

CURRICULUM VITAE



1. **Surname, name**
Mandal, Hasan

2. **Date of birth**
22-05-1965

3. **Contact Details**

Sabanci University, Research and Graduate Policies Directorate, Orhanli, Tuzla, Istanbul, TURKEY

+90 216 4839666

+90 216 4839118

hmandal@sabanciuniv.edu

4. **Education and academic degrees**

Education

<i>UK</i>	<i>University of Newcastle</i>	<i>Faculty of Engineering</i>	<i>Mechanical, Materials and Manufacturing Engineering</i>	<i>PhD</i>	<i>1992</i>
<i>Turkey</i>	<i>Middle East Technical University</i>	<i>Faculty of Engineering</i>	<i>Metallurgical Engineering</i>	<i>BSc</i>	<i>1987</i>

Academic Degrees

<i>Prof. Dr.</i>	<i>Sabanci University</i>	<i>Faculty of Engineering and Natural Sciences</i>	<i>Materials Science and Engineering</i>	<i>2011</i>
<i>Prof. Dr.</i>	<i>Anadolu University</i>	<i>Faculty of Engineering and Architecture</i>	<i>Materials Science and Engineering</i>	<i>2001</i>
<i>Assoc. Prof. Dr.</i>	<i>Anadolu University</i>	<i>Faculty of Engineering and Architecture</i>	<i>Ceramic Engineering</i>	<i>1996</i>
<i>Asst. Prof. Dr.</i>	<i>Anadolu University</i>	<i>Faculty of Engineering and Architecture</i>	<i>Ceramic Engineering</i>	<i>1996</i>
<i>Dr.</i>	<i>Anadolu University</i>	<i>Faculty of Engineering and Architecture</i>	<i>Ceramic Engineering</i>	<i>1994</i>

5. Present position

<i>Sabancı University</i>	<i>Turkey</i>	<i>Istanbul</i>	<i>Vice President</i>	<i>2012-</i>
<i>Sabancı University</i>	<i>Turkey</i>	<i>Istanbul</i>	<i>Director (Research and Graduate Policies Directorate)</i>	<i>2011-</i>
<i>Higher Educational Council</i>	<i>Turkey</i>	<i>Ankara</i>	<i>Coordinator (Bologna Experts National Team)</i>	<i>2013-</i>
<i>Higher Educational Council</i>	<i>Turkey</i>	<i>Ankara</i>	<i>Member (National Qualifications Committee)</i>	<i>2008-</i>
<i>Higher Educational Council</i>	<i>Turkey</i>	<i>Ankara</i>	<i>Bologna Expert</i>	<i>2009-</i>
<i>The Scientific and Technological Research Council of Turkey</i>	<i>Turkey</i>	<i>Ankara</i>	<i>Board Member of TEMEG (Technology Transfer Mech. Support Group)</i>	<i>2012-</i>
<i>World Academy of Ceramics</i>	<i>Italy</i>		<i>Member (Science)</i>	<i>2012-</i>
<i>European Ceramic Society (ECerS)</i>	<i>Belgium</i>	<i>Mons</i>	<i>ExCo Member</i>	<i>2003-</i>
<i>European Ceramic Society (ECerS)</i>	<i>Belgium</i>	<i>Mons</i>	<i>Council Member</i>	<i>1999-</i>
<i>International Ceramic Federation (ICF)</i>	<i>ABD</i>	<i>Westerville, OH</i>	<i>Council Member</i>	<i>2007-</i>
<i>GOSB Teknopark Inc.</i>	<i>Turkey</i>	<i>Gebze / Kocaeli</i>	<i>ExCo Member</i>	<i>2011-</i>
<i>Inovent Inc.</i>	<i>Turkey</i>	<i>Istanbul</i>	<i>ExCo Member</i>	<i>2011-</i>
<i>MDA Advanced Ceramics Ltd.</i>	<i>Turkey</i>	<i>Eskisehir</i>	<i>Founding Member and Board Member</i>	<i>2003-</i>
<i>National Nanotechnology Centre (UNAM)</i>	<i>Turkey</i>	<i>Ankara</i>	<i>Associate Member</i>	<i>2008-</i>
<i>Sabancı University, Nanotechnology Research & Application Centre (SUNUM)</i>	<i>Turkey</i>	<i>Istanbul</i>	<i>Coordination and Advisory Boards Member</i>	<i>2011-</i>
<i>University-Industry Collaboration Centers Platform (USIMP)</i>	<i>Turkey</i>		<i>Vice President</i>	<i>2012-</i>
<i>World Innovation Foundation (WIF)</i>	<i>UK</i>	<i>Huddersfield</i>	<i>Consulting Member</i>	<i>2001-</i>

6. Previous positions (most important ones)

<i>Anadolu University</i>	<i>Turkey</i>	<i>Eskisehir</i>	<i>Vice Rector (Research, International Relations)</i>	<i>2010-2011</i>
<i>International Federation of Engineering Education Societies (IFEES)</i>	<i>USA</i>	<i>Washington,DC</i>	<i>The First Vice President Vice President for Europe</i>	<i>2009-2012</i>
<i>Global Engineering Deans Council (GEDC)</i>	<i>USA</i>	<i>Washington,DC</i>	<i>Chairman</i>	<i>2009-2010</i>
<i>European Ceramic Society (ECerS)</i>	<i>Belgium</i>	<i>Mons</i>	<i>President</i>	<i>2009-2011</i>
<i>Journal of the European Ceramic Society (JECS) Trust</i>	<i>Belgium</i>	<i>Mons</i>	<i>President</i>	<i>2011-2013</i>
<i>Eskisehir Technopark ATAP Inc.</i>	<i>Turkey</i>	<i>Eskisehir</i>	<i>ExCo Member</i>	<i>2003-2011</i>
<i>Ceramic Research Centre Inc. (SAM)</i>	<i>Turkey</i>	<i>Eskisehir</i>	<i>ExCo Member</i>	<i>2008-2011</i>
<i>Anadolu University</i>	<i>Turkey</i>	<i>Eskisehir</i>	<i>Dean Faculty of Engineering and Architecture</i>	<i>2004-2010</i>
<i>Turkish Engineering Deans Council (MDK)</i>	<i>Turkey</i>		<i>General Secretary</i>	<i>2006-2010</i>
<i>Turkish Ceramic Society</i>	<i>Turkey</i>	<i>Istanbul</i>	<i>Vice President ExCo Member</i>	<i>1997-2010</i>
<i>National Boren Research Institute (BOREN)</i>	<i>Turkey</i>	<i>Ankara</i>	<i>ExCo Member</i>	<i>2003-2010</i>
<i>TUBITAK</i>	<i>Turkey</i>	<i>Ankara</i>	<i>Committee Member (Engineering Support Group MAG)</i>	<i>2004-2010</i>

