

MIT Award Number: 019554-001
Sponsor: DOE – Chicago, DE-SC0006315
Award Title: International Conference on Chemical Kinetics at MIT
PI: William H Green

The 7th International Conference on Chemical Kinetics (ICCK) was held July 10-14, 2011, at Massachusetts Institute of Technology (MIT), in Cambridge, MA, hosted by Prof. William H. Green of MIT's Chemical Engineering department. This cross-disciplinary meeting highlighted the importance of fundamental understanding of elementary reactions to the full range of chemical investigations. The specific conference focus was on elementary-step kinetics in both the gas phase and in condensed phase. The meeting provided a unique opportunity to discuss how the same reactive species and reaction motifs manifest under very different reaction conditions (e.g. atmospheric, aqueous, combustion, plasma, in nonaqueous solvents, on surfaces.). The conference featured special sessions on new/improved experimental techniques, improved models and data analysis for interpreting complicated kinetics, computational kinetics (especially rate estimates for large kinetic models), and a panel discussion on how the community should document/archive kinetic data. In the past, this conference had been limited to homogeneous gas-phase and liquid-phase systems. This conference included studies of heterogeneous kinetics which provide rate constants for, or insight into, elementary reaction steps.

This Grant from DOE BES covered about half of the subsidies we provided to students and postdocs who attended the conference, by charging them reduced-rate registration fees. The complete list of subsidies provided are listed in Table 1 below. This DOE funding was essential to making the conference affordable to graduate students, and indeed the attendance at this conference was higher than at previous conferences in this series. Donations made by companies provided additional subsidies, leveraging the DOE funding.

The conference was very effective in educating graduate students and important in fostering scientific interactions, particularly between scientists studying gas phase and liquid phase kinetics, since those two communities do not meet very often (it had been 6 years since the last time this conference had been held). The conference at MIT was so successful that European scientists decided to organize a similar conference (it will be held in Seville, Spain in July 2013). Almost 200 scientists participated, with more than 100 oral presentations and many poster presentations. A complete list of the presentations and their abstracts are given in the attachment. The conference led to many peer-reviewed papers published in several Special Issues of the International Journal of Chemical Kinetics in early 2012.

Table 1:

ICCK 2011 STUDENT & POSTDOC SUBSIDIES - PARTIALLY SUPPORTED BY DOE						
Reg ID	Name	Reg Date	Reg Type	Standard Reg Fee	Student & Postdoc Reg Fee	Student & Postdoc Subsidies
32631628	Ab Rahim, Reehan	4/19/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33195134	Aghsae, Mohammad	5/11/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33242946	Aguilera, Jorge	5/12/2011	Student/Postdoc	\$490.00	\$150.00	\$340.00
31763746	Aitken, Heather	3/20/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
31765944	Alecu, John	3/20/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33242789	Allen, Joshua	5/12/2011	Student/Postdoc	\$490.00	\$150.00	\$340.00
33282628	Annesley, Christopher	5/13/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33341721	Auzmendi-Murua, Itsaso	5/16/2011	Student/Postdoc	\$540.00	\$345.00	\$195.00
33312943	Bjorkman, Kathryn	5/16/2011	Student/Postdoc	\$540.00	\$345.00	\$195.00
33299682	Burke, Michael	5/15/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33280137	Class, Caleb	5/13/2011	Student/Postdoc	\$490.00	\$150.00	\$340.00
32712205	Coles, Tom	4/22/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33276332	Comandini, Andrea	5/13/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
32631947	Dorado, Joyeth	4/19/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
32001024	El Hajj, Ahmad	3/29/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
32971072	Eskola, Arkke	5/3/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33205564	Fu, Xiao	5/11/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33280220	Gao, Connie	5/13/2011	Student/Postdoc	\$490.00	\$150.00	\$340.00
33263338	Ghalaieny, Mohamed	5/13/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33310954	Gill, Vikramjit	5/15/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33270824	Goswami, Mayuri	5/13/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
30898697	Gryn'ova, Ganna	2/20/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33270749	Gudiyella, Soumya	5/13/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
32428778	Haas, Francis	4/12/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
32102552	Harwood, Stuart	3/31/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33293435	He, Ming	5/14/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
32761073	Hu, Hongyi	4/25/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
32712350	Huan, Xun	4/22/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
32436426	Jahangirian, Saeed	4/12/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33244542	Jalan, Amrit	5/12/2011	Student/Postdoc	\$490.00	\$150.00	\$340.00
31872452	Janbozorgi, Mohammad	3/23/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33163874	Joshi, Kaushik	5/10/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33267480	Karwat, Darshan	5/13/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33401907	KATSIKADAKOS, DIMITRIOS	5/18/2011	Student/Postdoc	\$540.00	\$345.00	\$340.00
33215703	Kenji, Miki	5/11/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33279929	Kessler, Sean	5/13/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33280259	Kida, Yuko	5/13/2011	Student/Postdoc	\$490.00	\$150.00	\$340.00
32844871	Kyne, Sara	4/28/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33238307	Labbe, Nicole	5/12/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33009213	Laine, Patrick	5/4/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33301608	LEE, Changyoul	5/15/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00

