Peter Nelson

Published papers *(* indicates corresponding authorship)*

1. Tahjna I. Robertson, **Peter N. Nelson***, A DFT and Experimental study of the Spectroscopic and Hydrolytic degradation behaviour of some Benzylideneanilines, *Journal of Molecular Struct*ure. 2021, 131625, DOI: 10.1016/j.molstruc.2021.131625 (Impact Factor: 2.10; Citation: 0)
2. **Peter N. Nelson***, A DFT Mechanistic study of two possible Hydrolytic Evolution pathways of Thiamethoxam; Implications in Food and Environmental Safety, Journal and Theoretical and Computational Chemistry. 2021, 10.1016/j.comptc.2021.113333 ** (Impact Factor: ***; Citation: 0)
3. Dahryn A. Augustine, Grace-Anne Bent, **Peter Nelson**. Mechanistic evidence for the effect of sulphur-based additive: metnionine on acrylamide reduction. FOOD ADDITIVES & CONTAMINANTS: PART A, 10.1080/19440049.2021.19251662021, ** (Impact Factor: ***; Citation: 0)
4. **Peter N. Nelson***. A Density Functional Theoretical Study of the Hydrolysis Mechanism of three Neonicotinoid based Pesticides, *Journal of Molecular Struct*ure. 2021, 129909 (Impact Factor: 2.10; Citation: 0)
5. **Peter Nattaniel Nelson*,** Deneikah T. Jackson, Irvin N. Booysen. A Lead Ion Selective Electrodes from Dibenzo-18-crown-6 derivatives: An exploratory study. *Journal of Molecular Struct*ure. 2021, 1227, 129575 (Impact Factor: 2.10; Citation: 0)
6. **Peter Nattaniel Nelson***, A Theoretical Study of the interactions between Carbon Dioxide and some Group(III) Trihalides: Implications in Carbon Dioxide Sequestration. *Journal of Molecular Struct*ure. 2020, 1223, 129212 (Impact Factor: 2.10; Citation: 0
7. **Peter Nattaniel Nelson***, A Theoretical assessment of the primary hydration shell formation for calcium pyrophosphate. *Journal of Molecular Struct*ure. 2019, 1190, 144 - 147. (Impact Factor: 2.10; Citation: 0)
8. Tishana Green, **Peter N. Nelson***, Mark A. W. Lawrence. Optical sensing and metal binding behavior of 1, 5-dipenylhydrazone. *Journal of Molecular Struct*ure. 2019, 1195, 426 - 434(Impact Factor: 2.10; Citation: 1)
9. Deneikah T. Jackson, **Peter N. Nelson***, Preparation and Properties of Some Ion Selective Membranes: A Review. *Journal of Molecular Struct*ure. 2019, 1182, 241 – 259. (Impact Factor: 2.10; Citation: 10)
10. **Peter N. Nelson*.** 1H-indazoles from phenylhydrazienes: A Exploratory DFT study of a possible Intramolecular Evolutionary synthetic Route. *Journal of Molecular Struct*ure. 2019, 1181, 423 - 427. (Impact Factor: 2.10; Citation: 0)
11. Mohammed Bakir*, Mark W. Lawrence, **Peter N. Nelson** and Bohari, M. Yamin. Electro-catalytic hydrogen evolution and homogeneous Suzuki-Miyuara C-C cross coupling catalysis by two Pd(II)-complexes of di-2-pyridyl ketone benzoyl hydrazones.

Journal of Coordination Chemistry. 2019, 72(13), 2261 - 2278_(Impact Factor: 0.67; Citation: 7)

12. Rivka Maoz, Jonathan Berson, Doron Burshtain, **Peter Nelson**, Ariel Zinger, Ora Bitton, and Jacob Sagiv*. Interfacial Electron Beam Lithography: Chemical Monolayer Nanopatterning via Electron Beam-Induced Interfacial Solid-Phase Oxidation, ACSNano. 2018, 12(10), 9680 - 9692 (Impact Factor: 13.71; Citation: 1)