7. Scientific awards

<i>Honour</i>	<i>Chinese Ceramic Society</i>	2009
<i>Technology</i>	<i>Elginkan Foundation</i>	2006
<i>Stuijts</i>	<i>European Ceramic Society</i>	2005
<i>Science / Technological Development</i>	<i>JCI Turkey</i>	2005
<i>Science</i>	<i>The Scientific and Technological Research Council of Turkey (TUBITAK)</i>	2005
<i>Science</i>	<i>METU Prof.Dr. Mustafa N. Parlar Foundation</i>	2004
<i>Honour</i>	<i>Turkish Ceramic Federation</i>	2004
<i>Technology Development</i>	<i>Eskisehir Chamber of Industry</i>	2003
<i>Successful Young Scientist</i>	<i>Turkish Academy of Sciences (TUBA)</i>	2001
<i>Science</i>	<i>Istanbul University</i>	2000
<i>Science and Technology</i>	<i>Anadolu University</i>	2000
<i>Tehnnology Encouragement</i>	<i>METU Prof.Dr. Mustafa N. Parlar Foundation</i>	2000
<i>Research Encouragement</i>	<i>The Scientific and Technological Research Council of Turkey (TUBITAK)</i>	1998
<i>Research Encouragement</i>	<i>METU Prof.Dr. Mustafa N. Parlar Foundation</i>	1996
<i>Post-Doctoral Fellowship</i>	<i>Alexander von Humbolt, Germany</i>	1997
<i>Post-Doctoral Fellowship</i>	<i>EPSRC, UK</i>	1994
<i>PhD Fellowship</i>	<i>TUBITAK – NATO B2</i>	1989

8. Membership of editorial boards of scientific journals

<i>SCI</i>	<i>Ceramics International</i>	<i>Italy</i>	2014 -
	<i>Journal of the Asian Ceramic Society</i>	<i>Japan</i>	2013
	<i>Boletín de la Sociedad Española de Cerámica y Vidrio (BSECV)</i>	<i>Spain</i>	2011-
<i>SCI</i>	<i>Journal of the European Ceramic Society</i>	<i>UK</i>	2011-2013
<i>SCI</i>	<i>Silicate Industriels</i>	<i>Belgium</i>	2003-2011
	<i>Key Engineering Materials</i>	<i>Switzerland</i>	2003-

9. Membership of scientific associations (Five most important)

	<i>European Ceramic Society</i>	<i>Mons / Belgium</i>	<i>1994-</i>
	<i>American Ceramic Society</i>	<i>Ohio / ABD</i>	<i>2013-</i>
	<i>Turkish Ceramic Society</i>	<i>Istanbul</i>	<i>1992-</i>
	<i>World Academy of Ceramics</i>	<i>Italy</i>	<i>2012-</i>
	<i>World Innovation Foundation</i>	<i>UK</i>	<i>2001-</i>

10. Regular contributions as a referee in the scientific journals

SCI	Journal of the American Ceramic Society
	Journal of the European Ceramic Society
	Journal of Materials Science
	Materials Letters
	Pure and Applied Chemistry
	Journal of Non Crystalline Solids

11. Most significant scientific publications to date (five at most must be listed).

Yaman, B. and Mandal, H. "Spark Plasma Sintering of Co-WC Cubic Boron Nitride Composites", Materials Letters, 63, 1041-1043, 2009 (Number of Citations: 15)

Van Krevel J.W.H., Van Rutten J.W.T., Hintzen H.T., Metselaar R. and Mandal H. "Luminescence Properties of Terbium-, Cerium-, or Europium-doped Alpha-SiAlON Materials", J. Sol. State Chem., 165, 19-24, 2002. (Number of Citations: 175)

Kurama, S., Herrmann, M. and Mandal, H. "The Effect of Processing Conditions, Amount of Additive and Composition on the Microstructures and Mechanical Properties of α -SiAlON Ceramics", Journal European Ceramic Society, 22, 109-119, 2002. (Number of Citations: 63)

Mandal, H. "New Developments in α -SiAlON Ceramics", Journal of European Ceramic Society, 19, 2349-2357, 1999. (Number of Citations: 98)

Mandal, H., Thompson, D.P. and Ekstrom, T. "Reversible $\alpha \leftrightarrow \beta$ SiAlON Transformation in Heat-Treated SiAlON Ceramics", Journal of European Ceramic Society, 12, 421-29, 1993. (Number of Citations: 128)

List of publications

Original Research Articles (SCI)

1. Yaman, B., Mandal, H., "Wear Performance of Spark Plasma Sintered Co/WC and cBN/Co/WC Composites", *Int. Journal of Refractory Metals and Hard Materials*, 42, 9-16, 2014
2. Ghaffari, S. A., Faghihi-Sani, M. A., Golestani-Fard, F., Mandal, H., "Spark Plasma Sintering of TaC-HfC UHTC via Disilicides Sintering Aids", *Journal of the European Ceramic Society*, 33, 1479-1484, 2013.
3. Kalemantas, A., Topates G., Ozcoban, H., Mandal, H., Kara; F., Janssen, R., "Mechanical Characterization of Highly Porous β -Si₃N₄ Ceramics Fabricated via Partial Sintering & Starch Addition", *Journal of the European Ceramic Society*, 33, 1507–1515, 2013.
4. Topates, T., Mammitzschb, L., Petasch, U., Adler, J., Kara, F., Mandal, H., "Microstructure–Permeability Relation of Porous β -Si₃N₄ Ceramics", *Journal of the European Ceramic Society*, 33, 1545–1551, 2013
5. Kalemantas, A., Topates, G., Bahadir, O., Kaya, P., Mandal, H., "Thermal Properties of Pressureless Melt Infiltrated AlN–Si–Al Composites", *Trans. Nonferrous Met. Soc. China*, 23, 1304–1313, 2013.
6. Mallik, A. K., Calis Acikbas, N., Kara, F, Mandal, H., Basu, B., "A Comparative Study of SiAlON Ceramics", *Ceramics International*, 38, 5757-5767, 2012.
7. Mandal, H., Calis Acikbas, N., "Processing, Characterization and Mechanical Properties of SiAlONs Produced from Low Cost beta-Si₃N₄ Powder", *Kona Powder and Particle Journal*, 30, 22-30, 2013
8. Calis Acikbas N., Yurdakul H., Mandal H., Kara F., Turan S., Kara A., Bitterlich B. "Effect of sintering conditions and heat treatment on the properties, microstructure and machining performance of α - β SiAlON ceramics", *Journal of the European Ceramic Society*, 32, 1321-1327, 2012.
9. Kumar A., Kumar Mallik A., Calis Acikbas N., Yaygingol M., Kara F., Mandal, H., Basu D., Basu B. "Cytocompatibility Property Evaluation of Gas Pressure Sintered SiAlON-SiC Composites with L929 Fibroblast Cells and Saos-2 osteoblast-like Cells", *Materials Science and Engineering C*, 32, 464-469.
10. Kumar Mallik A., Madhav Reddy K., Calis Acikbas N., Kara F., Mandal H., Basu D., Basu B., "Influence of SiC addition on tribological properties of SiAlON", *Ceramics International*, 37, 2495–2504, 2011.
11. Calis Acikbas N., Kumar R, Kara F., Mandal H., Basu B., "Influence of β -Si₃N₄ particle size and heat treatment on microstructural evolution of α : β -SiAlON Ceramics", *Journal of the European Ceramic Society*, 31, 629-635, 2011.
12. Ceylan, A., Suvaci, E., Mandal, H., "Role of Organic Additives on Non-Aqueous Tape Casting of SiAlON Ceramics", *Journal of the European Ceramic Society*, 31 167–173, 2010.

