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GORDON RESEARCH CONFERENCES *frontiers of science*

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2001 GORDON RESEARCH CONFERENCE

on Organometallic Chemistry

FINAL PROGRESS REPORT

DOE

DE-FG02-01ER15190

The Gordon Research Conference (GRC) on Organometallic Chemistry was held at Salve Regina University, Newport, Rhode Island, July 22-27, 2001. The conference was well attended with 133 participants (list enclosed). The attendees represented the spectrum of endeavor in this field coming from academia, industry, and government laboratories, both US 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In designing the formal speakers program, emphasis was placed on current unpublished research and discussion of the future target areas in this field.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. 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 (program enclosed).

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 As you know, in the interest of promoting the presentation of unpublished and frontier-breaking research, Gordon Research Conferences does not permit publication of meeting proceedings.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

Carol Burns
Conference Chair

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- 9:15 **Cassandra Fraser**, U. of Virginia
"Responsive Properties of Polymeric Metal Complexes and their Higher Order Assemblies"
- 9:45 Discussion

Tuesday, July 24

Morning

Discussion Leader: **Lisa McElwee-White**, U. of Florida

- 9:00 **Peter Scott**, U. Warwick
"Achieving High Diastereocontrol in Catalytic Enantioselective Alkene Cyclopropanation"
- 9:30 Discussion
- 9:45 **Seth Brown**, Notre Dame U.
"Amphoteric Reactivity of Osmium Nitrides"
- 10:15 Discussion
- 10:30 Coffee
- 11:00 **Masahiro Murakami**, U. Kyoto
"Activation of Carbon-Carbon Bonds Controlled by Rhodium"
- 11:30 Discussion
- 11:45 Poster Talk #1
- 12:00 Discussion
- 12:05 Poster Talk #2
- 12:20 Discussion
- 12:25 Lunch

Evening

Discussion Leader: **Jasson Patton**, Dow Chemical

- 7:45 **Claudio Bianchini**, U. Florence
"Evidence of a Meso Effect in the Alternating Copolymerization of Carbon Monoxide and Olefins by Pd-Diphosphine Catalysis"
- 8:15 Discussion
- 8:30 **Jessica Cook**, Union Carbide
"Novel Group IV Polyolefin Catalysts with Nitrogen Containing Ligands"
- 9:00 Discussion
- 9:15 **William Tumas**, LANL
"Biphasic Catalysis Approaches using Dense Phase Carbon Dioxide"
- 9:45 Discussion

Wednesday, July 25

Morning

Discussion Leader: **Janet Braddock-Wilking**, UM-SL

- 9:00 **Mitch Smith**, MSU
"Catalytic Hydrocarbon Borylation: What Can We Learn from an Inefficient Catalyst?"
- 9:30 Discussion
- 9:45 **Vivian Yam**, U. Hong Kong
"Design Strategies Towards Luminescent Metal-Based Molecular Materials"
- 10:15 Discussion
- 10:30 Coffee
- 11:00 **Jim Morken**, UNC Chapel Hill
"Development of Catalytic Reactions with Arrayed Catalyst Evaluation"
- 11:30 Discussion
- 11:45 Poster Talk #3
- 12:00 Discussion
- 12:05 Poster Talk #4

12:20 Discussion
12:25 Lunch

Evening

Discussion Leader: **Tom Baker**, LANL

7:45 **T. Don Tilley**, UC Berkeley
"Sigma-Bond Activation Processes at Transition Metal Centers"
8:15 Discussion
8:30 **Robin Perutz**, U. York
"Nickel-Mediated C-F Bond Activation"
9:00 Discussion
9:15 **David Bergbreiter**, Texas A&M U.
"Polymer-Complexed Transition Metal Catalysts"
9:45 Discussion

Thursday, July 26

Morning

Discussion Leader: **Michael Fickes**, Abbott Laboratories

9:00 **Geoffrey Coates**, Cornell University, "Promiscuous Catalysts: New Opportunities for the Synthesis of Defined Polymer Architectures"
9:30 Discussion
9:45 **Phil Power**, UC Davis
"Triple Bonds Between Heavier Main Group Elements"
10:15 Discussion
10:30 Coffee
11:00 **Doug Grotjahn**, SDSU
"Cues from Nature: Metal-Ligand Cooperativity Involving Proton Transfer or Hydrogen Bonding"
11:30 Discussion
11:45 Poster Talk #5
12:00 Discussion
12:05 Poster Talk #6
12:20 Discussion
12:25 Lunch

Evening

Discussion Leader: **Howard Turner**, Symyx Technologies

7:45 Election of Vice Chair for 2002 Conference and other business
8:00 **Charles Casey**, U. of Wisconsin
"New Catalysts for Simultaneous Transfer of H⁺ and H⁻ to Polar Molecules: Hydroxycyclopentadienyl Ruthenium Hydrides"
8:30 Discussion
John Bercaw, California Institute of Technology
"Mechanisms of Chain Transfer during Propylene Polymerization with Metallocene Catalysts"
9:15 Discussion
9:30 Adjourn Conference



ORGANOMETALLIC CHEMISTRY

SALVE REGINA UNIVERSITY
(22-Jul-01) - (27-Jul-01)

This was the final registration list for the 2001 Conference on
ORGANOMETALLIC CHEMISTRY.

