SEYHAN SALMAN

Address: 3820 Longlake Dr. Duluth, GA
Phone: (404) 834 9873
E-mail: salmansey@yahoo.com
http://www.researcherid.com/rid/F-3154-2015

Professional Experience

- *Assistant Professor*, Department of Genetics and Bioengineering, Faculty of Engineering and Natural Sciences, Istanbul Bilgi University, Istanbul, Turkey (2011 – 2016).
- *Department Head, Genetics and Bioengineering, Istanbul Bilgi University (2013-2016).*
- *Postdoctoral Fellow*, Institute of Molecular Sciences (ISM), University of Bordeaux, France (2009 – 2010).
- *Graduate Teaching and Research Assistant*, School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, GA, USA (2004 -2009).
- *Graduate Teaching and Research Assistant*, Bosphorus University, Istanbul, Turkey (2002 – 2004).

Education

Georgia Institute of Technology, School of Chemistry and Biochemistry
Ph.D., Chemistry, 2009
Dissertation: Theoretical Characterization of the Charge-Transport and Electroluminescence Properties of Pi-Conjugated Organic Materials
Advisor: Dr. Jean-Luc Brédas

Boğaziçi University, Institute of Science
M.S., Chemistry, 2004
Thesis: Modeling the Reactivity of Nonphosphorus and Phosphorus-Containing Acrylates
Advisor: Dr. Viktorya Aviyente

Boğaziçi University, Faculty of Arts and Sciences
B.S., Chemistry (*with Honors*), 2002

Selected Publications

1. T. G. Erbay, V. Aviyente, S. Salman* "How substitution tunes the electronic and transport properties of oligothiophenes, oligoselenophenes and oligotellurophenes", Synt. Met., 210, 236-244, 2015.

2. T. Furuncuoğlu, B. Dereli, O. Karahan, **S. Salman**, V. Aviyente, "Solvent Effects on Free-Radical Copolymerization of Styrene and 2-Hydroxyethyl methacrylate: A DFT Study", New J. Chem., 38 (1), 170 – 178, 2014.

3. **S. Salman**, J. L. Brédas, S. R. Marder, V. Coropceanu, S. Barlow, "Dipolar Ferrocene and Ruthenocene Second-Order Nonlinear Optical Chromophores: A Time-Dependent Density Functional Theory Investigation of their Absorption Spectra'' Organometallics, 32(20), 6061-6068, 2013.

4. S. Nenon, R. Mereau, **S. Salman**, F. Castet, T. Van Regemorter, S. Clima, D. Beljonne, J. Cornil, "Structural and Electronic Properties of the TTF/ZnO(10-10) Interface: Insights From Modeling" J. Phys. Chem. Lett. 3, 58-63, 2012.

5. **S. Salman**, D. Kim, V. Coropceanu, and J. L. Brédas, "Theoretical investigation of triscarbazole derivatives as host materials for blue electrophosphorescence: Effects of topology" Chem. Mater. 23 (23), 5223-5230, 2011.

6. Y. Zhang, C. Zuniga, S. J. Kim, D. Cai, S. Barlow, **S. Salman**, V. Coropceanu, J. L. Brédas, B. Kippelen and S. Marder "Polymers with Carbazole-Oxadiazole Side Chains as Ambipolar Hosts for Phosphorescent Light-Emitting Diodes" Chem. Mater. 23(17), 4002-4015, 2011.

7. D. Kim, **S. Salman**, V. Coropceanu, E. Salomon, A. Padmaperuma, L. Sapochak, A. Kahn, and J. L. Brédas, "Phosphine Oxide Derivatives as Hosts for Blue Phosphors: A Joint Theoretical and Experimental Study of Their Electronic Structure" Chem. Mater. 22(1), 247–254, 2010.

8. **S. Salman**, M. C. Ruiz Delgado, V. Coropceanu, and J. L. Brédas, "Electronic Structure and Charge-Transport Parameters of Functionalized Tetracene Crystals: Impact of Partial Fluorination and Alkyl or Alkoxy Derivatization" Chem. Mater. 21 (15), 3593–3601, 2009.

