

BIO-DATA

Name & Designation : Dr. Satya Prakash, Professor

Date of Birth : March 2, 1945

Place of Birth : Lucknow (U.P.)

Nationality : Indian

Marital Status : Married

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Academic Qualification :

Examination	Year	Univ./Institution	Div.	Remarks
Higher Secondary	1962	C.B.S.E. New Delhi	Ist	Distinction in Mathematics
B.E. (Met. Engg.)	1967	Institute of Technology Banaras Hindu University	Ist	-
M.E. (Met. Engg.)	1969	Institute of Technology Banaras Hindu University	Ist	U.G.C. Fellowship
Ph.D. (Met. Engg.)	1978	Hungarian Academy of Sciences, Budapest	-	Distinction in 2 Course Hungarian Govt. Scholarship for 4 Years

Ph.D. Topic	:	Behaviour of Titanium Minerals in the Titanium rich Indian Bauxite during the digestion by Bayer's Process
Teaching Experience	:	About 39 years Experience of Teaching both U.G. and P.G. levels Head of Department from 01-04-2002 to 31-12-2004.
Research Papers	:	More than 227 Published in Refereed Journals & National & International Conferences (Annexure-A)
No. of Ph.D. Thesis Guided	:	23
No. of Ph.D. Thesis Guiding	:	05
No. of M.E. Thesis	:	More Than 100
No. of M. Phil Thesis	:	05 (Under Materials Science Programme in Physics Department)
Sponsored Research Projects	:	14 (Annexure A1)
Consultancy Projects	:	15 (Annexure A2)

Special Courses Coordinated:

- “Advances in Welding Metallurgy” Continuing Education Department, University of Roorkee.
- Q.I.P. course on “High Temperature Oxidation of Metals and Alloys.
- Corrosion and it's control-coordinator for in-service.
- Inspection of Tubular Products-coordinator, ONGC in-service engineers.
- Corrosion and Cathodic Protection Short-term course sponsored by Institute of Management Development, Oil and Natural Gas Commission, Dehradun
- Q.I.P. Course on “Corrosion and its prevention”
- Q.I.P. Course on “Non Destructive Testing and Its application in industry”

Courses Taught and Developed

Graduate Level	Post Graduate Level
<ul style="list-style-type: none">• Non-destructive Testing	<ul style="list-style-type: none">• Equilibrium & Kinetics Hydrometallurgy
<ul style="list-style-type: none">• Foundry Technology	<ul style="list-style-type: none">• Inspection and Quality Control
<ul style="list-style-type: none">• Experimental Techniques	<ul style="list-style-type: none">• Industrial Furnaces & Refractories
<ul style="list-style-type: none">• Electric Steel Making and continuous casting	<ul style="list-style-type: none">• Equilibrium & Kinetics Pyrometallurgy
<ul style="list-style-type: none">• Non-Ferrous Metallurgy	<ul style="list-style-type: none">• Advanced Foundry Metallurgy
<ul style="list-style-type: none">• Joining of Metals	<ul style="list-style-type: none">• Advance Thermodynamics
<ul style="list-style-type: none">• Inspection and Quality Control	<ul style="list-style-type: none">• Simulation and Process Control
<ul style="list-style-type: none">• Corrosion and its Control	<ul style="list-style-type: none">• Failure Analysis
	<ul style="list-style-type: none">• Corrosion of Weldments

Administrative Responsibilities:

- Chief Warden
- Hony. Secy. I.I.M. Local Chapter
- President-Indian Society of Continuing Engineering Education
- President, Indian Society of Continuing Engineering Education since 1999
- Professor and Head, department of Metallurgical and Materials Engineering, IIT Roorkee
- Chairman, Institute Technical Committee, IIT Roorkee
- Co-coordinator Cognizance 2006
- Co-coordinator SURA 2004, 2005 & 2006

