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GORDON RESEARCH CONFERENCES *frontiers of science*

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Nancy Ryan Gray, Ph.D.

Director

GORDON RESEARCH CONFERENCE

on 2004 Electron Donor Acceptor Interactions Gordon Conference - August 8-13, 2004

FINAL PROGRESS REPORT

DOE

DE-FG02-04ER15625

The Gordon Research Conference (GRC) on 2004 Electron Donor Acceptor Interactions Gordon Conference - August 8-13, 2004 was held at Salve Regina University, Newport, RI from August 8-13, 2004. The Conference was well-attended with 119 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.

In designing the formal speakers program, emphasis was placed on current unpublished research and discussion of the future target areas in this field.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.

I want to personally 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 As you know, in the interest of promoting the presentation of unpublished and frontier-breaking research, Gordon Research Conferences does not permit publication of meeting proceedings.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.

Dr. Guilfor Jones
Conference Chair

ELECTRON DONOR ACCEPTOR INTERACTIONS

Participant List

Salve Regina University
Aug 8-13, 2004

Name	Organization	Participation	Status
HECTOR ABRUNA	CORNELL UNIVERSITY	Speaker	Registered
DAVID ADAMS	COLUMBIA UNIVERSITY	Speaker	Registered
MICHAEL J AHRENS	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
ELVIN ALEMAN	UNIVERSITY OF AKRON	Poster Presenter	Registered
JOHN E ANTHONY	UNIVERSITY OF KENTUCKY	Speaker	Registered
SUSAN E BAILEY	USC DEPARTMENT OF CHEMISTRY	Poster Presenter	Registered
SUJOY SB BAITALIK	TULANE UNIVERSITY	Poster Presenter	Registered
ILYA A BALABIN	DUKE UNIVERSITY	Poster Presenter	Registered
HANS-CHRISTIAN BECKER	UPPSALA UNIVERSITY	Poster Presenter	Registered
YURI A BERLIN	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
ERIC BITTNER	UNIVERSITY OF HOUSTON	Poster Presenter	Registered
FELIX N CASTELLANO	BOWLING GREEN STATE UNIVERSITY	Attendee	Registered
ROBERT J CAVE	HARVEY MUDD COLLEGE	Poster Presenter	Registered
VINCENT J. CHEBNY	MARQUETTE UNIVERSITY	Poster Presenter	Registered
ERIN T CHERNICK	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
ARINDAM P CHOWDHURY	COLUMBIA UNIVERSITY	Poster Presenter	Registered
STEFANO CORNI	INFM - NATIONAL RESEARCH CENTER S3	Poster Presenter	Registered
JEROME NM CORNIL	UNIVERSITY OF MONS-HAINAUT	Speaker	Registered
BRIAN R CRANE	CORNELL UNIVERSITY	Poster Presenter	Registered
NIELS H DAMRAUER	UNIVERSITY OF COLORADO	Attendee	Registered
ZACH E DANCE	NU CHEMISTRY	Poster Presenter	Registered
FRANS C DE SCHRYVER	KULEUVEN	Attendee	Registered
AMANDA L ECKERMANN	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
SEAN J ELLIOTT	BOSTON UNIVERSITY	Speaker	Registered
C. MICHAEL ELLIOTT	COLORADO STATE UNIVERSITY	Attendee	Registered
TORSTEN FIEBIG	BOSTON COLLEGE	Speaker	Registered
SAMUEL FLORES-TORRES	CORNELL UNIVERSITY	Poster Presenter	Registered
MALCOLM D.E. FORBES	UNIVERSITY OF NORTH CAROLINA	Poster Presenter	Registered
JOVAN M GIAIMO	NORTHWESTERN UNIVERSITY	Attendee	Registered
BRIAN P GILMARTIN	PENN STATE UNIVERSITY	Poster Presenter	Registered
RANDALL H GOLDSMITH	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
NANCY S GOROFF	STATE UNIVERSITY OF NEW YORK	Poster Presenter	Registered
IAN R GOULD	ARIZONA STATE UNIVERSITY	Speaker	Registered
MICHAEL GRAETZEL	SWISS FEDERAL INSTITUTE OF TECHNOLOGY	Speaker	Registered
MARY E GRESS	U.S. DEPARTMENT OF ENERGY	Attendee	Registered
JACOB E GROSE	CORNELL UNIVERSITY	Poster Presenter	Registered
PETER H GRUTTER	MCGILL UNIVERSITY	Speaker	Registered
MASA-AKI HAGA	CHUO UNIVERSITY	Poster Presenter	Registered
LEIF HAMMARSTROM	UPPSALA UNIVERSITY	Poster Presenter	Registered
CHARLIE HARDY	3M COMPANY	Attendee	Registered
MATTHEW R HARTINGS	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
LAURA M HERZ	UNIVERSITY OF OXFORD	Poster Presenter	Registered
MICHAEL W HOLMAN	COLUMBIA UNIVERSITY	Poster Presenter	Registered
NOEL S HUSH	UNIVERSITY OF SYDNEY	Poster Presenter	Registered
GEOFFREY R HUTCHISON	CORNELL UNIVERSITY	Poster Presenter	Registered
HUI JIANG	BOSTON UNIVERSITY, CHEMISTRY DEPARTMENT	Poster Presenter	Registered
MICHAEL B JOHNSTON	OXFORD UNIVERSITY	Poster Presenter	Registered

