

PROJECTS IN 2019

Research Projects



Completed Research Projects

- 1. "The Effect of Critical Coagulation Concentration on Flotation Efficiencies", TÜBİTAK Project
- 2. "Development of Processes for the Handling of High Value-Added Potassium Salts from Domestic Potassium Feldspar Ores", TÜBİTAK 3001 Project
- **3.** "Developing Process for the Addition of High Value Added KCI with Calcium Chloride to Be Produced from Kırşehir High Calcite Content Vollastonite", ITU Revolving Capital R&D Project,
- **4.** "Recovery of Precious Metals in Printed Circuit Boards with Flotation and Centrifuge Separators", ITU GAP
- **5.** "Development of Surface Properties of Biodegradable Alginate Based Polymeric Composite Thin Film of Magnesium Implants Fusible in the Body", TÜBİTAK 1002 Project,
- **6.** "Determining the Performance of Three-Product Double Roller Heavy Media Separators", ITU BAP M.Sc.
- **7.** "Recovery of Noble and Rare Metals in Printed Circuit Boards with Mineral Processing Methods", ITU BAP Master Degree
- 8. "Potassium Recovery from Potassium Feldspar Ore", ITU BAP M.Sc.
- 9. "Economic Production of Potassium Extraction from Feldspar Ores", ITU BAP M.Sc.

Ongoing Research Projects

- "Innovative Technologies And Concepts For Fine Particle Flotation: Unlocking Future Fine-Grained Mineral And Critical Raw Materials Resources For The EU, Horizon 2020 'FineFuture' (No. 821265)
- 2. "Controllability of Three-Product Heavy Media Cyclone Separation Densities with Gravity Feed", ITU GAP
- **3.** "Production of Clay-Based Gas Sensor Materials with Perovskite / Iron Oxide Added Fiber Structure and Development of Electrochemical Moisture Sensor", ITU GAP
- **4.** "Separation of Textile Wastes for Recovering from Image Processing and Surface Chemistry Perspective", ITU BAP License
- **5.** "Turkey Red Bed Type is Sediman Enrichment Technologies for Improving Outcomes in Precious Metals Copper Deposits", ITU BAP Ph.D.
- **6.** "Investigation of Synergetic Effects of Collector Reagents Used in Feldspar Flotation", ITU BAP M.Sc.
- 7. "Investigation of Lithium Recovery from Nepheline Syenite Rocks in Kırşehir Region", ITU BAP M.Sc.

Research Projects



Ongoing Research Projects

- **1.** The Effect of Critical Coagulation Concentration on Flotation Efficiencies, TÜBİTAK 1001 Project-117M659, 24 months, 01.11.2017-01.11.2019
- 2. "Development of Processes for the Handling of High Value-Added Potassium Salts from Domestic Potassium Feldspar Ores" TÜBİTAK 3001 Project-218M107
- **3.** "Recovery of Precious Metals in Printed Circuit Boards with Flotation and Centrifuge Separators", ITU. BAP Project
- **4.** "Recovery of noble and rare metals in printed circuit boards with ore enrichment methods", ITU BAP Master Thesis Project
- **5.** "Potassium Chloride, Potassium Sulphate and Aluminum Sulphate for Fertilizer Industry from Potassium Feldspar Ores" ITU Master Thesis Project (MYL-2017-40528)
- **6.** "Development of Turkey Red Bed Type Sediman enrichment Towards Precious Metals Technology Advantages of Copper Deposits", ITU PhD Thesis Project
- **7.** "Investigation of Lithium Recovery from Nepheline Syenite Rocks in Kırşehir", ITU Master Thesis Project
- **8.** "Development of sepiolite-added alginate nanocomposite coatings for biodegradable Mg based orthopedic implants and investigation of their surface properties", ITU Master Thesis Project,
- 9. "Enrichment of Profillit Ore with Flotation", ITU Master Thesis Project
- **10.** "Determining the Performance of Three-Product Double Roller Heavy Media Separators", ITU Master Thesis Project
- **11.** "Production And Characterization Of Clogging Controlled Sepiolite Clay Added Polysulfone Membranes", ITU BAP Research Project
- **12.** "Production of clay based gas sensor materials with perovskite / iron oxide added fiber structure and development of electrochemical moisture sensor", ITU BAP Research Project

Industrial Projects



Completed Industrial Projects

- **1.** "Recovery of Metals from Thermal Power Plant Ashes", Park Termik Elektrik Sanayi ve Ticaret A.Ş. In the name of
- 2. "Characterization and Optimization of Calcination and Lime Production Process", Technological Research Project, Red Rock Minerals Madencilik Ltd. Sti. On behalf of ITU Revolving Fund Operations. Project
- 3. "Technological Research for Enrichment of Gaziantep Region Bauxite Ore by Physical Enrichment Methods and Generation of Process Flow Chart to Provide Production of Bauxite Concentrate and By-Products Belongs to Red Rock Minerals" Red Rock Minerals Madencilik Ltd. Sti. On behalf of ITU Revolving Fund Operations. Project
- 4. "Enrichment of Sand Sample of Checkers Mining", İTÜ Döner Capital İşl. Project

Ongoing Industrial Projects

- **1.** "Enrichment of Kütahya / Gümüşköy Eye Pit Sulfur Zinc Ore with Flotation", İTÜ Döner Capital İşl. Project
- 2. "Investigation of Iron Ore's Enrichment Opportunities", İTÜ Döner Capital İşl. Project
- **3.** "Manganese Concentrates Production and Size Enlargement", on behalf of Mine Development & Operation, İTÜ Döner Capital İşl. Project