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a. REPORT UU	b. ABSTRACT UU	c. THIS PAGE UU			19b. TELEPHONE NUMBER 734-647-4750

RPPR Final Report

as of 30-May-2020

Agency Code:

Proposal Number: 76310CHCF

Agreement Number: W911NF-20-1-0019

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EIN: 050300482

Report Date: 23-Sep-2020

Date Received: 28-May-2020

Final Report for Period Beginning 23-Dec-2019 and Ending 23-Jun-2020

Title: 2020 Electrochemistry Gordon Research Conference and Gordon Research Seminar

Begin Performance Period: 23-Dec-2019

End Performance Period: 23-Jun-2020

Report Term: 0-Other

Submitted By: Nancy Gray

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Distribution Statement: 1-Approved for public release; distribution is unlimited.

STEM Degrees:

STEM Participants: 96

Major Goals: The 2020 Gordon Research Conference on Electrochemistry will highlight, contextualize, and promote the latest advances in electrochemical sciences, featuring an array of expert scientists both as speakers and as discussion leaders. The general intent of the meeting program is to stimulate rigorous discussion, debate, and ideation on a range of topics pertinent to charge transfer. The specific objectives of the meeting are three-fold: (1) to educate researchers from all backgrounds on the latest findings in the most active areas of electrochemical research, (2) to present a forum for domestic and international scientists active in electrochemical research to meet and to interact directly, and (3) to facilitate networking between seasoned researchers in electrochemistry and new investigators in electrochemical research. Sessions topics will include the formation of chemical fuels via electrochemical transformations, energy storage technologies, advances in electroanalytical methods to study electrochemical and photoelectrochemical reactions, and the design of advanced electrocatalysts for use in photoelectrochemical systems. In addition to oral presentations with extended Q&A sessions, this meeting will also include multiple poster sessions, an open session for short talks from any attendee, an afternoon professional development workshop, and a separate, student-run meeting (Graduate Research Seminar on Electrochemistry) held the weekend immediately preceding the start of the 2020 Gordon Research Conference on Electrochemistry. In total, this meeting will benefit the participants through networking opportunities, stimulating new/expanded collaborations, brainstorming, and feedback on their current results.

Accomplishments: The 2020 Electrochemistry GRC celebrated its 50th meeting and was one of the most exciting and important meetings in fundamental electrochemistry applied to organic and inorganic molecular materials, electrocatalysis, energy storage and bioelectrochemistry. We brought together an outstanding and diverse group of scientists at the forefront of research and will made every attempt to include younger scientists and students as well.

The Gordon Research Seminar on Electrochemistry was 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. This seminar covered topics of research including (but not limited to) fundamental electrochemistry, electrocatalysis, electrochemical energy storage, bioelectrochemical systems, single molecule/entity electrochemistry, theoretical and computational electrochemistry, organic electrochemistry and electroanalytical

RPPR Final Report as of 30-May-2020

methods.

Training Opportunities: Speakers, discussion leaders, poster presenters and attendees simultaneously contributed to and benefited from the collective skills and experience shared throughout the conference.

Results Dissemination: The final conference program has been posted on the GRC website.

Honors and Awards: Nothing to Report

Protocol Activity Status:

Technology Transfer: Nothing to Report



GORDON RESEARCH CONFERENCES

FINAL PROGRESS REPORT
Army Research Office
Electrochemistry GRC/GRS

Grant Number W911NF2010019

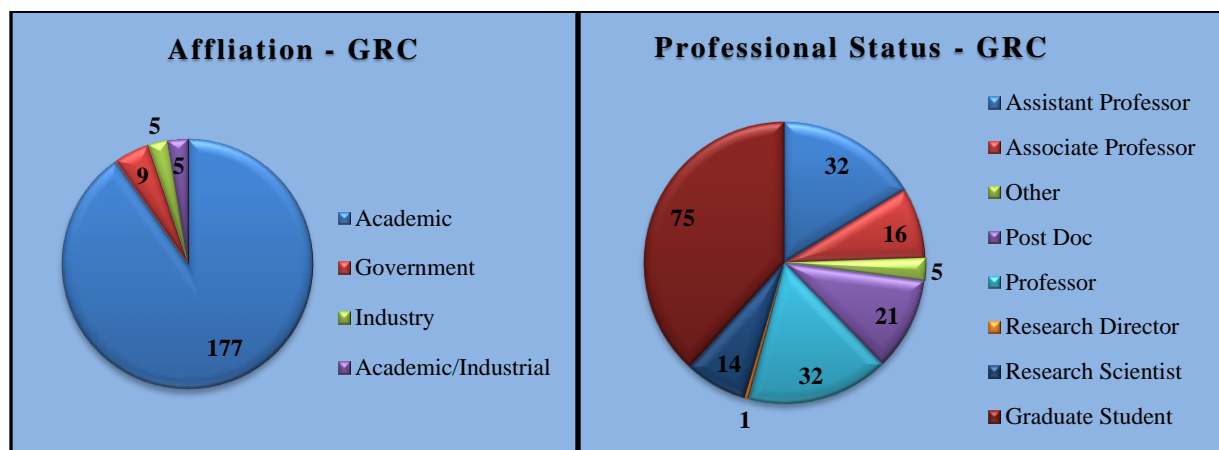
Operational Summary

The Gordon Research Conference (GRC) and Gordon Research Seminar (GRS) on Electrochemistry were held at the Four Points Sheraton in Ventura, California from January 4-10, 2020. The meeting covered a variety of scientific topics and the content presented was highly rated by participants.