GUILFORD JONES	BOSTON UNIVERSITY	Chair	Registered
YOUN KANG KANG	UNIVERSITY OF PENNSYLVANIA	Poster Presenter	Registered
SEONG WOO A KANG	CORNELL UNIVERSITY	Poster Presenter	Registered
HOWARD KATZ	BELL LABS-LUCENT TECHNOLOGIES	Speaker	Registered
CHAO-CHENG KAUN	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
TSUTOMU KAWATSU	DUKE UNIVERSITY	Poster Presenter	Registered
RICHARD F KELLEY	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
SHARON E KOH	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
BERN KOHLER	THE OHIO STATE UNIVERSITY	Speaker	Registered
DENIS V KOZLOV	BOWLING GREEN STATE UNIVERSITY	Poster Presenter	Registered
JOSEPH J KREMER	COLORADO STATE UNIVERSITY	Poster Presenter	Registered
VOLKER M. KRIEGISCH	UNIVERSITY OF WURZBURG	Poster Presenter	Registered
CLIFFORD P KUBIAK	UNIVERSITY OF CALIFORNIA, SAN DIEGO	Vice Chair	Registered
IGOR V KURNIKOV	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
CHRISTOPH LAMBERT	UNIVERSIT-T W_RZBURG	Poster Presenter	Registered
FANG LIU	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
CHARLENE LOBO	NATURE MATERIALS	Attendee	Registered
THOMAS MALLOUK	PENNSYLVANIA STATE UNIVERSITY	Speaker	Registered
DMITRY MATYUSHOV	ARIZONA STATE UNIVERSITY	Poster Presenter	Registered
JAMES M MAYER	UNIVERSITY OF WASHINGTON	Speaker	Registered
JAMES K MCCUSKER	MICHIGAN STATE UNIVERSITY	Speaker	Registered
GEORGE L MCLENDON	PRINCETON UNIVERSITY	Speaker	Registered
GERALD J MEYER	JOHNS HOPKINS UNIVERSITY	Speaker	Registered
THOMAS A MOORE	ARIZONA STATE UNIVERSITY	Poster Presenter	Registered
ANA L MOORE	ARIZONA STATE UNIVERSITY	Speaker	Registered
CHRISTOPHER M MORGAN	PENN STATE UNIVERSITY	Attendee	Registered
VLADIMIRO MUJICA	NORTHWESTERN UNIVERSITY	Attendee	Registered
STEPHEN F NELSEN	UNIVERSITY OF WISCONSIN-MADISON	Speaker	Registered
MARSHALL NEWTON	BROOKHAVEN NATIONAL LABORATORY	Speaker	Registered
MICHAEL OGAWA	BOWLING GREEN STATE UNIVERSITY	Speaker	Registered
MARCIA M PAYNE	UNIVERSITY OF KENTUCKY	Poster Presenter	Registered
KEVIN S PETERS	UNIVERSITY OF COLORADO	Speaker	Registered
TATIANA R PRYTKOVA	DUKE UNIVERSITY	Poster Presenter	Registered
RAJENDRA RATHORE	MARQUETTE UNIVERSITY	Poster Presenter	Registered
MARK A RATNER	NORTHWESTERN UNIVERSITY	Chair	Registered
FRANCISCO M RAYMO	UNIVERSITY OF MIAMI	Poster Presenter	Registered
TONG REN	UNIVERSITY OF MIAMI	Poster Presenter	Registered
JOHN R REYNOLDS	UNIVERSITY OF FLORIDA	Speaker	Registered
CHARLES SCHMUTTENMAER	YALE UNIVERSITY	Poster Presenter	Registered
DAVID I SCHUSTER	NEW YORK UNIVERSITY	Speaker	Registered
TAMAR SEIDEMAN	NORTHWESTERN UNIVERSITY	Speaker	Registered
CARLOS SILVA	UNIVERSITY OF CAMBRIDGE	Poster Presenter	Registered
LOUISE E SINKS	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
SPIROS S SKOURTIS	UNIVERSITY OF CYPRUS	Poster Presenter	Registered
MONICA SOLER	MICHIGAN STATE UNIVERSITY	Poster Presenter	Registered
GEMMA C SOLOMON	THE UNIVERSITY OF SYDNEY	Poster Presenter	Registered
ANNICK SPASSKY	CNRS	Poster Presenter	Registered
KATHRYN E SPLAN	DUKE UNIVERSITY	Attendee	Registered
KIMIHIRO SUSUMU	UNIVERSITY OF PENNSYLVANIA	Poster Presenter	Registered
SANKARAN THAYUMANAVAN	UMASS - AMHERST	Attendee	Registered
MICHAEL J THERIEN	UNIVERSITY OF PENNSYLVANIA	Speaker	Registered
ALESSANDRO TROISI	UNIVERSITA DI BOLOGNA	Poster Presenter	Registered
ANTHONY M TROZZOLO	UNIVERSITY OF NOTRE DAME	Evaluator	Registered
KU-DING TSUEI	NATIONAL SYNCHROTRON RADIATION RESEARCH CENTER	Attendee	Registered
CLAUDIA TURRO	OHIO STATE UNIVERSITY	Speaker	Registered