13. Mark A.W. Lawrence*, Kerry-Ann Green, **Peter N. Nelson**, Shannen C. Lorraine. Review: Pincer ligands—tunable, versatile and applicable. *Polyhedron.* 2017, 142, 11 – 27 (Impact Factor: 2.10; Citation: 61)

14. Rivka Maoz, Doron Burshtain, Hagai Cohen, **Peter Nelson**, Jonathan Deneikah T. Jackson, **Peter N. Nelson***, Preparation and Properties of Some Ion Selective Membranes: A Review. *Journal of Molecular Struct*ure. 2019, 1182, 241 – 259. (Impact Factor: 2.10; Citation: 10)

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14. Rivka Maoz, Doron Burshtain, Hagai Cohen, **Peter Nelson**, Jonathan Berson, Alexander Yoffe, and Jacob Sagiv*. Site-Targeted Interfacial Solid-Phase Chemistry. 2016, *Angewandte Chemie*. 2016, 128(40), 12554 – 12559. (Impact Factor: 12.10; Citation: 5)

15. Mohammed Bakir*, Mark Lawrence, **Peter Nelson.** Spectroscopic, X-ray crystallographic and electrochemical properties of di-2-thienyl ketone·di-2-thienyl ketone thiosemicarbazone hybrid [dtk.dtktsc] and [dsktsc]. *Electrochemica Acta*. 2016, 212, 1010 – 1020 (Impact Factor: 4.79; Citation: 9)

16. **Peter N. Nelson***, Temperature and Chain Length Dependence of the Vibrational Spectra of some Anhydrous Silver(I) *n*-Alkanoates. *International Journal of Spectroscopy*. 2016, 2016, 1 – 10 (Impact Factor: 0.76; Citation: 0)

17. **Peter N. Nelson***, Henry A. Ellis, Nicole A. S. White. Solid State ^{13}C-NMR, Infrared, X-ray Powder Diffraction and Differential Thermal Studies of the Homologous Series of some Mono-valent Metal (Li, Na, K, Ag) *n*-alkanoates: A comparative study. *Spectrochimica Acta Part A*. 2015, 145, 440 – 453. (Impact Factor: 2.88; Citation: 7)

18. **Peter N. Nelson,** Richard A. Taylor*. Powder X-ray Diffraction, Infrared and ^{13}C-NMR Spectroscopic Studies of the Homologous Series of some Solid-state Zinc(II) and Sodium(I) n-alkanoates. *Spectrochimica Acta Part A*. 2015, 138, 800 – 806. (Impact Factor: 2.88; Citation: 9)

18. **Peter N. Nelson**, Henry A. Ellis*. Odd-even Chain Packing, Molecular and Thermal Models for some Long Chain Sodium(I) *n*-alkanoates. *Journal of Molecular Struct*ure. 2014, 1075, 299 – 310. **(**Impact Factor: 2.01; Citation: 5)

20. **Peter N. Nelson**, Henry A. Ellis, Richard A. Taylor. Reply to comments on the Inter-planar Structures and Lamellar Packing of Short and Long chain Zinc (II) *n*-Alkanoates. *Journal of Molecular Struct*ure. 2014, 1070, 106 – 109. (Impact Factor: 2.01; Citation: 0)

21. Peter N. Nelson, Richard A. Taylor*. Theories and Experimental Investigations of the Structural and Mesomorphic Phase Behaviours of Metal Carboxylates. *Applied Petrochemical Research*. 2014, 4, 253–285. Impact Factor: Open Access; Citation: 31)

22. Peter N. Nelson, Henry A. Ellis*, Richard A. Taylor. Effects of Molecular and Lattice Structure on the Thermal Behaviors of some Long Chain Length Potassium(I) *n*-Alkanoates. *Journal of Molecular Structure*. 2014, 1058, 234 – 243. (Impact Factor: 2.01; Citation: 10)

23. **Peter N. Nelson**, Richard A. Taylor and Henry A. Ellis*. The effects of Molecular and Lattice Structures on the Thermotropic Phase behaviour of Zinc(II) Undecanoate and Isomeric zinc(II) Undecynoates. *Journal of Molecular Structure*. 2013, *1034*, 75-83. (Impact Factor: 2.01; Citation: 9)