- Manager, School Management Committee of VVABN senior school managed by University of Roorkee from September 1993 to September 2003.
- Chief Advisor, Hobbies Club till March 2006.
- Chairman, Hospital Advisory Committee, IIT Roorkee from September 2006 to October 2007
- Chief Vigilance Officer , IIT Roorkee from November 2007

Professional Bodies Membership:

- Member of the AICTE Accreditation Committee
- Member, Indian Institute Metals (IIM)
- Member, Indian Society of Non Destructive Testing (ISNT)
- Member, Institute of Engineers (IE)
- Member, Indian Society of Non Destructive Testing
- Life Fellow, Indian Society of continuing Engg. Education

Awards:

- **Life Time Achievement-2008** for Corrosion awareness by **NACE INDIA SECTION**
- Khosla Annual Research Award Gold Medal
- ARCI best Technical paper award , International Symposium on Materials Science and Engineering, IIT M , Chennai
- Excellent Performer Award for last four Years in IIT Roorkee system.

Books/monographs:

- ❖ Manual on high Temperature Oxidation of Metals & alloys completed under M.H.R.D. programme
- ❖ Contributed to a chapter entitled "**Hot Corrosion of Alloys and Coatings**" for the book entitled "New Development in High Temperature Corrosion and Protection of Materials" **Woodhead Publishing Limited, Abington Hall, Abington, Cambridge, CB1 6AH, England** ,ISBN 1 84569 219 5, April 2008

Sr. No.	Name of the Candidate	Topic of Ph.D. Thesis- Year	Co-Guide	Remarks
1.	Sh Jyoti Lata Pandey	Effect of Zirconium and Yttrium Alloying on High Temperature Oxidation of Fe-15wt% Cr-4wt% Al	Dr. I.P. Sarswat, Dr. M.L Mehta	Awarded (1983)
2.	Deepak Sexena	Effect of Zirconium and Yttrium addition on High Temperature Sulphidation Behaviour of Fe-15wt% Cr-4wt% Al alloy	Dr. I.P. Sarswat, Dr. M.L Mehta	Awarded (1986)
3.	Sh. Devendra Puri	Recovery of Values from the Red Mud By Matallothermic Process	Dr V K Tewari	Awarded (1993)
4.	Sh. R.N. Sharma	Hot Corrosion Behaviour of Ni- and Fe-Based Superalloys in Salt Environment at	--	Awarded (1996)

		Elevated Temperatures- 1996		
5.	Sh. S.N. Tiwari	Investigations on Hot Corrosion of Some Fe-, Ni- and Co-Based Superalloys in Na ₂ SO ₄ -V ₂ O ₅ Environment Under Cyclic Conditions- 1997	--	Awarded (1997)
6.	Mrs. Gitanjaly	Role of Inhibitors on Hot Corrosion of Superalloys in Na ₂ SO ₄ -V ₂ O ₅ Environment- 2003	Dr. Surendera Singh	Awarded (2003)
7.	Mr. Buta Singh	Studies on the Role of Coatings in Improving Resistance to Hot Corrosion and Degradation- 2003	--	Awarded (2002)
8.	Harpreet Singh	Hot Corrosion Studies on Plasma Spray Coatings on Some Ni-	Dr D Puri	Awarded (2006)

		& Fe based superalloys		
9.	T S Sidhu	Hot Corrosion Behaviour of HVOF Coatings on Some Ni – and Fe- base Superalloys	Dr R D Aggarwal	Awarded (2007)
10.	S. B. Mishra	Development of Erosion & Wear resistant Coatings	Dr. K. Chandra	Awarded (2006)
11.	Ramesh M R	Studies on the Role of HVOF coatings in improving resistance to hot corrosion and erosion	Dr SK NATH	Awarded (2008)
12.	Arivazhagan N	Weldment Corrosion on dissimilar metal combination	Dr S Singh	Awarded (2007)
13.	Mahesh Anwar	Hot Corrosion Behaviour of Conventional and Nanostructured Coatings on Superalloys	Dr R JAYAGANTHAN	Awarded (2008)
14.	Akhilesh Kumar Chauhan	Erosion resistant surface coatings	Dr D B GOEL	Awarded (2008)
15.	Ravindra Kumar	Studies on Hot Corrosion behavior of	Dr V K Tewari	Awarded (2007)

