BIOGRAPHICAL DATA

NAME SHAILENDRA KRISHNA VARMA

OFFICE ADDRESS Department of Metallurgical and Materials Engineering
The University of Texas at El Paso
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TELEPHONE NUMBERS
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SOCIAL SECURITY NUMBER 522-88-0783

CITIZENSHIP United States

MARITAL STATUS Married, Two Children

EDUCATION

Ph.D.	Georgia Institute of Technology, Atlanta, Georgia, 1977	
M.S.	University of Denver, Denver, Colorado, 1974	
B.E.	University of Roorkee, Roorkee, India, 1967	

EXPERIENCE

9/90-Present	Professor
9/84-8/90	Associate Professor Department of Metallurgical and Materials Engineering The University of Texas at El Paso, El Paso, Texas
8/80-8/84	Assistant Professor
9/78-8/80	Visiting Assistant Professor
11/77-8/78	Post Doctoral Research Associate Mechanical Engineering Department, Texas A&M University, College Station, Texas
10/68-12/70	Junior Scientific Assistant Solid State Physics Laboratory, Delhi, India

AWARDS & MEMBERSHIPS TO PROFESSIONAL SOCIETIES

1. Recognition of Teaching from the Dean of The College of Engineering, The University of Texas at El Paso, April 2000.
2. “Aged and Long Term Statically and Cyclically Oxidized Microstructures in Ti-44Al-11Nb Alloy”, Paper Award from the Gamma Titanium Aluminide 1999 Symposium held in San Diego. March 3, 1999.
3. Marquis’s Who is Who in Science and Engineering, 1998.
4. "Distinguished Alumnus Award", College of Engineering, Georgia Institute of Technology, Atlanta, Georgia, May 2, 1996.
5. "El Paso Natural Gas/Burlington Resources Foundation Research Award", At The University of Texas at El Paso, El Paso, Texas, April 12, 1993.
6. "MacIntosh Murchison Faculty Fellow" At The University of Texas at El Paso, El Paso, Texas, September 1991-93.
7. "Distinguished Achievement Award in Research Excellence", The University of Texas at El Paso, El Paso, Texas, April, 1993.

8. "Most Outstanding Professor" in the Department of Metallurgical and Materials Engineering at The University of Texas at El Paso, El Paso, Texas, April 1990.
9. Member of Alpha Sigma Mu Society.
10. Member of American Society for Metals International.
11. Member of The Metallurgical Society of AIME.
12. Licensed Professional Engineer (Sate of Texas).
13. Member of the Electro-Chemical Society (ECS).

COMMITTEE INVOLVEMENT

Faculty Liaison for Library (1985-1996)
University Committee for Graduate Affairs to the Faculty Senate (1986-1988)
College of Engineering Representative to the Graduate Council (1986-1989)
Graduate Catalog Committee (1987-1990)
College of Engineering External Affairs and Research Committee (1987-1990
Faculty Senate Library Committee (1989-1990)
Chairman of the Search Committee for the Chairman of the Metallurgical and Materials Engineering
Golden Nugget Award Committee (1990-1991)
Faculty Senate Member (1989-1991)
Executive Committee for Vice President for Academic Affairs (1990-1992)
Executive Committee for the President (1990-1992)
Catalog and Calendar Committee (1992-1995)
Distinguished Achievement for Research Award Committee (1994-1999)
Conditions of Work Study Committee (1995-1996)
Student's Publication Committee (1997-2000)
College Undergraduate Curriculum Committee (1999-2002)
Faculty Senate (1999-2002)
Faculty Welfare Committee (2000-2003)
Student Welfare and Grievance Committee (2000-2003)
Graduate Scholarship Committee (2002-2005)
Academic and Admissions Standards Committee (2002-2005)
Hearing Officer for the University (2002-present)
College Curricular Committee (2000-2005)
Faculty Welfare Committee (2005-2008)
Student Organizations and Activities (2005-2008)
Faculty Senate's Research Committee (2009-2012)

TITLES OF COURSES TAUGHT

Undergraduate Courses

Materials Science
Materials Selection
Structure and Properties of Alloys
Engineering Laboratory
Physical Metallurgy-I
Mechanical Metallurgy
Mechanical Behavior of Materials
Materials Science Laboratory
Materials Selection Laboratory
Advanced Materials Concept
Microscopy
Physical Metallurgy-II
Metallurgy of Casting Processes

