

Editorial for January 2014 for JPC A/B/C

B est wishes for the New Year to the authors, readers, and reviewers of *The Journal of Physical Chemistry (JPC)*. The Journal continues to thrive thanks to the creative and industrious research of our authors and thorough and thoughtful critiques from our reviewers. Over 6000 papers were published in *JPC A/B/C* during 2013, and our Impact Factors have been steady to increasing. Thanks to submission of high-quality research articles to the Journal, the overall citation activity is very favorable, placing *JPC* at or near the top in categories related to physical chemistry.

The Journal editors (pictured below) are both accomplished scientists and hard-working editors who have a first-hand understanding of the publishing process from the author's perspective. They know the importance of timely peer review, so it comes as no surprise that our average time from submission and web publication is similar to or better than our competitors. Our editors actively seek reviews, efficiently work with authors, and make timely decisions. Due to the large growth of submissions to the Journal, two years ago we added Deputy Editors to IPC A/B/C, to manage some of the functions of the Editor-in-Chief. The goal of the Deputy Editors was to provide individual leadership for each journal part (A, B, or C). This model has served us very well, with Anne McCoy in charge of JPC A, Sharon Hammes-Schiffer handling JPC B, and Cathy Murphy steering JPC C. Having the Deputy Editors in place has led to greater processing efficiency and enhanced leadership, and we are now able to provide authors with an additional level of personal attention when needed.

A new feature introduced to *JPC* this past September was the introduction of CrossCheck processing for all papers at the time they are submitted for revision. This functionality compares each of these manuscripts with articles previously published in almost any journal, providing the ability to easily identify plagiarism and other issues related to manuscript copyrights. For most authors the plagiarism checking process will be invisible, but a small

fraction of papers may require further processing, which we have found in most cases ultimately leads to a better published manuscript. We thank our authors for being sensitive to plagiarism and working with the editors on this additional process.

2013 was a busy year for Special Issues in the Journal. Those published include symposium or special topics issues on Electrophoretic Deposition (JPC B), Nanostructured Enhanced Photoenergy Conversion (IPC C), Structure and Dynamics (relating to the ESDMC-2013 (Electronic Structure and Dynamics on Molecules and Cluster) meeting held in Kolkata in 2013) (IPC A), and Stereodynamics (IPC A). Festschrift issues that were published include Paul Barbara (IPC B), Peter Armentrout (IPC A), Joel Bowman (JPC A), John Wright (JPC A), Takahishi Oka (JPC A), Rienk van Grondelle (JPC B), Ron Naaman (JPC C), Peter Wolynes (JPC B), Terry A. Miller (JPC A), Michael Fayer (JPC B), and Curt Wittig (IPC A). A number of excellent feature articles were also published in the Journal during 2013 and are listed in Table 1. Authors or readers who have ideas for possible Special Issues, Virtual Issues, Feature Articles, or Review Articles are encouraged to contact one of the editors.

Expanding our social media presence, *JPC* now has a Twitter feed (@JPhysChem), which has been great for brief announcements. The *JPC* Facebook page (http://www.facebook.com/home.php?#!/JournalofPhysicalChemistry) continues to be very popular among our readers, with several new postings each day that provide highlights to recent papers as well as news items and biographical information about our editors and Advisory Board members.

2013 was the inaugural year for the *JPC* Lectureships, a joint *JPC* and ACS Division of Physical Chemistry award. This is a new class of awards given to younger scientists (from any country) who have a record of publishing in *JPC*, are members of the Physical Division of the ACS, and have made major impacts on the field of physical chemistry in the research areas associated



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with each journal section. We had an outstanding group of awardees this year: John M. Herbert (The Ohio State University) for *JPC A*, David McCamant (University of Rochester) for *JPC B*, and Sarbajit Banerjee (University at Buffalo) for *JPC C*. Each gave terrific lectures at the ACS meeting in Indianapolis in a session that immediately preceded the joint *JPC*/Physical Division reception on Tuesday evening. We are holding the *JPC* Lectureships again in 2014 and look forward to the lectures, which will be given at the Fall ACS National Meeting in San Francisco.

To accommodate continued growth for *JPC A/B/C* and *JPC Letters*, we were fortunate to add Howard Fairbrother of Johns Hopkins University as a new Senior Editor this year. Howard replaced Senior Editor Francisco Zaera, who moved to *JPC Letters*. Senior Editors Randy Snurr and Peter Felker retired at the end of 2013; we gratefully thank them for their years of service.

Donna Minton, our Managing Editor, continues to provide invaluable service to the Journal, this year serving as the

coordinator for the *JPC* Lectureships in addition to her many other responsibilities. We thank the head office staff in Evanston—Davine Henderson (Coordinating Editor), Julie Rossetti, Barbara Sydow, Vincent Rezaei, Felicia Miller, and Catherine Corliss—for their tireless work to make the Journal run smoothly and efficiently. We are also grateful to our Associate Coordinating Editors: Betsy Foran, LeeAnn Pannebaker, and Harriet Bradham for their terrific work in managing the Deputy Editor offices for *JPC A/B/C*, respectively.