		Boiler Tube Steel weldments		
16.	Anupam Singhal	Detoxification of Pickling Sludge, Sludge Utilisation & Recovery of Values	DR V K Tewari	Awarded (2006)
17.	Hazoor Singh	Role HVOF coatings in improving material degradation at elevated temperature	Dr Buta Singh	Awarded (2007)
18.	Pawan Kumar Sapra	Study of detonation gun coated alloys for resistance to erosion and corrosion	Dr SURENDRA SINGH	Awarded (2009)
19.	Subhash Kamal	Characterisation and hot corrosion behaviour of detonation gun sprayed coating	Dr R JAYAGANTHAN	Awarded (2009)
20.	Vikas Chawla	Hot Corrosion and Erosion behaviour of nano structured and conventional coatings	Dr D PURI	Awarded (2009)
21.	Manpreet Kaur	Studies on Role of High-Velocity Oxy-Fuel Spray coatings to enhance Erosion Corrosion Resistance of Boiler Steels	Dr HARPREET SINGH	Awarded (2010)
22.	Niraj Bala	Investigations on Hot Corrosion Behaviour of Cold Spray and HVOF Spray Coatings on T22	Dr HARPREET SINGH	Awarded

		and SA516 Steels		
23.	GAGANDEEP KAUSHAL	Erosion Corrosion Studies on High-Velocity Oxy-Fuel Thermal Spray Coating over Some Boiler Steels	Dr HARPREET SINGH	Awarded
24.	GURBHINDER SINGH	High Temperature Erosion and Corrosion of coatings on superalloys	Dr SURENDRA SINGH	Completed
25.	MANOJ MITTAL	Development of coatings and its wear , erosion and environmental behavior	Dr SK NATH	Completed
26.	Jyoti Rani	Study of nano films	Dr KL Yadav	Ongoing
27.	Nidhi Rana	Life time assessment of coatings	Dr R. Jayaganthan	Ongoing
28.	Deepa Mudgal	Hot corrosion behaviour of HVOF sprayed coatings	Dr Surendra Singh	Ongoing

Annexure A1

Sponsored Research Projects:

Sl. No.	Title	Sponsored by	Remark
1.	“Influence of TiO ₂ content of Bauxite on the Technology of Alumina production	D.A.E.	Investigator-in-charge
2.	Effect of reactive and rare metal oxides on high temperature oxidation behaviour of Fe-15Cr-4Al alloy	C.S.I.R.	Co-investigator Investigator-in-charge since March, 1986
3.	Settling studies on red-mud	U.G.C.	Research Grant
4.	Utilisation studies on red-mud	U.P.C.S.I.R.	
5.	Settling studies on red-mud	U.P.C.S.I.R.	
6.	Recovery of zinc metal from ash of	U.P.C.S.I.R.	

	zinc melting		
7.	Material Performance in Chloride environment with special relevance to Stress Corrosion Cracking	Oil Industries Development Board	Co-investigator Rs. 49.7 lakhs
8.	Development of Technology of shape welding using SAW process	D.S.T. completed Deptt. of Science & Technology Govt. of India	
9.	Hot corrosion studies on Ni ₃ Al coated steel in molten salt environment	All India council of Technical Education New Delhi	Principal Investigator
10.	Processes Development for Recovery of Values from Metallurgical Wastes	MHRD, GOI	Principal Investigator Rs. 17.00 Lakhs, Completed
11.	Modernisation of NDT Laboratory	MHRD	Rs. 16.00 Lakhs
12.	Erosion, Wear and Hot Corrosion Studies on Plasma and HVOF Spray Coated Superalloys	MHRD	Rs.14.00 Lakhs Completed
13.	Design Centre- State Initiated Design Centre	Department of Textile, Govt. of India	Rs. 36.00 Lakhs
14	KVIC Project	Department of Textile, Govt. of India	Rs. 90.00 Lakhs