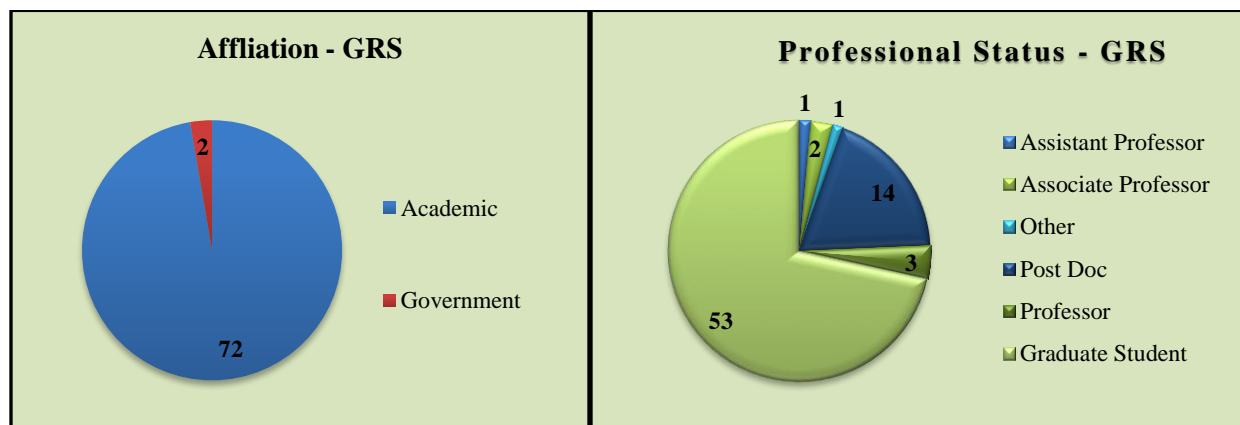
Conference Participants

The conference was well-attended with 1960 participants. Scientists from academia represented 90% of the participants while attendees from government accounted for 4%, attendees from industry totaled 3% and those from academic/industrial accounted for 3%. The meeting also attracted a strong mix of young investigators and senior scientists. Students and post-docs accounted for 49% of all attendees. Approximately 37% of the participants at the 2020 meeting were women.



Seminar Participants

The seminar was well-attended with 74 participants. Scientists from academia represented 97% of the participants while attendees from government accounted for 3%. The seminar also attracted a strong mix of young investigators and senior scientists. Students and post-docs accounted for 91% of all attendees. Approximately 41% of the participants at the 2020 seminar were women.



Conference Program

The 2020 Electrochemistry GRC celebrated its 50th meeting and was one of the most exciting and important meetings in fundamental electrochemistry applied to organic and inorganic molecular materials, electrocatalysis, energy storage and bioelectrochemistry. We brought together an outstanding and diverse group of scientists at the forefront of research and will make every attempt to include younger scientists and students as well.

The Gordon Research Seminar on Electrochemistry was 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. This seminar covered topics of research including (but not limited to) fundamental electrochemistry, electrocatalysis, electrochemical energy storage, bioelectrochemical systems, single molecule/entity electrochemistry, theoretical and computational electrochemistry, organic electrochemistry and electroanalytical methods.

Conference Budget

Funding provided by the Army Research Office supported partial registration for 4 postdocs, 3 graduate students, 5 professors, 4 associate professors and 9 assistant professors at the GRC and partial registration for 10 graduate students, 4 postdocs, 1 other and 1 assistant professor at the GRS.

Conference Feedback

Participants had an opportunity to provide feedback at the end of the Conference. The feedback collected from the meeting was extremely positive. Evaluations included numerous positive remarks regarding diversity of topics, networking opportunities and the discussion time after each presentation. Evaluations from the GRS included positive comments regarding the proposal writing panel, discussions at posters and the data focused short talks.

GRC would like to thank the Army Research Office for its continued support of the meetings. The contributions received have been critical to the success of the conferences and are having a measurable impact in advancing the frontiers of science worldwide.

Dr. Janine Mauzeroll, GRC Chair
McGill University

Dr. Stephen Maldonado, GRC Vice Chair
University of Michigan

Dr Srinivasan Ramakrishnan, GRS Chair
University of California, Berkeley

Dr. Marcel Schreier, GRS Chair
University of Wisconsin-Madison

Dr. Nancy Ryan Gray
President and Chief Executive Officer
Gordon Research Conferences

Electrochemistry
Gordon Research Conference
Bridging Scales in Electrochemical Materials and Methods Applied to Organic and Inorganic Chemistry,
Catalysis, Energy and Biology
January 5 - 10, 2020
Chair Janine Mauzeroll
Vice Chair Stephen Maldonado

Conference Program

Sunday

- 4:00 pm - 8:00 pm Arrival and Check-in
- 6:00 pm - 7:00 pm Dinner
- 7:30 pm - 7:40 pm Introductory Comments by GRC Site Staff / Welcome from the GRC Chair
- 7:40 pm - 9:30 pm Organic Molecular Electrochemistry
Discussion Leader: Shannon Stahl (University of Wisconsin-Madison, USA)
- 7:40 pm - 8:10 pm Shelley Minteer (University of Utah, USA)
"Novel Approaches to C-N Bond Formation"
- 8:10 pm - 8:20 pm Discussion
- 8:20 pm - 8:50 pm Siegfried Waldvogel (Johannes Gutenberg University Mainz, Germany)
"Electrifying Organic Synthesis: Going Metal- and Reagent-Free!"
- 8:50 pm - 9:00 pm Discussion
- 9:00 pm - 9:25 pm Robert Francke (University of Rostock, Germany)
"Electrochemical Catalysis and Molecular Rearrangements"
- 9:25 pm - 9:30 pm Discussion

Monday

- 7:30 am - 8:30 am Breakfast
- 8:30 am - 9:00 am Group Photo
- 9:00 am - 12:30 pm Inorganic Molecular Electrochemistry
Discussion Leader: Shelley Minteer (University of Utah, USA)
- 9:00 am - 9:30 am Jillian Dempsey (University of North Carolina at Chapel Hill, USA)
"Elucidating Proton-Coupled Electron Transfer Mechanisms Underpinning the Catalytic Generation of Renewable Fuels"
- 9:30 am - 9:45 am Discussion
- 9:45 am - 10:15 am Jenny Yang (University of California, Irvine, USA)
"Thermodynamic Considerations for Selective CO₂ Reduction"
- 10:15 am - 10:30 am Discussion
- 10:30 am - 11:00 am Coffee Break
- 11:00 am - 11:30 am Hubert Girault (École Polytechnique Fédérale de Lausanne, Switzerland)
"Redox Electrocatalysis for Water Splitting and Redox Flow Batteries"
- 11:30 am - 11:45 am Discussion
- 11:45 am - 12:15 pm Jennifer Rupp (Massachusetts Institute of Technology, USA)
"Lithionics: When Lithium Solid State Battery Materials Gain Additional Electrochemistry Functions"
- 12:15 pm - 12:30 pm Discussion
- 12:30 pm - 1:30 pm Lunch