Graduate Courses

Plastic Deformation of Metals
Phase Transformations
Mechanical Behavior of Materials
Electron Microscopy Techniques
Deformation Processing

GRADUATE STUDENTS

1.	Chung-Min Chang (1988)	"The Effect of Prior Cold Work Amount and Annealing Temperature on Subgrain Growth in OFHC Copper During Static Recovery"
2.	Hong Zhu (1989)	"The Effect of Amount of Cold Work and Annealing Temperature On Subgrain Growth Kinetics in Pure Nickel During Static Recovery"
3.	Yi-Yin Chao (1990)	"The Effect of Strain Rate on the Dislocation Cell Structure Formation in aluminum and Nickel During Static Recovery"
4.	Ming-Wei Tseng (1991)	"Subgrain Growth in FCC Metals and Alloys During Recovery"
5.	Jose Carlos Arroyo (1991)	"The Effect of Indenter Shape, Grain Diameter and Nickel Content on the Transient Current Response of Fe-Ni-Cr Alloys During a Scratch Test "
6.	S. Thiagarajan (1991)	"The Effect of Wire Drawing Speed on the Substructures and Mechanical Properties in OFHC Copper"
7.	Sanjay Mehta (1991)	"The Effect of Wire Drawing Speed on the Substructural Evolution and Mechanical Properties in Nickel 200"
8.	Indradev Samajdar (1991)	"The Effect of Wire Drawing Speed on the Dislocation Substructures and Mechanical Properties in pure Aluminum"
9.	Jyothi G. Rao (1992)	"Combined Effects of Grain Size and Strain Rate on the Dislocation Substructures and Mechanical Properties in Nickel-200"
10.	Deepak Sil (1992)	"Combined Effects of Grain Size and Strain Rate on the Dislocation Substructures and Mechanical Properties in Pure Aluminum"
11.	H. Shankaranarayana (1993)	"Effect of Grain Size and Strain Rate on the Dislocation Substructures and Mechanical Properties in OFHC Copper"
12.	Jagadish Kalyanam (1993)	"Effect of Grain Size on the Formation of Deformation Induced Martensite in 304 Stainless Steel"
13.	Vijay Shrinivas (1994)	"Deformation Induced Martensite Characteristics in 304 and 316 Stainless Steel During Room Temperature Rolling"
14.	Veronica Caballero (1996)	"Effect of SFE on the Characterization of the Deformation Mechanisms in the Cu-Al System During Room Temperature Tensile Testing and Wire Drawing"
15.	Javier Ponce (1997)	"Influence of Solutionizing Time on the Aging Response of 6061 Aluminum Alloy Reinforced with Alumina Particles"
16.	Daniel Salas (1998)	"Work Hardening Characteristics of 6061 Aluminum Alloy Reinforced with Alumina Particles During Room Temperature Rolling"
17.	Carlos Hernandez(2000)	"Aging Characteristics of Ti-44Al-xNb Alloys"
18.	Alvaro Chan(2000)	"Effect of Nb on the Static and Cyclic Oxidation of Ti-44Al-xNb Alloys"
19.	John C. Woo (2002)	"Oxidation Behavior of T-44Al-(9,11)Nb-2(Zr, Ta) Alloys"
20.	Erika Esquivel (2002)	"Effect of Solutionizing on the Aging Characteristics of 7075 Aluminum Alloy and Composites Containing Alumina Particles"
21.	Aditya Putrevu (2006)	"Metal Dusting in Ferrous Alloys"
22.	Maduri Pasala (2006)	"Oxidation in T22, T91, and 800 Alloys"
23.	P. Raju Kakarlapudi (2007)	"Super-High Temperature Oxidation of Nb-Cr-W Alloys"
24.	Benedict Portillo (2008)	"High Temperature Oxidation Behavior of the Nb-W-Cr System and Response of Boron Additions"
25.	Maria D. Moricca (2010)	'The Effect of Cr on the Oxidation Behavior of the Alloys from Nb-W-Cr System"
26.	Julieta Ventura (2009)	"Microstructures and High Temperature Oxidation Behavior of Nb-20Mo-15Si-20Cr-5B Alloy"
27.	Clemente Parga (2010)	"Low Temperature Oxidation Behavior of Zr-Nb-Ti Alloys in Air"

