

# HUSNU ALP ALIDEDEOGLU

[alidedeoglu@yahoo.com](mailto:alidedeoglu@yahoo.com)

(601) 266-4726

## EDUCATION:

### **The University of Southern Mississippi**

Doctorate of Philosophy, School of Polymers and High Performance Materials

3.74 G.P.A. 08/03-

### **Bogazici University**

Master of Science, Chemistry

3.88 G.P.A. 09/00-06/03

### **Middle East Technical University**

Bachelors of Science, Chemistry

3.24 G.P.A. 09/95-06/00

## RESEARCH:

### **The University of Southern Mississippi, Hattiesburg, MS**

Ph.D. Candidate, Advisor: Sarah Elisabeth Morgan, Ph.D.

- Evaluate the potential use of the sec-butenyl acetate. Overall goal of this research is to define what important assets that sec-butenyl acetate, an allylic acetate, could impart to characteristic properties of well-known commercial polymers such as polystyrene, poly(methyl methacrylate), poly(vinyl acetate) and poly(butyl acrylate) in terms of hydrophilicity, softness and conversion, when it is copolymerized with their monomers through emulsion polymerization.
- Investigate nanotribological properties of hyaluronic acid and its derivatives prepared via surface initiated polymerization. In this project, firstly, nanotribological studies of high molecular weight HA physisorbed and chemisorbed onto surfaces will be performed using recently developed nano probe techniques. Then, hyaluronic acid residues (two or three repeating units), prepared via hydrolysis of commercially available high molecular weight hyaluronic acid, will be reacted with the pendent group of the acrylate monomer to synthesize a new HA functionalized acrylate monomer. This new monomer will be surface polymerized by using recent controlled free radical technique, RAFT, to increase boundary lubricity of the surface comparing to the systems in which high molecular weight hyaluronic acid is chemisorbed and physisorbed on the same surface.
- Evaluate the potential use of a new class reactive diluent; tetra(2,7-octadienyl) titanate. Overall goal of this research is to define how tetra(2,7-octadienyl) titanate influences characteristic properties of air-drying solvent-borne alkyd in terms of VOC content, dry time, film properties, etc.

**Bogazici University**, Bebek, Istanbul, Turkey  
Master of Science, Advisor: Turgut Nugay, Ph.D.

- Synthesize the block copolymer of poly(methyl methacrylate ) and polystyrene through transfer from anionic polymerization technique to thermal initer controlled free radical polymerization technique. In this study, trityl functionalized poly(methyl methacrylate) was synthesized through anionic polymerization by using trityl lithium anionic initiator in the presence of lithium chloride at -78°C. Then, trityl functionalized poly(methyl methacrylate) was tried to copolymerize with styrene at different temperature in different solvent such as hexane, toluene and benzene.

## **EXPERIENCE:**

**School of Polymers and High Performance Materials**, USM, Hattiesburg, MS.

- Research Assistant 06/04- Present
- Teaching Assistant 08/03-06/04

**Eczacibasi Pharmaceutical Company**, Luleburgaz, Corum, Turkey 08/99-09/99

- Research and development center and studied on production of cosmetic product.

## **AWARD:**

- Middle East Technical University, Chemistry Department, members of Honor Group (1998-2000)
- Middle East Technical University, Chemistry Department, Honor Award (1998-2000)

## **PUBLICATIONS AND PRESENTATIONS:**

- 1. Master Thesis**, “Anionic Polymerization and Characterization of Methylmethacrylate Initiated with Triphenylmethyl Lithium”, Bogazici University, Chemistry Department, **2000**.
- 2. ACS Washington Meeting**, “*Sec-Butenyl Acetate and Styrene Copolymers via Emulsion Polymerization*”, **2005**.
- 3. Waterborne Meeting**, “*Reactive Diluent For Air-Drying Alkyd Paints: Tetra(2,7-Octadienyl) Titanate*”, **2006**.
- 4. ACS Atalanta Meeting**, “*Surface Friction Study of Hyaluronic Acid Thin Films Through Lateral Force Microscopy*”, **2006**.