- 1:30 pm - 4:00 pm Free Time
- 3:00 pm - 4:00 pm The GRC Power Hour™
The GRC Power Hour™ is designed to address challenges women face in science and issues of diversity and inclusion. The program supports the professional growth of all members of our communities by providing an open forum for discussion and mentoring.
Organizers: Kristina Tschulik (Ruhr University Bochum, Germany) and Stephen Maldonado (University of Michigan, USA)
- 4:00 pm - 6:00 pm Poster Session
- 6:00 pm - 7:00 pm Dinner
- 7:30 pm - 9:30 pm Energy Storage
Discussion Leader: Shoji Hall (Johns Hopkins University, USA)
- 7:30 pm - 8:00 pm Hector Abruna (Cornell University, USA)
"Energy Conversion and Storage: Novel Materials and Operando Methods"
- 8:00 pm - 8:10 pm Discussion
- 8:10 pm - 8:40 pm Jeff Dahn (Dalhousie University, Canada)
"How Good Does a Lithium Ion Battery Really Need to Be for EV and Grid Storage Applications and How Good Can It Actually Be!"
- 8:40 pm - 8:50 pm Discussion
- 8:50 pm - 9:20 pm Shirley Meng (University of California, San Diego, USA)
"Probing and Understanding the Electrochemical Interfaces and Interphases by Combining Advanced Characterization with Computation Modeling"
- 9:20 pm - 9:30 pm Discussion
- Tuesday
- 7:30 am - 8:30 am Breakfast
- 9:00 am - 12:30 pm Electroanalytical Chemistry
Discussion Leader: Ryan White (University of Cincinnati, USA)
- 9:00 am - 9:30 am Richard Crooks (The University of Texas at Austin, USA)
"Electrocatalysis at Oxide-Supported Nanoparticles"
- 9:30 am - 9:45 am Discussion
- 9:45 am - 10:15 am Julie Macpherson (University of Warwick, United Kingdom)
"Atomistic Insights into Metal Electrodeposition"
- 10:15 am - 10:30 am Discussion
- 10:30 am - 11:00 am Coffee Break
- 11:00 am - 11:30 am Henry White (University of Utah, USA)
"Concerted Phase- and Electron-Transfer"
- 11:30 am - 11:45 am Discussion
- 11:45 am - 12:15 pm Shigeru Amemiya (University of Pittsburgh, USA)
"Nanogap Electrochemistry of Adsorption-Coupled Electron Transfer"
- 12:15 pm - 12:30 pm Discussion
- 12:30 pm - 1:30 pm Lunch
- 1:30 pm - 4:00 pm Free Time
- 4:00 pm - 6:00 pm Poster Session
- 6:00 pm - 7:00 pm Dinner
- 7:30 pm - 9:30 pm New Materials in Electrocatalysis
Discussion Leader: Francis Zamborini (University of Louisville, USA)

7:30 pm - 8:00 pm Viola Birss (University of Calgary, Canada)
"Rapid and Reversible CO₂ Splitting at a Single Electrode Material"

8:00 pm - 8:10 pm Discussion

8:10 pm - 8:40 pm Keith Stevenson (Skolkovo Institute of Science and Technology (Skoltech), Russia)
"Tuning the Electrocatalytic Activity of Earth Abundant Metal Oxides Through Active Site Variation and Support Interactions"

8:40 pm - 8:50 pm Discussion

8:50 pm - 9:20 pm Nicolas Plumeré (Ruhr-Universität Bochum, Germany)
"Protection Mechanisms Within Catalytic Redox Matrices"

9:20 pm - 9:30 pm Discussion

Wednesday

7:30 am - 8:30 am Breakfast

9:00 am - 12:30 pm Bioelectrochemistry
Discussion Leader: David Cliffel (Vanderbilt University, USA)

9:00 am - 9:30 am Parastoo Hashemi (Imperial College London, United Kingdom)
"Utilizing In Vivo Phenomena to Improve Sensors for Neurotransmitter Detection"

9:30 am - 9:45 am Discussion

9:45 am - 10:15 am Andrew Ewing (University of Gothenburg, Sweden)
"Electrochemical Measurements of Nanometer Vesicle Structure and Dynamics"

10:15 am - 10:30 am Discussion

10:30 am - 11:00 am Coffee Break

11:00 am - 11:30 am Nongjian (NJ) Tao (Arizona State University, USA)
"Probing Single Molecule Redox Reactions via Conductance Measurement"

11:30 am - 11:45 am Discussion

11:45 am - 12:15 pm Paolo Actis (University of Leeds, United Kingdom)
"Application of Nanopipettes for Single Entity Manipulation"

12:15 pm - 12:30 pm Discussion

12:30 pm - 1:30 pm Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster Session

6:00 pm - 7:00 pm Dinner

7:00 pm - 7:30 pm Business Meeting
Nominations for the Next Vice Chair; Fill in Conference Evaluation Forms; Discuss Future Site and Scheduling Preferences; Election of the Next Vice Chair

7:30 pm - 9:30 pm Single Entity Electrochemistry
Discussion Leader: Mei Shen (University of Illinois at Urbana-Champaign, USA)

7:30 pm - 7:35 pm Introduction by Discussion Leader

7:35 pm - 8:05 pm Robbyn Anand (Iowa State University, USA)
"Integration of Electrokinetic and Electrochemical Methods at Bipolar Electrodes for Single-Cell Analysis"

8:05 pm - 8:20 pm Discussion

8:20 pm - 8:25 pm Introduction by Discussion Leader

8:25 pm - 8:55 pm Talia Stockmann (Memorial University of Newfoundland, Canada)
"Electro-Polymerization of Nanocomposite Thin-Films at Immiscible Water/Ionic Liquid Interfaces"