28. David Alvarez — "Oxidation Behavior of Pure Cr and Nb in Air"
29. Benedict Portillo — "Oxidation Behavior of Nb-20M-15si-5B-20(Cr,Ti) Alloy up to 1400^{o}C"
30. Alma Vasquez — "Oxidation Resistance of Nb-20Si-20Cr-(5,10)Hf Alloys"
31. Brendan Vogelwede (2012) — "The Effects of Uncommon Silicides on the Oxidation of Alloys from Nb-Cr-Si SYstem"
32. Nydia Esparza (2012) — "The Effect of B and Al Addition on the Oxidation Behavior of Alloys from the Nb-Cr-Si System"
33. Victoria Rangel (2012) — "The Effect of Al, Mo and B on the Oxidation behavior of Three Nb-Based Alloys"
34. Katherine Thomas (2015) — Presently working on Ph.D.
35. Ruth Doasry(2014) — Presently working on Ph.D.

RESEARCH FUNDING

1. "Request for Funding for the Construction of a Dimpler to be Used in TEM Foil Preparation", S. K. Varma, $400, 5/82, Texas A&M University Minigrant.

2. "Dual Phases in Martensitic Stainless Steels to Conserve Chromium", S. K. Varma, $15,800, 6/82-5/83, Center for Energy and Mineral Resources, Texas.

3. "Materials to be Used in Dimpler", S. K. Varma, $300, 5/83, Texas A&M University Minigrant.

4. "Renewal Proposal on Dual Phases in Martensitic Stainless Steels to Conserve Chromium", S. K. Varma, $9,000, 6/83-5/84, Center for Energy and Mineral Resources, Texas.

5. "Theory of Subgrain Growth During Recovery in Al and Cu", S. K. Varma, $7,500, 11/84-9/85, University Research Institute Grant from The University of Texas at El Paso.

6. "Recrystallization Mechanisms in Pure Copper", S. K. Varma, $5,500, 11/85-9/86, University Research Institute Grant from The University of Texas at El Paso.

7. "The Structural Characterization of Hard and Standard Rods of Phelps Dodge Company", S. K. Varma, $18,716, 6/86-9/87, Phelps Dodge Company, El Paso, Texas.

8. "The Substructural Characterization During High Temperature Wire Drawing Deformation in Conductor Grade Copper", S. K. Varma, $15,000, 1/87-9/87, An Award from The University of Texas at El Paso, MacIntosh Murchison Faculty Fellowship.

9. "The Transient Current Response of Fe-Ni-Cr Alloys After Depassivation by a Controlled Scribe", A. Bronson, S. K. Varma, S. W. Stafford and J. Rojo, $1,086,590, 9/88-8/93, National Science Foundation.

10. "A Comparison of the Substructures Produced During Hot Working and Cold Working Annealing Combination", S. K. Varma, $11,164, 6/88-8/89, An Award From The University of Texas at El Paso, MacIntosh Murchison Faculty Fellowship.

11. "The Role of Misorientation Angles and Stacking Fault Energy in Work Hardening and Annealing Processes in Aluminum, Copper and Nickel", S. K. Varma, $100,000, 1/90-8/92, Advanced Research Program, Texas Higher Education Coordinating Board.

12. "The Combined Effect of Stacking Fault Energy, Grain Size and Strain Rate on the Development of Dislocation Substructures and Mechanical Properties in Aluminum, Copper and Their Dilute Alloys", S. K. Varma and L. E. Murr, $512,577, 9/93-3/00, National Science Foundation.

13. "Corrosive Wear of Fe-Cr-Ni System", A. Bronson, S. K. Varma and J. Rojo, $528,134, 9/93-3/00, National Science Foundation.

14. “Thermal Cyclic Effects on the Oxidation and Microstructural Stability of Ti-44Al-11Nb Alloy”, S. K. Varma, $161,650, 12/97-12/99, Defense Logistics Agency (DLA).

15. "Super-High Temperature Alloys and Composites from Nb-Cr-W Systems", S.K. Varma, $200,000, 9/05-8/08, Department of Energy (DOE).

16. "High Temperature Oxidation Resistance of Alloys from Nb-Cr-Si System, S.K. Varma, $600,000, 11/07-10/10, Office of Naval Research (ONR).

17. "Acquisition of Electropolisher and Ion Mill for the Characterization of Microstructures in Alloys from Nb-Cr-Si System, $99,505, 11/07-10/10, Office of Naval Research (ONR).

18. "High Temperature Oxidation Resistance of Alloys from Nb-Cr-Si System, S.K. Varma, $900,000, 11/09-10/12, Office of Naval Research (ONR).

