

Publications intéressantes

Dans Journal of Chemical Education

2019

- [A Tale of Two Molecules: How the Heat Capacities of N₂\(g\) and F₂\(g\) Differ At High Temperature and Why Naïve Expectations Fail to Explain These Differences: A Spreadsheet Exercise for Physical Chemistry Students](#) Arthur M. Halpern and Robert J. Noll, *J. Chem. Educ.*, 2019, 96 (5), pp 926–935 DOI: 10.1021/acs.jchemed.9b00029
- [Creating and Experimenting with a Low-Cost, Rugged System to Visually Demonstrate the Vapor Pressure of Liquids as a Function of Temperature](#) Rodrigo Papai, Mayara Araujo Romano, Aline Rodrigues Arroyo, Bárbara Rodrigues da Silva, Bruno Tresoldi, Gabriela Cabo Winter, Julia Messias Costa, Maria Aparecida Freitas Santos, Matheus Damasceno Prata, and Ivanise Gaubeur, *J. Chem. Educ.*, 2019, 96 (2), pp 335–341 DOI: 10.1021/acs.jchemed.8b00381
- [Teaching Boyle's Law and Charles' Law through Experiments that Use Novel, Inexpensive Equipment Yielding Accurate Results](#) Taweetham Limpanuparb, Siradanai Kanithasevi, Maytouch Lojanarungsiri, and Puh Pakwilaikiat, *J. Chem. Educ.*, 2019, 96 (1), pp 169–174 DOI: 10.1021/acs.jchemed.8b00460
- [Simple and Low-Cost Setup for Measurement of the Density of a Liquid](#) Nima Noei, Iman Mohammadi Imani, Lee D. Wilson, and Saeid Azizian, *J. Chem. Educ.*, 2019, 96 (1), pp 175–179 DOI: 10.1021/acs.jchemed.7b00979
- [Reduction of Water Waste in an Organic Chemistry Laboratory Using a Low-Cost Recirculation System for Condenser Apparatus](#) Alex Schoeddert, Keshwaree Babooram, and Sarah Pelletier, *J. Chem. Educ.*, 2019, 96 (1), pp 180–182 DOI: 10.1021/acs.jchemed.8b00400
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- [Wetting Modification by Photocatalysis: A Hands-on Activity To Demonstrate Photoactivated Reactions at Semiconductor Surfaces](#) Luca Rimoldi, Tommaso Taroni, and Daniela Meroni, *J. Chem. Educ.*, 2018, 95 (12), pp 2216–2221 DOI: 10.1021/acs.jchemed.8b00362
- [Constructing the Phase Diagram of a Single-Component System Using Fundamental Principles of Thermodynamics and Statistical Mechanics: A Spreadsheet-Based Learning Experience for Students](#) Arthur M. Halpern and Charles J. Marzocco, *J. Chem. Educ.*, 2018, 95 (12), pp 2197–2204 DOI: 10.1021/acs.jchemed.8b00560
- [Using the Principles of Classical and Statistical Thermodynamics To Calculate the Melting and Boiling Points, Enthalpies and Entropies of Fusion and Vaporization of Water, and the Freezing Point Depression and Boiling Point Elevation of Ideal and Nonideal Aqueous Solutions](#) Arthur M. Halpern and Charles J. Marzocco, *J. Chem. Educ.*, 2018, 95 (12), pp 2205–2211 DOI: 10.1021/acs.jchemed.8b00561
- [The Gibbs Phase Rule: What Happens When Some Phases Lack Some Components?](#) Deepika Janakiraman, *J. Chem. Educ.*, 2018, 95 (11), pp 2086–2088 DOI: 10.1021/acs.jchemed.8b00377
- [Liquid Crystal Demonstration of Binary Phase Behavior for the Classroom](#) Marissa E. Tousley, *J. Chem. Educ.*, 2018, 95 (11), pp 2000–2005 DOI: 10.1021/acs.jchemed.8b00081

- [Approximate Equation To Calculate Partial Pressures in a Mixture of Real Gases](#) Bernard Hayez, *J. Chem. Educ.*, 2018, 95 (11), pp 1982–1988 DOI: 10.1021/acs.jchemed.8b00185
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- [Facilitating Students' Interaction with Real Gas Properties Using a Discovery-Based Approach and Molecular Dynamics Simulations](#) Chelsea Sweet, Oyewumi Akinfenwa, and Jonathan J. Foley, *J. Chem. Educ.*, 2018, 95 (3), pp 384–392 DOI: 10.1021/acs.jchemed.7b00747

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- [Development and Use of an Open-Source, User-Friendly Package To Simulate Voltammetry Experiments](#) Shuo Wang, Jing Wang, and Yanjing Gao, *J. Chem. Educ.*, 2017, 94 (10), pp 1567–1570 DOI: 10.1021/acs.jchemed.6b00986
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- [Let Students Derive, by Themselves, Two-Dimensional Atomic and Molecular Quantum Chemistry from Scratch](#), Yingbin Ge, *J. Chem. Educ.*, 2016, 93 (12), pp 2033–2039 DOI: 10.1021/acs.jchemed.6b00572
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- [An Alternative Presentation of the Second Law of Thermodynamics](#) Sangyoub Lee, Kyusup Lee, and Jiyeon Lee, *J. Chem. Educ.*, 2015, 92 (4), pp 771–773 DOI: 10.1021/ed5007822
- [Measuring the Speed of Sound through Gases Using Nitrocellulose](#) Karen Sinclair Molek, Karl A. Reyes, Brandon A. Burnette, and Jacob R. Stepherson, *J. Chem. Educ.*, 2015, 92 (4), pp 762–766 DOI: 10.1021/ed400653t
- [Cost Effective Paper-Based Colorimetric Microfluidic Devices and Mobile Phone Camera Readers for the Classroom](#) Myra T. Koesdjojo, Sumate Pengpumkiat, Yuanyuan Wu, Anukul Boonloed, Daniel Huynh, Thomas P. Remcho, and Vincent T. Remcho, *J. Chem. Educ.*, 2015, 92 (4), pp 737–741 DOI: 10.1021/ed500401d
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- [University chemistry students' interpretations of multiple representations of the helium atom](#) Zahilyn D. Roche Allred and Stacey Lowery Bretz, *Chem. Educ. Res. Pract.*, 2019,20, 358-368 DOI: 10.1039/C8RP00296G

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- [Some remarks concerning the thermodynamics of the simple ideal gas and related mathematical background](#), Láng, G.G. *ChemTexts* (2016) 2: 10. doi:10.1007/s40828-016-0028-2

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- [The hot chocolate effect might have practical application](#)
 - [Contactless, probeless and non-titrimetric determination of acid–base reactions using broadband acoustic resonance dissolution spectroscopy \(BARDS\)](#), M. Rizwan Ahmed, Sean McSweeney, Jacob Krüse, Bastiaan Vos and Dara Fitzpatrick, *Analyst*, 2018, 956-962. DOI : 10.1039/C7AN01447C

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