered
POPERE, BHOOSHAN C	UNIVERSITY OF MASSACHUSETTS AMHERST	Poster Presenter	Registered
PRYTKOVA, TATIANA R	CHAPMAN UNIVERSITY	Poster Presenter	Registered
RAMAKRISHNA, GUDA	WESTERN MICHIGAN UNIVERSITY	Poster Presenter	Registered
RATNER, MARK A	NORTHWESTERN UNIVERSITY	Discussion Leader	Registered
REGO, LUIS GC	FEDERAL UNIVERSITY OF SANTA CATARINA	Poster Presenter	Registered
REICHERT, THOMAS	UNIVERSITY OF KASSEL	Poster Presenter	Registered
REUTER, MATTHEW G	OAK RIDGE NATIONAL LABORATORY	Poster Presenter	Registered
RHINEHART, JUSTIN M	RUTGERS UNIVERSITY - NEWARK	Poster Presenter	Registered
RITZERT, NICOLE L	CORNELL UNIVERSITY	Poster Presenter	Registered
ROLCZYNSKI, BRIAN S	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
ROSENTHAL, JOEL	UNIVERSITY OF DELAWARE	Poster Presenter	Registered
ROY, XAVIER	COLUMBIA UNIVERSITY	Poster Presenter	Registered
RUMBLES, GARRY	NATIONAL RENEWABLE ENERGY LABORATORY	Discussion Leader	Registered
SARACINI, CLAUDIO	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered
SAZAMA, GRAHAM T	HARVARD UNIVERSITY	Poster Presenter	Registered
SCHENCK, CHRISTINE L	COLUMBIA UNIVERSITY	Poster Presenter	Registered
SCHMIDT, ROBERT D	UNC-CHAPEL HILL	Poster Presenter	Registered
SCHOLES, GREGORY D	UNIVERSITY OF TORONTO	Speaker	Registered
SCHUBERT, CHRISTINA	UNIVERSITY ERLANGEN-NUREMBERG	Poster Presenter	Registered
SCHWALBE, MATTHIAS	HUMBOLDT-UNIVERSITAT ZU BERLIN	Poster Presenter	Registered
SCOTT, AMY M	COLUMBIA UNIVERSITY	Poster Presenter	Registered
SEKITA, MICHAEL	UNIVERSITY ERLANGEN/NUERNBERG	Poster Presenter	Registered
SHAHEEN, SEAN	UNIVERSITY OF DENVER	Speaker	Registered
SHE, CHUNXING	ARGONNE NATIONAL LABORATORY	Poster Presenter	Registered
SHEEHAN, STAFFORD W	YALE UNIVERSITY	Poster Presenter	Registered
SHOER, LEAH	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
SHULTZ, DAVID A	NC STATE UNIVERSITY	Speaker	Registered
SIRJOOSINGH, ANDREW	PENNSYLVANIA STATE UNIVERSITY	Poster Presenter	Registered
SOLOMON, GEMMA C	UNIVERSITY OF COPENHAGEN	Speaker	Registered
STEEGER, MARKUS	UNIVERSITY OF WUERZBURG	Poster Presenter	Registered
STEIN, BENJAMIN W	UNIVERSITY OF NEW MEXICO	Poster Presenter	Registered
STRANO, MICHAEL S.	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	Speaker	Registered
STUCHEBRUKHOV, ALEXEI	UC DAVIS	Speaker	Registered
SUN, LICHENG	KTH ROYAL INSTITUTE OF TECHNOLOGY	Speaker	Registered
SWIERK, JOHN R	PENN STATE UNIVERSITY	Poster Presenter	Registered
SZUROMI, PHILLIP D	SCIENCE MAGAZINE	Attendee	Registered
TAHERI, ATEFEH	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered

