

Bora Derin, PhD., Assoc. Prof.



Work address:

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Education:

- 1999-2004 PhD. Degree, Istanbul Technical University, Metallurgy and Materials Engineering Dept.
Thesis: *Sulfide Capacities of Lead containing Slags* (University of Alabama, USA for experimental studies)
- 1997-1999 MSc. Degree, Thesis : *Investigation of Solubility of Cobalt in Alumina Containing Iron Silicate Slags* . Istanbul Technical University, Metallurgy and Materials Engineering Dept.
- 1993-1997 BSc. Degree, Thesis: *Removing of Chlorides and Lead from Galvanizing Ashes via Hydrometallurgical and Pyrometallurgical Methods*. Istanbul Technical University, Metallurgy and Materials Engineering Dept.

Academic Career:

- 2012- Assoc. Prof., Istanbul Technical University, Metallurgy and Materials Engineering Dept.
- 2007-2012 Assist. Prof., Istanbul Technical University, Metallurgy and Materials Engineering Dept.
- 2007-2012 Senior Scientist in Applied Research Center of Materials Science & Production Technologies, Istanbul Technical University,
- 1998-2007 Research Assist., Istanbul Technical University, Metallurgy and Materials Engineering Dept.

Research Interests:

- Thermochemical modeling studies for metallurgical processes.
- Synthesis of advanced ceramics (B_4C , TiB_2 , W_xB_y , AlN etc.).
- Production of metals, alloys, ferroalloys by carbothermic and metallothermic processes.
- Recyclings of slags and other industrial wastes (galvanizing residues, brass ash, vanadium sludge etc.) by hydro-pyrometallurgical processes.
- Equilibrium and impurity capacity studies of ferrous and non-ferrous slags.
- Self-Propagating High-Temperature Synthesis Studies.
- Materials Characterization.
- Problem solving studies and Trainings for Industry.

Courses Taught:

- Heat and Materials Balances
- Chemical Metallurgy
- Computational Thermochemistry for Metallurgical Processes
- Non-Ferrous Metallurgy
- Materials Characterization

Publications:

International Journal Papers

1. S. Yazici, B. Derin. Effects of process parameters on tungsten boride production from WO_3 by self-propagating high temperature synthesis, *Materials Science and Engineering: B* 178 (2013) 89-93. (SCI)
2. M. Alkan, M.S. Sonmez, B. Derin, O. Yucel. Effect of Initial Composition on Boron Carbide Production by SHS Process followed by Acid Leaching, *Solid State Sciences* (2012), doi:10.1016/j.solidstatesciences.2012.07.004. (SCI)
3. M.H. Morcali, O. Yucel, A. Aydin, B. Derin. Carbothermic Reduction of electric arc furnace dust and Calcination of Waelz oxide by semi-Pilot scale rotary furnace, *J. Min. Metall. Sect. B-Metall.* 48 (2) B (2012) 173 - 184 (SCI)
4. Rusen, A. Geveci, Y. A. Topkaya, B. Derin. Investigation of effect of colemanite addition on copper losses in matte smelting slag. *Canadian Metallurgical Quarterly* Vol. 51 No. 2 (2012) 157-169. (SCI)
5. S. Yazici, B. Derin. Production of Tungsten Boride from $CaWO_4$ by Self-propagating High-Temperature Synthesis followed by HCl Leaching. *Int. Journal of Refractory Metals and Hard Materials* 29 (2011) 90–95. (SCI)
6. B. Derin, O. Yücel, R.G. Reddy. Sulfide capacity modeling of FeO_x -MO-SiO₂ (MO=CaO, MnO_x, MgO) melts. *Minerals & Metallurgical Processing Journal* Vol. 28, No. 1, (2011) 33-36. (SCI)
7. B. Derin, M. Suzuki, T. Tanaka. Sulphide Capacity Prediction of Molten Slags by Using a Neural Network Approach. *ISIJ International*, Vol. 50, No. 8 (2010) 1059-1063. (SCI)
8. C. Maralcan, B. Derin, O. Yucel. Coating Degradation of First and Second Stage Gas Turbine Blades High Temperature Materials and Processes Vol.28, No.6 (2009) 343-346. (SCI)
9. B. Derin, U.Demircan and O. Yucel. Producing NiCrAl Alloy by the SHS Method for Use in Thermal Spray Powder Manufacturing *Met. Mater. Int.*, Vol. 15, No. 2 (2009) 331-336. (SCI)
10. U. Demircan, B. Derin, O. Yucel. Effect of HCl concentration on TiB_2 separation from a self-propagating high-temperature synthesis (SHS) product. *Materials Research Bulletin* 42 (2007) 312-318. (SCI)
11. O. Yucel, S. Yigit, B. Derin. Production of Magnesium Metal from Turkish Calcined Dolomite using Vacuum Silicothermic Reduction Method. *Materials Science Forum*, Vols. 488-489 (2005) 39-42. (SCI)
12. F.C. Sahin, V. Kızıllırmak, B. Derin, O. Yucel, E.F Ozdogru. Carbothermal Reduction-Nitridation Study of Seydisehir Alumina, *Silicates Industriels*, Vol. 69, (2004) 5-8. (SCI)
13. S. Ercayhan, B. Derin, F.C. Sahin, O. Yucel. Production of Aluminum Nitride Powders from Seydisehir Aluminum Hydroxide. *Key Engineering Materials* Vols. 264-268 (2004) 105-108. (SCI)
14. O. Kahvecioglu, B. Derin, O. Yucel. Carbothermal Recovery of Zinc from Brass Ash. *Trans. of the Institution of Mining and Metallurgy, Sec. C. Min. Proc. and Extr. Met.*,112, August (2003) 95-101. (SCI)
15. B. Derin, O. Yucel. The Distribution of Cobalt between Co-Cu Alloys and Al_2O_3 -FeO-Fe₂O₃-SiO₂ Slags. *The Scandinavian Journal of Metallurgy*, Vol. 31, (2002) 12-19. (SCI)