REVIEW INVOLVEMENT

Reviewed numerous papers for	Metallurgical and Materials Transactions A Materials Science and Engineering A Scripta Materialia Philosophical Magazine
Reviewed Proposals for	National Science Foundation ILIR Navy Program
Guest Editor	Journal of Metallurgy
Editor	Journal of Metals – Refractory Metals Issues
Program Committee Member	M3 2011 – Annual International Conference on Materials Science, Metals & Manufacturing

REFEREED JOURNAL PUBLICATIONS

1. "On Silicon Single Crystal Growth by Czochralski Method", W. N. Borle, S. Tata and S. K. Varma, *Journal of the Institution of Telecommunication Engineers*, 16(1970)696.

2. "Silicon Crystals Almost Free of Dislocations", W. N. Borle, S. Tata and S. K. Varma, *Journal of Crystal Growth*, 8(1971)223.

3. "On Doping of Silicon Crystals", W. N. Borle, S. Tata, S. K. Varma, S. N. Chattergee and S. K. Agarwal, *Indian Journal of Pure and Applied Physics*, 9(1971)136.

4. "Effect of Alloying and Processing on Subgrain-Strength Relationship in Aluminum Conductor Grade Alloys", David Kalish, B. G. LeFevre and S. K. Varma, *Metallurgical Transactions*, 8A(1977)204.

5. "Compounds and Phase Relationships in Lithium-Iridium-Hydrogen System" S. K. Varma, F. C. Chang and C. B. Magee, *Journal of the Less Common Metals*, 60(1978)P47.

6. "Substructural Developments in EC Aluminum", S. K. Varma, *Scripta Metallurgica*, 13(1979)345.

7. "The Electroplastic Effect in Aluminum", S. K. Varma and L. R. Cornwell, *Scripta Metallurgica*, 13(1979)733.

8. "Reply to Comments on Electroplasticity in Aluminum", S. K. Varma and L. R. Cornwell, *Scripta Metallurgica*, 14(1980)1035.

9. "The Electroplastic Effect in Metals", S. K. Varma and L. R. Cornwell, *Texas Engineering Experiment Station Bulletin*, 80-1(1980)10.

10. "Large Wire Drawing Plastic Deformation in Aluminum and Its Dilute Alloys", S. K. Varma and B. G. LeFevre, *Metallurgical Transactions*, 11A(1980)935.

11. "Wire Drawing of Pure Aluminum", S. K. Varma, Invited paper in *Res Mechanica Letters*,1(1981)459.

12. "Dislocation Densities in EC Aluminum During Wire Drawing", S. K. Varma, Invited paper in *Res Mechanica*, 8(1983)175.

13. "Dynamic Recrystallization in Cold Drawn Al-0.6Fe Alloy", S. K. Varma, *Res Mechanica*,9(1983)249.

14. "Subgrain Growth in Aluminum During Static Annealing", S. K. Varma and Barry L. Willits, *Metallurgical Transactions*, 15A(1984)1502.

15. "Dual Phases in Martensitic 410 Stainless Steels", S. K. Varma, *Journal of Materials Science Letters*, 4(1985)920.

16. "Behavior of Dual Phase Steels at Large Rolling Strains", S. K. Varma, *Journal of Materials Science Letters*, 15(1986)125.

17. "Subgrain Growth in Al-0.6Fe Alloy During Recovery", S. K. Varma and Ray W. Guard *Journal of Materials Science Letters*, 5(1986)206.

18. "Effect of Cold Work Amount and Annealing Temperature on Subgrain Growth in Al-0.2Mg Alloy", S. K. Varma, *Materials Science and Engineering*, 82(1986)L19.

19. "Effect of Cold Work on Subgrain Growth During Recovery in Al-0.6Fe Alloy", S. K. Varma and Sylvia J. Reyes, *Materials Science and Engineering*, 95(1987)L1.

20. "Effect of Annealing Temperature on Subgrain Growth During Recovery in OFHC Copper", Chung-Min R. Chang, John R. Serrano and S. K. Varma, *Materials Science and Engineering*, 100(1988)L15.

21. "Effect of Cold Work on Subgrain growth During Recovery in Pure Aluminum", S. K. Varma and Bradford C. Wesstrom, *Journal of Materials Science Letters*, 7(1988)1092.