THOMSON, JOANNE L	ROYAL SOCIETY OF CHEMISTRY	Attendee	Registered
TIEDE, DAVID M	ARGONNE NATIONAL LABORATORY	Poster Presenter	Registered
TIMMEL, CHRISTIANE R	UNIVERSITY OF OXFORD	Speaker	Registered
TURRO, CLAUDIA	OHIO STATE UNIVERSITY	Discussion Leader	Registered
ULLMAN, ANDREW M	MIT	Poster Presenter	Registered
VAGNINI, MICHAEL T	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
VILLAMAINA, DIEGO	UNIVERSITY OF GENEVA	Poster Presenter	Registered
VINOGRADOV, SERGEI A	UNIVERSITY OF PENNSYLVANIA	Attendee	Registered
VLCEK, JR., A.	UNIVERSITY OF LONDON	Discussion Leader	Registered
VOGT, LESLIE	YALE UNIVERSITY	Poster Presenter	Registered
VULLEV, VALENTINE I	UNIVERSITY OF CALIFORNIA, RIVERSIDE	Attendee	Registered
VURA-WEIS, JOSHUA A	UNIVERSITY OF CALIFORNIA, BERKELEY	Poster Presenter	Registered
WALDECK, DAVID H	UNIVERSITY OF PITTSBURGH	Vice Chair	Registered
WALKER, ALISON B	UNIVERSITY OF BATH	Speaker	Registered
WALTER, MICHAEL G	UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE	Poster Presenter	Registered
WANG, YANG	UNIVERSITY OF PITTSBURGH	Poster Presenter	Registered
WARD, WILLIAM M	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered
WASIELEWSKI, MICHAEL	NORTHWESTERN UNIVERSITY	Discussion Leader	Registered
WATSON, DAVID F	UNIVERSITY AT BUFFALO, SUNY	Attendee	Registered
WEISS, EMILY A	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
WENGER, OLIVER	GEORG-AUGUST UNIVERSITY OF GOTTINGEN	Speaker	Registered
WENNINGER, MATTHIAS	LUDWIG MAXIMIAN UNIVERSITY MUNICH	Poster Presenter	Registered
WILLIAMS, MARY BETH	PENNSYLVANIA STATE UNIVERSITY	Speaker	Registered
WINKLER, JAY R	CALIFORNIA INSTITUTE OF TECHNOLOGY	Attendee	Registered
YAN, YONG	TULANE UNIVERSITY	Poster Presenter	Registered
YIN, XING	UNIVERSITY OF PITTSBURGH	Poster Presenter	Registered
YOUNG, ELIZABETH R	AMHERST COLLEGE	Poster Presenter	Registered
ZAMKOV, MIKHAIL	BOWLING GREEN STATE UNIVERSITY	Poster Presenter	Registered
ZOERB, MATTHEW	UC BERKELEY	Poster Presenter	Registered

195 Attendees

Electron Donor-Acceptor Interactions (GRS) (2012)

Name	Organization	Participation	Status
ACHEY, DARREN C	JOHNS HOPKINS UNIVERSITY	Discussion Leader	Registered
ALBINSSON, BO	CHALMERS UNIVERSITY OF TECHNOLOGY	Attendee	Registered
ARADHYA, SRIHARSHA V	COLUMBIA UNIVERSITY, NEW YORK	Poster Presenter	Registered
ARDO, SHANE A	CALIFORNIA INSTITUTE OF TECHNOLOGY	Speaker	Registered
BORGES, ANDERS C.	UNIVERSITY OF COPENHAGEN	Poster Presenter	Registered
BRIGHAM, ERINN C	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered
BROWN, KRISTEN E	NORTHWESTERN UNIVERSITY	Speaker	Registered
BROWN, ALLISON M	UPPSALA UNIVERSITY	Chair	Registered
BUTLER RICKS, ANNIE	MICHIGAN STATE UNIVERSITY	Poster Presenter	Registered
FERNANDEZ, LAURA E	PENNSYLVANIA STATE UNIVERSITY	Poster Presenter	Registered
FORBES, MALCOLM D.E	NATIONAL SCIENCE FOUNDATION	Poster Presenter	Registered
FRASER, MICHAEL G	UNIVERSITY OF OTAGO	Poster Presenter	Registered
GAGLIARDI, CHRISTOPHER J	UNIVERSITY OF NORTH CAROLINA	Poster Presenter	Registered
GARDNER, DANIEL M	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
GHADIRI, ELHAM	ECOLE POLYTECHNIQUE FEDERAL DE LAUSANNE	Speaker	Registered
GILBERT, MELINA	CHALMERS UNIVERSITY OF TECHNOLOGY	Speaker	Registered
GLOVER, STARLA D	UPPSALA UNIVERSITY	Poster Presenter	Registered
GRUMSTRUP, ERIK M	UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL	Poster Presenter	Registered
HANSEN, THORSTEN	LUND UNIVERSITY	Discussion Leader	Registered
HANSON, CHRISTINA J	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	Poster Presenter	Registered
HEDBERG, JOACHIM	CHALMERS UNIVERSITY OF TECHNOLOGY	Poster Presenter	Registered
HU, KE	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered
HUANG, JIER	ARGONNE NATIONAL LAB	Poster Presenter	Registered
KHNAYZER, RONY S	BOWLING GREEN STATE UNIVERSITY	Poster Presenter	Registered
KOUZELOS, J. ANDREW	MICHIGAN STATE UNIVERSITY	Chair	Registered
LARSEN, CHRISTOPHER B	UNIVERSITY OF OTAGO	Poster Presenter	Registered
LI, GUANGQI	NORTHWESTERN UNIVERSITY, NERC	Poster Presenter	Registered
LYKKEBO JORGENSEN, JACOB	UNIVERSITY OF COPENHAGEN	Poster Presenter	Registered
MANI, TOMOYASU	UNIVERSITY OF PENNSYLVANIA	Speaker	Registered
MARKLE, TODD F	UPPSALA UNIVERSITY	Poster Presenter	Registered
MCCUSKER, CATHERINE E	BOWLING GREEN STATE UNIVERSITY	Speaker	Registered
MCLAURIN, EMILY J	UNIVERSITY OF WASHINGTON	Speaker	Registered
MORRIS, LARRY	MICHIGAN STATE UNIVERISTY	Poster Presenter	Registered
MUKHERJEE, ANUSREE	ARGONNE NATIONAL LABORATORY	Speaker	Registered
NIKLAS, JENS	ARGONNE NATIONAL LABORATORY	Poster Presenter	Registered
NOCERA, DANIEL G	MIT	Speaker	Registered
O'DONNELL, RYAN M	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered
POPERE, BHOOSHAN C	UNIVERSITY OF MASSACHUSETTS AMHERST	Poster Presenter	Registered
ROLCZYNSKI, BRIAN S	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered

