

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE

DTIC FILE COPY

2

AD-A226 673

1. REPORT SECURITY CLASSIFICATION		1b. RESTRICTIVE MARKINGS									
2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION/AVAILABILITY OF REPORT									
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE		unlimited									
4. PERFORMING ORGANIZATION REPORT NUMBER(S)		5. MONITORING ORGANIZATION REPORT NUMBER(S)									
		AFOSR-TR- 90 1021									
6a. NAME OF PERFORMING ORGANIZATION	6b. OFFICE SYMBOL (If applicable)	7a. NAME OF MONITORING ORGANIZATION									
University of Rhode Island		AFOSR/NC									
6c. ADDRESS (City, State and ZIP Code)		7b. ADDRESS (City, State and ZIP Code)									
Gordon Research Conferences Kingston, RI 02881		Bldg 410 Bolling AFB DC 20332-6448									
8a. NAME OF FUNDING/SPONSORING ORGANIZATION	8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER									
AFOSR	NC ✓	AFOSR-84-0102									
8c. ADDRESS (City, State and ZIP Code)		10. SOURCE OF FUNDING NOS.									
Bldg 410 Bolling AFB, DC 20332-6448		<table border="1"> <tr> <th>PROGRAM ELEMENT NO.</th> <th>PROJECT NO.</th> <th>TASK NO.</th> <th>WORK UNIT NO.</th> </tr> <tr> <td>61102F Chemistry</td> <td>2303</td> <td>B2</td> <td></td> </tr> </table>		PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT NO.	61102F Chemistry	2303	B2	
PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT NO.								
61102F Chemistry	2303	B2									
11. TITLE (Include Security Classification)											
Gordon Research Conference on Organometallic											
12. PERSONAL AUTHOR(S)											
J.W. Faller											
13a. TYPE OF REPORT	13b. TIME COVERED	14. DATE OF REPORT (Yr., Mo., Day)	15. PAGE COUNT								
FINAL	FROM 1 Apr 84 to 31 Mar 85	Dec 85	4								
16. SUPPLEMENTARY NOTATION											
17. COSATI CODES		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)									
FIELD	GROUP	SUB. GR.									
		organometallic chemistry									
19. ABSTRACT (Continue on reverse if necessary and identify by block number)											
DTIC ELECTE SEP 19 1990 S E D											
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT		21. ABSTRACT SECURITY CLASSIFICATION									
UNCLASSIFIED/UNLIMITED ☐ SAME AS RPT. ☐ DTIC USERS ☐											
22a. NAME OF RESPONSIBLE INDIVIDUAL	22b. TELEPHONE NUMBER (Include Area Code)	22c. OFFICE SYMBOL									
Anthony J. Matuszko	767-4963	NC									

APR 22 1986

FINAL SCIENTIFIC REPORT

AIR FORCE GRANT AFOSR-84-0102

GORDON RESEARCH CONFERENCE ON ORGANOMETALLIC CHEMISTRY

Accession For	
NTIS GRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	



GORDON RESEARCH CONFERENCE ON ORGANOMETALLIC CHEMISTRY

AIR FORCE GRANT AFOSR-84-0102

✓ The financial support of the Air Force Office of Scientific Research was greatly appreciated in the organization and presentation of this conference. The additional funds provided by AFOSR allowed the assembling of an outstanding group of speakers. In particular, it provided sufficient incremental funds to support travel for speakers from greater distances and allowed us to extend invitations to internationally recognized speakers from Canada, England, France, Hungary, and Japan. > 682

The conference was very successful and included 122 participants. The topics covered many areas of current activity in organometallic chemistry and a program summary is given on the following pages. The discussions were stimulating and I was pleased to receive numerous personal comments, as well as letters, complementing the organizing committee on the program.

Jw Faller

FINAL PROGRAM
GORDON RESEARCH CONFERENCE ON ORGANOMETALLIC CHEMISTRY
August 13-17, 1984, Proctor Academy, Andover, N.H.

Chairman: Jack Faller, Yale University
Vice Chairman: Duane Dombek, Union Carbide

→ *to top included*
SESSION 1. Bonding and Reactivity in Organometallics
Discussion leader: R. McKinney DuPont

Some Problems in Acetylene Metathesis,
Thomas Albright Houston

→ Bimetallic Clusters)
Joseph Lauher SUNY, Stony Brook

→ Electron Transfer and Reactions of Organometallics
Didier Astruc Bordeaux

SESSION 2. Stereochemistry and Mechanisms
Discussion leader: Jack Faller Yale

Asymmetric Catalytic Allylation
Brice Bosnich Toronto

Mechanisms of Coenzyme B₁₂-Promoted Reactions: Organometallics
as Free Radical Precursors
Jack Halpern Chicago

SESSION 3. Alkane Activation by Homogeneous Systems
Discussion leader: Jennifer Quirk Union Carbide

From Alkanes to Transition Metal Hydrido Alkyls
William Graham Alberta

C-H and C-C Bond Activation in Alkanes
Robert Crabtree Yale

Oxidative Addition of Alkane C-H Bonds to Complexes of Rh and Ir
Robert Bergman UC Berkeley

SESSION 4. Oxidation in Systems with Metal-Carbon Bonds. (JY) ~~←~~
Discussion leader: James Lyons SunTech

Ligand Mediated Oxygen Atom Transfer: Oxidation of Alkanes
Mark Andrews Brookhaven

Reductive Activation of Dioxygen for Catalytic Oxidation of
Hydrocarbons using Transition Metal Complexes
Brian James British Columbia

SESSION 5. Reactions In Metal Clusters and Multiply Bonded Systems

Discussion leader: Phillip Garron Dow

N-H Bond Formation in Nitrido and Nitrosyl Metal Clusters

Wayne Gladfelter Minnesota

The Road from Acetylenes to Metal to Carbon Multiple Bonds

Michael Green Bristol

Sulfided Bimetallic Clusters Incorporating Early and Late Transition Metals: Unusual CO Hydrogenation Catalyst Precursors.

M. David Curtis Michigan

SESSION 6. Catalysis with Lanthanide and Actinide Systems

Discussion leader: John Gilje Hawaii

Recent Developments in Organolanthanide Catalysis

Patricia Watson DuPont

Ligand Substitution and Electron-Transfer Processes of Uranium(III) Metallocenes

R. Andersen UC Berkeley

SESSION 7. Organometallics in Organic Synthesis

Discussion leader: Howard Alper Ottawa

Transition Metal Organometallics in Organic Synthesis

Anthony Pearson Case Western

The Activation of Alcohols and Amines with Transition Metal Complex Catalysts

S-I Murahashi Osaka

Two-electron, Three-Center M---H---C Bonds and Their Relationship to Alkyl Insertion Reactions

M. Brookhart North Carolina

SESSION 8. Advances in Main Group Organometallics

Discussion leader: David Singleton Shell

Compounds with Multiple Bonding Between Main-Group and Transition Elements

Alan Cowley Texas, Austin

The Influence of Bulky Ligands in Organo-group 3 Chemistry

O.T. Beachley SUNY, Buffalo

SESSION 9. Catalysis by Organometallics

Discussion Leader: Duane Dombek Union Carbide

Mechanistic Aspects of Transition Metal Catalyzed Carbonylation Reactions

A. Sen Pennsylvania State

New Aspects of the Iridium Complex Promoted Oxidative Addition of H-H and C-H Bonds

R. Eisenberg Rochester

Hydrogenation of C=O and C=N Bonds using Cr, Fe, Co and Rh Complexes as Catalysts

Lazlo Marko Hungary