Annexure A2

Consultancy Projects:

Sl. No.	Title	Sponsored by
1.	Recovery of aluminium from dross of aluminium melting	J.K. METAL
2.	Beneficiation & Testing of bauxites	U.P. State Mineral Dev. Corpn., Lucknow
3.	Role of Nitrogen in plate steels and its welding	I.S.G.E.C. Yamunanagar
4.	Investigation of plugged holes in crane jigs in V.S.L. Vishakhapatnam	Triveni Structures Naini
5.	Corrosion behaviour of Duplex steel	O.N.G.C.
6.	Hydrogen Induced Cracking/Sulphide Stress Corrosion Cracking of Steels	O.N.G.C. 2.5 Lacks
7.	Nitride Coating on threading die for improved wear resistances of tools	M/s sharp tools Pvt. Ltd., Poanta Sahib
8.	Development Micro absorber Ferrite from waste of textile industry	M/s Paramount Engg. Dedhradun
9.	Setting up ZnO Plant in H. P.	
10.	Investigation in cracking of continuous cast billets on rolling	Arti Steels Ltd. Ludhiana
11.	Investigation on cracking of Kanthal based alloy during rolling	Vaishnav Steel Pvt. Ltd. Muzzafarnagar
12.	Testing of the shafts of Usha Braco Ltd., Haridwar	Usha Braco Ltd., Mansadevi Udan Khatola, Haridwar
13.	Environmental Impact Assessment Studies	Monnet Ispat Ltd., Raipur
14.	Failure Investigation of Molasses Tank of Sugar mill, Khatauli.	Triveni Sugar Mill, Khatauli
15.	Failure Analysis of a Dryer of a Paper Mill	Star Paper Mill, Saharanpur

Annexure A3

List of Papers Published:

(A) International Referred Journals

1. Khelendra Agrawal, Gurbhinder Singh, Satya Prakash, Synthesis and characterization of Hydroxyapatite Powder by Sol- Gel method for Biomedical Application, ***Journal of Minerals & Materials Characterization & Engineering***, Vol. 10, No.8, pp.727-734, 2011.
2. Kaushal, G., Singh, H., Prakash,S, High-temperature erosion-corrosion performance of high-velocity oxy-fuel sprayed Ni-20 Cr coating in actual boiler environment, ***Metallurgical and Materials Transaction A*** **42 (7) (2011) 1836-46**
3. Kaushal, G., Singh, H., Prakash,S, Comparative high temperature analysis of HVOF sprayed and detonation gun sprayed Ni-20Cr coating in laboratory and actual boiler environments, ***Oxidation of Metals*** **1-23**.
4. Goyal, G., Singh,H., Prakash, S. Effect of superficially applied Y_2O_3 coating on high-temperature corrosion behaviour of Ni-based superalloys, ***Surface Engineering*** **(2010) 26 (6) 428-439**
5. Goyal, G., Singh,H., Prakash, S. Role of CeO_2 coating in enhancing high temperature corrosion resistance of Ni-based superalloys as inhibitor, ***Materials at High Temperatures***, **(2010) 27 (2) 109-116**.
6. Vikas Chawla, Amita Chawla, Buta Singh Sidhu, S. Prakash and D. Puri, "Oxidation behavior of nanostructured TiAlN and AlCrN thin coatings on ASTM-SA213-T-22 boiler steel", ***Journal of Minerals and Materials Characterization and Engineering***, (2010)Vol. 9, No.11, , 1037-1057.
7. Dinesh Gond, Vikas Chawla, D. Puri and S. Prakash, "High Temperature Corrosion Behaviour of T-91 and T-22 Bare Steel in 75wt. %Na₂SO₄+25wt. %NaCl Molten Salt Environment at 900°C", ***Journal of Minerals and Materials Characterization and Engineering***, (2010) Vol. 9, No. 7, 593-606.
8. Dinesh Gond, Vikas Chawla, D. Puri and S. Prakash, "Oxidation Studies of T-91 and T-22 Boiler steel in air at 900°C", ***Journal of Minerals and Materials Characterization and Engineering***, (2010) Vol. 9, No. 8, 749-761.