SAZAMA, GRAHAM T	HARVARD UNIVERSITY	Poster Presenter	Registered
SHEEHAN, STAFFORD W	YALE UNIVERSITY	Poster Presenter	Registered
SHOER, LEAH	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
SIRJOOSINGH, ANDREW	PENNSYLVANIA STATE UNIVERSITY	Speaker	Registered
STEIN, BENJAMIN W	UNIVERSITY OF NEW MEXICO	Poster Presenter	Registered
SWIERK, JOHN R	PENN STATE UNIVERSITY	Poster Presenter	Registered
TAHERI, ATEFEH	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered
VAGNINI, MICHAEL T	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
VOGT, LESLIE	YALE UNIVERSITY	Discussion Leader	Registered
WANG, YANG	UNIVERSITY OF PITTSBURGH	Poster Presenter	Registered
WARD, WILLIAM M	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered
WENNINGER, MATTHIAS	LUDWIG MAXIMIAN UNIVERSITY MUNICH	Speaker	Registered
YIN, XING	UNIVERSITY OF PITTSBURGH	Poster Presenter	Registered
ZOERB, MATTHEW	UC BERKELEY	Poster Presenter	Registered

53 Attendees

FEDERAL FINANCIAL REPORT

(Follow form instructions)

1. Federal Agency and Organizational Element to Which Report is Submitted DOE	2. Federal Grant or Other Identifying Number Assigned by Federal Agency (To report multiple grants, use FFR Attachment) DE-SC0008141	Page 1	of 1 pages
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3. Recipient Organization (Name and complete address including Zip code)
 Gordon Research Conferences, 512 Liberty Lane, West Kingston, RI 02892

4a. DUNS Number 07-571-2877	4b. EIN 26-0150662	5. Recipient Account Number or Identifying Number (To report multiple grants, use FFR Attachment) 2012 Electron Donor-Acceptor Interactions	6. Report Type <input type="checkbox"/> Quarterly <input type="checkbox"/> Semi-Annual <input checked="" type="checkbox"/> Annual <input type="checkbox"/> Final	7. Basis of Accounting <input checked="" type="checkbox"/> Cash <input type="checkbox"/> Accrual
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8. Project/Grant Period From: (Month, Day, Year) 7/15/2012	To: (Month, Day, Year) 7/14/2013	9. Reporting Period End Date (Month, Day, Year) 7/14/2013
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10. Transactions Cumulative

(Use lines a-c for single or multiple grant reporting)

Federal Cash (To report multiple grants, also use FFR Attachment):	
a. Cash Receipts	9,000
b. Cash Disbursements	9,000
c. Cash on Hand (line a minus b)	0

(Use lines d-o for single grant reporting)

Federal Expenditures and Unobligated Balance:	
d. Total Federal funds authorized	9,000
e. Federal share of expenditures	9,000
f. Federal share of unliquidated obligations	0
g. Total Federal share (sum of lines e and f)	9,000
h. Unobligated balance of Federal funds (line d minus g)	0