13. Kumar, R., Acikbas Calis N., Kara, F., Mandal, H. and Basu B. "Microstructure-Mechanical Properties-Wear Resistance Relationship of SiAlON Ceramics, *Metallurgical and Materials Transactions A*, 40, 2009.
14. Yaman, B. and Mandal, H. "Spark Plasma Sintering of Co-WC Cubic Boron Nitride Composites", *Materials Letters*, 63, 12, 1041-1043, 2009.
15. Kushan, S.R., Uzun, I., Dogan, B. and Mandal, H. "Experimental and Finite Element Study of the Thermal Conductivity of α -SiAlON Ceramics" *Journal of the American Ceramic Society*, 90, 3902-3907, 2007.
16. Acikbas Calis, N, Suvaci, E., Mandal, H. "Fabrication of Functionally Graded SiAlON Ceramics by Tape Casting", *Journal of the American Ceramic Society*, 89, 3255-3257, 2006.
17. Kurama, S., Cigdemir, G, Mandal, H., Herrmann, M. "Sr²⁺-Mg²⁺- Doped SiAlON Ceramics", *Journal of the American Ceramic Society*, 89, 714-716, 2006.
18. Ayas, E., Kara, A., Mandal, H., Turan, S., Kara, F. "Production α - β SiAlON-TiN / TiCN Composites by Gas Pressure Sintering", *Silicates Industriels, Journal of the Belgian Ceramic Society*, 69, 287-292, 2004.
19. Kalemtas, A., Kara, A., Kara, F., Mandal, H., Aktug, B. "Joining of SiAlON Ceramics to Pyrex Glass" *Silicates Industriels Special Issue, Journal of the Belgian Ceramic Society*, 69, 219-224, 2004.
20. Calis, N., Kushan, S.R., Kara, F., Mandal, H. "Functionally Graded SiAlON Ceramics", *Journal of European Ceramic Society*, 24, 3387-3393, 2004.
21. Ayas, E., Kara, A., Mandal, H., Turan, S., Kara, F. "Decolouration Effect of WC Addition on Gas Pressure Sintered α - β SiAlON Ceramics", *Materials Letters*, 58, 1498-1501, 2004.
22. Kara, F., Kara, A., Turan, S., Mandal, H. "Pressing Behaviours of Spray Dried Alumina Zirconia Granules", *Key Engineering Materials*, 264-268, 233-236, 2004.
23. Kushan, S.R., Mandal, H. "Effect of Different Nucleation Temperatures on the Microstructural Development of α -SiAlON Ceramics", *Key Engineering Materials*, 264-268, 1099-1102, 2004.
24. Kurama, S., Mandal, H. "Microstructural Evolution R- α -SiAlON Ceramics (R=Y, Y+Sm and Sm)", *Key Engineering Materials*, 264-268, 1103-1106, 2004.
25. Kurama, S., Mandal, H. "Formation of α -SiAlON Ceramics Containing Scandium", *Key Engineering Materials*, 264-268, 1107-1110, 2004.
26. Kurama, S., Mandal, H. "Mg⁺² and Ce⁺³ Doped α -SiAlON: Processing, Microstructure and Properties", *Key Engineering Materials*, 264-268, 1111-1114, 2004.
27. Topates, G., Mandal, H. "Producing Cordierite From Local Magnesium Sources", *Key Engineering Materials*, 264-268, 933-936, 2004.
28. Calis, N., Kara, A., Kara, F. and Mandal, H. "Development of Laminar Type Functionally Graded SiAlON Ceramics", *Key Engineering Materials*, 264-268, 1095-1099, 2004.