BURAK ULGUT	CORNELL UNIVERSITY	Poster Presenter	Registered
LORI A VERMEULEN	SOUTHERN ILLINOIS UNIVERSITY	Poster Presenter	Registered
DAVID H WALDECK	UNIVERSITY OF PITTSBURGH	Poster Presenter	Registered
STAFFAN G WALLIN	UPPSALA UNIVERSITY	Poster Presenter	Registered
DAVID R WALT	TUFTS UNIVERSITY	Speaker	Registered
JIANDI WAN	BOSTON UNIVERSITY	Poster Presenter	Registered
MICHAEL R WASIELEWSKI	NORTHWESTERN UNIVERSITY	Speaker	Registered
YANHU WEI	BROWN UNIVERSITY	Poster Presenter	Registered
EMILY A WEISS	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
MARY BETH WILLIAMS	PENNSYLVANIA STATE UNIVERSITY	Speaker	Registered
SHANA WOLFF	UNIVERSITY OF AKRON	Poster Presenter	Registered
FRANK WUERTHNER	UNIVERSITY OF WUERZBURG	Speaker	Registered
PING YAN	COLUMBIA UNIVERSITY	Poster Presenter	Registered
XINGZHONG YAN	WAYNE STATE UNIVERSITY	Poster Presenter	Registered
ROIE YERUSHALMI	WEIZMANN INSTITUTE OF SCIENCE	Poster Presenter	Registered
KLAAS ZACHARIASSE	MAX-PLANCK-INSTITUTE FOR BIOPHYSICAL CHEMISTRY	Poster Presenter	Registered
MATTHEW B ZIMMT	BROWN UNIVERSITY	Vice Chair	Registered

Electron Donor Acceptor Interactions

Program

August 8-13, 2004
Salve Regina University
Newport, RI

Chairs: [Guilford Jones](#) & [Mark A Ratner](#)
Vice Chairs: [Clifford P Kubiak](#) & [Matthew B Zimmt](#)

The 2004 Gordon Conference on Donor/Acceptor Interactions will take place at Salve Regina University in Newport, Rhode Island on August 8-13, 2004. Newport is a beautiful and historic setting, replete with mansions, beaches, boating and Narragansett Bay. The conference will be devoted to the consequences of charge interaction and charge motion in molecular and materials systems.