9. Vikas Chawla, Amita Chawla, Buta Singh Sidhu, S. Prakash and D. Puri, "Performance of nanostructured metal nitride coated T-22 boiler steel in Na₂SO₄–60% V₂O₅ environment at 900°C under cyclic conditions", **Journal of Minerals and Materials Characterization and Engineering (2011) Vol. 10, No.7, 583-608.**
10. Vikas Chawla, Amita Chawla, Y. Mehta, S. Prakash, D. Puri and Buta Singh Sidhu, "Investigation of properties and corrosion behavior of hard TiAlN and AlCrN PVD thin coatings in the 3 wt% NaCl solution" **Journal of the Australian Ceramic Society, Vol. 47, No. 1, 2011, 48-56.**
11. Vikas Chawla, S. Prakash, D. Puri, Buta Singh, "Hot Corrosion and Erosion problems in coal based power plants in India and possible solutions: a review", **Journal of Minerals and Materials Characterization and Engineering,(2011)Vol. 10, No.4, 367-385**
12. P. Hui, S.L. Meena, Gurbhinder Singh, R.D. Agarawal, Satya Prakash, (2010), "Synthesis of Hydroxyapatite Bio-Ceramic Powder by Hydrothermal Method", *Journal of Minerals & Materials Characterization & Engineering*, Vol. 9, No.8, pp.683-692, 2010
13. Gurbhinder Singh, Surendra Singh and Satya Prakash, (2010), "Role of Post Heat Treatment of Plasma Sprayed Pure and Al₂O₃-TiO₂ Reinforced Hydroxyapatite Coating on the Microstructure and Mechanical Properties", *Journal of Minerals & Materials Characterization & Engineering*, (2010) Vol. 9, No.12, pp.1059-1069
14. Gurbhinder Singh, Surendra Singh, Satya Prakash, (2011), " Post Heat Treatment of Plasma Sprayed Pure and Alumina-Titania Reinforced Hydroxyapatite Coating on SS 304 Steel, *Journal of Minerals & Materials Characterization & Engineering*, (2011) Vol. 10, No.2, pp.173-184
15. Gurbhinder Singh, Surendra Singh and Satya Prakash, (2011), " Surface characterization of plasma sprayed pure and reinforced hydroxyapatite coating on Ti6Al4V alloy, *Surface and Coatings Technology*, Vol. 205 (20), pp. 4814-4820.
16. Gurbhinder Singh, Surendra Singh and Satya Prakash, (2011), "Role of reinforced materials in thermal sprayed hydroxyapatite coating on bio implants: A Review", **Ceramic Transactions, Volume 228, Wiley, ISBN: 978-1-1180-6001-8.**