29. Kurama, S., Herrmann, M. and Mandal, H. "The Design of Composition for Multi-Cation Doped α - β SiAlON Ceramics by Rietveld Method", *Key Engineering Materials*, 237, 59-64, 2003.
30. Mandal, H., Kara, F., Turan S. and Kara, A. "Novel SiAlON Ceramics for Cutting Tool Applications", *Key Engineering Materials*, 237, 193-202, 2003.
31. Kushan, S.R. and Mandal, H. "The Effect of Different Nucleation Temperatures on the Grain Morphology of α -SiAlON Ceramics", *Key Engineering Materials*, 237, 169-174, 2003.
32. Turan, S., Kara, F., Mandal, H., "Transmission Electron Microscopy of SrO Containing Multi-Cation Doped α -SiAlON Ceramics", *Materials Science Forum*, 383, 37-42, 2002.
33. Herrmann, M., Kurama, S., Mandal, H. "Investigation of the Phase Composition and Stability of α -SiAlONs by the Rietveld Method", *Journal European Ceramic Society*, 22, 2997-3005, 2002.
34. Kurama, S., Herrmann, M. and Mandal, H. "The Effect of Processing Conditions, Amount of Additive and Composition on the Microstructures and Mechanical Properties of α -SiAlON Ceramics", *Journal European Ceramic Society*, 22, 109-119, 2002.
35. Kushan, S.R. and Mandal, H. "Effects of Different Si₃N₄ Starting Powders and Sintering Conditions on the Grain Morphology and Mechanical Properties of α -SiAlON Ceramics", *Key Engineering Materials*, 206-213, 417-420, 2002.
36. Mandal, H., Kara, F., Turan, S. and Kara, A. "Performance of New α - β SiAlONs in Turning Operations", *Key Engineering Materials*, 206-213, 929-932, 2002.
37. Kurama, S., Herrmann, M. and Mandal, H. "Improvement of Elongated α -SiAlON Ceramics by Variation of the Processing Conditions and Amounts of Additives", *Key Engineering Materials*, 206-213, 1009-1012, 2002.
38. Kushan, S. R. and Mandal, H. "Effect of the type of Starting Si₃N₄ Powder and Sintering Conditions on the Grain Morphology of α -SiAlON Ceramics", *Materials Science Forum*, 383, 31-36, 2002.
39. Kushan, S.R. and H. Mandal, "Effect of Starting Si₃N₄ Powder Type and Sintering Conditions on the Grain Morphology of α -SiAlON Ceramics", *British Ceramic Transactions*, 101, 35-37, 2002.
40. Van Krevel J.W.H., Van Rutten J.W.T., Hintzen H.T., Metselaar R. and Mandal H. "On the Luminescence of Rare Earth Doped alpha-SiAlON Materials", *J. Sol. State Chem.*, 165, 19-24, 2002.
41. Mandal, H. and Thompson, D. P. "New Heat Treatment Methods for the Optimization and Improvement of SiAlON Ceramics", *Journal Materials Science*, 35, 6285-6292, 2001.
42. Mandal, H., Oberacker, R., Hoffmann, M.J. and Thomspom, D.P. " α -SiAlON Ceramics Densified with Mixed Oxide Sintering Additives", *Materials Science Forum*, 325-326, 207-212, 2000.
43. Mandal, H. and Hoffmann, M.J. "Hard and Tough α -SiAlON Ceramics", *Materials Science Forum*, 325-326, 219-224, 2000.

44. Mandal, H. and Hoffmann, M.J. "Novel Developments in α -SiAlON Ceramics", *Key Engineering Materials*, 175-176, 131-137, 2000.
45. Mandal, H. "New Developments in α -SiAlON Ceramics", *Journal of European Ceramic Society*, 19, 2349-2357, 1999.
46. Mandal, H. and Thompson, D.P. " $\alpha \rightarrow \beta$ SiAlON Transformation in Calcium Containing α - SiAlON Ceramics", *Journal of European Ceramic Society*, 19, 543-552, 1999.
47. Mandal, H. and Hoffmann, M.J. "Preparation of Multiple-Cation α -SiAlON Ceramics Containing La₂O₃", *Journal of American Ceramic Society*, 82, 229-232, 1999.
48. Mandal, H., Thompson, D.P. and Jack, K.H. " $\alpha \rightarrow \beta$ Phase Transformation in silicon Nitride and SiAlONs", *Key Engineering Materials*, 159-160, 1-9, 1999.
49. Turan, S., Mandal, H., Kara, F. and Knowles, K.M., "Transmission Electron Microscopy Studies of La₂O₃ Doped α -SiAlON Ceramics", *Ins. Phys. Conf. Ser.*, 161, 417, 1999.
50. Mandal, H., Camuscu, N. and Thompson, D.P. "Effect of Starting Composition, Type of Rare Earth Sintering additive and Amount of Liquid Phase on $\alpha \rightarrow \beta$ SiAlON Transformation", *Journal of European Ceramic Society*, 17, 599-613, 1997.
51. Mandal, H., Thompson, D. P., Liu, Q. and Gao, L. "High Temperature Thermal Stability of α - SiAlON Ceramics Containing Glass Additions", *Journal of European Inorganic and Solid State Chemistry*, 34, 179-195 1997.
52. Qian, L., Mandal, H., Thompson, D. P., Gao, L. and Yan, D. S. "The Effect of Heat-Treatment on the Performance of Submicron SiC(p)-Reinforced α - β SiAlON Composites: I. Preparation of Agglomerate-Free Starting Powders", *Journal of European Ceramic Society*, 17, 581-585, 1997.
53. Qian, L., Mandal, H., Thompson, D. P., Gao, L. and Yan, D. S. "The Effect of Heat-Treatment on the Performance of Submicron SiC(p)-Reinforced α - β SiAlON Composites: II. Heat-Treatment Studies", *Journal of European Ceramic Society*, 17, 587-592, 1997.
54. Qian, L., Mandal, H., Thompson, D. P., Gao, L. and Yan, D. S. "The Effect of Heat-Treatment on the Performance of Submicron SiC(p)-Reinforced α - β SiAlON Composites: III. Mechanical Properties", *Journal of European Ceramic Society*, 17, 593-598, 1997.
55. Liddell, K., Mandal, H. and Thompson, D.P. "X-ray Data for New Y-Si-Al-O-N Glass Ceramics", *Journal of European Ceramic Society*, 17, 781-787, 1997.
56. Mandal, H. and Thompson, D.P. "Preparation of Ce-and Nd β -SiAlON Ceramics by $\alpha \leftrightarrow \beta$ SiAlON Transformation", *British Ceramic Transactions*, 96, 199-203, 1997.
57. Mandal, H. and Thompson, D.P. "Optimization and Improvement of SiAlON Ceramics with New Heat Treatment Techniques", *Key Engineering Materials*, 132-136, 984-989, 1997.
58. Mandal, H. and Thompson, D.P. "The Driving Force for $\alpha \leftrightarrow \beta$ Transformation in Rare Earth α -SiAlON Ceramics", *Key Engineering Materials*, 132-136, 798-801, 1997.
59. Mandal, H. and Thompson, D.P. "Thermal Stability of Rare Earth Densified α -SiAlON Ceramics", *Key Engineering Materials*, 132-136, 990-993, 1997.