16. B. Derin, F.C. Sahin, O. Yucel. Chloride Removal from Zinc Ash. The Scandinavian Journal of Metallurgy, 29, (2000) 224-230. (SCI)
17. M. Bakkal, V. Naksiler, B. Derin. Machinability of Bulk Metallic Glass Materials On Milling And Drilling. Advanced Materials Research Vols. 83-86 (2010) 335-341. (other indexes)
18. B. Derin, U. Demircan, T. Uzunoglu, O. Yücel. A Study on Thermal Decomposition of Dolomite from West Anatolia Region using Semi-pilot Scale Rotary Furnace. The International Journal of Mineral Resources Engineering, Vol. 12, No.3 (2007) 205-214. (other indexes)

International Conference Papers

1. B. Derin, O. Altinordu, M. Alkan, S.Sonmez, O. Yucel, V. Sanin, D. Andreev, V. Yukhvid*; Production of Ni, Co, Cr based cast alloys via SHS Method under Normaland High Gravity Conditions . 10th International Symposium of Croatian Metallurgical Society, 17-21.06.2012 Sibenik, Croatia. Metalurgija 51 (2012) 3, 415
2. S. Yilmaz, M. Alkan, O. Yucel, B. Derin, Production of ZrB₂ Powders from ZrO₂ Containing Dental Implant Wastes , 2012 TMS Annual Meeting, 11-15 March, 2012, Orlando, Florida, USA, 68
3. B. Derin, O. Altinordu, M. Alkan, S. Sonmez, O. Yucel, V. Sanin, V. Yukhvid, A Study of Ni-Cr-Al Alloys by Self-Propagating High Temperature Synthesis , 2012 TMS Annual Meeting, 11-15 March, 2012, Orlando, Florida, USA, 296
4. M. Alkan, O. Altinordu, S. Sönmez, O. Yücel, B. Derin, V. Sanin, V. Yukhvid, A Study of Co-V-Al Alloys by Self Propagating High TemperatureSynthesis 2012 TMS Annual Meeting, 11-15 March, 2012, Orlando, Florida, USA, 296
5. Murat Alkan, Bora Derin, Filiz Şahin and Onuralp Yücel, Production of Boron Alloys and Compounds by Metallothermic Processes ISBB 2011, 17th International Symposium on Boron, Borides and Related Materials, 11-17 September 2011, Polat Renaissance Hotel, İstanbul, Türkiye, 230
6. Özge Balcı, Duygu Ağaoğulları, İsmail Duman and Bora Derin, A Comparison Between Experiment Results and Predictions in BCl₃-H₂ System Utilizing FTIR and FactSage Modelling ISBB 2011, 17th International Symposium on Boron, Borides and Related Materials, 11-17 September 2011, Polat Renaissance Hotel, İstanbul, Türkiye, 241.
7. B. Derin, O. Altinordu, M. Alkan, S. Sonmez, O. Yucel, V. Sanin, D. Andreev, V.Yukhvid, Some thermodynamic aspects for SHS of cast alloys and experiments under normal and high gravity SHS 2011, XI International Symposium of Self-Propagating High Temperature Synthesis 5 - 9 September 2011, Anavyssos, Attica, Greece, 71-72.
8. D.E. Andreev , V.N. Sanin, D.M. Ikornikov, V.I. Yukhvid, B. Derin, S. Sonmez, O.Yücel, Formation of cast Ni–Cr(Co)–Al and Fe–Co–V–Al alloys during SHS in the field of centrifugal forces SHS 2011, XI International Symposium of Self-Propagating High Temperature Synthesis 5 - 9 September 2011, Anavyssos, Attica, Greece, 94-95.
9. Burcu Akkas, Murat Alkan, Bora Derin, Onuralp Yucel, Effect of Hcl Concentration on ZrB₂ Separation from a Self-Propagating High-Temperature Synthesis (SHS) Product, 2011 TMS Annual Meeting, February 27 - March 3, 2011, San Diego, California, USA, 499-504