We are looking forward to a productive 2014, and we hope that all of you, our authors and reviewers, have a prosperous and successful year!

George C. Schatz, Editor-in-Chief Anne B. McCoy, Deputy Editor Sharon Hammes-Schiffer, Deputy Editor Catherine J. Murphy, Deputy Editor

Table 1. Feature and Review Articles Published during 2013

Table 1. Peacure and Review Articles Published during 2015			
Title	Authors	Citation	
Organic Aerosol Mixing Observed by Single Particle Mass Spectrometry	Ellis Shipley Robinson, Rawad Saleh, and Neil M. Donahue	J. Phys. Chem. A 2013 , 117 (51), XX. DOI: 10.1021/jp405789t	
The Intersection of Interfacial Forces and Electrochemical Reactions	Jacob N. Israelachvili, Kai Kristiansen, Matthew A. Gebbie, Dong Woog Lee, Stephen H. Donaldson, Jr., Saurabh Das, Michael V. Rapp, Xavier Banquy, Markus Valtiner, and Jing Yu	J. Phys. Chem. B 2013 , 117 (51), XX. DOI: 10.1021/jp408144g	
Predictive Theory for the Addition and Insertion Kinetics of ¹ CH ₂ Reacting with Unsaturated Hydrocarbons	Daniela Polino, Stephen J. Klippenstein, Lawrence B. Harding, and Yuri Georgievskii	J. Phys. Chem. A 2013 , 117 (48), 12677–12692. DOI: 10.1021/jp406246y	
To Be or Not To Be in a Cavity: The Hydrated Electron Dilemma	Jennifer R. Casey, Argyris Kahros, and Benjamin J. Schwartz	J. Phys. Chem. B 2013 , 117 (46), 14173–14182. DOI: 10.1021/jp407912k	
Revealing the Dynamics of Charge Carriers in Polymer: Fullerene Blends Using Photoinduced Time-Resolved Microwave Conductivity	Tom J. Savenije, Andrew J. Ferguson, Nikos Kopidakis, and Garry Rumbles	J. Phys. Chem. C 2013, 117 (46), 24085–24103. DOI: 10.1021/jp406706u	
Utility and Importance of Poisson—Nernst—Planck Immittance-Spectroscopy Fitting Models	J. Ross Macdonald	J. Phys. Chem. C 2013, 117 (45), 23433–23450. DOI: 10.1021/jp403510y	
Beyond the Continuum: How Molecular Solvent Structure Affects Electrostatics and Hydrodynamics at Solid—Electrolyte Interfaces	Douwe Jan Bonthuis and Roland R. Netz	<i>J. Phys. Chem. B</i> 2013 , 117 (39), 11397–11413. DOI: 10.1021/jp402482q	
Cation Exchange: A Versatile Tool for Nanomaterials Synthesis	Brandon J. Beberwyck, Yogesh Surendranath, and A. Paul Alivisatos	J. Phys. Chem. C 2013 , 117 (39), 19759–19770. DOI: 10.1021/jp405989z	
Strain Influence on the Oxygen Electrocatalysis of the (100)-Oriented Epitaxial ${\rm La_2NiO_{4+\delta}}$ Thin Films at Elevated Temperatures	Dongkyu Lee, Alexis Grimaud, Ethan J. Crumlin, Khaled Mezghani, Mohamed A. Habib, Zhenxing Feng, Wesley T. Hong, Michael D. Biegalski, Hans M. Christen, and Yang Shao-Horn	J. Phys. Chem. C 2013 , 117 (37), 18789–18795. DOI: 10.1021/jp404121p	
Photoelectrochemical Tandem Cells for Solar Water Splitting	Mathieu S. Prévot and Kevin Sivula	J. Phys. Chem. C 2013, 117 (35), 17879–17893. DOI: 10.1021/jp405291g	
Chemodynamics of Soft Charged Nanoparticles in Aquatic Media: Fundamental Concepts	Raewyn M. Town, Jacques Buffle, Jérôme F. L. Duval, and Herman P. van Leeuwen	J. Phys. Chem. A 2013 , 117 (33), 7643–7654. DOI: 10.1021/jp4044368	
Interpretation of Diffusion and Recombination in Nanostructured and Energy-Disordered Materials by Stochastic Quasiequilibrium Simulation	Mehdi Ansari-Rad, Juan A. Anta, and Juan Bisquert	J. Phys. Chem. C 2013 , 117 (32), 16275–16289. DOI: 10.1021/jp403232b	
Kinetic and Thermodynamic Modified Wulff Constructions for Twinned Nanoparticles	Emilie Ringe, Richard P. Van Duyne, and Laurence D. Marks	J. Phys. Chem. C 2013, 117 (31), 15859–15870. DOI: 10.1021/jp401566m	
In Situ Electrochemical Quartz Crystal Admittance Methodology for Tracking Compositional and Mechanical Changes in Porous Carbon Electrodes	Mikhael D. Levi, Sergey Sigalov, Doron Aurbach, and Leonid Daikhin	J. Phys. Chem. C 2013, 117 (29), 14876–14889. DOI: 10.1021/jp403065y	
Electronic Spectroscopy of Carbon Chains and Rings of Astrophysical Interest	C. A. Rice and J. P. Maier	J. Phys. Chem. A 2013 , 117 (27), 5559–5566. DOI: 10.1021/jp401833m	
Why Are There So Few Perovskite Ferroelectrics?	Nicole A. Benedek and Craig J. Fennie	J. Phys. Chem. C 2013 , 117 (26), 13339–13349. DOI: 10.1021/jp402046t	
Can We Model Snow Photochemistry? Problems with the Current Approaches	Florent Domine, Josué Bock, Didier Voisin, and D. J. Donaldson	J. Phys. Chem. A 2013 , 117 (23), 4733–4749. DOI: 10.1021/jp3123314	
Exciton Dissociation within Quantum Dot—Organic Complexes: Mechanisms, Use as a Probe of Interfacial Structure, and Applications	Kathryn E. Knowles, Mark D. Peterson, Martin R. McPhail, and Emily A. Weiss	J. Phys. Chem. C 2013, 117 (20), 10229–10243. DOI: 10.1021/jp400699h	
Reactions of Hydrocarbon Radicals and Biradicals	Michael J. Pilling	J. Phys. Chem. A 2013 , 117 (18), 3697–3717. DOI: 10.1021/jp402178c	
Defect Thermodynamics and Diffusion Mechanisms in ${\rm Li_2CO_3}$ and Implications for the Solid Electrolyte Interphase in Li-Ion Batteries	Siqi Shi, Yue Qi, Hong Li, and Louis G. Hector, Jr.	J. Phys. Chem. C 2013, 117 (17), 8579–8593. DOI: 10.1021/jp310591u	