24**.** Peter Nattaniel Nelson and Henry Anthony Ellis*. Structural, Odd-Even chain Alternation and Thermal investigation of a Homologous series of Anhydrous Silver(I) *n*-Alkanoates. *Dalton Trans*. 2012, *41*, 2632-2638. (Impact Factor: 4.10; Citation: 21)

25. N. A. S. White, H. A. Ellis and **Peter N. Nelson**, P.T. Maragh. Thermal and Odd-Even behaviour in a Homologous series of Lithium(I) *n*-alkanoates. *Journal of Chem*ical *Thermodynamics* 2011, *43*, 584-590. (Impact Factor: 2.63; Citation: 9)

26. **Peter N. Nelson**, H. A. Ellis and R. A. Taylor. Odd-even Alternation in a Homologous series of Zinc(II) *n*-alkanoates. *Journal Molecular Struct*ure. 2011, *986*, 10-15. (Impact Factor: 2.01; Citation: 15)

Conference papers

1. **Surface Patterning of *n*-octadecyltrichlorosilane (OTS) Self Assembly Monolayers: Constructive Nanolithgraphy.**
   International Nanotechnology Conference & Expo April 4 – 6, 2016, Baltimore, USA.

Authors: Peter A. Nelson, Rivka Maoz, Jacob Sagiv

2. **Physico-chemical and biological properties of polypyridyl hydrazonic ligands**.
   Faculty of Science and Technology, UWI-Mona conference, 2015.
   Authors: Mohammed Bakir, Peter A. Nelson, Kenroy Wallace

3. **Room temperature molecular and lattice structures for a homologous series of anhydrous sodium(I) *n*-alkanoates.**
   244th ACS National Meeting and Exposition (Theme – Materials for Health and Medicine), Philadelphia, PA, August 19 - 23, 2012.
   Authors: Peter A. Nelson, Henry A. Ellis

4. **A molecular model for the odd-even alternation in a homologous series of anhydrous silver(I) *n*-alkanoates.**

5. **A molecular model for the odd-even behavior in zinc(II) carboxylates.**
   5th IUPAC- Sponsored International Symposium on Macro and Supramolecular Architectures and Materials, Sunset Jamaica Grande Resort and Spa, Ochi Rios, Jamaica, August 15 – 20, 2010.
   Authors: Peter N. Nelson, Henry A. Ellis, Richard A. Taylor

6. **Novel insight into the reaction between the amino acid, methionine and the toxin, acrylamide.**
   4th Food Structure and Functionality Symposium, 14-17 June 2020, Clayton Hotel, Cork City, Cork, Ireland.
   Dahryn A. Augustine, Grace-Anne Bent, Peter N. Nelson

7. **Functional group gating of dibenzo-18-crown-6 towards the development of lead(II) ion sensing electrodes**
   The Caribbean Academy of Sciences Virtual 22nd Biennial Conference and General Meeting. August 9-14, 2021
   Authors: Deneikah T. Jackson and Peter N. Nelson

8. **A DFT and experimental study of the hydrolytic degradation behaviour and spectroscopic properties of some benzylideneanilines**
   The Caribbean Academy of Sciences Virtual 22nd Biennial Conference and General Meeting. August 9-14, 2021
   Authors: Tahjna I. Robertson, and Peter N. Nelson

9. **Crown ether based lead(II) sensing electrodes: towards the development of lead sensing electrodes for lead in drinking water**
   Common wealth Poster conference, September 30, 2021

Authors: Deneikah T. Jackson and Peter N. Nelson

10. **A DFT and experimental study of the hydrolytic degradation behaviour of some benzylideneanilines: towards the development of optical metal sensors**
    Common wealth Poster conference, September 30, 2021
    Authors: Tahjna I. Robertson and Peter N. Nelson

11. **Novel insight into the reaction between the amino acid, methionine and food toxin, acrylamide**
    4th Food Structure and Functionality Symposium
    October 19-20, 2021
    Authors: Dahryn Andilla Augustine, Grace-Anne Bent, Peter Nattaniel Nelson