10. M. Seref Sonmez, Sertac Yazici, Bora Derin, Treatment of Waste Leaching Liquor of a SHS Produced Tungsten Boride, 2011 TMS Annual Meeting, February 27 - March 3, 2011, San Diego, California, USA, 1031-1035
11. Güvenç Güven, Murat Alkan, Bora Derin, Onuralp Yücel, A Study On Ferromolybdenum Production By Metallothermic Reduction Process, 2011 TMS Annual Meeting, February 27 - March 3, 2011, San Diego, California, USA, 268
12. B. Akkas, M. Alkan, B. Derin, O. Yucel, Effect of HCl Concentration on ZrB₂ Separation from a Self-Propagating High-Temperature Synthesis (SHS) Product, 2011 TMS Annual Meeting, February 27 - March 3, 2011, San Diego, California. Supplemental Proceedings Vol1: Materials Processing and Energy Materials, 499-504.
13. M. S. Sonmez, S. Yazici, B. Derin. Treatment of Waste Leaching Liquor of a SHS Produced Tungsten Boride, 2011 TMS Annual Meeting, February 27 - March 3, 2011, San Diego, California EPD Congress 2011, 1031-1035.
14. M. Alkan, B. Derin, O. Yucel. Production of Advanced Ceramics via Self Propagating High Temperature Synthesis Method. The 42nd International Conference on Mining and Metallurgy, Extractive metallurgy, October 10-13, 2010, Kladovo, Serbia, IOC 2010 Proceedings, 416-419.
15. S. Yazici, B. Derin. Double SHS of W₂B₅ Powder from CaWO₄ and B₂O₃. CIMTEC 2010 - 12th International Ceramics Congress, 6-11/06/2010, Montecatini Terme, Italy. Advances in Science and Technology Vol.63 (2010) 246-250.
16. B. Akkas, M. Alkan, B. Derin, O. Yucel, Production of Zirconium Diboride Powder by Self Propagating High Temperature Synthesis. CIMTEC 2010 - 12th International Ceramics Congress, 6-11/06/2010, Montecatini Terme, Italy. Advances in Science and Technology Vol.63 (2010) 251-256.
17. B. Derin, O. Yucel, K. Hack. Thermochemical Computations in Carbothermic and Metallothermic Ferroalloy Processes. INFACON XII. International Ferroalloys Congress INFACON 6-9/06/2010, 207-211, Helsinki, Finland.
18. S. Yazıcı, B. Derin. Tungsten Boride Production via Self Propagating High Temperature Synthesis. 10th International Symposium on Self-Propagating High Temperature Synthesis (SHS-2009) 6-11/07/2009, Tsakhkadzor, Armenia
19. O. Yucel, B. Derin, F. Şahin, M. Alkan. Some Research Studies on Metallothermic Processes. 10th International Symposium on Self-Propagating High Temperature Synthesis (SHS 2009) 6-11/07/2009, Tsakhkadzor, Armenia
20. M. Alkan, S. Sönmez, B. Derin, O. Yucel. Purification Attempts of B₄C powders produced by metallothermic process. 11th International Conference and Exhibition of the European Ceramic Society (ECERS 2009) 21-25/06/2009, Krakow, Poland, 1003-1005.
21. S. Yazıcı ve B. Derin, Tungsten Boride Synthesis from WO₃ and B₂O₃ powders via Self-Propagating High-Temperature Synthesis. (ECERS 2009), 11th International Conference and Exhibition of the European Ceramic Society, Haziran 21-25, 2009, Krakow, Poland, 107-109
22. Y. Demiray, B. Derin, O. Yucel. A Study on Influence of Fluxing Additives on Magnesium Refining Process, 2009 TMS Annual Meeting, 15-19/02/2009, San Francisco USA. Magnesium Technology 2009, 41-44.