SUNDAY

2:00 pm - 9:00 pm Arrival and check-in

6:00 pm Dinner

7:30 pm - 9:30 pm DONOR/ACCEPTOR DEVICE DYNAMICS

Discussion Leader: **Robert Cave** (Harvey Mudd College)

7:30 pm - 8:10 pm **Theresa Mayer** (Penn State University)

8:10 pm - 8:50 pm **Peter Grutter** (McGill University)
"Forcing Contacts: electrical contacts to nanostructures by atomic force microscopy"

8:50 pm - 9:30 pm **Tamar Seideman** (Northwestern University)
"Current-driven dynamics in molecular-scale devices"

MONDAY

7:30 am - 8:30 am Breakfast

9:00 am - 12:30 pm DONOR/ACCEPTOR FUNDAMENTALS

Discussion Leader: **Frans De Schryver** (Universiteit Leuven)

9:00 am - 9:45 am **Kevin Peters** (University of Colorado)
"Non-adiabatic proton transfer: evidence for the inverted region"

9:45 am - 10:30 am **Jim Mayer** (University of Washington)
"Proton-coupled electron transfer"

10:30 am Coffee Break / Photo

11:00 am - 11:45 am **Stephen F. Nelsen** (University of Wisconsin)
"Excited state splitting in intervalence compounds"

11:45 am - 12:30 pm **Jim McCusker** (Michigan State University)
"Spin effects in intramolecular electron transfer"

12:30 pm Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster Session

6:00 pm Dinner

7:30 pm - 9:30 pm EXTENDED SYSTEMS

Discussion Leader: **Guilford Jones** (Boston University)

7:30 pm - 8:10 pm **Michael Therien** (University of Pennsylvania)
"Photoinduced electron transfer in unusual donor-spacer-acceptor structural motifs interrogated by visible pump/IR probe spectroscopy"

8:10 pm - 8:50 pm **John R. Reynolds** (University of Florida)
"Electronic give and take of heterocycles in conjugated polymers"

8:50 pm - 9:30 pm **Marshall Newton** (Brookhaven National Laboratory)
"Electron transfer mechanisms: probes of activation and tunnelling"

TUESDAY

7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	FRONTIERS
	Discussion Leader: TBA
9:00 am - 9:45 am	Claudia Turro (Ohio State University) "Photophysical properties of bimetallic and mononuclear complexes in solution and bound to DNA"
9:45 am - 10:30 am	Michael Ogawa (Bowling Green State University) "Electron-transfer within dynamic peptide-protein complexes"
10:30 am	Coffee Break
11:00 am - 11:45 am	Sean Elliot (Boston University) "Electrochemical studies of metalloproteins: investigating enzyme mechanism using protein film voltammetry"
11:45 am - 12:30 pm	John Anthony (University of Kentucky) "Engineering the donor/acceptor properties of crystal-engineered acenes"
12:30 pm	Lunch
1:30 pm - 4:00 pm	Free Time
4:00 pm - 6:00 pm	Poster Session
6:00 pm	Dinner
7:30 pm - 9:30 pm	DONOR/ACCEPTOR FUNDAMENTALS
	Discussion Leader: Michael Wasielewski (Northwestern University)
7:30 pm - 8:10 pm	Ian R. Gould (Arizona State University) "Applications of irreversible photooxidants"
8:10 pm - 8:50 pm	Frank Wuerthner (Universitaet Wuerzburg) "Self-organization of multichromophoric dye aggregates"
8:50 pm - 9:30 pm	Jerome Cornil (University of Mons-Hainaut) "Charge transfer processes in organic electronic devices: a quantum-chemical insight"