Name	Organization	Participation	Status
BRUCE A ARNDTSEN	MCGILL UNIVERSITY	Poster Presenter	Registered
ANDREW T AU	SABIC AMERICAS, INC.	Attendee	Registered
R. TOM BAKER	LOS ALAMOS NATIONAL LABORATORY	Discussion Leader	Registered
JOHN E BERCAW	CALIFORNIA INSTITUTE OF TECHNOLOGY	Speaker	Registered
DAVID E BERGBREITER	TEXAS A&M UNIVERSITY	Speaker	Registered
CLAUDIO BIANCHINI	ISSECC-CNR	Speaker	Registered
JOHN R BLEEKE	WASHINGTON UNIVERSITY	Poster Presenter	Registered
JAMES M BONCELLA	UNIVERSITY OF FLORIDA	Poster Presenter	Registered
JANET BRADDOCK-WILKING	UNIVERSITY OF MISSOURI - ST. LOUIS	Discussion Leader	Registered
JUSTIN K BRASK	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	Poster Presenter	Registered
SETH N BROWN	UNIVERSITY OF NOTRE DAME	Speaker	Registered
HENRY E BRYNDZA	DUPONT	Attendee	Registered
MORRIS BULLOCK	BROOKHAVEN NATIONAL LABORATORY	Poster Presenter	Registered
EMILIO E BUNEL	ELI LILLY	Attendee	Registered
DAVID J BURKEY	SAN DIEGO STATE UNIVERSITY	Poster Presenter	Registered
CAROL J BURNS	LOS ALAMOS NATIONAL LABORATORY	Chair	Registered
CHARLES P CASEY	UNIVERSITY OF WISCONSIN AT MADISON	Speaker	Registered
ASHOK G CHAUDHARY	MERCK & CO., INC	Attendee	Registered
TIANNIU CHEN	UNIVERSITY OF TENNESSEE	Poster Presenter	Registered
GEOFFREY W COATES	CORNELL UNIVERSITY	Speaker	Registered
JESSICA A COOK	UNION CARBIDE	Speaker	Registered
JOYCE Y COREY	UNIVERSITY OF MISSOURI - ST LOUIS	Attendee	Registered
KATHARINE J COVERT	NATIONAL SCIENCE FOUNDATION	Attendee	Registered
CHRISTOPHER C CUMMINS	MASSACHUSETTS INST. OF TECHNOLOGY	Poster Presenter	Registered
CALVIN J CURTIS	NATIONAL RENEWABLE ENERGY LABORATORY	Poster Presenter	Registered
PAUL A DECK	VIRGINIA TECH	Poster Presenter	Registered
PAULA L DIACONESCU	MIT	Poster Presenter	Registered
FABIO DOCTOROVICH	UNIVERSITY OF BUENOS AIRES	Poster Presenter	Registered
BERNADETTE T DONOVAN-MERKERT	UNIVERSITY OF NORTH CAROLINA CHARLOTTE	Poster Presenter	Registered
SVEN DOYE	UNIVERSITAET HANNOVER	Poster Presenter	Registered
MARY R DUBOIS	UNIVERSITY OF COLORADO	Poster Presenter	Registered
RICHARD EISENBERG	UNIVERSITY OF ROCHESTER	Poster Presenter	Registered
GREGORY M FERRENCE	DEPARTMENT OF CHEMISTRY	Poster Presenter	Registered
MICHAEL FICKES	ABBOTT LABORATORIES	Discussion Leader	Registered
LESLIE D FIELD	UNIVERSITY OF SYDNEY	Attendee	Registered
MARK J FINK	TULANE UNIVERSITY	Poster Presenter	Registered
RICHARD A FISHER	MATERIA, INC.	Poster Presenter	Registered
CASSANDRA FRASER	UNIVERSITY OF VIRGINIA	Speaker	Registered
BRIAN J FROST	COLUMBIA UNIVERSITY	Poster Presenter	Registered
MICHAEL D FRYZUK	UNIVERSITY OF BRITISH COLUMBIA	Poster Presenter	Registered
SANDRO GAMBAROTTA	UNIVERSITY OF OTTAWA	Attendee	Registered
JUVENTINO J GARCIA	NATIONAL AUT. UNIVERSITY OF MEXICO (UNAM)	Poster Presenter	Registered
DAVID GINDELBERGER	MATERIA, INC.	Attendee	Registered
DAVID S GLUECK	DARTMOUTH COLLEGE	Poster Presenter	Registered
ALAN S GOLDMAN	RUTGERS UNIVERSITY	Speaker	Registered
DOUGLAS GROTHJAHN	SAN DIEGO STATE UNIVERSITY	Speaker	Registered
JOHN R HAGADORN	UNIVERSITY OF COLORADO	Poster Presenter	Registered
BRIAN E HANSON	VIRGINIA TECH	Poster Presenter	Registered