23. M. Alkan, B. Derin, S. Sonmez, O. Yucel. Effects of Stoichiometry on Boron Carbide Production via Self Propagating High Temperature Synthesis. 2009 TMS Annual Meeting, 15-19/02/2009, San Francisco USA. EPD Congress 2009, 703-709.
24. C. Colakoglu, B. Derin, O. Yucel. A Study on Nickel Containing Iron Alloy Production From West Anatolian Region Lateritic Ores. 2009 TMS Annual Meeting, 15-19/02/2009, San Francisco USA. EPD Congress 2009, 719-723.
25. H. Morcali, B. Derin, A. Aydın, O. Yucel. Removal of Pb, Cd and Cl from Waelz Oxide via Pyrometallurgical Process. 2009 TMS Annual Meeting, 15-19/02/2009, San Francisco USA. Supplemental Proceedings 2009 Vol 3: General Paper Selections, 853-858.
26. M. S. Sonmez, M. Alkan, B. Derin, O. Yucel. Removal of Magnesium and Boron from Chloride Containing Spent Liquors. REWAS 2008 Global Symposium on Recycling, Waste Treatment and Clean Technology, 12-15/10/2008, Cancun, Mexico, 851-856.
27. H. Morcali, B. Derin, A. Aydın, O. Yucel. A Study on Recovery of Metallic Values From EAF Flue Dusts. REWAS 2008 Global Symposium on Recycling, Waste Treatment and Clean Technology, 12-15/10/2008, Cancun, Mexico, 605-609.
28. M. Alkan, B. Derin, S. Sonmez, O. Yucel. Boron Carbide Production by Self Propagating High Temperature Synthesis. 16th International Symposium on Boron, Borides and Related Materials, 7-12/09/2008, Matsue, Shimane, Japan, 85. .
29. M. Alkan, B. Derin, M.S. Sönmez, O. Yucel. Production of Boron Carbide by Self Propagating High Temperature Synthesis/ *Kendiliğinden İlerleyen Yüksek Sıcaklık Sentezi (SHS) İle Bor Karbür Tozu Üretimi*, 14th International Metallurgy & Materials Congress (IMMC 2008) 16-18/10/2008, Istanbul Turkiye, 904-912. .
30. F. Şahin, E. Özüdoğru, B. Derin, G. Göller, O. Yücel, M. Tokita. Spark Plasma Sintering of B₄C Powder/ *B₄C Tozlarının Spark Plasma Sinterlenmesi*. 14th International Metallurgy & Materials Congress (IMMC 2008) 16-18/10/2008, Istanbul Turkiye, 936-942.
31. H. Morcali, B. Derin, A. Aydın, O. Yucel. *A Study on Recovery of Zinc from EAF Flue Dusts/ EAF Baca Tozlarından Çinkonun Geri Kazanımı*. 14th International Metallurgy & Materials Congress (IMMC 2008) 16-18/10/2008, Istanbul Turkiye, 543-548. .
32. M. Alkan, B. Derin, O. Yücel, Ferromolybdenum Production by Aluminothermic Reduction/Aluminotermik Yöntemle Ferromolibden Üretimi , 14th International Metallurgy & Materials Congress (IMMC 2008) 16-18/10/2008, Istanbul Turkiye, 559-567. .
33. F. Sahin, K. Kurtoglu, B. Derin, O. Yucel. An Investigation of TiB₂ Synthesis Using TiO₂/B₄C/C Powder Mixture. TMS Annual Meeting, 9-13/03/2008, New Orleans, USA. EPD Congress 2008, 355-360. .
34. B. Derin, K. Kurtoglu, F. Sahin, O. Yucel. Titanium Diboride Synthesis by Carbothermal Reduction of TiO₂ and B₂O₃. . TMS Annual Meeting, 9-13/03/2008, New Orleans, USA. EPD Congress 2008, 379-383.