8:55 pm - 9:10 pm Discussion

9:10 pm - 9:30 pm General Discussion

Thursday

7:30 am - 8:30 am Breakfast

9:00 am - 12:30 pm Scanning Probe Electrochemistry

Discussion Leader: Lane Baker (Indiana University Bloomington, USA)

9:00 am - 9:30 am Yury Gogotsi (Drexel University, USA)

"Electrochemical Properties of MXenes: In Situ Study of the Mechanisms"

9:30 am - 9:45 am Discussion

9:45 am - 10:15 am Christine Kranz (Institute of Analytical and Bioanalytical Chemistry, Ulm University, Germany)

"Nano-Electrochemistry Combined with AFM Force Spectroscopy"

10:15 am - 10:30 am Discussion

10:30 am - 11:00 am Coffee Break

11:00 am - 11:30 am Gunther Wittstock (Carl von Ossietzky University of Oldenburg, Germany)

"Probing Porous Materials by Scanning Electrochemical Microscopy"

11:30 am - 11:45 am Discussion

11:45 am - 12:15 pm Yasufumi Takahashi (WPI Nano Life Science Institute, Kanazawa University, Japan)

"Visualization of Inhomogeneous Reactivity Using Scanning Electrochemical Cell Microscopy"

12:15 pm - 12:30 pm Discussion

12:30 pm - 1:30 pm Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster Session

6:00 pm - 7:00 pm Dinner

7:30 pm - 9:30 pm Late-Breaking Topics

Discussion Leader: Stephen Maldonado (University of Michigan, USA)

7:30 pm - 7:40 pm Introduction by Discussion Leader

7:40 pm - 7:50 pm Late-Breaking Topic

7:50 pm - 7:55 pm Discussion

7:55 pm - 8:05 pm Late-Breaking Topic

8:05 pm - 8:10 pm Discussion

8:10 pm - 8:20 pm Late-Breaking Topic

8:20 pm - 8:25 pm Discussion

8:25 pm - 8:35 pm Late-Breaking Topic

8:35 pm - 8:40 pm Discussion

8:40 pm - 8:50 pm Late-Breaking Topic

8:50 pm - 8:55 pm Discussion

8:55 pm - 9:05 pm Late-Breaking Topic

9:05 pm - 9:10 pm Discussion

9:10 pm - 9:20 pm Late-Breaking Topic

9:20 pm - 9:25 pm Discussion

9:25 pm - 9:30 pm Closing Remarks

Friday

7:30 am - 8:30 am Breakfast

9:00 am Departure

Contributors



**Gordon Research
Conferences**
Frontiers of Science



Carl Storm
Underrepresented
Minority Fellowship
Program



Carl Storm
International
Diversity
Fellowship Program



Predominantly
Undergraduate
Institution Fund



CH Instruments



BES
The Bioelectrochemical Society



analytical
chemistry

J | A | C | S
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY

CellPress



Energy &
Environmental
Science
Editorial Board Chair
Nathan Lewis



Sustainable
Energy & Fuels

Editor-in-chief
James Durrant

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McGill University - Department of Chemistry

McGill University - Office for Science and Society

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Electrochemistry
Gordon Research Seminar
Fundamental Electrochemistry Fostering Innovations in Energy, Analytical and Biochemical Sciences

January 4 - 5, 2020

Chairs Srinivasan Ramakrishnan and Marcel Schreier

Conference Program

Saturday

- 2:00 pm - 5:00 pm Arrival and Check-in
- 3:30 pm - 3:45 pm Introductory Comments by GRC Site Staff / Welcome from the GRS Chair
- 3:45 pm - 4:30 pm Electroanalytical Chemistry / Electron Transfer Kinetics
Discussion Leader: Vignesh Sundaresan (University of Notre Dame, USA)
- 3:45 pm - 3:50 pm Opening Remarks
- 3:50 pm - 4:05 pm Julia Chung (University of California, Santa Barbara, USA)
"A Kinetic Approach to Mitigate Edge Effects During Single Entity Detection"
- 4:05 pm - 4:10 pm Discussion
- 4:10 pm - 4:25 pm Tejal Sawant (University of Pittsburgh, USA)
"Flow Battery Electroanalysis: Electron-Transfer Kinetics of Aqueous Fe (III/II) at Noble Metal and Carbon Electrodes"
- 4:25 pm - 4:30 pm Discussion
- 4:30 pm - 6:00 pm Poster Session
- 6:00 pm - 7:00 pm Dinner
- 7:30 pm - 9:30 pm Electrochemical Energy Conversion and Storage
Discussion Leaders: Michael Pegis (Massachusetts Institute of Technology, USA) and Peter Csernica (Stanford University, USA)
- 7:30 pm - 7:45 pm Jaeyune Ryu (Massachusetts Institute of Technology, USA)
"Tracking Electrical Fields at the Pt/H₂O Interface During Hydrogen Catalysis"
- 7:45 pm - 7:50 pm Discussion
- 7:50 pm - 8:05 pm Sebastian Oener (University of Oregon, USA)
"Water Dissociation Catalysis"
- 8:05 pm - 8:10 pm Discussion
- 8:10 pm - 8:25 pm Sahag Voskian (Massachusetts Institute of Technology, USA)
"Redox-Active Mediation in Electrochemical Separations and Catalysis"
- 8:25 pm - 8:30 pm Discussion
- 8:30 pm - 8:45 pm Evelyn Wang (University of Cambridge, United Kingdom)
"Effects of Atmospheric Gases on Li Metal Anodes and Solid-Electrolyte Formation"
- 8:45 pm - 8:50 pm Discussion
- 8:50 pm - 9:05 pm Prayag Biswal (Cornell University, USA)
"On the Nucleation and Early-Stage Growth of Li Electrodeposits"
- 9:05 pm - 9:10 pm Discussion
- 9:10 pm - 9:25 pm Ryan Pekarek (National Renewable Energy Laboratory, USA)
"*In Situ* Characterization of Electrolyte Solution Structures and SEI Components at Si Anode/Electrolyte Interfaces"
- 9:25 pm - 9:30 pm Discussion