17. Sapra Pawan Kumar, Singh Surendra, Prakash Satya, "Erosion-Corrosion Behaviour of Ni-based Superalloy Superni-600 in the Real Service Environment of the Boiler" International Journal of Microstructure and Materials Properties (IJMMP). (In Press)
18. Sapra, P.K., Singh, S., **Prakash, S.** and M R, Ramesh. "Elevated Temperature Solid Particle Erosion Performance of Al_2O_3 -3 wt% TiO_2 Composite Coatings", Int. J. Surface Science and Engineering (In Press).
19. Manpreet Kaur, Harpreet singh, **Satya Prakash**, (2009) High-Temperature Corrosion Studies of HVOF-Sprayed Cr3C2-NiCr Coating on SAE-347H Boiler Steel, Journal of Thermal Spray Technology, Volume 18, Number 4 / December, 2009, pp 619-632.
20. Sapra, P.K., Singh, S., **Prakash, S.** (2009) 'Performance of Al_2O_3 -3% TiO_2 detonation gun coated ferritic steels in coal fired boiler', Int. J. Surface Science and Engineering, Vol. 3, No. 1/2, pp.145-156.
21. Sapra, P.K., Singh, S. and **Prakash, S.** (2009) "Detonation spray gun coatings against high temperature erosion in actual Boiler Environment", Int. J. of Materials and Product Technology (IJMPT) Vol. X, No. Y, pp.000–000.
22. Harpreet Singh , Gitanjaly, Surendra Singh, **S. Prakash**, (2009) "High temperature corrosion behaviour of some Fe-, Co- and Ni-base superalloys in the presence of Y_2O_3 as inhibitor" Applied Surface Science 255, pp. 7062-7069
23. Niraj Bala, Harpreet Singh, **Satya Prakash**, (2009), "High-temperature oxidation studies of cold-sprayed Ni–20Cr and Ni–50Cr coatings on SAE 213-T22 boiler steel" Applied Surface Science 255, pp. 6862–6869
24. R.A. Mahesh, R. Jayaganthan, **S. Prakash**, "High Temperature Oxidation studies on HVOF sprayed NiCrAl coatings on superalloys" Surface Engineering (Accepted for Publication).
25. Gitanjaly Goyal, Harpreet Singh, **Satya Prakash**, "Effect of Superficially applied ZrO_2 Inhibitor on the High Temperature Corrosion Performance of Some Fe-, Co- and Ni-Base Superalloys", Applied Surface Science 254 (2008) 6653–6661

26. R.A. Mahesh, R. Jayaganthan, **S. Prakash**, Vipin Chawla, Ramesh Chandra [High temperature cyclic oxidation behavior of magnetron sputtered Ni–Al thin films on Ni- and Fe-based superalloys](#) *Materials Chemistry and Physics*, *In Press, Corrected Proof*, Available online 6 December 2008
27. Manpreet Kaur, Harpreet singh, **Satya Prakash**,” A survey of the literature on the use of high velocity oxy-fuel spray technology for high temperature corrosion and erosion corrosion resistant coatings, *Anti Corrosion Methods and Materials*, Vol. 55 No.2, 2008, pp 86-96.
28. Sapra, P.K., Singh, S. and **Prakash, S.** (2008) ‘Evaluation of detonation gun sprayed alumina titania coatings’, *Int. J. Surface Science and Engineering*, Vol. 2, No. 5, pp.400-408.
29. N. Arivazhagan, Surendra Singh, **Satya Prakash**, G. Madhusudhan Reddy, (2007) “An assessment of hardness, impact strength, and hot corrosion behaviour of friction-welded dissimilar weldments between AISI 4140 and AISI 304” *International Journal of advance Manufacturing Technology*.(Springer)
30. A.K. Chauhan, D.B. Goel, **S. Prakash**, (2007), “Solid particle erosion behaviour of 13Cr-4Ni and 21Cr-4Ni-N steels”, *Journal of Alloys and Compounds*. In press
31. A.K. Chauhan, D.B. Goel, **S. Prakash**, (2007), “Erosion behaviour of Hydro turbine steels”, *Bulletin of Material Science* (Springer). In press
32. Ravindra Kumar, V.K. Tewari, and S. Prakash, Studies on Hot Corrosion of the 2.25 Cr-1Mo Boiler Tube Steel and Its Weldments in the Molten Salt Na₂SO₄-60 pct V₂O₅Environment, *Metallurgical and Materials Transactions A*, Vol 38 A, 2007, pp 54-57
33. S.B. Mishra, K. Chandra and **S. Prakash**, “Characterisation and erosion behaviour of NiCrAlY coating produced by plasma spray method on two different Ni-based superalloys”, *Materials Letters*, Volume 62, Issues 12-13, 30 April 2008, Pages 1999-2002