35. O. Yucel, B. Derin, F. Sahin, M. Alkan. Materials Production via Metalthermic Process. The 3rd International Conference on Corrosion, Advanced Materials & Processes in Industry, 29-31/05/2007 Beer-Sheva, Israel. CAMPI 2007, 79 .
36. B. Derin, U. Demircan, O. Yucel. The Synthesis of TiB₂ Powder by a Self-Propagating High-Temperature Synthesis (SHS) and HCl Leaching Technique Proc. 10th ECerS Conf. 17-21/06/2007, Göller Verlag, Berlin, Germany 2007, 447-450.
37. T. Uzunoglu, B. Derin, O. Yucel. Reduction behaviors of chromite and NiO in liquid Fe-C Alloys. INFACON XI International Ferroalloys Congress, 18-21/02/2007, New Delhi, India, 93-98
38. B. Derin, U. Demircan, T. Uzunoglu, O. Yucel, Calcination Behaviour of Turkish Dolomite in Semi-Pilot Scale Rotary Furnace / Yerli Dolomitin Yarı Pilot Döner Fırındaki Kalsinasyon Mekanizmasının İncelenmesi. 13th International Metallurgy & Materials Congress (IMMC 2006) 9-11/11/2006, Istanbul, Turkey, 301-306 .
39. B. Derin, O. Yucel, K. Hack. Computational Solutions in Metallurgical Processes. 13th International Metallurgy & Materials Congress (IMMC 2006) 9-11/11/2006, Istanbul, Turkey, 52-57 .
40. B. Derin, O. Yucel, R.G. Reddy. Predicting of Sulfide Capacities of Industrial Lead Smelting Slags. TMS, Sohn International Symposium on Advanced Processing of Metals and Materials: Volume 1- Thermo And Physicochemical Principles: Non-Ferrous High-Temperature Processing. 27-31/08/2006 Catamaran Resort. San Diego, California, USA, 237-244 (Davetli bildiri- Tam metin)
41. B. Derin, U. Demircan, T. Uzunoglu, O. Yucel. Semi-Pilot Scale Calcination Study of Turkish Dolomite for Magnesium Production. 2006 Beijing International Materials Week (2006BIMW), Conference A, 2nd International Conference on Magnesium (ICM 2006) June 25-30, 2006 , Beijing, China, 49
42. B. Derin, R. Reddy, Sulfide Capacities of Copper Smelting Slags 135th SME Annual Meeting and Exhibit & 7th ICARD March 26-29, 2006 St. Louis, Missouri, USA, 77
43. B. Derin, O.Yucel, R. G. Reddy. Sulfide Capacities of PbO-SiO₂ and PbO-SiO₂-AlO_{1.5} (Sat) Slags Lead & Zinc 2005 Proceedings of the International Symposium on Lead and Zinc Processing, Kyoto, Japan, October 17-19, 2005 Vol II., 1279-1287.
44. O. Yucel, S. Yigit, B. Derin. Production of Magnesium Metal using Vacuum Silicothermic Reduction Method. 12th International Metallurgy & Materials Congress (IMMC 2005), 28/09-02/10/2005, Istanbul, Turkey, 435-439.
45. F.S. Cinar, O. Yucel, B. Derin. Carbothermal Reduction - Nitridation Study of Aluminum Containing Raw Materials. Characterization of Minerals, Metals and Materials, EPD Congress 2005 TMS Annual Meeting, 13-17/02/2005, San Francisco, CA- USA, 207-214.
46. U. Demircan, B. Derin, O. Yucel. Synthesis of TiB₂ Powder by Pyro-Hydrometallurgical Process. XII. International Materials Research Congress. 22-26/08/2004, Cancun-Mexico, 36 .
47. T. Uzunoglu, B. Derin, O. Yucel. Reduction of Chromite and NiO in Carbon Saturated Liquid Iron Alloys. XII. International Materials Research Congress 22-26/08/2004, Cancun-Mexico, 38 .
48. B. Derin, O. Yucel, R.G. Reddy. Modeling of Sulfide Capacities of Binary Titanate Slags. EPD Congress 2004, TMS Annual Meeting, 14-18/03/2004 North Carolina-USA, 155-160.