22. "Vacancy Versus Pipe Diffusion Mechanisms for Subgrain Growth in OFHC Copper", Chung-Min Chang and S. K. Varma, *Acta Metallurgica*, 37(1989)927.

23. "Subgrain Growth in Nickel During Recovery", Hong Zhu and S. K. Varma, *Metallurgical Transactions*, 21A(1990)500.

24. "Effect of Strain Rate on Dislocation Cell Size and Hall-Petch Type Relationship at Various Strain Levels During Uniaxial Tensile Test in Nickel", Yi-Yin Chao and S. K. Varma, *Scripta Metallurgica et Materialia*, 24(1990)1665.

25. "Dissection of Sandstrom's Model for Subgrain Growth in Al-0.6Fe Alloy", Ming-Wei Tseng and S. K. Varma, *Scripta Metallurgica et Materialia*, 24(1990)1741.

26. "Effect of Strain Rate on Dislocation Cell Size at Various Stress Levels During Uniaxial Tensile Test in EC Aluminum", Yi-Yin Chao and S. K. Varma, *Materials Science and Engineering*, A131(1990)L1.

27. "Effect of Strain Rate on Dislocation Cell Size and Hall-Petch Type Relationship at Various Strain Levels During Uniaxial Tensile Test in EC Aluminum", Yi-Yin Chao and S. K. Varma, *Journal of Materials Science Letters*, 10(1991)630.

28. "The Surface Morphology and Transient Current Response of Fe-16w/oCr-16w/oNi in a Scratch Test", Jose Carlos Arroyo, A. Bronson and S. K. Varma, *Journal of Materials Science Letters*, 10(1991)91.

29. "Effect of Prior Cold Work Amount and Annealing Temperature on Subgrain Growth in Nickel During Recovery", Hong Zhu and S. K. Varma, *Journal of Materials Science Letters*, 10(1991)875.

30. "Effect of Microstructure on the Repassivation Kinetics in VP Iron", Jose Carlos Arroyo, A. Bronson and S. K. Varma, *Corrosion*, 47(1991)177.

31. "Dislocation Cell Structures and Mechanical Properties of OFHC Copper During Wire Drawing at Various Speeds", S. Thiagarajan and S. K. Varma, *Metallurgical Transactions*, 22A(1991)258.

32. "Correction to Dislocation Cell Structures and Mechanical properties of Oxygen-Free High Conductivity Copper During Wire Drawing at Various Speeds", S. Thiagarajan and S. K. Varma, *MetallurgicalTransactions*, 22A(1991)1893.

33. "The Effect of Wire Drawing Speed on the Dislocation Cell Size and Mechanical Properties in Pure Aluminum", Indradev Samajdar and S. K. Varma, *Materials Science and Engineering*, A141(1991)L1.

34. "The Effect of Indenter Shape on the Transient Current Response and Surface Microstructures in Fe-16%Cr-16%Ni Alloy", S. K. Varma, J. C. Arroyo and A. Bronson, *Wear*, 154(1992)49.

35. "Effect of Strain Rate on the Dislocation Cell Size in OFHC Copper", S. Thiagarajan and S. K. Varma, *Journal of Materials Science Letters*, 11(1992)692.

36. "Transmission Electron Microscopy of Scratch-Induced Surface Deformation in Austenitic Fe-Cr-Ni Alloys", A. H. Advani, J. C. Arroyo, L. E. Murr, S. K. Varma, L. Montes and C. Odegard, *Scripta Metallurgica et Materialia*, 26(1992)1181.

37. "Structure Sensitive Properties During Room Temperature Wire Drawing at Various Speeds in Nickel 200", Sanjay Mehta and S. K. Varma, *Journal of Materials Science*, 27(1992)3570.

38. "Development of Empirical Model for Subgrain Growth in Al-0.6Fe Alloy, Aluminum, Nickel and Copper During Recovery", Ming-Wei Tseng and S. K. Varma, *Journal of Materials Science*, 27(1992)5509.

39. "Effect of Strain Rate on Cell Size Refinement and Strengthening in Nickel and Aluminum", Deepak Sil, Jyothi G. Rao and S. K. Varma, *Metallurgical Transactions*, 23A(1992)3166.

40. "The Combined Effect of Grains Size and Strain Rate on Substructures and Mechanical Properties in Pure Aluminum", Deepak Sil and S. K. Varma, *Metallurgical Transactions*, 24A(1993)1153.