Sunday

- 7:30 am - 8:30 am Breakfast
- 9:00 am - 11:00 am Electrocatalytic CO₂ Reduction / Bio-Electrochemistry
Discussion Leader: Alexander Shaver (Johns Hopkins University School of Medicine, USA)
- 9:00 am - 9:15 am Ruperto Mariano (Stanford University, USA)
"Selective Increase in CO₂ Electroreduction Activity at Grain-Boundary Surface Terminations"
- 9:15 am - 9:20 am Discussion
- 9:20 am - 9:35 am Zhuoqun Zhang (Johns Hopkins University, USA)
"Cationic Surfactant Adsorption Enhances CO₂ Reduction Electrocatalysis on Copper Electrodes by Reducing the Interfacial Proton Donor Concentrations"
- 9:35 am - 9:40 am Discussion
- 9:40 am - 9:55 am Elizabeth Corson (University of California, Berkeley, USA)
"Directing Selectivity of Electrochemical CO₂ Reduction Using Plasmonics"
- 9:55 am - 10:00 am Discussion
- 10:00 am - 10:15 am Stephanie Wang (University of California, Santa Barbara, USA)
"Electrochemistry of Coacervates"
- 10:15 am - 10:20 am Discussion
- 10:20 am - 10:35 am Olja Simoska (University of Texas at Austin, USA)
"Real-Time Electrochemical Monitoring of Metabolism Dynamics of Pathogenic Bacteria Using Carbon Ultramicroelectrode Arrays"
- 10:35 am - 10:40 am Discussion
- 10:40 am - 10:55 am Lei Wan (University of Oxford, United Kingdom)
"Fast Enzyme-Catalyzed Electrocatalytic Biosynthesis in Different Strategies, with Continuous Monitoring"
- 10:55 am - 11:00 am Discussion
- 11:00 am - 12:30 pm Poster Session
Coffee will be served in the poster area from 11:00 am - 11:30 am
- 12:30 pm - 1:30 pm Lunch
- 1:30 pm - 2:30 pm Mentorship Component: Excelling in Writing Research Grant Proposals
The mentorship component of the GRS will feature a workshop on grant proposal writing, led by eminent academics representing different areas of electrochemistry.
Discussion Leader: Shelley Minter (University of Utah, USA)
- 1:30 pm - 2:30 pm Panel Discussion
Mentorship Component: Excelling in Writing Research Grant Proposals
Janine Mauzeroll (McGill University, Canada)
Bryan McCloskey (University of California, Berkeley, USA)
Yogesh Surendranath (Massachusetts Institute of Technology, USA)
- 2:30 pm - 3:00 pm Evaluation Period
Fill in GRS Evaluation Forms
- 3:00 pm Seminar Concludes

Contributors



CH Instruments

GAMRY
INSTRUMENTS



This material is based upon work supported by the U.S. Department of Energy, Office of Science Chicago, under Award Number DE-SC0020209. This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

The views, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army or U.S. Government position, policy, or decision, unless so designated by other documentation.

Electrochemistry GRC Registration List

Name	Organization	Participation	Status
Abruna, Hector D	Cornell University	Speaker	Registered
Actis, Paolo	University of Leeds	Speaker	Registered
Adam, David	Max Planck Institute for Terrestrial Microbiology	Poster Presenter	Registered
Amemiya, Shigeru	University of Pittsburgh	Speaker	Registered
Anand, Robbyn K	Iowa State University	Speaker	Registered
Baker, Lane A	Indiana University Bloomington	Discussion Leader	Registered
Beaulieu, Isabelle	McGill University	Attendee	Registered
Biswal, Prayag	Cornell University	Poster Presenter	Registered
Borchers, Janis	Iowa State University	Poster Presenter	Registered
Boucher, Dylan G	University of Texas at Austin	Poster Presenter	Registered
Bradley, Chris	US Department of Energy	Attendee	Registered
Brown, David E	University of California, Berkeley	Poster Presenter	Registered
Bucci, Alberto	ICIQ (Institut Catalá de Investigación Química)	Poster Presenter	Registered
Carino, Emily V	Argonne National Laboratory	Poster Presenter	Registered
Carroll, Michael G	NREL	Poster Presenter	Registered
Chen, Qianjin	Donghua University	Poster Presenter	Registered
Chung, Minju	Massachusetts Institute of Technology	Poster Presenter	Registered
Chung, Julia	University of California, Santa Barbara	Poster Presenter	Registered
Cliffel, David	Vanderbilt University	Discussion Leader	Registered
Co, Anne	The Ohio State University	Speaker	Registered
Corson, Elizabeth R	University of California, Berkeley	Poster Presenter	Registered
Counihan, Michael J	University of Illinois at Urbana-Champaign	Poster Presenter	Registered
Crooks, Richard M	The University of Texas at Austin	Speaker	Registered
Csernica, Peter	Stanford University	Poster Presenter	Registered
Dahn, Jeff R	Dalhousie University	Speaker	Registered
Datta, Abheek	Okinawa Institute of Science and Technology Graduate University	Poster Presenter	Registered
Dawkins, Jeremy Ivan G	McGill University	Poster Presenter	Registered
Dempsey, Jillian L	University of North Carolina at Chapel Hill	Speaker	Registered
Dhar, Debanjan	University of North Carolina at Chapel Hill	Poster Presenter	Registered
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Esposito, Anne Marie	University of Illinois	Poster Presenter	Registered
Ewing, Andrew	University of Gothenburg	Speaker	Registered
Farnum, Byron H	Auburn University	Poster Presenter	Registered
Feldberg, Stephen W	Brookhaven National Laboratory	Attendee	Registered
Feng, Xinran	Cornell University	Poster Presenter	Registered
Fernández Martín, Sergio	Catalan Institute for Chemical Research (ICIQ)	Poster Presenter	Registered
Francke, Robert	University of Rostock	Speaker	Registered
Frater, Theodore E Presenter	US Army, Combat Capabilities Development Command, Armaments Center Registered		Poster
Fu, Kaiyu	Stanford University	Poster Presenter	Registered
Galyamova, Aigerim	University of Texas at Austin	Poster Presenter	Registered
Gao, Rui	University of Utah	Poster Presenter	Registered
Garcia, Adaly O	California State University, Los Angeles	Poster Presenter	Registered
Geise, Natalie	Stanford University	Poster Presenter	Registered

