S. Hessam Moosavi Mehr

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Research interests

Supramolecular chemistry, structural chemistry, organic reaction development, scientific computation, chemical education

Education

Doctor of Philosophy Chemistry, *University of British Columbia*, Vancouver, Canada 2011–**BSc** Electrical Engineering, *Sharif University of Tech.*, Tehran, Iran (GPA: 16.5/20) 2005–2009

Publications

- Mehr, S. H. M.; Fukuyama, K.; Bishop, S.; Lelj, F.; MacLachlan, M. J. "Deuteration of Aromatic Rings Under Very Mild Conditions Through Keto-Enamine Tautomeric Amplfication" *J. Org. Chem*, **2015**¹
- Mehr, S. H. M.; Giese, M.; Qi, H.; Shopsowitz, K.; Hamad, W. Y.; MacLachlan, M. J. "Novel PPV/Mesoporous Organosilica Composites: Influence of the Host Chirality on a Conjugated Polymer Guest" *Langmuir*, 2013, 29 (40), 12579–12584
- Frischmann, P.D.; Mehr, S. H. M.; Patrick, B. O.; Lelj, F.; MacLachlan, M. J. "Role of Entropy and Autosolvation in Dimerization and Complexation of C_{60} by Zn_7 Metallocavitands" *Inorganic Chemistry*, **2012**, 51 (6), 3443–3453
- S. H. M. Mehr, S. Khorasani; Influence of asymmetry on the band structure of photonic crystals, *Proceedings* of SPIE Photonics West 2010, San Francisco, USA
- Shahshahani, S. M. "Calculus" (in Persian) 2, 2008, Fatemi Publications, Tehran, Iran
- Mehr, S. H. M.; Bahraini, M.] "eXAM: An Distributed Online Examination System" *Proceedings of the 18th International Conference on Chemical Education*, **2004**, Turkey

Teaching experience

Shared Instrument Facility (TA) University of British Columbia, 2012-

Chem121/123 (TA) University of British Columbia, 2011-2012

Organic Chemistry Farzangan High School, 2005–2010

Digital Signal Processing Lab (TA) Sharif Univ. Tech., 2009–2010

Chemistry for the IChO Allameh Helli High School, 2009–2010, 2004–2006

Electromagnetics (TA) Spring 2009, Sharif Univ. Tech.

Computer skills

Computational chemistry Gaussian, Psi4

Programming Python, C, Go HTML/CSS/Javascript

Numerical/symbolic computing MATLAB, SciPy, Mathematica

¹In press

²(As mathematical illustrator) ISBN: 978-964-318456-8

Languages

Farsi Native
English Near native
French, Italian Fair
Japanese Basic