9. T. Kinnibrugh, **S. Salman**, Y. Getmanenko, V. Coropceanu, W. W. Porter III, T. V. Timofeeva, A. J. Matzger, J. L. Brédas, S. R. Marder, and S. Barlow "Dipolar Second-Order Nonlinear Optical Chromophores Containing Ferrocene, Octamethylferrocene, and Ruthenocene Donors and Strong pi-Acceptors: Crystal Structures and Comparison of pi-Donor Strengths" Organometallics 28 (5), 1350-1357, 2009.

10. E. F. Valeev, V. Coropceanu, D. A. da Silva Filho, **S. Salman** and J. L. Brédas, "Effect of Electronic Polarization on Charge-Transport Parameters in Molecular Organic Semiconductors" J. Am. Chem. Soc. 128 (30), 9882-9886, 2006. Times Cited: 417.

11. **S. Salman**, A. Z. Albayrak, D. Avcı and V. Aviyente, "Synthesis and Modeling of New Phosphorus-Containing Acrylates" J. Polym. Sci. Part A: Polym. Chem. 43, 2574–2583, 2005.

12. H. Günaydin, **S. Salman**, N. Ş. Tüzün, D. Avcı and V. Aviyente, "Modeling the Free Radical Polymerization of Acrylates" Int. J. Quantum Chem. 103, 176-189, 2005.

Conferences, Workshops, Scientific Meetings

1. **S. Salman**, J-L. Brédas, S. Marder, V. Coropceanu, S. Barlow "Theoretical Characterization of the Optical Properties of Organometallic Pi-Conjugated Donor-Acceptor Chromophores", *Poster*, Theory and Applications of Computational Chemistry (TACC 2016), August 28 – September 2, 2016, University of Washington, Seattle, WA, USA.

2. **S. Salman**, "Dipolar Ferrocene and Ruthenocene Second-Order Nonlinear Optical Chromophores: A Time-Dependent Density Functional Theory Investigation of Their Absorption Spectra", *Talk*, 7th European Symposium on Computing π-Conjugated Compounds (CpiC7), Bordeaux, France, February 12-13, 2016.

3. **S. Salman**, *Participant*, Materials Research Society Fall Meeting and Exhibition, November 30 – December 5, 2014, Boston, MA.

4. **S. Salman**, J. L. Brédas, S. R. Marder, V. Coropceanu, S. Barlow, "Dipolar Ferrocene and Ruthenocene Second-Order Nonlinear Optical Chromophores: A Time-Dependent Density Functional Theory Investigation of Their Absorption Spectra" *Poster* and *Talk*, International Conference on Applied Informatics for Health and Life Sciences in association with Turkish-German Workshop on Bioinformatics: Recent Developments from Health to Nanotechnology" Kusadasi, Turkey, October 19-22, 2014.

5. MUDEK (Engineering Programs Accreditation Board) Workshop, Ankara, Turkey, 31 May 2014.

6. T. G. Erbay, **S. Salman**, V. Aviyente, "A Computational Approach to the Design of Oligothiophene and Oligoselenophene based Solar Cells" *Poster*, 44th IUPAC World Chemistry Congress, Istanbul, Turkey, August 11-16, 2013.

7. **S. Salman**, D. Kim, V. Coropceanu, J. L. Brédas, "Theoretical Investigation of Triscarbazole Derivatives as Host Materials for Blue Electrophosphorescence", *Poster*, ICSM 2012 International Conference on Science and Technology of Synthetic Metals, Atlanta, GA, July 8-13, 2012.

8. **S. Salman**, "Theoretical Characterization of the Charge-Transport and Electroluminescence Properties of Pi-Conjugated Organic Materials", *Invited Talk*, Chemistry Department, Boğaziçi University, Istanbul, Turkey, May 4, 2011.

9. **S. Salman**, S. Clima, J. Idé, R. Méreau, L. Ducasse, J. Cornil, D. Beljonne, and F. Castet, "Modelling of Electronic Processes at Interfaces in Organic-based Electronic Devices", *Poster*, International Symposium on Functional π-Electron Systems, Georgia Institute of Technology – Atlanta, GA, May 23-28, 2010.

10. **S. Salman**, "Theoretical Characterization of the Charge-Transport and Electroluminescence Properties of Pi-Conjugated Organic Materials", *Talk,* Institute of Molecular Sciences, Université Bordeaux I, France, November 3, 2009.