Recipient Share:	
i. Total recipient share required	
j. Recipient share of expenditures	
k. Remaining recipient share to be provided (line i minus j)	

Program Income:	
l. Total Federal program income earned	
m. Program income expended in accordance with the deduction alternative	
n. Program income expended in accordance with the addition alternative	
o. Unexpended program income (line l minus line m or line n)	

11. Indirect Expense	a. Type	b. Rate	c. Period From	Period To	d. Base	e. Amount Charged	f. Federal Share
	N/A	N/A	N/A	N/A	N/A	N/A	N/A
g. Totals:						N/A	N/A

12. Remarks: Attach any explanations deemed necessary or information required by Federal sponsoring agency in compliance with governing legislation:

13. Certification: By signing this report, I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and intent set forth in the award documents. I am aware that any false, fictitious, or fraudulent information may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 18, Section 1001)

a. Typed or Printed Name and Title of Authorized Certifying Official Darlene Graveline	c. Telephone (Area code, number and extension) 401-360-1519
b. Signature of Authorized Certifying Official 	d. Email address grants@grc.org
	e. Date Report Submitted (Month, Day, Year) 8/23/12
14. Agency use only:	

Standard Form 425 - Revised 6/28/2010
 OMB Approval Number: 0348-0061
 Expiration Date: 10/31/2011

Paperwork Burden Statement
 According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is 0348-0061. Public reporting burden for this collection of information is estimated to average 1.5 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0061), Washington, DC 20503.

PATENT CERTIFICATION

Gordon Research Conferences
Awardee

Interim Certification

DE-SC0008141 (2012 Electron-Donor Acceptor Interactions)
DOE Prime and/or Subcontract Nos.

Final Certification

Awardee hereby certifies unless indicated to the contrary, that:

1. All procedures for identifying and disclosing subject inventions as required by the patent clause of the contract have been followed throughout the reporting period.
2. There were no subcontracts or purchase orders involving research, development, and demonstration except as follows: (a separate certification must be provided to DOE for each subcontract or purchase order awarded.)
3. No inventions or discoveries were made or conceived in the course of or under this contract other than the following (Certification includes , does not include all subcontracts):

<u>TITLE</u>	<u>INVENTOR</u>	<u>DATE REPORTED</u>	<u>DOE "S" NO.*</u>
--------------	-----------------	----------------------	---------------------

n/a

4. The completion date of this contract is as follows:
5. The following period is covered by this certification:

<u>July</u>	<u>15,</u>	<u>2012</u>	to	<u>July</u>	<u>14,</u>	<u>2013</u>
Month	Day	Year		Month	Day	Year



Gordon Research Conferences
Contractor

Signature

Nancy Ryan Gray

Director and President
Title

512 Liberty Lane, West Kingston, RI 02892
Address

8/23/2012
Date of Certification

* Also include Subcontract No. if available.

NOTE: A positive certification for this Item 3 does not negate the requirement for furnishing to DOE a fully executed Patent Certification from each subawardee identified in Item 2.

**TANGIBLE PERSONAL PROPERTY REPORT
SF- 428**

		Page 1	of 1 Pages
1. Federal Agency and Organization Element to Which Report is Submitted DOE	2. Federal Grant or Other Identifying Number Assigned by Federal Agency DE-SC0008141	3a. DUNS 07-571-2877	3b. EIN 26-0150662
4. Recipient Organization (Name and complete address including zip code) GORDON RESEARCH CONFERENCES 512 LIBERTY LANE WEST KINGSTON RI 02892		5. Recipient Account or Identifying Number 2012 Electron-Donor-Acceptor Interactions	
6. Attachment (Check applicable) <input type="checkbox"/> Annual Report (SF-428-A) <input checked="" type="checkbox"/> Final (Award Closeout) Report (SF-428-B) <input type="checkbox"/> Disposition Report/Request (SF-428-C)		7. Supplemental Sheet <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
8. Comments NO PROPERTY			
9a. Typed or Printed Name and Title of Authorized Certifying Official DARLENE GRAVELINE CONFERENCE OPERATIONS & GRANTS MANAGER		9c. Telephone (area code, number, extension) 401-360-1505	
		9d. Email address GRANTS@GRC.ORG	
9b. Signature of authorized Certifying Official <i>Darlene Graveline</i>		9e. Date report submitted (Month, Day, Year) <i>8/23/12</i>	
10. Agency use only			