

## SEYHAN SALMAN

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<http://www.researcherid.com/rid/I-1175-2012>



### Work Experience

- *Adjunct Instructor of Chemistry*, Gwinnett Technical College, GA, USA, current.
- *Assistant Professor*, Department of Genetics and Bioengineering, Faculty of Engineering and Natural Sciences, Istanbul Bilgi University, Istanbul, Turkey (2011 – 2016).
- *Department Chair*, Genetics and Bioengineering, Istanbul Bilgi University, Turkey (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 & Center for Organic Photonics and Electronics, 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

Bosphorus University, Institute of Science

M.S., Chemistry, 2004

**Thesis:** Modeling the Reactivity of Nonphosphorus and Phosphorus-Containing Acrylates

**Advisor:** Dr. Viktorya Aviyente

Bosphorus University, Faculty of Arts and Sciences

B.S., Chemistry (*with Honors*), 2002

### Selected Publications

1. X. Sallenave, A. Bucinkas, **S. Salman**, D. Volyniuk, O. Bezvikonnyi, V. Mimaite, J. Grazulevicius, G. Sini, "Sensitivity of Redox and Optical Properties of Electroactive Carbazole Derivatives to the Molecular Architecture and Methoxy-Substitutions" *J. Phys. Chem. C*, 122 (18), 10138–10152, 2018. DOI: 10.1021/acs.jpcc.8b02148
2. H. T. Turan, B. Kahraman, O. Kucur, **S. Salman** and V. Aviyente "Design of Donor-Acceptor Copolymers for Organic Photovoltaic Materials: A Computational Study", *Phys. Chem. Chem. Phys.*, 20, 3581-3591, 2018.
3. B. Camli, E. Kusakci, B. Lafci, **S. Salman**, H. Torun and A. D. Yalcinkaya "Cost-Effective, Microstrip Antenna Driven Ring Resonator Microwave Biosensor for Biospecific Detection of Glucose" *Journal of Selected Topics in Quantum Electronics*, 23(2), 1-6, 2017. DOI: 10.1109/JSTQE.2017.2659226

4. T. G. Erbay, V. Aviyente, **S. Salman\*** "How substitution tunes the electronic and transport properties of oligothiophenes, oligoselenophenes and oligotellurophenes" *Synthetic Metals*, 210, 236–244, 2015. doi:10.1016/j.synthmet.2015.09.020 Times Cited: 1.
5. **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. **DOI:** 10.1021/om400617d Times Cited: 15.
6. **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. Times Cited: 36. **DOI:** 10.1021/cm2022449
7. 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. Times Cited: 52. **DOI:** 10.1021/cm201562p
8. 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. Times Cited: 70. **DOI:** 10.1021/cm9029616

### **Computational Skills**

DFT calculations, Quantum-Chemical Methods, Charge-transfer integral calculations, Excited-state calculations  
Softwares: Gaussian, QChem, ADF, VASP (beginner)