60. Sun, W.Y., Yan, D.S., Gao, L., Mandal, H. and Thompson, D.P. "Subsolidus Phase Relationships in the Systems Dy₂O₃-Si₃N₄-AlN-Al₂O₃", *Journal of European Ceramic Society*, 16, 1277-1282, 1996.
61. Mandal, H. and Thompson, D.P. "CeO₂ Doped α -SiAlON Ceramics", *Journal of Materials Science Letters*, 15, 30, 1435-1438, 1996.
62. Sun, W.Y., Yan, D.S., Gao, L., Mandal, H., Liddell, K. and Thompson, D.P. "Subsolidus Phase Relationships in the Systems Ln₂O₃-Si₃N₄-AlN-Al₂O₃", *Journal of European Ceramic Society*, 15, 349-355, 1995.
63. Mandal, H., Camuscu, N. and Thompson, D.P. "Comparision of the Effectiveness of Rare Earth Sintering Additives on the High Temperature Stability of α -SiAlON Ceramics", *Journal of Material Science*, 30, 5901-5909, 1995.
64. Huang, L.P., Sun, X.W., Gao, L., Mandal, H. and Thompson, D.P. "The Densification Behaviour and Reaction Sequence of Sm₂O₃ α - β SiAlON Ceramic", *Journal of European Inorganic and Solid State Chemistry*, 31, 895-907, 1994.
65. Mandal, H., Thompson, D.P. and Ekstrom, T. "Reversible $\alpha \leftrightarrow \beta$ SiAlON Transformation in Heat-Treated SiAlON Ceramics", *Journal of European Ceramic Society*, 12, 421-29, 1993.
66. Mandal, H., Thompson, D.P. and Ekstrom, T. "Heat Treatment of Ln-Si-Al-O-N Glasses", *Key Engineering Materials*, 72-74, 187-203, 1992.

Original Research Articles (Other Indexes)

1. Kalemantas, A., Acikbas Calis, N., Kara, F., Mandal, H., Krnel, K., Kosmac, T. "Interactions Between AlN and SiAlON Ceramics", *Key Engineering Materials*, 403, 97-98, 2009.
2. Acikbas Calis, N., Kara, F., Mandal, H. "Development of α - β SiAlON Ceramics from Different Si₃N₄ Starting Powders", *Key Engineering Materials*, 403, 107-108, 2009.
3. Ceylan, A., Suvaci, E., Mandal, H. "Utilization of a Phosphate Ester as a Dispersant for SiAlON Based Ceramics", *Materials Science Forum*, 554, 71-77, 2007.
4. Kushan, S.R., Tamsu, N., Acikbas, N.C., Suvaci, E., Mandal, H. "Textured α -SiAlON Ceramics via Templated Grain Growth", *Materials Science Forum*, 554, 79-84, 2007.
5. Kushan, S.R., Acikbas, N.C., Krestan, P., Sajgalik, Mandal, H. "Role of α -SiAlON Nuclei Addition on the Rod-Like Y-Sm α -SiAlON Formation", *Materials Science Forum*, 554, 101-106, 2007.
6. Acikbas, N.C., Kara, A., Turan, S., Kara, F., Mandal and Bitterlich "Influence of Type of Cations on Intergranular Phase Crystallisation of SiAlON Ceramics", *Materials Science Forum*, 554, 119-122, 2007
7. Akin, B., Kushan, S.R., Mandal, H. "Sr²⁺-Mn⁴⁺ Doped SiAlON Ceramics", *Advances in Science and Technology*, 45, 73-76, 2006.
8. Bitterlich, B., Friederich, K., Mandal, H. "SiAlON-SiC-Composites for Cutting Tools", *Advances in Science and Technology*, 45, 1786-1791, 2006.

International

1. Kara, F., Mandal, H., Turan, S., Kara, A., Acikbas Calis, N. "Developments Strategies for SiAlON Ceramics", *Global Roadmap for Ceramics ICC2 Proceedings 2nd International Congress on Ceramics, June 29 - July 4, Toronto, 119-128, 2008.*
2. Dolekcekic, E., Mandal, H. and Hoffmann M.J., "The design of composition and mechanical properties of α - β SiAlON ceramics densified with higher atomic number rare earths", *7th Int. Symp. on Ceramic Materials and Components for Engines, Goslar, Germany, 435-438, 2000.*
3. Dolekcekic, E., Mandal, H. and Hoffmann M.J., "Rare Earth Doped α -SiAlON Ceramics", *Proc. of 10th International Metallurgy and Materials Congress, Istanbul, Turkey, 1417-1424, 2000.*
4. Kushan, S.R. and Mandal, H., "Effect of the type of the Si₃N₄ powder on the grain morphology of α -SiAlON Ceramics", *Proc. of 10th International Metallurgy and Materials Congress, Istanbul, Turkey, 1507-1512, 2000.*
5. Mandal, H., Thompson, D.P., Jack, K.H. and Hoffmann M.J., "The Driving Force for $\alpha \leftrightarrow \beta$ Phase Transformation in SiAlONs", *Proceedings of the 9th CIMTEC World Congress, Florence, Italy, 1998.*
6. Mandal, H. and Thompson, D.P., "The Mechanism of $\alpha \rightarrow \beta$ SiAlON Transformation", *Proc. of Euro Ceramics IV, Riccione, Italy, 327-334, 1995.*
7. Mandal, H. and Thompson, D.P., "Effect of Type of Rare Earth Oxide Additive on the Design of SiAlON Ceramics", *Proc. of Euro Ceramics IV, Riccione, Italy, 273-280, 1995.*
8. Mandal, H. and Thompson, D.P., "Preparation and Characterization of Glass-Free Silicon Nitride Ceramics", *Proc. of Euro Ceramics IV, Riccione, Italy, 217-224, 1995.*
9. Cheng, Y.B., Mandal, H. and Thompson, D.P. "Post-Sintering Heat-Treatment of Rare-Earth α -SiAlON Ceramics", *Proc. of Euro Ceramics IV, Riccione, Italy, 341-346, 1995.*
10. Mandal, H., "SiAlON Ceramics Sintered with Additions of Yb₂O₃, Dy₂O₃ and Sm₂O₃ or as Mixtures with Y₂O₃", *Proc. of 8th International Metallurgy and Materials Congress, Istanbul, Turkey, 803-808, 1995.*
11. Mandal, H., "Creep Resistance of SiAlON Ceramics", *Proc. of 8th International Metallurgy and Materials Congress, Istanbul, Turkey, 845-852, 1995.*
12. Camuscu, N., Mandal, H. and Thompson, D.P. "Optimised High-Temperature SiAlON Ceramics Containing Melilite as the Grain Boundary Phase", *Proceedings of 21st Century Ceramics, Stoke on-Trent, UK, 239-248, 1995.*
13. Mandal, H. and Thompson, D.P., "Vacuum Heat Treatment of SiAlON Ceramics", *Proceedings of 21st Century Ceramics, Stoke-on-Trent, UK, 249-260, 1995.*
14. Mandal, H. and Thompson, D.P., "Microstructural Control of Properties in Transformed $\alpha \rightarrow \beta$ SiAlON Ceramics", *Proceedings of 21st Century Ceramics, Stoke-on-Trent, UK, 261-273, 1995.*