11. **S. Salman**, D. Kim, V. Coropceanu, J. L. Brédas, "Theoretical investigation of host materials for efficient blue electrophosphorescence" *Poster*, 2nd Solvay-COPE Symposium on Organic Electronics, Atlanta, GA, May 6, 2008.

12. **S. Salman**, D. Kim, I. Rudra, V. Coropceanu, J. L. Brédas, "Theoretical investigation of host materials for efficient blue electrophosphorescence" *Poster*, MRS Spring Meeting, San Francisco, CA, March 24-28, 2008.

13. **S. Salman**, K. Schmidt, I. Rudra, J. L. Brédas, U. C. Yoon, M. H. Hyun, H. J. Choi, Z. Jing, "Theoretical investigation of the ligand role in the emission properties of cyclometalated heteroleptic iridium complexes", *Poster*, 9th European Conference on Molecular Electronics, Metz, France, September 5-8, 2007.

14. K. Schmidt, **S. Salman**, I. Rudra, J. L. Brédas, U. C. Yoon, M. H. Hyun, H. J. Choi, Z. Jing, "Theoretical investigation of the emission properties of homoleptic and heteroleptic cyclometalated iridium complexes" *Poster*, 9th European Conference on Molecular Electronics, Metz, France, September 5-8, 2007.

15. Addison, V. Coropceanu, **S. Salman**, J. L. Brédas, "Electronic Properties of a Series of Fused Polycyclic Organic Structures" *Poster*, REU 2007 (Research Experience for Undergraduate) Program, Georgia Institute of Technology, Atlanta, GA, August 2, 2007.

16. **S. Salman**, K. Schmidt, I. Rudra, and J. L. Brédas, "Triplet emitters for OLED applications: Theoretical analysis of emission properties in iridium complexes" *Poster*, Solvay-COPE symposium on Organic Electronics, Georgia Institute of Technology, Atlanta, GA, May 8, 2007.

17. D. A. da Silva Filho, V. Coropceanu, E. G. Kim, **S. Salman**, R. S. Sánchez-Carrera, M. C. Ruiz-Delgado and J. L. Brédas, "Theoretical characterization of crystalline organic semiconductors" *Poster*, 100 Years of Chemistry at Tech, Atlanta, April 18, 2007.

18. K. Schmidt, S. Ohira, I. Rudra, **S. Salman**, V. Coropceanu and J. L. Brédas, "Modeling of excited states to explore non-linear optical and energy transfer processes" *Poster*, 100 Years of Chemistry at Tech, Atlanta, April 18, 2007.

19. **S. Salman**, V. Coropceanu, D. A. da Silva Filho, E. F. Valeev and J. L. Brédas, "Charge-Transport Parameters in Organic Crystals" *Poster*, Gordon Research Conferences – Electronic Processes in Organic Materials, Mount Holyoke College, South Hadley, MA, July 30 - August 4, 2006.

20. **S. Salman**, E. F. Valeev, V. Coropceanu, D. A. da Silva Filho and J. L. Brédas, "Charge-Transport Properties of Conjugated Oligomers and Polymers: Evolution of Electronic Coupling" *Poster*, 231st ACS National Meeting, Atlanta, GA, March 26-30, 2006.

21. Değirmenci, **S. Salman**, D. Avcı and V. Aviyente, "Modeling the Reactivity of New Phosphorus-Containing Acrylates" *Poster*, 15th European Symposium on Quantitative Structure-Activity Relationships and Molecular Modeling, Istanbul, Turkey, September 5-10, 2004.

22. V. Aviyente, **S. Salman**, A. Z. Albayrak and D. Avcı, "Synthesis and Modeling of New Phosphorus-Containing Acrylates" *Poster*, Molecular Quantum Mechanics – Conference in Honor of Nicholas Handy, St John's College, Cambridge University, England, July 24-29, 2004.

23. **S. Salman**, V. Aviyente and D. Avcı, "Modeling the Reactivity of Phosphonic Acid Monomers in Free Radical Polymerization" *Poster*, Density Functional Theory in Chemistry and Physics, Free University of Brussels, Belgium, September 7-12, 2003.