TIMOTHY P HANUSA	VANDERBILT UNIVERSITY	Poster Presenter	Registered
ELISABETH HAUPTMAN	DUPONT CENTRAL RESEARCH AND DEVELOPMENT	Attendee	Registered
JOHANNES HEINEMANN	BASF-AG	Attendee	Registered
PATRICK HOLLAND	UNIVERSITY OF ROCHESTER	Poster Presenter	Registered
RUSSELL P HUGHES	DARTMOUTH COLLEGE	Poster Presenter	Registered
CARL N. IVERSON	LOS ALAMOS NATIONAL LABORATORY	Attendee	Registered
FRIEDER JAKLE	RUTGERS UNIVERSITY	Poster Presenter	Registered
KUMUDINI C JAYARATNE	UNIVERSITY OF MARYLAND	Poster Presenter	Registered
CRAIG M JENSEN	UNIVERSITY OF HAWAII	Poster Presenter	Registered
LI L JIA	LEHIGH UNIVERSITY	Poster Presenter	Registered
WIECHANG JIN	UNIVERSITY OF WISCONSIN-MADISON	Poster Presenter	Registered
WILLIAM D JONES	UNIVERSITY OF ROCHESTER	Poster Presenter	Registered
YASUTAKA KATAOKA	OSAKA UNIVERSITY	Poster Presenter	Registered
JERRY KEISTER	UNIVERSITY AT BUFFALO	Poster Presenter	Registered
FRAN M KERTON	UNIVERSITY OF YORK	Poster Presenter	Registered
JAQUELINE L KIPLINGER	LOS ALAMOS NATIONAL LABORATORY	Discussion Leader	Registered
JERZY KLOSIN	THE DOW CHEMICAL COMPANY	Speaker	Registered
RANDOLF D KOHN	DEPARTMENT OF CHEMISTRY, UNIVERSITY OF BATH	Poster Presenter	Registered
SHANE W KRSKA	MERCK RESEARCH LABORATORIES	Poster Presenter	Registered
FOLAMI T LADIPO	UNIVERSITY OF KENTUCKY	Poster Presenter	Registered
CLARK R LANDIS	UNIVERSITY OF WISCONSIN	Poster Presenter	Registered
ANNE M LAPOINTE	SYMIX TECHNOLOGIES	Speaker	Registered
DIMITRI LEMENOVSKII	MOSCOW STATE UNIVERSITY	Poster Presenter	Registered
ROBERT T LI	EXXONMOBIL CHEMICAL	Attendee	Registered
WENMING LIU	NOVARTIS PHARMACEUTICALS CORP.	Attendee	Registered
JANIS LOUIE	UNIVERSITY OF UTAH	Poster Presenter	Registered
BRETT L LUCHT	UNIVERSITY OF RHODE ISLAND	Discussion Leader	Registered
MAHESH K MAHANTHAPPA	STANFORD UNIVERSITY	Poster Presenter	Registered
LENORE H MCALEXANDER	IDAHO STATE UNIVERSITY	Attendee	Registered
DAVID H MCCONVILLE	EXXONMOBIL CHEMICAL COMPANY	Attendee	Registered
LISA MCELWEE-WHITE	UNIVERSITY OF FLORIDA	Discussion Leader	Registered
CHRISTIAN P MEHNERT	EXXONMOBIL RESEARCH AND ENGINEERING COMPANY	Attendee	Registered
ANTONIO MEZZETTI	SWISS FEDERAL INSTITUTE OF TECHNOLOGY (ETH ZURICH)	Poster Presenter	Registered
DAVID MILSTEIN	THE WEIZMANN INSTITUTE OF SCIENCE	Poster Presenter	Registered
DANIEL J MINDIOLA	THE UNIVERSITY OF CHICAGO	Poster Presenter	Registered
KENNETH G MOLOY	DU PONT CR&D	Attendee	Registered
ANDREW T MOREHEAD	UNIVERSITY OF MARYLAND	Poster Presenter	Registered
JAMES P MORKEN	UNIVERSITY OF NORTH CAROLINA	Speaker	Registered
MASAHIRO MURAKAMI	KYOTO UNIVERSITY	Speaker	Registered
HIDEO NAGASHIMA	KYUSHU UNIVERSITY	Speaker	Registered
BERNHARD NEUMUELLER	UNIVERSITY OF MARBURG	Attendee	Registered
JACK R NORTON	COLUMBIA UNIVERSITY	Attendee	Registered
AARON L ODOM	MICHIGAN STATE UNIVERSITY	Poster Presenter	Registered
ROCCO PACIELLO	BASF AG	Attendee	Registered
GIANLUCA PAPEO	PHARMACIA AND UPJOHN	Attendee	Registered
GERARD PARKIN	COLUMBIA UNIVERSITY	Poster Presenter	Registered
LAWRENCE E PATTERSON	ELI LILLY AND COMPANY	Attendee	Registered
JASSON T PATTON	DOW CHEMICAL COMPANY	Discussion Leader	Registered
THOMAS PECHMANN	INSTITUTE OF INORGANIC CHEMISTRY	Poster Presenter	Registered
ROY A PERIANA	UNIVERSITY OF SOUTHERN CALIFORNIA	Poster Presenter	Registered
ROBIN N PERUTZ	UNIVERSITY OF YORK	Speaker	Registered
JONAS C PETERS	CALTECH	Poster Presenter	Registered
PHILIP P POWER	UNIVERSITY OF CALIFORNIA	Speaker	Registered
CHANGTAO QIAN	SIOC CHINESE ACADEMY OF SCIENCE	Poster Presenter	Registered
NORA S RADU	DUPONT CO.	Speaker	Registered
BRINDABAN C RANU	INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE	Poster Presenter	Registered
TONG REN	UNIVERSITY OF MIAMI	Poster Presenter	Registered
MICHAEL A REYNOLDS	UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN	Poster Presenter	Registered
CHARLIE G RIORDAN	UNIVERSITY OF DELAWARE	Poster Presenter	Registered
BORIS RYBTCHINSKI	WEIZMANN INSTITUTE OF SCIENCE	Poster Presenter	Registered