WEDNESDAY

7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	FRONTIERS
	Discussion Leader: Matthew Zimmt (Brown University)
9:00 am - 9:45 am	Mary Beth Williams (Penn State University) "iDNA"
9:45 am - 10:30 am	Bern Kohler (Ohio State University) "Ultrafast dynamics in proton-coupled electron transfer model systems"
10:30 am	Coffee Break
11:00 am - 11:45 am	Torsten Fiebig (Boston College) "Dynamics of electronic transfer processes- real-time probing of structural and electronic properties of DNA"
11:45 am - 12:30 pm	David Adams (Columbia University) "Single molecule spectroscopy of electron transfer"
12:30 pm	Lunch
1:30 pm - 4:00 pm	Free Time
4:00 pm - 6:00 pm	Poster Session
6:00 pm	Dinner
7:30 pm - 9:30 pm	DEVICES
	Discussion Leader: Mark Ratner (Northwestern University)
7:30 pm - 8:30 pm	Howard E. Katz (Bell Laboratories-Lucent Technologies) "Organic semiconductor devices: solid state structures, deposition mechanisms, and novel architectures"
8:30 pm - 9:30 pm	Michael Graetzel (EPFL) "Photoinduced charge separation and light energy conversion in mesoporous systems"

THURSDAY

7:30 am - 8:30 am Breakfast

9:00 am - 12:30 pm DONOR/ACCEPTOR FUNCTION AND SENSING

Discussion Leader: **Gerald Meyer** (Johns Hopkins University)

9:00 am - 9:45 am **David I. Schuster** (New York University)
"Topological effects on photoinduced electron transfer in porphyrin-fullerene hybrids: Dyads, rotaxanes, catenanes, pseudocatenanes, and molecular wires"

9:45 am - 10:30 am **Ana Moore** (Arizona State University)
"Energy and electron transfer in artificial photosynthesis"

10:30 am Coffee Break

11:00 am - 11:45 am **David R. Walt** (Tufts University)
"Optical and optoelectrical microsensor arrays"

11:45 am - 12:30 pm **Leif Hammarstrom** (Uppsala University)
"Mechanisms of proton coupled electron transfer from aminoacids"

12:30 pm Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster Session

6:00 pm Dinner

7:30 pm - 9:30 pm NEW DIRECTIONS

Discussion Leader: **Clifford Kubiak** (UCSD)

7:30 pm - 8:30 pm **Hector D. Abruna** (Cornell University)
"Redox and photo active building blocks for molecular electronics"

8:30 pm - 9:30 pm **George McLendon** (Duke University)
"Cytochrome c: charge transfer and the suicide hotline"

FRIDAY

7:30 am - 8:30 am Breakfast

9:00 am Departure

FINANCIAL STATUS REPORT

(Follow instructions on the back.)