Girault, Hubert H	École Polytechnique Fédérale de Lausanne	Speaker	Registered
Goes, Shannon	University of Wisconsin Madison	Poster Presenter	Registered
Gogotsi, Yury	Drexel University	Speaker	Registered
Greener, Jesse	Laval University	Poster Presenter	Registered
Gruninger, Cole	University of North Carolina at Chapel Hill	Poster Presenter	Registered
Gunathunge, Charuni M	Boston College	Poster Presenter	Registered
Hall, Shoji	Johns Hopkins University	Discussion Leader	Registered
Hamill, Rosalie	University of Leeds	Poster Presenter	Registered
Hanna, Caitlin	University of California, Irvine	Poster Presenter	Registered
Hashemi, Parastoo	Imperial College London	Speaker	Registered
Hielscher, Maximilian M	Johannes-Gutenberg Universität Mainz	Poster Presenter	Registered
Hill, Caleb M.	University of Wyoming	Poster Presenter	Registered
Hoar, Benjamin	UCLA Chemistry and Biochemistry	Poster Presenter	Registered
Honjo, Shintaro	Mitsubishi Heavy Industries America, Inc.	Attendee	Registered
Huang, Ke	The University of Texas at Austin	Poster Presenter	Registered
Huang, William	Stanford University	Poster Presenter	Registered
Humiston, Elaine M.	Combat Capabilities Development Command Armaments Center	Poster Presenter	Registered
Islam, Md Rafiqul	University of Manitoba	Poster Presenter	Registered
Kanokkanchana, K	Ruhr University Bochum	Poster Presenter	Registered
Kaufman, Lori	UC Berkeley	Poster Presenter	Registered
Kedzie, Elyse	UC Berkeley	Poster Presenter	Registered
Kempler, Paul A	California Institute of Technology	Poster Presenter	Registered
Kharel, Pom L	University of Louisville	Poster Presenter	Registered
Kim, Moonjoo	Seoul National University	Poster Presenter	Registered
Kim, R. Soyoun	Massachusetts Institute of Technology	Poster Presenter	Registered
Korzeniewski, Carol	Texas Tech University	Poster Presenter	Registered
Kranz, Christine	Institute of Analytical and Bioanalytical Chemistry, Ulm University	Speaker	Registered
Kuss, Sabine	University of Manitoba	Poster Presenter	Registered
Lazouski, Nikifar	Massachusetts Institute of Technology	Poster Presenter	Registered
Lee, Jong-Sook	Chonnam National University	Poster Presenter	Registered
Lee, Katherine	University of North Carolina at Chapel Hill	Poster Presenter	Registered
Leger, Christophe	Unité de Bioénergétique et Ingénierie des Protéines, CNRS / Aix Marseille Université	Poster Presenter	Registered
Leung, Kwan	University of Michigan	Poster Presenter	Registered
Li, Yuzhang	Stanford University	Poster Presenter	Registered
Li, Xiang	Boston College	Poster Presenter	Registered
Liang, Allen Yu-Lun	Stanford University	Poster Presenter	Registered
Liu, Guoliang (Greg)	Virginia Tech	Poster Presenter	Registered
Liu, Chong	University of California, Los Angeles	Attendee	Registered
Lodaya, Kunal	University of North Carolina at Chapel Hill	Poster Presenter	Registered
Lu, Xinyao	Cornell University	Poster Presenter	Registered
Lu, Yi-Hsien	Lawrence Berkeley National Laboratory	Poster Presenter	Registered
Luo, Long	Wayne State University	Poster Presenter	Registered
Luu, Huy Tran Le	University of Manitoba	Poster Presenter	Registered
Macazo, Florika C	Bioanalytical Systems, Inc. (BASi)	Attendee	Registered
Macpherson, Julie V	University of Warwick	Speaker	Registered

Mainali, Badri P	University of Louisville	Poster Presenter	Registered
Maldonado, Stephen	University of Michigan	Vice Chair	Registered
Manthiram, Karthish	Massachusetts Institute of Technology	Poster Presenter	Registered
Mariano, Ruperto G	Stanford University	Poster Presenter	Registered
Marshall-Roth, Travis	Massachusetts Institute of Technology	Poster Presenter	Registered
Martins, Vitor	University of Sao Paulo	Poster Presenter	Registered
Martinson, Alex B F	Argonne National Laboratory	Poster Presenter	Registered
Maurer, Joshua A	US Army - Combat Capabilites Development Command - Armament Center	Attendee	Registered
Mauzeroll, Janine	McGill University	Chair	Registered
McCloskey, Bryan D	University of California, Berkeley	Attendee	Registered
McKone, James R	University of Pittsburgh	Poster Presenter	Registered
Mefford, J. Tyler	Stanford University	Poster Presenter	Registered
Melville, Jonathan F	Massachusetts Institute Of Technology	Poster Presenter	Registered
Meng, Shirley	University of California, San Diego	Speaker	Registered
Minteer, Shelley	University of Utah	Speaker	Registered
Mirkin, Michael	Queens College-CUNY	Attendee	Registered
Neale, Nathan R	National Renewable Energy Laboratory	Poster Presenter	Registered
O'Neil, Glen D	Montclair State University	Poster Presenter	Registered
Oener, Sebastian Z	University of Oregon	Poster Presenter	Registered
Osman, Sommer	Iowa State University	Poster Presenter	Registered
Ovalle, Vincent J	Boston College	Poster Presenter	Registered
Parent, Alexander R	North Dakota State University	Poster Presenter	Registered
Pegis, Michael	Massachusetts Institute of Technology	Poster Presenter	Registered
Pekarek, Ryan T	National Renewable Energy Laboratory	Poster Presenter	Registered
Pender, Joshua P	University of Texas at Austin	Poster Presenter	Registered
Peng, Yi	The University of Texas at Austin	Poster Presenter	Registered
Plumeré, Nicolas	Ruhr-Universität Bochum	Speaker	Registered
Pollok, Nicole E	The University of Texas at Austin	Poster Presenter	Registered
Prabhakaran, V	Pacific Northwest National Laboratory	Poster Presenter	Registered
Rahn, Kira L	Iowa State University	Poster Presenter	Registered
Rajan, Teena S	University of Warwick	Poster Presenter	Registered
Ramaiyan, Kannan	Los Alamos National Laboratory	Poster Presenter	Registered
Ramakrishnan, Srinivasan	University of California Berkeley	Poster Presenter	Registered
Ren, Hang	Miami University	Poster Presenter	Registered
Rose, Michael J	University of Texas at Austin	Poster Presenter	Registered
Ross, Ashley E	University of Cincinnati	Poster Presenter	Registered
Ruccolo, Serge	Merck & Co.	Poster Presenter	Registered
Rupp, Jennifer L.M.	Massachusetts Institute of Technology	Speaker	Registered
Ryu, Jaeyune	Massachusetts Institute of Technology (MIT)	Poster Presenter	Registered
Safazadeh, Leila	General Electric Global Research Center	Attendee	Registered
Sambur, Justin B	Colorado State University	Poster Presenter	Registered
Saouma, Caroline T	University of Utah	Poster Presenter	Registered
Sarkar, Bidushi	Indian Institute of Science	Poster Presenter	Registered
Savignac, Laurence	Université du Québec à Montréal	Poster Presenter	Registered
Sawant, Tejal V	University of Pittsburgh	Poster Presenter	Registered
Schreier, Marcel	University of Wisconsin-Madison	Poster Presenter	Registered
Seo, Daye	Seoul National University	Poster Presenter	Registered

