

South Texas Section - AIChE Best Fundamental Paper Award

Year Awarded	Year Presented	Recipients (& all authors)	Best Fundamental Paper Title	Periodical and Date Published
		(STS member authors are in bold and <u>underlined</u> .)		
2015	2016	Wael A. Fouad, Le Wang, Amin Haghmoradi, Sunmeh K. Gupta, and Walter G. Chapman	"Understanding the Thermodynamics of Hydrogen Bonding in Alcohol-Containing Mixtures: Self Association"	<i>The Journal of Physical Chemistry B</i> , 2015, 119 (44), pp 14086–14101
2014	2015	Johnny Saavedra, Hieu A. Doan , Christopher J. Pursell, Lars C. Grabow , and Bert D. Chandler	"The critical role of water at the gold-titania interface in catalytic CO oxidation"	<i>Science</i> , Vol. 345, No. 6204, 26 September 2014, pp. 1599-1602
2013	2014	Rachel Liontas, Kun Ma, George J. Hirasaki , and Sibani Lisa Biswal .	"Neighbor-induced bubble pinch-off: novel mechanisms of in situ foam generation in microfluidic channels"	<i>Soft Matter</i> , 2013, 9, 10971
2012	2013	Aditya Agrawal, Paul Luchette, Peter Palffy-Muhoray, Sibani Lisa Biswal , Walter G. Chapman , and Rafael Verduzco	"Surface Wrinkling in Liquid Crystal Elastomers"	<i>The Royal Society of Chemistry's Soft Matter</i> , 2012, 8, pp. 7138–7142
2011	2012	Yu-Lun Fang, Kimberly N. Heck, Pedro J.J. Alvarez, and Michael S. Wong	"Kinetics Analysis of Palladium/Gold Nanoparticles as Colloidal Hydrochlorination Catalysts"	<i>ACS Catalysis</i> , Vol. 2011, No. 1, pages 128–138
2010	2011	Nikta Fakhri, Frederick C. Mackintosh, Brahim Louis, Laurent Cognet, and Matteo Pasquali	"Brownian Motion of Stiff Filaments in a Crowded Environment"	<i>Science</i> , 24-December, 2010, Vol. 330, pp. 1804-1807
2009	2010	Gang Cheng, Pauline Markenscoff, and Kyriacos Zygorakis (Rice University)	"A 3D Hybrid Model for Tissue Growth: The Interplay between Cell Population and Mass Transport Dynamics"	<i>Biophysical Journal</i> 97 , 401–414 (2009)
2008	2009	Kimberly N. Heck , Benjamin G. Janesko, Gustavo E. Scuseria, Naomi J. Halas and Michael S. Wong (Rice Univ.)	"Observing Metal-Catalyzed Chemical Reactions in Situ Using Surface-Enhanced Raman Spectroscopy on Pd-Au Nanoshells"	<i>J. Am. Chem. Soc.</i> , 2008, 130, 16592–16600.
2007	2008	Kenneth R. Hall and G. A. Iglesias-Silva (Texas A&M Univ)	Improved Equations for the Standing-Katz Tables	<i>Hydrocarbon Processing</i> , 2007, April, 107-110
2006	2007	Dan Luss and Ganesh Viswanathan (Univ. of Houston)	"Hot Zone Formation and Dynamics in Long Adiabatic Packed Bed Reactor"	<i>Industrial Engineering and Chemistry Research</i> , 45, p7057-7066, 2006
2005	2006	G. Viswanathan, D. Luss , A. Bindal, and J. Khinast (Univ. of Houston)	"Stationary Transversal Hot Zones in Adiabatic Packed-Bed Reactors"	<i>AIChE Journal</i> , vol. 51 no. 11, pp 3029-3038.
2004	2005	J.T. Richardson , R. M. Scates, M. V. Twigg (Univ. of Houston)	"X-ray diffraction Study of the Hydrogen reduction of NiOa-Al2O3 steam Reforming Catalysts"	<i>Applied catalysis A: General</i> 267 (2004) 35-46.