1. FEDERAL AGENCY AND ORGANIZATIONAL ELEMENT TO WHICH REPORT IS SUBMITTED Earlette M. Robinson U.S. Department of Energy/ACQ Chicago Operations Office 9800 South Cass Avenue Argonne, IL 60439		2. FEDERAL GRANT OR OTHER IDENTIFYING NUMBER DE-FG02-04ER15625		OMB Approved No. 80-R0180	
3. RECIPIENT ORGANIZATION (Name and complete address, including ZIP code) Gordon Research Conferences PO Box 984 West Kingston, RI 02892-0984		4. EMPLOYER IDENTIFICATION NUMBER 050300482			
		5. RECIPIENT ACCOUNT NUMBER OR IDENTIFYING NO.			
		6. FINAL REPORT <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		7. BASIS <input checked="" type="checkbox"/> CASH <input type="checkbox"/> ACCRUAL	
8. PROJECT/GRANT PERIOD (See instructions)		9. PERIOD COVERED BY THIS REPORT			
FROM (Month, day, year) 08/01/2004	TO (Month, day, year) 07/31/2005	FROM (Month, day, year) 08/01/2004		TO (Month, day, year) 07/31/2005	
10. STATUS OF FUNDS					
a. Net outlays previously reported				\$ 0.00	
b. Total outlays this report period				8,500	
c. Less: Program income credits				0.00	
d. Net outlays this report period (Line a minus line c)				8,500	
e. Net outlays to date (Line a plus line d)				8,500	
f. Less: Non-Federal share of outlays				0	
g. Total Federal share of outlays (Line e minus line f)				8,500	
h. Total unliquidated obligations				0.00	
i. Less: Non-Federal share of unliquidated obligations shown on line h				0.00	
j. Federal share of unliquidated obligations (Line h minus line i)				0.00	
k. Total Federal share of outlays and unliquidated obligations (Line g plus j)				8,500	
l. Total cumulative amount of Federal funds authorized				8,500	
m. Unobligated balance of Federal funds (Line l minus line k)				0.00	
11. INDIRECT EXPENSE		a TYPE OF RATE (Place "X" in appropriate box) <input type="checkbox"/> PROVISIONAL <input type="checkbox"/> PREDETERMINED <input type="checkbox"/> FINAL <input type="checkbox"/> FIXED			
		b. RATE	c. BASE	d. TOTAL AMOUNT	e. FEDERAL SHARE
12. REMARKS (Attach any explanations deemed necessary or information required by Federal sponsoring agency in compliance with governing legislation.) 2004 Electron Donor Acceptor Interactions Gordon Conference - August 8-13, 2004					
13. CERTIFICATION I certify to the best of my knowledge and belief that this report is correct and complete and that all outlays and unliquidated obligations are for the purposes set forth in the award documents		SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL <i>Nancy Ryan Gray</i>		DATE REPORT SUBMITTED September 14, 2005	
		TYPED OR PRINTED NAME AND TITLE Nancy Ryan Gray, Director		TELEPHONE (Area code, number, and extension) 401-783-4011	
DISTRIBUTION: Copy 1 - Official Grant File Copy 2 - Grants Section, FAAB Copy 3 - Grantee			STANDARD FORM 269 (7-76) Prescribed by Office of Management and Budget Cir. No. A-110		

FINANCIAL ASSISTANCE
PROPERTY CERTIFICATION

AWARDEE Gordon Research Conferences

AWARD NO. DE-FG02-04ER15625

The DOE Assistance Rules, 10 CFR 600, define property acquired under the terms of the award as either exempt (purchased with DOE operating dollars) or non-exempt (acquired with DOE capital equipment dollars, Government-furnished or acquired from the Government excess property lists). Non-exempt property is normally identified in the award document as Government-owned and requires a Semi-Annual Summary Report of DOE-Owned Plant and Capital Equipment to be submitted **annually** pursuant to DOE regulations.

In order to facilitate grant closeout, please review your property records and complete the applicable Item I, for exempt property, or Item II, for non-exempt property, of this certificate and return it to the Contracting Officer as soon as possible.

- I. There was no reportable residual exempt property of any description at the completion of this award.

SIGNATURE Nancy Ryan Gray

TITLE Director

DATE September 14, 2005

- II A final inventory of residual non-exempt property is enclosed for the category (or categories) checked below:

() A. NONEXPENDABLE PERSONAL PROPERTY, Federally-Owned (acquired with Capital Equipment funds, Government-furnished equipment, or through excess)

() B. EXPENDABLE PERSONAL PROPERTY (SUPPLIES), if fair market value exceeds \$5,000.

Except for the category (categories) checked above, no other reportable residual property Of any description remained on this award at its completion.

SIGNATURE Nancy Ryan Gray

TITLE Director

DATE September 14, 2005

PATENT CERTIFICATION

Gordon Research Conferences

Awardee

☐ Interim Certification

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>
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NONE

4. The completion date of this contract is as follows: 07/31/2005 Award# DE-FG02-04ER15625
5. The following period is covered by this certification:

<u>08/01/2004</u>	to	<u>07/31/2005</u>
Month Day Year		Month Day Year

Gordon Research Conferences
Contractor

Nancy Ryan Gray
Signature

PO Box 984

Director
Title

W. Kingston, RI 02892
Address

September 14, 2005
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.