Table 1. continued

Title	Authors	Citation
Conductive Scanning Probe Characterization and Nanopatterning of Electronic and Energy Materials	Albert L. Lipson and Mark C. Hersam	J. Phys. Chem. C 2013 , 117 (16), 7953–7963. DOI: 10.1021/jp312594s
Excitons in Conjugated Polymers: A Tale of Two Particles	William Barford	J. Phys. Chem. A 2013 , 117 (13), 2665–2671. DOI: 10.1021/jp310110r
Effects of Inhomogeneities—Nanoscale to Mesoscale—on the Durability of Li-Ion Batteries	Stephen J. Harris and Peng Lu	J. Phys. Chem. C 2013, 117 (13), 6481–6492. DOI: 10.1021/jp311431z
Solution NMR and Computational Methods for Understanding Protein Allostery	Gregory Manley, Ivan Rivalta, and J. Patrick Loria	J. Phys. Chem. B 2013 , 117 (11), 3063–3073. DOI: 10.1021/jp312576v
Physically-Motivated Force Fields from Symmetry-Adapted Perturbation Theory	Jesse G. McDaniel and J. R. Schmidt	J. Phys. Chem. A 2013 , 117 (10), 2053–2066. DOI: 10.1021/jp3108182
Mass-Independent Isotope Effects	Anatoly L. Buchachenko	J. Phys. Chem. B 2013 , 117 (8), 2231–2238. DOI: 10.1021/jp308727w
Modeling Excited States and Alignment of Energy Levels in Dye-Sensitized Solar Cells: Successes, Failures, and Chal- lenges	Mariachiara Pastore, Simona Fantacci, and Filippo De Angelis	J. Phys. Chem. C 2013 , 117 (8), 3685–3700. DOI: 10.1021/jp3095227
Photofunctional Hybrid Nanocarbon Materials	Tomokazu Umeyama and Hiroshi Imahori	J. Phys. Chem. C 2013 , 117 (7), 3195–3209. DOI: 10.1021/jp309149s
A Current Opinion on Electrophoretic Deposition in Pulsed and Alternating Fields	Bram Neirinck, Omer Van der Biest, and Jef Vleugels	J. Phys. Chem. B 2013 , 117 (6), 1516–1526. DOI: 10.1021/jp306777q
Theory and Modeling of Plasmonic Structures	Stephen K. Gray	J. Phys. Chem. C 2013 , 117 (5), 1983–1994. DOI: 10.1021/jp309664c
Electronic Structure Modeling of Electrochemical Reactions at Electrode/Electrolyte Interfaces in Lithium Ion Batteries	Kevin Leung	J. Phys. Chem. C 2013 , 117 (4), 1539–1547. DOI: 10.1021/jp308929a