AARON D SADOW	UNIVERSITY OF CALIFORNIA- BERKLEY	Poster Presenter	Registered
MATTHIAS SCHNEIDER	SCHERING AG	Attendee	Registered
MADELEINE SCHULTZ	ORGANISCH-CHEMISCHES INSITUT	Poster Presenter	Registered
PETER SCOTT	UNIVERSITY OF WARWICK	Speaker	Registered
MICHAEL J SCOTT	UNIVERSITY OF FLORIDA	Poster Presenter	Registered
KEVIN H SHAUGHNESSY	THE UNIVERSITY OF ALABAMA	Poster Presenter	Registered
ULRICH SIEMELING	UNIVERSITY OF KASSEL	Poster Presenter	Registered
GARY S SILVERMAN	ATO-FINA	Attendee	Registered
MITCH R SMITH	MICHIGAN STATE UNIVERSIY	Speaker	Registered
SHANNON STAHL	UNIVERSITY OF WISCONSIN	Poster Presenter	Registered
JEFFREY M STRYKER	UNIVERSITY OF ALBERTA	Speaker	Registered
DWIGHT A SWEIGART	BROWN UNIVERSITY	Poster Presenter	Registered
SLAWOMIR R SZAFERT	UNIVERSITY OF WR	Poster Presenter	Registered
MATTHIAS TAMM	UNIVERSITY OF MUENSTER	Poster Presenter	Registered
KLAUS H THEOPOLD	UNIVERSITY OF DELAWARE	Poster Presenter	Registered
DON TILLEY	UNIV. OF CALIFORNIA, BERKELEY	Speaker	Registered
WILLIAM TUMAS	LOS ALAMOS NATIONAL LAB	Speaker	Registered
HOWARD W TURNER	SYMYX TECHNOLOGIES	Discussion Leader	Registered
DANIEL D VANDERLENDE	THE DOW CHEMICAL COMPANY	Attendee	Registered
ALAN VAUGHAN		Speaker	Registered
JOHN F WALZER	EXXONMOBIL	Attendee	Registered
H WERNER	SONDERFORSCHUNGSBEREICH 347	Poster Presenter	Registered
CHARLES H WINTER	WAYNE STATE UNIVERSITY	Poster Presenter	Registered
PETER T WOLCZANSKI	CORNELL UNIVERSITY	Vice Chair	Registered
VIVIAN W YAM	UNIVERSITY OF HONG KONG	Speaker	Registered