41. "Residual Microstructures of a Shaped-Charge Jet Fragment", A. C. Gurewitch, L. E. Murr, W. W. Fisher, S. K. Varma, A. H. Advani and L. Zernow, *Journal of Materials Science*, 28(1993)2795.

42. "Effect of Grain Size and Strain Rate on the Substructural Developments and Mechanical Properties in Nickel 200", Jyothi G. Rao and S. K. Varma, *Metallurgical Transactions*, 24A(1993)2559.

43. "The Effect of Grain Size on the Formation of Deformation Induced Martensite in 304 and 316 Stainless Steels During Room Temperature Tensile Testing", S. K. Varma, Jagadish Kalyanam, L. E. Murr and Vijay Srinivas, *Journal of Materials Science Letters*, 13(1994)107.

44. "Influence of Near Surface Microstructures and Grain Size on the Transient Current Response in Fe-Cr-Ni Alloys During Scratch Tests", S. K. Varma, Monica M. de Lugo, A. H. Advani and A. Bronson, *Metallurgical and Materials Transactions*, 25A(1994)1325.

45. "Influence of Electrolyte and Grain Size on the Transient Current Response in Fe-Ni-Cr Alloys During Corrosive Wear", S. K .Varma, Monica M. de Lugo and Veronica Caballero, *Wear*, 178(1994)101.

46. "Deformation Induced Martensitic Characteristics in 304 and 316 Stainless Steels During Room Temperature Rolling", Vijay Shrinivas, S. K. Varma and L. E. Murr, *Metallurgical and Materials Transactions*, 26A(1995)661.

47. "The Combined Effect of Strain Rate and Grain Size on the Dislocation Substructures and Mechanical Properties in OFHC Copper During Room Temperature Tensile Testing", Hursha Shankaranarayan and S. K. Varma, *Journal of Materials Science*, 30(1995)3576.

48. 'The Kinetics of Grain Growth and Control of Grain Size in $(6061\ Alloy)_m/(Al_2O_3)_p$ Composite by Solutionizing Treatment", S. K. Varma, Javier Ponce, Michael Solis, Daniel Salas and Shane Andrews, *Metallurgical and Materials Transactions*, 27A(1996)2023.

49. "Microstructures During Solutionizing in a 6061 Aluminum Alloy Matrix Reinforced with Alumina Particles", S. K. Varma, Javier Ponce, Shane Andrews, Erica Corral and Daniel Salas, *Materials Science Forum*, 217-222(1996)931.

50. "The Effect of Stacking Fault Energy on the Microstructural Development During Room Temperature Wire Drawing in Cu, Al and Their Dilute Alloys, S. K. Varma, Veronica Caballero, Javier Ponce, Arturo De La Cruz, Daniel Salas and Juan Sanchez, *Journal of Materials Science*, 31(1996)5623.

51. "The Effect of Impact and Continuous Scratches on the Corrosive Wear Behavior of Fe-18%Cr-5%Ni Alloy and 304 Stainless Steels", S. K. Varma and Richard R. Romero, *Wear*, 201(1996)121.

52. "Solutionizing Effects During Corrosive Wear by the Impact and Continuous Scratches in 6061 Aluminum Alloy and Composites", S. K. Varma and Shane Andrews, *Journal of Materials Engineering and Performance*, 7(1998)33.

53. "Effect of Stacking Fault Energy and Strain Rate on the Microstructural Evolution During Room Temperature Tensile Testing in Cu and Cu-Al Dilute Alloys", Veronica Caballero and S. K. Varma, *Journal of Materials Science*, 34(1999)461.

54. "Corrosive Wear Behavior of 2014 and 6061 Aluminum Alloy Composites", S. K. Varma, Shane Andrews and Gustavo Vasquez, *Journal of Materials Engineering and Performance*, 8(1999)98.

55. "Microstructural Development During Aging of 2014 Aluminum Alloy Composite", S. K. Varma, Daniel Salas, Erica Corral, Erika Esquivel, Miriam Regalado, K. K. Chawla, and R. Mahapatra, *Journal of Materials Science*, 34(1999)1855.

56. “Room Temperature Rolling and Tensile Deformation of 2014 Aluminum Alloy Composites”, S. K. Varma, Daniel Salas, Erica Corral and Erika Esquivel, *Metallurgical and Materials Transactions*, 30A(1999)2539.