Sepunaru, Lior	UCSB	Poster Presenter	Registered
Shaver, Alexander	Johns Hopkins University School of Medicine	Poster Presenter	Registered
Shen, Mei	University of Illinois at Urbana-Champaign	Discussion Leader	Registered
Shin, Younsook	Chonnam National University	Poster Presenter	Registered
Simoska, Olja	University of Texas at Austin	Poster Presenter	Registered
Smith, Leilani N	University of Texas at Austin/Crooks Research Group	Poster Presenter	Registered
Smith, Diane K	San Diego State University	Poster Presenter	Registered
Stahl, Shannon	University of Wisconsin-Madison	Discussion Leader	Registered
Stevenson, Keith J	Skolkovo Institute of Science and Technology	Speaker	Registered
Strain, Jacob M	University of Louisville	Poster Presenter	Registered
Strasser, Juliette W	The University of Texas at Austin	Poster Presenter	Registered
Sun, Li	Pine Research Instrumentation	Attendee	Registered
Sundaresan, Vignesh	University of Notre Dame	Poster Presenter	Registered
Surendranath, Yogesh	Massachusetts Institute of Technology	Poster Presenter	Registered
Syzdek, Jaroslaw S	Bio-Logic USA LLC	Attendee	Registered
Takahashi, Yasufumi	WPI Nano Life Science Institute, Kanazawa University	Speaker	Registered
Tan, Cherie	Tianjin University	Poster Presenter	Registered
Tao, Nongjian (NJ)	Arizona State University	Speaker	Registered
Thoi, Sara	Johns Hopkins University	Poster Presenter	Registered
Thompson, Jonathan R	The University of Texas at Austin	Poster Presenter	Registered
Tilley, David	University of Zurich	Poster Presenter	Registered
Ting, Michelle	McGill University	Poster Presenter	Registered
Toh, Wei Lun	MIT Chemistry	Poster Presenter	Registered
Trindell, Jamie A	University of Texas	Poster Presenter	Registered
Tschulik, Kristina	Ruhr University Bochum	Attendee	Registered
Vaid, Thomas P.	University of Michigan	Poster Presenter	Registered
Vargas-Barbosa, Nella M	Max Planck Institute for Solid State Research	Poster Presenter	Registered
Voskian, Sahag	Massachusetts Institute of Technology	Poster Presenter	Registered
Waldvogel, Siegfried R	Johannes Gutenberg University Mainz	Speaker	Registered
Walgama, Charuksha T	University of Texas at Austin	Poster Presenter	Registered
Wan, Jiayu	Stanford University	Poster Presenter	Registered
Wan, Lei	University of Oxford	Poster Presenter	Registered
Wang, Hailiang	Yale University	Poster Presenter	Registered
Wang, Hansen	Stanford University	Poster Presenter	Registered
Wang, Yixian	California State University, Los Angeles	Poster Presenter	Registered
Wang, Stephanie X	University of California, Santa Barbara	Poster Presenter	Registered
Wang, Evelyn	University of Cambridge	Poster Presenter	Registered
White, Ryan	University of Cincinnati	Discussion Leader	Registered
White, Henry	University of Utah	Speaker	Registered
Wilder, Logan M	Crooks Group	Poster Presenter	Registered
Wittstock, Gunther	Carl von Ossietzky University of Oldenburg	Speaker	Registered
Wolfe, Kody	Vanderbilt University	Poster Presenter	Registered
Wood, Georgia F	University of Warwick	Poster Presenter	Registered
Xiang, Danlei	UCLA, Department of Chemistry and Biochemistry	Poster Presenter	Registered
Yan, Zhifei	University of Pennsylvania	Poster Presenter	Registered
Yang, Jenny Y	University of California, Irvine	Speaker	Registered
Yang, Yuan	Columbia University	Poster Presenter	Registered
Yang, Yao	Cornell University	Poster Presenter	Registered

Yao, Yan	University of Houston	Poster Presenter	Registered
Yoo, Seung Joon	Gwangju Institute of Science and Technology (GIST)	Poster Presenter	Registered
Yoo, Dong Il	Chonnam National University	Poster Presenter	Registered
Zamborini, Francis P	University of Louisville	Discussion Leader	Registered
Zestos, Alexander G	American University	Poster Presenter	Registered
Zhan, Wei	Auburn University	Poster Presenter	Registered
Zhang, Jie	Monash University	Poster Presenter	Registered
Zhang, Shiyu	Ohio State University	Poster Presenter	Registered
Zhang, Feng-Yuan	University of Tennessee	Poster Presenter	Registered
Zhang, Zhuoqun	Johns Hopkins University	Poster Presenter	Registered
Zhang, Jenny Z	University of Cambridge	Poster Presenter	Registered
Zhang, Fen	The Ohio State University	Poster Presenter	Registered
Zhu, Rose	Associate editor, Joule	Attendee	Registered