33280292	Liu, Zan	5/13/2011	Student/Postdoc	\$490.00	\$150.00	\$340.00
33290691	Lynch, Patrick	5/14/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33239295	Magoon, Gregory	5/12/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33173895	Malewicki, Tom	5/10/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
32842761	Matsugi, Akira	4/28/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33279500	McGillen, Max	5/13/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33114987	Mehta, Maulik	5/8/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33280328	Merchant, Shamel	5/13/2011	Student/Postdoc	\$490.00	\$150.00	\$340.00
33243176	Middaugh, Joshua	5/12/2011	Student/Postdoc	\$490.00	\$150.00	\$340.00
33193130	Milne, Christopher	5/11/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33293966	Moncada, Christiam	5/14/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33212592	Nguyen, Lam	5/11/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33419491	Oyeyemi, Victor	5/19/2011	Student/Postdoc	\$540.00	\$345.00	\$195.00
32921764	Paranjpe, Rucha	5/1/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33295352	Pedraza, Juan	5/15/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
31485523	Peukert, Sebastian	3/10/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33262164	Polino, Daniela	5/13/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33294153	Quintero, Astrid	5/14/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
31329252	Raj, Abhijeet	3/5/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33233484	Ravikrishnan, Vinu	5/12/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
32631822	Rayson, Mark	4/19/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33189097	Sakamoto, Yosuke	5/11/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
32922337	Salavatizadeh, Ali	5/1/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33205157	Sarathy, Mani	5/11/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33280384	Schnoor, Mary	5/13/2011	Student/Postdoc	\$490.00	\$150.00	\$340.00
32505681	Sempere, Bernat	4/14/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
32571685	Shannon, Robin	4/18/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33305645	Sharma, Amit	5/15/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33280444	Shi, Yu	5/13/2011	Student/Postdoc	\$490.00	\$150.00	\$340.00
32804777	Simbaqueba, Andres	4/26/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33296015	Snitsiriwat, Suarwee	5/15/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33236577	Sun, Hongyan	5/12/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33115317	Tanaka, Kotaro	5/8/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33213015	Vandewiele, Nick	5/11/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33394117	Vasiliou, AnGayle	5/18/2011	Student/Postdoc	\$540.00	\$345.00	\$195.00
32050496	Vasu, Subith	3/30/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
32932947	Venpin, Wendy	5/2/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33203206	Villano, Stephanie	5/11/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33267351	Wagnon, Scott	5/13/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33289454	Weber, Bryan	5/14/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33244213	West, Richard	5/12/2011	Student/Postdoc	\$490.00	\$150.00	\$340.00
32731723	Zhang, Feng	4/24/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
33233656	Zhang, Peng	5/12/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
31805990	Zhou, Chongwen	3/22/2011	Student/Postdoc	\$490.00	\$295.00	\$195.00
				\$41,900.00	\$23,585.00	\$18,460.00