



GORDON RESEARCH CONFERENCES *frontiers of science*

P.O. Box 984, WEST KINGSTON, RI 02892-0984
PHONE: 401 783-4011 • FAX: 401 783-7644
E-MAIL: grc@grcmail.grc.uri.edu
WORLD WIDE WEB: <http://www.grc.uri.edu>

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In designing the formal speakers program, emphasis was placed on current unpublished research and discussion of the future target areas in this field.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 As you know, in the interest of promoting the presentation of unpublished and frontier-breaking research, Gordon Research Conferences does not permit publication of meeting proceedings.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 Diastereoccontrol 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 Blanchini, 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

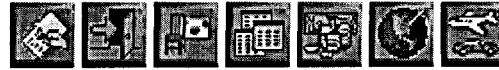
8:00 **Charles Casey**, U. of Wisconsin
"New Catalysts for Simultaneous Transfer of H+ and H- to Polar Molecules:
Hydroxycyclopentadienyl Ruthenium Hydrides"

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 | MARTERIA, INC. | Attendee | Registered |
| DAVID S GLUECK | DARTMOUTH COLLEGE | Poster Presenter | Registered |
| ALAN S GOLDMAN | RUTGERS UNIVERSITY | Speaker | Registered |
| DOUGLAS GROTJAHN | SAN DIEGO STATE UNIVERSITY | Speaker | Registered |
| JOHN R HAGADORN | UNIVERSITY OF COLORADO | Poster Presenter | Registered |
| BRIAN E HANSON | VIRGINIA TECH | Poster Presenter | Registered |

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| 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 LAPONTE | SYMYX 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 |

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| AARON D SADOW | UNIVERSITY OF CALIFORNIA- BERKLEY | Poster Presenter | Registered |
| MATTHIAS SCHNEIDER | SCHERING AG | Attendee | Registered |
| MADELEINE SCHULTZ | ORGANISCH-CHEMISCHES INSTITUT | 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 | EXXONMOBIL | Speaker | Registered |
| JOHN F WALZER | SONDERFORSCHUNGSBEREICH 347 | Attendee | Registered |
| H WERNER | WAYNE STATE UNIVERSITY | Poster Presenter | Registered |
| CHARLES H WINTER | CORNELL UNIVERSITY | Poster Presenter | Registered |
| PETER T WOLCZANSKI | UNIVERSITY OF HONG KONG | Vice Chair | Registered |
| VIVIAN W YAM | | Speaker | Registered |

