

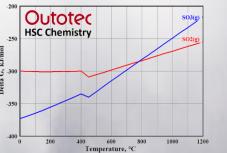
Yeditepe University Materials Science & Nanotechnology Eng. Dpt. Sustainable Process Metallurgy (SPM) Research Group

Research Interests

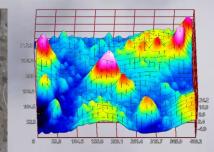
- ✓ Sustainable metallurgy
- ✓ Extractive metallurgy

Steel, Al, Cu, Mg, Li, Cu, Sb etc. and precious metals

- ✓ Recycling of metallurgical wastes
- ✓ Synthesis and sintering of advanced ceramics
- ✓ CO_2 capture







People



Principal Investigator Assoc Prof Dr Ahmet Turan

PhD Students







Tuğçe Ergül

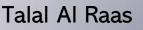


Umut Özdemir

Umay Çınarlı İlayda Özbağ

MSc Students







Azer Vurkır



X (jam)



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Projects

- Science Committee of Kazakhstan, "Development of a refractory materials technology in solid-phase combustion and reactive sintering from metal industry waste". 2020 - 2022 (Completed)
- ✓ HORIZON 2020 EU Co-funded ERA-MIN 3 project (122N062), "Utilization of aluminium bearing raw materials for the production of aluminium metal, other metals and compounds". 2022 - 2025 (Ongoing)
- European Cooperation in Science & Technology (COST) Action (CA21127), "Techno-economic analysis of carbon mitigation technologies (TrANsMIT)". 2022 – 2026 (Ongoing)

Selected Publications

- ✓ Valorisation of aluminium black dross
 DOI: <u>https://doi.org/10.1007/s42461-020-00344-0</u>
 ✓ Solid state synthesis of Li₄SiO₄ for CO₂ capture
 DOI: <u>https://doi.org/10.1039/C7TA08738A</u>
 ✓ Refractory brick production from metallurgical wastes
- DOI: https://doi.org/10.3390/su141811439

Industrial & Academical Partners / Collaborators