49. B. Derin, S Ercayhan, O. Yucel. Effects of Charge Components on Reduction of Chromite Concentrates by Aluminothermic Process. INFACON X. International Ferroalloys Congress 01-04/02/2004 , Cape Town - South Africa, 78-82.
50. B. Derin, F. C. Sahin, O. Yucel. The Electrical Characteristic of Copper Slags in a 270 kVA DC Arc Furnace. 3rd Balkan Conference on Metallurgy, Ohrid, Macedonia, 24-27/09/2003, 265-270.
51. B. Derin, F. C. Sahin, O.Yucel, E. Acma, O. Addemir. A Process Designed for The Ancient Copper Smelting Slags, Yazawa International Symposium on Metallurgical and Materials Processing, TMS, 02-06/03/2003 San Diego, California, USA, Vol:2, 471-482. (Davetli bildiri-Tam metin)
52. B. Derin, R.G. Reddy. Sulfur and Oxygen Partial Pressure Ratios Prediction in Copper Flash Smelting Plants using Reddy-Blander Model, Yazawa International Symposium on Metallurgical and Materials Processing, TMS, 02-06/03/2003 San Diego, California, USA, Vol:1, 625-632.
53. O. Kahvecioglu, B. Derin, O. Yucel. Recovery of Zinc From Brass Melting Residues. Recycling and Waste Treatment in Mineral and Metal Processing: Technical and Economic Aspects, TMS, 16-20/06/2002, Lulea, Sweden, 901-908.
54. B. Derin, R.G. Reddy. Modeling of Sulfide Capacities of FeO-Based Ternary Silicate Melts Using Reddy-Blander Model. 11th International Metallurgy & Materials Congress (IMMC 2002), Istanbul, Turkey, 54-62.
55. S. Ercayhan, B. Derin, O. Yucel. Reduction of Chromite Concentrates by Aluminothermic Process. 11th International Metallurgy & Materials Congress (IMMC 2002), Istanbul, Turkey, 744-751.
56. B. Derin, O. Yucel. The Solubility of Cobalt in Alumina Containing Iron Silicate Slags. 10th Proceedings of the International Metallurgy and Materials Congress, 24-28/05/2000, Istanbul, Turkey, Vol 1, 101-108.

Scientific Books/Sections

- Editor in Innovation in Materials Science II Edited by M. Nadagouda, M. Connelly, B. Derin, H.P. Li and J. A. Sekhar. Trans Tech Publications Ltd, Switzerland, ISBN-13: 978-3-03785-473-0, Key Engineering Materials Vol. 521, 2012.
- Section in book: S.Genc, B. Derin Field Responsive Fluids, A review. Innovation in Materials Science II, Trans Tech Publications Ltd, Switzerland, ISBN-13: 978-3-03785-473-0, Key Engineering Materials Vol. 521, 2012, 87-100.

Domestic Journal Papers

1. Yücel O., Derin B., Yükselen G., Cevizci S., Paksoy M., Mazlumoglu M., Extraction and Usage of Zinc Borate as Fire Retardant from Domestic Sources Metal Dunyasi, August 2004, 135, 50-53.(Turkish).
2. Derin B., Yucel O., Reddy R.G., Sulfide capacity of lead oxide containing silicate and aluminasilicate slags itüdergisi/d Cilt 4 Sayı 3 99-106. Haziran 2005 (Turkish).

Other Presentations :

B. Derin, O. Yücel. University Based Research Studies aided by Factsage Simulation Program GTT - 10th Annual Workshop on Computational Thermochemistry, 4-6/06/2008, Herzogenrath, Germany

Some Projects Supervised:

- Investigations of Some New Alloy Productions via SHS Method and Effects of Gravity on the SHS-Products (International Project Turkish-Russia 2012)
- Recovery of valuable metals from SHS leaching liquors (National Project-ITU-BAP. 2012)
- Production of Zirconium Diboride Powder via Self Propagating High Temperature Synthesis (National Project-ITU-BAP. 2010)
- Production of Tungsten Boride from Scheelite (CaWO_4) and tungsten oxide (WO_3) by Self Propagating High-Temperature Synthesis (National Project-BOREN. 2009)
- Ferronickel Production from domestic Lateritic Nickel Ores (National Project-ITU-BAP. 2008)
- Investigation on the Effect of Duration of Use on the Microstructures of Nickel Based Superalloys Used as Industrial Gas Turbines (National Project-ITU-BAP. 2008)

Thesis Students Supervised: 8 MSc., 2 PhD.

Memberships:

1994-2001 MD-118 International Lions Clubs- Istanbul Dalyan Leo Club (1997-1998 as President)
1996- FM Radio Band 144-146 Mhz Radio Amateur – TA2CMQ
2000- Turkish Ceramic Society
2000- Chamber of Metallurgical Engineers of Turkey
2002- TMS (The Minerals, Metals & Materials Society)