57. “Microstructures During Static and Cyclic Oxidation”, S.K. Varma, Rabindra Mahapatra, Carlos Hernandez, Alvaro Chan, and Erica Corral, *Materials and Manufacturing Processes*, 14(1999)821-835.

58. “Static and Cyclic Oxidation of Ti-44Al and Ti-44Al-xNb Alloys”, S. K. Varma, Alvaro Chan, R. Mahapatra, *Oxidation of Metals*, 55(2001)423-435.

59. “Comparison of In-Situ Oxidation Between Ti-44Al and Ti-44Al-11Nb Alloys Below 400°C", J. C. Woo , S.K. Varma, P. W. Wang, M. Avila, and R. N. Mahapatra, *Journal of Materials Science Letters*, 21(2002)539-541.

60. “Oxidation Behavior and TEM Characterization of Ti-44Al-(9,11)Nb-2(Ta,Zr) Alloys, John W. Woo, S.K. Varma, and R.N. Mahapatra, *Metallurgical and Materials Transactions*, 34A(2003)2263-2271.

61. “In-Situ Oxidation of Ti-44Al-11Nb Alloy at Room Temperature", P. W. Wang J. Woo, M. Avila, J. Garcia, A. Bronson, and S.K.Varma, *Journal of Materials Science*, 38(2003)489-497.

62. “Corrosive Wear Behavior of 7075 Aluminum Alloy and Composites”, S.K. Varma and Gustavo Vasquez, *Journal of Materials Engineering and Performance*, 12(2003)99-105.

63. “Comparison of Oxidation Characteristics of Rh-30Ni-18Nb Alloy with Inconel 713C”, R.N. Mahapatra, C. Lei, V.N. Agarwala, and S.K. Varma, *Oxidation of Metals*, Nos. 1/2, 62(August 2004)93-102.

64. “Effect of Water Vapor on Metal Dusting Behavior of Ferrous Alloys”, Aditya Putrevu, S.K. Varma, Z. Zeng, and K. Natesan, *TMS Letters*, Structural Materials Division, 3(2006)49-50.

65. “Thermal Stability and Oxidation Resistance of Pt-10Al-4Cr Alloy at Super-High Temperatures, *Oxidation of Metals*, vol. 66, Nos. ¾, 66(2006)127-135.

66. “Metal Dusting and Oxidation at 593 and 704^{o}C”, S.K. Varma, Aditya Putrevu, Maduri Pasala, Z. Zeng, and Ken Natesan, *Materials Science Forum*, vols. 539-543, 539-543(2007)4226-4231.

67. "The Possible Application of Nb-W-Cr Alloys in High Temperature Air", Benedict Portillo, Purushotham Kakarlapudi, and S.K. Varma, *Journal of Metals*, vol.59, 46-49(2007).

68. "The High-Temperature Oxidation Characteristics of Alloys from the Nb-W-Cr System with C Additions", Maria D. Moricca and S.K. Varma, *Journal of Metals*, vol.60, 66-69(2008).

69. "Oxidation Resistance $NbCr_2$ Phase in Nb-W-Cr System", Julieta Ventura, Benedict Portillo, and S.K. Varma, *Journal of Alloys and Compounds*, 476, 257-262(2009).

70. "Oxidation Resistance of Nb-20Mo-15Si-5B-20Cr up to 1300^{o}C", Julieta Ventura and S.K. Varma, *Journal of Metals*, vol.61, 72-75(2009).

71. "Oxidation Resistant $NbCr_2$ Phase in Nb-W-Cr System", Julieta Ventura, Benedict Portillo, and S.K. Varma, *Journal of Alloys and Compounds*, Vol.476, 257-262(2009).

72. "Oxidation Behavior of Nb-20Mo-15Si-5B-20Cr and Nb-20Mo-15Si-5B-20Ti Alloys Up To 1300^{o}C", Julieta A. Ventura, Benedict I. Portillo, Shailendra K. Varma, and Rabindra N.

Mahapatra, *ECS Transactions,* (The Electrochemical Society), Vol.16, Issue 44, pp.157-166, 2009.

73. "Correlation Between Microstructures and Oxidation Resistance in Zr-Nb-Ti Alloys", Clemente J Parga and S.K. Varma, *Metallurgical and Materials Transactions,* Vol.40A, 2987-2993, 2009.

74. "High Temperature Oxidation Characteristics of Nb-10W-XCr Alloys", M. Moricca and S.K. Varma, *Journal of Alloys and Compounds*, Vol.489, 195-201, 2010.

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