

DOE-BES Final Report

Award Number: DE-SC0017268

Title: Kokes Award for the 25th North American Catalysis Society Meeting

Institution: Colorado School of Mines, Golden, CO

Principal Investigator:

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Overall NAM Summary

The 25th NAM was held in Denver, CO from June 4th-9th, 2017 at the Hyatt Regency Hotel. The meeting's theme was "Mile High Catalysis". The Rocky Mountain Catalysis Society hosted the event, which featured:

- 3 plenary lectures (Houdry, Emmett, and Boudart Awards)
- 19 keynote presentations
- 580 oral presentations
- 520 poster presentations



The conference drew over 1,500, including 397 students and 97 graduate student Kokes award winners, and 56 exhibitors.

The members of the organizing committee are:

Honorary Chair: Cal Bartholomew (Brigham Young University)

Meeting co-chairs: Ryan Richards (Colorado School of Mines)
Abhaya Datye (University of New Mexico)

Secretary: Joe Holles (University of Wyoming)

Treasurer: Morris Argyle (Brigham Young University)

Program Chairs:	Will Medlin (University of Colorado Boulder) Jesse Hensley (National Renewable Energy Laboratory) Dan Ginosar (Idaho National Laboratory??)
Fund-raising Chairs:	Anne Gaffney (Idaho National Laboratory) Bob Baldwin (National Renewable Energy Laboratory) Rich Bolin (National Renewable Energy Laboratory)
Publicity/Website Chair:	Brian Trewyn (Colorado School of Mines)
Local Arrangements Chairs:	Matt Yung (National Renewable Energy Laboratory) Michael Griffin (National Renewable Energy Laboratory) Stephanie Wettstein (Montana State University)
Kokes Award Chairs:	John L. Falconer (University of Colorado Boulder) Svitlana Pylypenko (Colorado School of Mines)
Poster Program Chairs:	Gregg Beckham (National Renewable Energy Laboratory) Brian Trewyn (Colorado School of Mines) Lucia Petkovic (Idaho National Laboratory)
Exhibit Chairs:	Mark Nimlos (NREL) Jennifer Nieweg (Albemarle)

Kokes Award Background

The objective of the Richard. J. Kokes Travel Award program is to encourage the participation of students in the biennial North American Catalysis Society (NACS) Meetings. The Kokes Award covers a significant portion of the costs associated with attendance of the conference (transportation, lodging, and conference registration costs). In 2017 Kokes Award covered lodging and conference registration costs. Eligible students must be enrolled at a North American university and need to present an oral or poster presentation at the meeting. The Kokes awardee are required to contribute some time to the organizing committee to assist in meeting operations and to be present at the meeting during the entire time. Undergraduate students are also eligible for the Kokes Award program, but none were awarded in 2017.

Timeline

September 15, 2016 – Kokes Award application submission begins
November 14, 2016 – original deadline for application submission
November 29, 2016 -extended deadline for application submission
April 2017 – Notification of Kokes Awards

The description of the Kokes Awards was provided on the official website.

Summary

The NAM25 awarded 98 Kokes Awards. The award provides students an opportunity to attend the meeting, present either an oral or poster presentation of their research work, and to provide service to the North American Catalysis Society (NACS) by participating in the organization and operation of the meeting. The latter was a prerequisite of the meeting. Financial support was provided by the National Science Foundation (NSF), the Department of Energy (DOE), and the NACS (local organizing committee). Of the 98 awardees, 89 students were from U.S. universities. 5 students were from Canada and 4 from Mexico. As Kokes award recipients, each student (except for local participants) received in kind a total of \$886 to offset the cost of registration (\$295, early registration fee) and hotel accommodations (\$591). 4 Kokes award recipients were local and received \$295 to offset early registration fee. Two students notified us at a late date that they would not be attending the meeting, and it was decided this was too late to try and replace them and find a room to share. Funds provided by the DOE-BES were used to support over 20 students, all these students were first time Kokes Award winners from U.S. universities. Awardees received a certificate of recognition for being chosen to receive a Richard J. Kokes Award.

Details of Funding and Award Amounts

Funds for the Richard J. Kokes Awards were provided by NACS and the Kokes Award committee wrote proposals to the NSF (managed by Dr. Robert McCabe, CBET Catalysis and Biocatalysis) and DOE-BES (managed by Dr. Viviane Schwartz, Catalysis Science). Other agencies (DOD) were also approached but no funding was received. Funds were requested through proposals submitted by the Colorado School of Mines. Both the DOE and NSF funding amounts to cover expenses for U.S.-university based students were invoiced by to the Colorado School of Mines. Table 1 summarizes the dollar amounts received from the various sources.