2003	2004	G. A. Iglesias-Silva, A. Bonilla-Petriciolet, P. T. Eubank , J. C. Holste , & K. R. Hall (Texas A&M Univ)	"An algebraic method that includes Gibbs minimization for performing phase equilibrium calculations for any number of components or phases."	<i>Fluid Phase Equilibria</i> 210 (2003), pages 229-245
2002	2003	No Award Given	No Award Given	No Award Given
2001	2002	Dr. Nikos Mantzaris , Aaron Kelly, Friedrich Stone, & Prodomos Daoutidis	"Optimal Carbon Source Switching Strategy for the Production of PHA"	@NA
2000	2001	Jiaxiang Ren , Dr. Adriana S. Silva , & Ramanan Krishnamoorti (Univ. of Houston)	"Linear Viscoelasticity of Disordered Polystyrene-Polyisoprene Block Co-polymer Based Layered-Silicate Nano-Composites"	@NA
1999	2000	Bin Lin & Aydin Akgerman	"Isoprene/methyl acrylate Diels-Alder reaction in supercritical carbon dioxide"	<i>Ind. Eng. Chem. Res.</i> , Vol. 38, No. 12, 1999
1998	1999	R. Joe (Principal Author), Thomas A. Badgwell , & R.H. Hauge (Rice Univ.)	"Atomic Carbon Insertion as a low-substrate-temperature growth mechanism in diamond CVD"	<i>Diamond and Related Materials</i> 7, (1998), 1364-1374
1997	1998	Dr. Ron Darby , P.E., Ph.D. (Texas A&M Univ)	"Control valves: Match the trim to the selection"	<i>Chemical Engineering</i> , June, 1997
1996	1997	Suracha Udomsak (Principal Author), & Rayford G. Anthony (Texas A&M Univ)	@NA	@NA
1995	1996	Dr. Dan Luss, PhD (UH)		
1994	1995			
1993	1994	C. Thibaud , C. Erkev , & A. Akgerman	"Investigation of the Effect of Moisture on the Sorption and Desorption of Chlorobenzene and Toluene from Soil"	<i>Environ. Sci. Technol.</i> , Vol. 27, No. 12, pp 2373-2380, 1993
1992	1993			
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1990	1991	Angel G. Guzman-Garcia , Peter N. Pintau, Mark V. Veerbrugge, & Robert F. Hill	"Development of a Space-Charge Transport Model for Ion-Exchange Membranes"	<i>AIChE Journal</i> , Vol. 36, No. 7, pp. 1061-1074, July, 1990
1989	1990	Snehal A. Patel , James G. Daly, & Dragomir B. Bukur (Texas A&M Univ)	"Holdup and Interfacial Area Measurements Using Dynamic Gas Disengagement"	<i>AIChE Journal</i> , Vol. 35, No. 6, pp. 931-942, 1989
1988	1989	K. Zygorakis & C. W. Sandermann (Rice Univ.)	"Discrete Structural Models and Their Applications to Gas-Solid Reacting Systems"	<i>AIChE Journal</i> , Vol. 34, No. 12, pp. 2030-2040, December 1988
1987	1988	K. R. Hall , D. R. McGeorg, J. C. Holub, D. T. Eubank , K. N. Marsh (Texas A&M Univ)	@NA	@NA
1986	1987	R. G. Anthony , D. Moolon, M. Bracener, N. Brauner (Texas A&M Univ)	@NA	@NA
1985	1986	D. M. Maron, N. Brauner, & A. E. Duckler (Univ. of Houston)	"Interfacial Structure of Thin Falling Films: Piecewise Modelling of the Waves"	<i>PhysicoChemical Hydrodynamics</i> , 6, 87, 1985
1984	1985	D. R. Paul & J. W. Barlow (Univ. of Texas)	@NA	@NA
1983	1984	R.C. Fernandes, R. Semiat, & A. E. Dukler (Univ. of Houston)	@NA	@NA
1982	1983	R. G. Anthony (Texas A&M Univ)		
1981	1982	W. K. Lee & R. W. Flumerfelt	@NA	@NA
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1964	1965	??? David E. Rosenberg & David Hellums	D. E. Rosenberg and J. D. Hellums, Flow development and heat transfer in variable-viscosity fluids, Indust. Engng Chem. Funct	
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