

**PROPOSED, SUPERVISED & COMPLETED THESES** (by Prof. Dr. A. Cuneyt Tas)

1. Nezahat Kivrak, "[Synthesis of Hydroxyapatite \(HA\) / Tri-Calcium Phosphate \(TCP\) Composite Bioceramic Powders and Their Sintering Behavior](#)," METU (Middle East Technical University, Ankara, Turkey), June 1996 (*M. Sc. Thesis*).
2. F. Arzum Simsek, "[Chemical Preparation of Calcium Hydroxyapatite \(HA\) in Simulated Body Fluids at 37°C and Its Use in Chemical Coating of Titanium and Stainless Steel Strips](#)," METU, July 1997 (*M. Sc. Thesis*).
3. Oguz Yigiterhan, "[Production of The Thin Laminates of Calcium Hydroxyapatite \(HA\) by Tape-Casting and Die-Pressing](#)," METU, January 1998 (*M. Sc. Thesis*).
4. N. Ozgur Engin, "[Manufacture of Macroporous Calcium Hydroxyapatite \(HA\) and Tri-Calcium Phosphate \(TCP\) Bioceramics](#)," METU, January 1999 (*M. Sc. Thesis*).
5. Bora Mavis, "[Dip-Coating of Calcium Hydroxyapatite \(HA\) on Titanium and Stainless Steel Strips](#)," METU, January 1999 (*M. Sc. Thesis*).
6. Sahil Jalota, "Evaluation of Apatite-inducing Ability of Different SBF Solutions on Titanium Alloys, Calcium Phosphate Nanowhiskers, and TTCP [Ca<sub>4</sub>(PO<sub>4</sub>)<sub>2</sub>O] Powders," Clemson University, SC, USA, July 2004 (*M. Sc. Thesis*).
7. Kenneth M. Evans, "Synthesis of Stable Apatitic Calcium Phosphate at 1500°C in Oxygen Atmosphere," Clemson University, SC, USA, December 2004 (*M. Sc. Thesis*).
8. Baris Kokuoz, "Surface Modifications on Alumina Ceramics for Biomedical Applications," Clemson University, SC, USA, August 2005 (*M. Sc. Thesis*).
9. Tarang R. Desai, "Development of Monetite (CaHPO<sub>4</sub>)-based Orthopedic and Dental Cements of High Resorbability," Clemson University, SC, USA, August 2006 (*M. Sc. Thesis*).
10. Sahil Jalota, "Development and In Vitro Examination of Materials for Osseointegration," Clemson University, SC, USA, May 2007 (*Ph. D. Thesis*).

## **SENIOR CAPSTONE PROJECT THESES; PROPOSED, SUPERVISED & COMPLETED**

(@ Dept. of Biomedical Engineering, Yeditepe University, Istanbul, Turkey)

1. Aslihan Jadidi, "Hydrothermal Treatment of Ti6Al4V at 60°C and 90°C by using NaOH and KOH Solutions," February 2009.
2. Ozge Hindistan, "Changing the Persistent Particle Morphology of CaHPO<sub>4</sub>·2H<sub>2</sub>O (Brushite) Powders," February 2009.
3. Yudum Kip, "The Reaction of Metal Shots with Physiological Solutions," May 2009.
4. Ibrahim Mert, "Modification of the Morphology of Brushite Crystals," June 2009.
5. Metin Delikurt, "Aragonite Synthesis in Urea Solutions," June 2009.
6. Selen Mandel, "Brushite (CaHPO<sub>4</sub>·2H<sub>2</sub>O) to Octacalcium Phosphate (Ca<sub>8</sub>(HPO<sub>4</sub>)<sub>2</sub>(PO<sub>4</sub>)<sub>4</sub>·5H<sub>2</sub>O) Transformation in DMEM Solutions at 36.5°C," September 2009.
7. Yakup Ozsezer, "Hydrothermal Treatment of TiO<sub>2</sub> Powders at 90°C and 150°C by using NaOH Solutions," June 2009.
8. Giray Giriskan, "Development of a New Biomineralization/Calcification Solution," January 2010.
9. Murat Bicakci, "Single-pot Synthesis of Biphasic Brushite-Apatite Powders," January 2010.
10. Gokce Kurtulus, "Struvite (MgNH<sub>4</sub>PO<sub>4</sub>·6H<sub>2</sub>O): Synthesis, Stability and Hydrothermal Conversion," January 2010.
11. Neslihan Temizel, "Rapid Transformation of Brushite to OCP at Temperatures between 50° and 80°C," June 2010.

(@ the College of Dentistry, University of Oklahoma Health Sciences Center)

12. Christina Kim, "Comparison of the Hydrophobicity of the Surfaces of Titanium Coupons Soaked in 5 M NaOH versus 5 M KOH," September 2011.
13. Manoj K. Jain, "Crystallization of Brushite ( $\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$ ) Micro-granules," September 2011.

(@ the Department of Materials Science and Engineering, University of Illinois at Urbana-Champaign)

14. Jin H. Lee, "Synthesis of Aragonite Whiskers in Calcium Chloride-Urea versus Calcium Chloride-Magnesium Chloride-Urea Solutions at 90 C," February 2014.

(@ Dept. of Metallurgical and Materials Engineering, Middle East Technical University, Ankara, Turkey)

1. Ercan Taspinar, "Low-temperature Chemical Synthesis of Lanthanum Monoaluminate," 1997.
2. Ersin E. Oren, "Chemical Preparation of Lead Zirconate ( $\text{PbZrO}_3$ ) Powders by Homogeneous Precipitation and Calcination," 1997.
3. Ersin E. Oren, "Hydrothermal Synthesis of Dy-doped  $\text{BaTiO}_3$  Powders," 1998.
4. Defne Bayraktar, "Chemical Preparation of Carbonated Calcium Hydroxyapatite Powders at 37°C in Urea-containing Synthetic Body Fluids," 1999.
5. Defne Bayraktar, "Formation of Hydroxyapatite Precursors at 37°C in Urea- and Enzyme Urease-containing Body Fluids," 1999.

6. I. Erkin Gonenli, "Chemical Preparation of Aluminum Borate Whiskers," 1999.
7. I. Erkin Gonenli, "Chemical Synthesis of Pure and Gd-doped  $\text{CaZrO}_3$  Powders," 1999.
8. Onder Uysal, "Chemical Preparation of the Binary Compounds of  $\text{CaO-Al}_2\text{O}_3$  System by Combustion Synthesis," 1997.
9. Alp Sehirlioglu, "Production of Self-setting Pastes of Calcium Hydroxyapatite Bioceramics," 1998.
10. Vahit Atakan, "Nitridation Behavior of Sub-micron, Monodisperse  $\text{SiO}_2$  Spheres Heated in a Nitrogen Atmosphere," 1998.
11. Agca B. Kayihan, "Dip Coating of Calcium Hydroxyapatite Bioceramics on Titanium or Stainless Steel Strips," 1998.
12. A. Erman Uzgur, "Synthesis of Aluminum Borate Whiskers for Metal Matrix Composites," 1996.
13. Korhan Imer & O. Doruk Yener, "Synthesis of  $\text{SiO}_2$ , Enstatite ( $\text{MgSiO}_3$ ), and Cordierite ( $\text{Mg}_2\text{Al}_4\text{Si}_5\text{O}_{18}$ ) from Isopropanol and Ethanol Solutions," 1996.
14. Emre Akin & Hakan Der, "Chemical Preparation of YIG (Yttrium Iron Garnet) and YAG (Yttrium Aluminum Garnet) Powders by Self-Propagating Combustion Synthesis (SPCS)," 1996.