15. Mandal, H., Thompson, D.P., Sun, W.Y. and Ekstrom, T., "Mechanical Property Control of Rare Earth Oxide Densified α - β SiAlON Transformation", *Proc. of 5th Int. Symp. On Ceramic Materials and Components for Engines, Shanghai, China, 441-446, 1994.*
16. Mandal, H., Thompson, D.P. and Cheng, Y.B., " α -SiAlON Ceramics with a Crystalline Melilite Grain-Boundary Phase", *Proc. of 5th Int. Symp. On Ceramic Materials and Components for Engines, Shanghai, China, 202-207, 1994.*
17. Mandal, H. and Thompson, D.P., "Vacuum Heat Treatment of Nitrogen Ceramics", *Proc. of 5th Int. Symp. On Ceramic Materials and Components for Engines, Shanghai, China, 445-453, 1994.*
18. Sun, W.Y., Tu, H.Y., Yen, D.S., Mandal, H. and Thompson, D.P., "Phase Relationships in the Sm-Si-Al-O-N System", *Proc. of 5th Int. Symp. on Ceramic Materials and Components for Engines, Shanghai, China, 437-440, 1994.*
19. Zhuang, H.R., Fu, X.R., Gao, L., Mandal, H. and Thompson, D.P., "Heat Treatment of SiAlON-AlN Polytypoid Composites with Rare Earth Oxides Additives", *Proc. of 5th Int. Symp. on Ceramic Materials and Components for Engines, Shanghai, China, 276-280, 1994.*
20. Mandal, H. and Thompson, D.P., "Control of Properties by $\alpha \rightarrow \beta$ SiAlON Transformation", *II. International Ceramics Congress, Istanbul, Turkey, 208-217, 1994.*
21. Mandal, H., Thompson, D.P. and Cheng, Y.B., " α -High Temperature Heat Treatment of SiAlON Ceramics", *II. International Ceramics Congress, Istanbul, Turkey, 31-40, 1994.*
22. Mandal, H. and Thompson, D.P., "New Oxynitride Glass Ceramics", *II. International Ceramics Congress, Istanbul, Turkey, 366-377, 1994.*
23. Mandal, H. and Thompson, D.P., "Removal of Grain Boundary Glass in Nitrogen Ceramics by Vacuum Heat-Treatment", *II. International Ceramics Congress, Istanbul, Turkey, 1-10, 1994.*
24. Mandal, H., Thompson, D.P. and Ekstrom, T., "Optimization of SiAlON Ceramics by Heat-Treatment", *Proc. of EuroCeramics III, Madrid, Spain, Volume 2, pp 1163-11169, 1993.*
25. Mandal, H., Patel, J.K., Thompson, D.P. "Nitrogen Pyroxenes", *Proc. of EuroCeramics III, Madrid, Spain, Volume 2, pp 1163-1169, 1993.*
26. Mandal, H. Thompson, D.P. and Ekstrom, T., "Heat Treatment of SiAlON Ceramics Densified with Higher Atomic Number Rare Earths and Mixed Yttrium/Rare Earth Oxides", *Int. Conf. On Special Ceramics 9, London, UK, 97-104, 1990.*

Abstracts

27. Turan, S., Mandal, H., Kara, F. and Kara, A. "Relationship between microstructure and cutting performance of novel alpha-beta SiAlON cutting tools", *14th International Electron Microscopy Congress, Durban, South Africa, 09/2002.*
28. Ozgen, S. and Mandal, H., "Ceramic Education and Research in Turkey", *7th Conference and Exhibition of the European Ceramic Society, Brugge-Belgium, 2001.*

29. Kushan, S.R. and Mandal, H., "Effect of the Type of the Si₃N₄ Powder and Sintering Conditions on the Grain Morphology of α -SiAlON Ceramics", Eastern Mediterranean Chemical Engineering Conference, Ankara, Turkey, 212, 2001.
30. Ayas, E., Kara, A., Mandal, H., Kara, F. and Turan, S., "Decoloration Effect of WC to Gas Pressured Sintered α - β SiAlON Cutting Tool Inserts", Eastern Mediterranean Chemical Engineering Conference, Ankara, Turkey, 246, 2001.
31. Mandal, H., Kara, F., Turan, S. and Kara, A., "Novel SiAlON Ceramics for Cutting Tool Applications", Eastern Mediterranean Chemical Engineering Conference, Ankara, Turkey, 240, 2001.
32. Kushan, S.R. and Mandal, H., "Effect of the Type of the Si₃N₄ Powder on the Grain Morphology and Mechanical Properties of α -SiAlON Ceramics", 7th Int. Symp. on Ceramic Materials and Components for Engines, Goslar, Germany, 166, 2000.
33. Mandal, H. and Hoffmann, M.J., "Novel Developments in α -SiAlON Ceramics", 6th European Ceramic Society Conference, Brighton, UK, Vol 2, 11-13, British Ceramic Proceedings, 60, 1999.
34. Mandal, H. and Thompson, D.P., " α - β SiAlON Transformation", Int. Conf. on JENI 9 (Journées D'études Sur Les Nitrures), Limoges, France, 13, 1993.

National

1. Kara, D., Mandal, H. and Kara, F., "Development of High Abrasion Resistance Glazes", 5. Ceramics Congress with International Participation, Istanbul, Turkey, 201-205, 2001.
2. Kushan, S.R. and Mandal, H., "The Effect of Nucleation Temperature on the Microstructure and Mechanical Properties of α -SiAlON Ceramics", 5. Ceramics Congress with International Participation, Istanbul, Turkey, 302-306, 2001.
3. Mandal, H., Kara, F., Turan, S., Kara, A. and Cetinkaya, A., "Application of New SiAlON Ceramics as Cutting Tool", 5. Ceramics Congress with International Participation, Istanbul, Turkey, 307-311, 2001.
4. Kalemteş, A., Kushan, S.R. and Mandal, H., "The Effect of Nucleation Heat Treatment on the Grain Morphology of α -SiAlON Ceramics", 5. Ceramics Congress with International Participation, Istanbul, Turkey, 278-283, 2001.
5. Kurama, S., Hermann, M., Mandal, H., "The Effect of the Amount of Sintering Additive and Sintering Conditions on the Development of Elongated α -SiAlON Ceramics", 5. Ceramics Congress with International Participation, Istanbul, Turkey, 266-271, 2001.
6. Dolekçekiç, E., Kurama, S., Mandal, H., Oberacker, R., Hoffmann, M.J., Thompson and D.P., "Multi-Cation Doped α -SiAlON Ceramics", 4. Ceramics Congress with International Participation, Eskisehir, Turkey, 395-400, 1998.
7. Mandal, H. and Thompson, D.P., "High Temperature Thermal Stability of Calcium Containing α -SiAlON Ceramics", 4. Ceramics Congress with International Participation, Eskisehir, Turkey, 401-407, 1998.

