Danielle Schweke Jan. 2019

CURRICULUM VITAE

• **Personal Details**

Name: Danielle Schweke

Date and place of birth: At 1978 in Paris, France

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• **Education**

1997-1999	B.Sc.	Hebrew University of Jerusalem, Department of Chemistry Summa cum laude
1999-2005	Ph.D.	Hebrew University of Jerusalem, Department of Chemistry Prof. Y. Haas Photo-inducted intramolecular charge transfer in molecular systems.

• **Employment History**

2018-Present	Researcher -Department of physics, NRCN, Israel
2017-2018	Visiting researcher, Department of Materials Engineering, Ben-Gurion University of the Negev, Israel
20013-2017	Head of the physical chemistry and metallurgy group - Department of physics, NRCN, Israel
2011-2013	Head of the physical chemistry group - Department of physics, NRCN, Israel
2006-2011	Researcher - Department of physics, NRCN, Israel

Awards, Citations, Honors, Fellowships

2016 NRCN Award for excellent research.
2006-2012 Katzir research scholarship
2001-2005 Scholarship for excellent students
2001 Golda Meir reward
2001 Rector honor

List of publications:

1. L. Shelly, **D. Schweke**, S. Zalkind, N. Shamir, S. Barzilai, T. Gouder, and S. Hayun "Effect of U Content on the Activation of H_2O on $Ce_{1-x}U_xO_{2+\delta}$ Surfaces" Chemistry of Materials 2018 30 (23), 8650-8660
2. **D. Schweke**, Y. Mordehovitz, M. Halabi, L. Shelly and S. Hayun Defect chemistry of oxides for energy application, Advanced Materials, (2018), 30, pp 1706300

3. **D. Schweke**, S. Zalkind, S. Attia, and J. Bloch, "The Interaction of CO_2 with CeO_2 powder explored by correlating adsorption and thermal desorption analyses", The Journal of Physical Chemistry C, (2018), *122* (18), pp 9947–9957
4. S. Zalkind, G. Rafailov, I. Halevy, T. Livneh, A. Rubin, H. Maimon, **D. Schweke** "Uranium oxidation kinetics monitored by in-situ X-ray diffraction" Journal of Nuclear Materials, 485 (2017) 202-206
5. **D. Schweke**, C. Maimon,Z. Chemia, T. Livneh "Monitoring the in-situ oxide growth on uranium by UV-Vis reflectance spectroscopy". Journal of Applied Physics, 112,9 (2012) 093104 – 093108
6. M. Bereznitsky, J. Bloch, M. Yonovich, **D. Schweke**, M. H. Mintz, I. Jacob, "Hydrogen absorption in Ce_xGd_{1-x} alloys". Journal of Alloys and Compounds, 532 (2012) 102-108
7. G. Benamar, **D. Schweke**, G. Kimmel, M.H. Mintz, "Preferred hydride growth orientation on oxide coated Gd surfaces". Journal of Alloys and Compounds, 520 (2012) 98-104
8. G. Benamar, **D. Schweke**, T. Livneh, S. Zalkind, N. Shamir, A. Danon, M. Mintz "Heat-pretreatment-induced activation of gadolinium surfaces towards the initial precipitation of hydrides". Journal of Alloys and Compounds,498 (2010) 26-29
9. N. Shamir, **D. Schweke**, A. Rubin, A. Raveh, T. Livneh, S. Zalkind. "Carbon induced hydrogen attack on an oxidized U-0.1Wt%Cr surface" IOP Conf. Series: Materials Science and Engineering, 9 (2010) 012037
10. G. Benamar, **D. Schweke**, J. Bloch, T. Livneh, M.H.Mintz, "The very initial stage of hydride formation on polycrystalline gadolinium". Journal of Alloys and Compowds, 477 (2009) 188-192
11. S. Abramov, **D. Schweke**, S. Zilberg, Y. Haas, "The fluorescence of 5-cyano-2-(lpyrrolyl)-pyridine (CPP) in different solvents and in solid argon: An experimental and theoretical study", Chem. Phys, 335 (2007) 79-86
12. **D. Schweke**, S. Abramov, Y. Haas, "The crystal structure and vibrational spectra of two molecules emitting dual fluorescence: 4-(l1H-pyrrol-1-yl)benzonitrile (PBN) and 5-cyano-2-(1pyrrolyl)-pyridine (CPP)". Chem. Phys, 335 (2007) 87-93
13. **D. Schweke**, B. Brauer, R. B. Gerber and Y. Haas, "The vibrational spectra ofN-phenylpyrrole in the gas phase, in argon matrices, and in single crystals". Chem. Phys, 333, 2-3, 168-178 (2007)
14. Y. Haas and **D. Schweke** "Molecular dynamics simulations of matrix tapped molecules" J. Indian Inst. Sci., 319-52,2004,85
15. **D. Schweke**, Y. Haas, B. Dick "The photophysics of phenylpyrrole derivatives and their acetonitrile clusters in the gas phase and in argon matrices: Simulations of structure and reactivity". J. Phys. Chem. A, 109,3830 (2005)
16. **D. Schweke**, H. Baumgarten, Y. Haas, B. Dick, W. Rettig "Charge transfer type fluorescence of 4-(lH-pynol-1-yl)benzonitrile (PBN) in cryogenic matrices: evidence for direct excitation of the CT band". J. Phys. Chem. A, 109, 576-85 (2005)
17. **D. Schweke** and Y. Haas "The fluorescence ofN-phenylpyrrole in an argon/acetonitrile matrix". J. Phys. Chem. A,107,9554-9560 (2003).

18. R. Fraenkel, **D. Schweke**, Y. Haas, F. Molnar, D. Horinek, B. Dick “Molecular Dynamics Simulations of Site Geometies of Anthracene in an Argon Matrix”. J. Phys. Chem. A, 104, 3786-91 (2000).