Table 1. Comparison of Kokes Award funding source and amount for the last five NAM Meetings (2007 – 2015). Data from previous meetings from the 23rd NAM report.

Funding Source	21 st NAM San Francisco 2009	22 nd NAM Detroit 2011	23 rd NAM Louisville 2013	24 th NAM Pittsburg 2015	25 th NAM Denver 2017
NACS	\$30,000	\$30,000	\$30,000	\$35,000	\$35,000
NSF	\$20,400	\$25,000	\$25,000	\$30,000	\$30,000
DOE	\$25,000	\$25,000	\$20,000	\$20,000	\$20,000
Michael Strem	--	--	--	\$20,000	----
Sub-total	\$75,400	\$80,000	\$75,000	\$105,000	\$85,000
Local OC	\$10,612	\$22,665	\$30,000	\$5,000	---
Total	\$86,612	\$102,665	\$105,000	\$110,000	\$85,000

Distribution of Awards

The geographic distribution of Kokes awards are summarized in Table 2.

Table 2. Distribution of Kokes Awardees and average award level. Data from previous meetings from the 23rd NAM report.

Student Origin	21 st NAM San Francisco 2009	22 nd NAM Detroit 2011	23 rd NAM Louisville 2013	24 th NAM Pittsburg 2015	25 th NAM Denver 2017
USA	92	93	96	93	89
Canada	3	6	2	8	5
Mexico	6	7	9	9	4
Total	101	106	107	110	98
Award per student*	~\$860	\$969	\$981	\$1000	\$886

*4 local students were offered award in the lower amount (to cover registration and parking).

Two students (1 local) notified us at a late date that they would not be attending the meeting, and it was decided this was too late to try and replace them.

Selection Process

The Kokes Award committee (Svitlana Pylypenko and John L. Falconer) received 386 completed applications. Students were able to apply for Kokes awards during the abstract submission process. Many students selected the box to apply for a Kokes award, but they did not submit a complete application, and many students from outside North America applied, but were not eligible. Postdoctoral fellows were also not eligible for an award. For a graduate student indicated they were graduating in spring 2017, we considered them a graduate student as far as the award was concerned.

The awardees were chosen on merit-based guideline with an effort to include students from as many research groups as possible and to ensure appropriate representation from underrepresented groups, including minorities and women, first-time attendees, and students of young faculty. The process included evaluation of the student's CV, the letter of recommendation from the student's adviser (and the ranking by the advisor if more than one student from that research group applied), and the abstract. All abstracts were peer-reviewed. The number of students from Mexico, Canada, and the United States was chosen so that the number of students from each country was approximately proportional to the number of applicants from that country. Students who had previously received a Kokes award were not selected to receive a second award.

Ninety-four students were offered registration and funds for a shared hotel room. No funds were available for travel. In addition, 4 offers were made to local students; these offers only included the meeting registration and parking. Once students were selected for an award, they were notified by email sent out by Meeting Solutions, the company that was contracted by NAM to help run the meeting. Students who did not receive an award were also notified. In the letter, they were also told that they could request roommate; two Kokes awardees shared a room.

An alphabetical list of students who received a Kokes Award and participated in the entire meeting is shown below in Table 3.

Table 3. Complete alphabetical list of Kokes awardees, their home institution and country

	Applicant First Name	Applicant Last Name	Institution	Country
1	Nusnin	Akter	Stony Brook University	USA
2	Daniel G.	Araiza	Instituto de Física, UNAM	Mexico
3	Martha A.	Arellano-Trevino	Columbia University	USA
4	Motahare	Athariboroujeny	Washington State University	USA
5	Kevin	Barnett	University of Wisconsin Madison	USA
6	Jason	Bates	Purdue University	USA
7	Jacob R.	Boes	Carnegie Mellon University	USA
8	Yolanda	Bonita	University of Notre Dame	USA
9	Daniel	Bregante	University of Illinois at Urbana-Champaign	USA
10	Gokhan	Celik	Ohio State University	USA
11	Leanne	Chen	Stanford University	USA
12	Greg	Collinge	Washington State University	USA
13	Anish	Dasgupta	Pennsylvania State University	USA
14	Dexter	Davis	Purdue University	USA
15	Louise	Debefve	University of California, Davis	USA
16	Leo	DeRita	University of California, Riverside	USA
17	J. Trey	Diulus	Oregon State University	USA
18	Michael	Dzara	Colorado School of Mines	USA
19	Lucas	Ellis	University of Colorado Boulder	USA
20	Nicholas	Gould	University of Delaware	USA
21	Joseph	Grant	University of Wisconsin - Madison	USA
22	Ana	Gutiérrez	nstituto Mexicano del Petróleo	Mexico
23	James W.	Harris	Purdue University	USA
24	Peng	He	Unviersity of Calgary	Canada
25	Jiajie	Huo	Iowa State University	USA
26	Andrew	Hwang	University of Minnesota-Twin Cities	USA
27	Yasser	Jangjou	University of Houston	USA
28	Sungyup	Jung	City College of New York	USA
29	Sadia	Kabir	University of New Mexico	USA