8. Mandal, H. and Hoffmann, M.J., " α -SiAlON Ceramics with Elongated Grain Morphology", 4. Ceramics Congress with International Participation, Eskisehir, Turkey, 409-415, 1998.
9. Camuscu, N., Thompson D.P., Mandal, H., "The Parameters Effecting the $\alpha \rightarrow \beta$ SiAlON Transformation", 4. Ceramics Congress with International Participation, Eskisehir, Turkey, 417-421, 1998.
10. Mandal, H. and Thompson, D.P., "New Heat Treatment Methods for the Optimization of SiAlON Ceramics", 3. Ceramics Congress with International Participation, Istanbul, Turkey, 29-39, 1996.
11. Mandal, H. and Thompson, D.P., "High Temperature Thermal Stability of Rare Earth Densified α -SiAlON Ceramics", 3. Ceramics Congress with International Participation, Istanbul, Turkey, 149-155, 1996.
12. Camuscu, N., Mandal, H. and Thompson, D.P., "Above Eutectic Temperature Heat Treatment of α -SiAlON Ceramics", 3. Ceramics Congress with International Participation, Istanbul, Turkey, 139-148, 1996.
13. Camuscu, N., Mandal, H. and Thompson, D.P., "Preparation and Properties of Aluminium Substituted Nitrogen Melilite", 3. Ceramics Congress with International Participation, Istanbul, Turkey, 228-236, 1996.
14. Tunaboylu, B., Verner, J.R. and Mandal, H., "Effect of Y₂O₃ and Al₂O₃ Additions on the Sintering Behaviour, Microhardness and Fracture Toughness of Silicon Nitride", 3. Ceramics Congress with International Participation, Istanbul, Turkey, 221-227, Ekim 1996.
15. Demir, V., Tatlı, Z., Mandal, H. and Thompson, D.P., "Pressureless Sintering of Si₃N₄ with MgO", 3. Ceramics Congress with International Participation, Istanbul, Turkey, 127-132, 1996.
16. Liu, Q., Gao, L., Yan, D.S., Mandal, H. and Thompson, D.P., "Preparation and Mechanical Properties of Ln-SiAlON/SiC(p) Composites", 3. Ceramics Congress with International Participation, Istanbul, Turkey, 251-257, 1996.
17. Tatlı, Z., Mandal, H. and Thompson, D.P., "Densification Behaviour of Oxide-Coated Silicon Nitride Powders", 3. Ceramics Congress with International Participation, Istanbul, Turkey, 92-98, 1996.
18. Liddell, K., Mandal, H. and Thompson, D.P., "Devitrification of Yttrium and Lanthanide Glass Ceramics", 3. Ceramics Congress with International Participation, Istanbul, Turkey, 243-250, 1996.

Patents

1) Substituted Silicon Nitride Products and Method Thereof

Derek P. Thompson, Hasan Mandal, Yi-Bing Cheng

WO 94/17010, 4 August 1994

2) Heat Treatment of Nitrogen Ceramics

Derek P. Thompson, Hasan Mandal

WO 94/07811, 14 April 1994

3) Multication Doped Alpha-Beta SiAlON Ceramics

Hasan Mandal, Ferhat Kara, Servet Turan, Alpagut Kara

PCT No: PCT/TR02/00006 (Feb. 2002)

US Patent No: US 7,064,095 B2

EP Patent No: 1 414 580 B1

4) Silicon Nitride Ceramics with Improved Wear Resistance and Production Method Therefore

Hasan Mandal, Ferhat Kara, Servet Turan, Alpagut Kara

WO2013EP60197 20130516

WO2013171324

5) Doped Alpha-Beta-SiAlON Ceramic Materials

Bernd Bitterlich, Kilian Friederich, Hasan Mandal, Ferhat Kara, Servet Turan, Alpagut Kara

WO2010EP67496 20101115

WO2011058176

6) SiAlON Ceramics

Hasan Mandal, Ferhat Kara, Servet Turan, Alpagut Kara

EP12182818.0, OZ12022EP-Q3/BR, 03 September 2012

Edited Conference Proceeding Books

3. International Symposium on SiAlONs and Non-Oxides

Edited by H. Mandal and K. Komeya

Journal of the European Ceramic Society, 32, 2012

5th International Symposium on Nitrides

Edited by H. Mandal

Materials Science Forum, Vol. 554, TransTec Publications, Switzerland, 2007

8. Conference and Exhibition of the European Ceramic Society

Edited by H.Mandal and L. Öveçoğlu

Key Engineering Materials, Vol. 264-268, TransTec Publications, Switzerland, 2004

21. Century Ceramics

Edited by D.P. Thompson and H. Mandal,

British Ceramic Proceedings, No: 54, The Institute of Materials, London, UK, 1996.