196 Attendees

Electrochemistry GRS Registration List

Name	Organization	Participation	Status
Biswal, Prayag	Cornell University	Speaker	Registered
Boucher, Dylan G	University of Texas at Austin	Poster Presenter	Registered
Brown, David E	University of California, Berkeley	Poster Presenter	Registered
Bucci, Alberto	ICIQ (Institut Catalá de Investigaci3n Quimica)	Poster Presenter	Registered
Chung, Minju	Massachusetts Institute of Technology	Poster Presenter	Registered
Chung, Julia	University of California, Santa Barbara	Speaker	Registered
Corson, Elizabeth R	University of California, Berkeley	Speaker	Registered
Counihan, Michael J	University of Illinois at Urbana-Champaign	Poster Presenter	Registered
Csernica, Peter	Stanford University	Discussion Leader	Registered
Datta, Abheek	Okinawa Institute of Science and Technology Graduate University	Poster Presenter	Registered
Dawkins, Jeremy Ivan G	McGill University	Poster Presenter	Registered
Dhar, Debanjan	University of North Carolina at Chapel Hill	Poster Presenter	Registered
Esposito, Anne Marie	University of Illinois	Poster Presenter	Registered
Fernández Mart3n, Sergio	Catalan Institute for Chemical Research (ICIQ)	Poster Presenter	Registered
Frater, Theodore E	US Army, Combat Capabilities Development Command, Armaments Center	Poster Presenter	Registered
Fu, Kaiyu	Stanford University	Poster Presenter	Registered
Galyamova, Aigerim	University of Texas at Austin	Poster Presenter	Registered
Geise, Natalie	Stanford University	Poster Presenter	Registered
Goes, Shannon	University of Wisconsin Madison	Poster Presenter	Registered
Gunathunge, Charuni M	Boston College	Poster Presenter	Registered
Hanna, Caitlin	University of California, Irvine	Poster Presenter	Registered
Huang, William	Stanford University	Poster Presenter	Registered
Huang, Ke	The University of Texas at Austin	Poster Presenter	Registered
Kanokkanchana, K	Ruhr University Bochum	Poster Presenter	Registered
Kaufman, Lori	UC Berkeley	Poster Presenter	Registered
Kedzie, Elyse	UC Berkeley	Poster Presenter	Registered
Kim, Moonjoo	Seoul National University	Poster Presenter	Registered
Lazouski, Nikifar	Massachusetts Institute of Technology	Poster Presenter	Registered
Lee, Katherine	University of North Carolina at Chapel Hill	Poster Presenter	Registered
Li, Xiang	Boston College	Poster Presenter	Registered
Li, Yuzhang	Stanford University	Poster Presenter	Registered
Liang, Allen Yu-Lun	Stanford University	Poster Presenter	Registered
Mainali, Badri P	University of Louisville	Poster Presenter	Registered
Mariano, Ruperto G	Stanford University	Speaker	Registered
Marshall-Roth, Travis	Massachusetts Institute of Technology	Poster Presenter	Registered
Mauzeroll, Janine	McGill University	Speaker	Registered
McCloskey, Bryan D	University of California, Berkeley	Speaker	Registered
Mefford, J. Tyler	Stanford University	Poster Presenter	Registered
Melville, Jonathan F	Massachusetts Institute of Technology	Poster Presenter	Registered
Minteer, Shelley	University of Utah	Discussion Leader	Registered
Oener, Sebastian Z	University of Oregon	Speaker	Registered
Ovalle, Vincent J	Boston College	Poster Presenter	Registered
Pegis, Michael	Massachusetts Institute of Technology	Discussion Leader	Registered

Pekarek, Ryan T	National Renewable Energy Laboratory	Speaker	Registered
Pender, Joshua P	University of Texas at Austin	Poster Presenter	Registered
Pollok, Nicole E	The University of Texas at Austin	Poster Presenter	Registered
Rajan, Teena S	University of Warwick	Poster Presenter	Registered
Ramaiyan, Kannan	Los Alamos National Laboratory	Poster Presenter	Registered
Ramakrishnan, Srinivasan	University of California Berkeley	Chair	Registered
Ryu, Jaeyune	Massachusetts Institute of Technology (MIT)	Speaker	Registered
Savignac, Laurence	Université du Québec à Montréal	Poster Presenter	Registered
Sawant, Tejal V	University of Pittsburgh	Speaker	Registered
Schreier, Marcel	University of Wisconsin-Madison	Chair	Registered
Seo, Daye	Seoul National University	Poster Presenter	Registered
Shaver, Alexander	Johns Hopkins University School of Medicine	Discussion Leader	Registered
Simoska, Olja	University of Texas at Austin	Speaker	Registered
Strasser, Juliette W	The University of Texas at Austin	Poster Presenter	Registered
Sundaresan, Vignesh	University of Notre Dame	Discussion Leader	Registered
Surendranath, Yogesh	Massachusetts Institute of Technology	Speaker	Registered
Thompson, Jonathan R	The University of Texas at Austin	Poster Presenter	Registered
Ting, Michelle	McGill University	Poster Presenter	Registered
Toh, Wei Lun	MIT Chemistry	Poster Presenter	Registered
Voskian, Sahag	Massachusetts Institute of Technology	Speaker	Registered
Wan, Lei	University of Oxford	Speaker	Registered
Wan, Jiayu	Stanford University	Poster Presenter	Registered
Wang, Evelyn	University of Cambridge	Speaker	Registered
Wang, Stephanie X	University of California, Santa Barbara	Speaker	Registered
Wilder, Logan M	Crooks Group	Poster Presenter	Registered
Wolfe, Kody	Vanderbilt University	Poster Presenter	Registered
Wood, Georgia F	University of Warwick	Poster Presenter	Registered
Yan, Zhifei	University of Pennsylvania	Poster Presenter	Registered
Yang, Yao	Cornell University	Poster Presenter	Registered
Zhang, Zhuoqun	Johns Hopkins University	Speaker	Registered
Zhu, Rose	Associate editor, Joule	Poster Presenter	Registered

74 Attendees