30	Sashank	Kasiraju	University of Houston	USA
31	Dilip	Krishnamurthy	Carnegie Mellon University	USA
32	Gaurav	Kumar	Pennsylvania State University	USA
33	Petar	Lachkov	University of Toronto	Canada
34	Wendy	Lang	University of Houston	USA
35	Hugo	Lara-García	Universidad Nacional Autónoma de México	Mexico
36	Allegra	Latimer	Stanford	USA
37	Ethan	Lawrence	Arizona State University	USA
38	Xuemin	Li	Colorado School of Mines	USA
39	Yuting	Li	University of Kansas	USA
40	Chih-Heng	Lien	University of Colorado Boulder	USA
41	Rungmai	Limvorapitux	Northwestern University	USA
42	Shengsi	Liu	Northwestern University	USA
43	Ryan	Loe	University of Kentucky	USA
44	Yueyun	Lou	Tulane University	USA
45	Yubing	Lu	Virginia Polytechnic Institute and State University	USA
46	Zheng	Lu	University of Alabama - Huntsville	USA
47	Wesley	Luc	University of Delaware	USA
48	Debtanu	Maiti	University of South Florida	USA
49	Paulami	Majumdar	Purdue University	USA
50	Osman	Mamun	University of South Carolina	USA
51	Prateek	Mehta	University of Notre Dame	USA
52	Xiangchao	Meng	University of Ottawa	Canada
53	Anuradha	Nagaraj	Texas A&M University-Kingsville	USA
54	Scott	Nauert	Northwestern University	USA
55	Hannah	Nguyen	University of Delaware	USA
56	Steven	Nystrom	University of Florida	USA
57	Su Cheun	Oh	University of Maryland, College Park	USA
58	Chukwuemeka	Okolie	Georgia Institute of Technology	USA
59	Trenton	Otto	University of California, Berkeley	USA
60	Sudipta	Pal	Purdue University	USA
61	Andrew	Palermo	University of California - Davis	USA
62	Ashley M.	Pennington	Rutgers,	USA
63	Xavier Isidro	Pereira Hernandez	Washington State University	USA
64	Jose-Alfonso	Pinedo-Escobar	Universidad Autónoma de San Luis Potosi	Mexico
65	Koushik	Ponnuru	University of Massachusetts	USA
66	Samiksha	Poudyal	University of Tennessee	USA
67	Supareak	Praserthdam	Texas A&M University	USA
68	Wei	Qin	University of Houston	USA
69	David	Raciti	Johns Hopkins University	USA
70	Walter	Ralston	University of California, Berkeley	USA

71	Radhika Giri	Rao	Iowa State University	USA
72	Christopher	Riley	University of New Mexico	USA
73	Insoo	Ro	University of Wisconsin Madison	USA
74	Jason	Robbins	Stevens Institute of Technology	USA
75	Julie	Rorrer	University of California, Berkeley	USA
76	Izabela A.	Samek	Northwestern University	USA
77	Irem	Sen	Carnegie Mellon University	USA
78	Chang Yup	Seo	University of Michigan	USA
79	Asish K. R.	Somidi	University of Saskatchewan	Canada
80	Achintya	Sujan	Auburn University	USA
81	Brian	Tackett	Columbia university	USA
82	William	Taifan	Lehigh University	USA
83	D. Chester	Upham	University of California Santa Barbara	USA
84	Minh Nguyen	Vo	University of Pittsburgh	USA
85	Sibo	Wang	University of Connecticut	USA
86	Siwen	Wang	Virginia Polytechnic Institute and State University	USA
87	Cassandra	Whitford	Northwestern University	USA
88	Todd	Whittaker	Trinity University	USA
89	Cody	Wrasman	Stanford University	USA
90	Zhenwei	Wu	Purdue University	USA
91	Lang	Xu	University of Wisconsin-Madison	USA
92	Yu-Hao	Yeh	University of Pennsylvania	USA
93	Zachary D.	Young	University of Virginia	USA
94	Dongmin	Yun	Western University	Canada
95	Seif	Yusuf	North Carolina State University	USA
96	Chuanlin	Zhao	Louisiana State University	USA
97	Yiteng	Zheng	Stevens Institute of Technology	USA
98	Yongping	Zheng	University of Texas at Dallas	USA

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