III. Ceramics Congress

Edited by V.Günay, H.Mandal and S.Özgen

Turkish Ceramic Society Publications, No: 16 and 17, Istanbul, Turkey, 1996

Some of the Invited Lectures

<i>5th International Ceramics Congress, Beijing, China</i>	<i>17-21 August 2014</i>
<i>4th International Symposium on SiAlONs and Non-Oxides, Japan</i>	<i>25-28 May 2014</i>
<i>8th International Symposium on Advanced Processing and Manufacturing Technologies for Structural and Multifunctional Materials and Systems (APMT8), Daytona Beach, USA</i>	<i>26-31 January 2014</i>
<i>5th International Symposium on Advanced Ceramics (ISAC-5), Wuhan, China</i>	<i>9-12 December 2013</i>
<i>International Conference on Traditional and Advanced Ceramics (ICTA 2013), Bangkok, Thailand</i>	<i>11-15 September 2013</i>
<i>World Conference on Global Innovation, Kuala Lumpur, Malaysia</i>	<i>25-27 March 2013</i>
<i>Going Global 2013, Dubai, UAE</i>	<i>5 March 2013</i>
<i>International Conference on Emerge of New Era in Glass and Ceramics NEGC 2013, India</i>	<i>17-19 January 2013</i>
<i>2nd International Engineering Education Conference (IEEC2012, Antalya, Turkey</i>	<i>31 October – 3 November 2012</i>
<i>Ceramic Materials for Energy and Environmental Technologies, CMEET 2012, Shanghai, China</i>	<i>29 August – 1 September 2012</i>
<i>4. International Ceramics Congress, Chicago, USA</i>	<i>15-19 July 2012</i>
<i>7th China International Conference on High-Performance Ceramics (CICC-7), Xiamen, China</i>	<i>4-7 November 2011</i>
<i>Engineering Ceramics 2012, Smelonica Castle, Slovakia</i>	<i>9-12 May 2011</i>
<i>Advances in Applied Physics and Materials Science Congress, Antalya, Turkey</i>	<i>12-15 May 2011</i>
<i>Advanced Engineering Ceramics and Composites (ISAC-4), Osaka, Japan</i>	<i>14-18 November 2010</i>
<i>6th China International Conference on High-Performance Ceramics (CICC-6), Harbin, China</i>	<i>15-19 August 2009</i>
<i>6th International Symposium on Nitrides and Related Materials (5th ISN'T IT), Karlsruhe, Germany</i>	<i>15-18 March 2009</i>
<i>9. International Symposium on Ceramic Materials and Components for Energy and Environmental Applications, Shanghai, China</i>	<i>10-14 November 2008</i>
<i>2. International Congress on Ceramics, Verona, Italy</i>	<i>29 June – 4 July 2008</i>
<i>2nd International Symposium on SiAlONs and Non-Oxides, Japan</i>	<i>2-5 December 2007</i>
<i>Sixth International Conference on High Temperature Ceramics, New Delhi, India</i>	<i>4-7 September 2007</i>
<i>10th Conference and Exhibition of the European Ceramic Society, Berlin, Germany</i>	<i>17-21 June 2007</i>

<i>The Second International Ceramics Conference on the Characterization and Control of Interfaces for High Quality Advanced Ceramics, Kurashiki, Japan</i>	5-9 September 2006
<i>9th Conference and Exhibition of the European Ceramic Society, Porto Roz-Slovenia</i>	19-23 June 2005
<i>International Symposium on New Frontier of Advanced Si-Based Ceramics and Composites, Gyeongju, Korea.</i>	20-23 June 2004
<i>International Symposium on SiAlONs, Chiba-Japan</i>	2-4 December 2001
<i>Eastern Mediterranean Chemical Engineering Conference, Ankara, Turkey</i>	2001
<i>Uluslararası Katılımlı IV. Seramik Kongresi, Eskisehir, Turkey</i>	22-25 December 1998
<i>3. Ceramics Congress with International Participation, Istanbul, Turkey</i>	1996
<i>5th Int. Symp. on Ceramic Materials and Components for Engines, Shanghai, China</i>	1994
<i>II. International Ceramics Congress, Istanbul, Turkey</i>	1994

Supervised MSc and PhD Thesis

PhD Thesis

- Production of Si₃N₄ Based Porous Ceramics Starting from Silicon, B. Tarhan, On progress
- Development of Si₃N₄ based Ceramics for Diesel Particulate Filter Applications, G. Topates, 2011
- The Improvement of Tribological Properties of Ceramic Based Composite Materials Produced by Spark Plasma Sintering, B. Yaman, 2009
- Development of SiAlON Ceramics for Tribological Applications, N. Calis Acikbas, 2009
- Production of Functionally Grades SiAlON Ceramics Produced by Tape Casting, A. Ceylan, 2006
- The Improvement in Microstructural Development and Thermal Properties of α -SiAlON Ceramics by Seed Additions, S.R. Kushan, 2006
- The Investigation of α -SiAlON Phase Region and Microstructural Characterization, S. Kurama, 2004

MSc Thesis

- Mn²⁺ and Fe³⁺ Doped α -SiAlON Ceramics, B. Akin, 2006
- The Stability of B-Phase (Ln₂SiAlO₅N; Ln=Y-Ce; Y-Sm) in Multication Doped Oxynitrides, H. Yurdakul, 2004
- Functionally Graded SiAlON Ceramics, N. Calis, 2004
- The Production of Cordierite Starting From Different Magnesium Raw Materials, G. Topates, 2003
- The Research on the Improvement of Wear Resistance in Floor Tiles, D. Kara, 2002
- The Effect of Starting Silicon Nitride Powders on the Microstructure of α -SiAlON Ceramics, S.R. Kushan, 2000
- α - β SiAlON Ceramics with Reduced Amount of Grain Boundary Phase, E. Dolekcekic, 1999

Research Projects

- New Approaches for SiC and Si₃N₄ Obtaining via Polymer Nanocomposites and Their Use for Structural Ceramics”- NASIPONAC - (*IMAWATCO*), EU MANUNET Project
- Functional Nitrides for Energy Applications (FUNEA) EU Marie Curie ITN Project
- Development of SiAlON Ceramics for Tribological Applications, SAN-TEZ (00103.STZ.2007-1); AU BAP 070209; TUBITAK – CSIR India TBAG-U/193 (106T757).
- The Graduate Programme for the Improvement of R&D Capacity of Ceramic Industry, DPT 2004K120270
- Design and Development of Functionally Graded SiAlON Ceramics, TUBITAK-Slovenia, 104T248
- Design of Microstructure for SiAlON Ceramics, TUBITAK-TEYDEB 3040287
- The Sintering of SiAlON Ceramics Under High Nitrogen Gas Pressure, AU BAP 040253
- α -SiAlON with Needle-like Microstructure for Wear Applications, TUBITAK – Slovakia 103M039
- The Improvement in Microstructural Development and Thermal Properties of α -SiAlON Ceramics by Seed Additions, AU BAP 030204.
- Crystal Chemistry of SiAlON Based Cutting Tools and the Effect of Production Techniques on Cutting Performances AU BAP 020212
- Development of High Wear Resistance Glazes, TUBITAK-SAM P/2000-8
- The Effect of Different Starting Silicon Nitride Powders on the Microstructure of α -SiAlON Ceramics, AU BAP 000203
- Enrichment of Local (Eskisehir Kızılcaoren) Rare Earth Elements and the Research on Their Usage as a Sintering Additive in SiAlON Ceramics AU BAP 000220
- The Investigation of α -SiAlON Phase Region and Microstructural Characterization, AU BAP 000244
- The Research on the Usage of Perlite as a Alternative Fluxing Agent in Floor Tiles and Sanitaryware, TUBITAK-SAM P/1999-06
- The Production of SiAlON Based Refractory Ceramics for High Temperature and High Corrosion Resistance Applications, DPT 97K120380
- The Development of Novel SiAlON Ceramics for Cutting Tool Applications and their Cutting Performance Tests, DPT 96K120340