34. Hazoor Singh Sidhu, Buta Singh Sidhu and **S. Prakash**, (2007) "Solid particle erosion of HVOF sprayed NiCr and Stellite-6 coatings", *Surface and Coatings Technology*, In Press
35. R. A. Mahesh, R. Jayaganthan and **S. Prakash**, (2008), "Oxidation behavior of HVOF sprayed Ni-5Al coatings deposited on Ni- and Fe-based superalloys under cyclic condition" *Materials Science and Engineering A*, Vol. 475, (2008), pp. 327-335.
36. R A. Mahesh, R Jayaganthan, **S. Prakash**, (2008), "Oxidation behaviour of selected Ni- and Fe- based superalloys in air at 900°C under cyclic conditions", *Transactions of the Indian Institute of Metals Journal*, Vol. 61, No. 1, (2008), pp. 45-49.
37. R. A. Mahesh, R. Jayaganthan and **S. Prakash**, (2008), "A study on hot corrosion behaviour of Ni-5Al coatings on Ni- and Fe-based superalloys in an aggressive environment at 900°C", *Journal of Alloys and Compounds*, Vol. 460 (2008), pp. 220-231.
38. R A. Mahesh, R. Jayaganthan, **S. Prakash**, (2008), "Microstructural Characteristics and Mechanical properties of HVOF Sprayed NiCrAl Coating on Superalloys", *Journal of Alloys and Compounds*, (in press) (doi: 10.1016/j.jallcom.2008.01.025)
39. R A. Mahesh, Girish Rao, R Jayaganthan, **Satya Prakash**, (2008), "Hot corrosion behaviour of HVOF sprayed NiCrAlY-0.4wt%CeO₂ coatings on superalloys in an aggressive environment at 900°C", *Corrosion Engineering Science and Technology*, (in press) (doi: 10.1179/174327808X303473)
40. R A. Mahesh, R. Jayaganthan, **S. Prakash**, (2007), "Evaluation of Hot Corrosion Behaviour of HVOF Sprayed NiCrAl coating on Superalloys at 900 Degree C, *Materials Chemistry and Physics*, Vol. 111, (2008), pp. 524-533.
41. R A. Mahesh, R Jayaganthan, **Satya Prakash**, (2008), "Characterisation of HVOF sprayed NiCrAlY-0.4wt%CeO₂ Coatings on Superalloys", *Surface Engineering*, Vol. 24, No. 5, pp. 366-373.
42. R A. Mahesh, R Jayaganthan, **S. Prakash**, (2008), "Microstructural Characterization and hardness evaluation of HVOF Sprayed Ni-5Al coatings on

Ni and Fe - based superalloys”, *Journal of Materials Processing Technology* (accepted) (doi:10.1016/j.jmatprotec.2008.08.009).

43. Subhash Kamal, R. Jayaganthan and S Prakash, (2007), “Hot corrosion behavior of detonation gun sprayed Cr_3C_2 -NiCr coatings on Ni and Fe-based superalloys in Na_2SO_4 -60% V_2O_5 environment at 900 °C” *Journal of Alloys and Compounds*, in press
44. Subhash Kamal, R Jagyaganthn, **S Prakash**, Characterisation of Detonation gun sprayed Cr_3C_2 -25%NiCr coatings on Ni- and Fe-based superalloys, *Surface Engineering*, (accepted)
45. Subhash Kamal, R. Jagyaganthn, **S Prakash**, High temperature oxidation studies of Detonation-Gun sprayed Cr_3C_2 -NiCr coating on Fe and Ni -Based Superalloys in air under cyclic condition at 900 °C, *Journal of Alloy and Compounds*,(accepted).
46. Subhash Kamal, R. Jagyaganthn, **S Prakash**, Mechanical and Microstructural characterisations of NiCrCoAlYTb coatings on superalloys deposited by detonation gun technique, *Surface Engineering*, (accepted).
47. Subhash Kamal, R. Jagyaganthn, S Prakash, Evaluation of cyclic hot corrosion behaviour of detonation gun sprayed Cr_3C_2 -25%NiCr coatings on Nickel and Iron-based superalloys *Surface and Coatings Technology*, (accepted)
48. Atikur Rahman, R. Jayaganthan, **Satya Prakash**, Vipin Chawla, Ramesh Chandra, (2008), “High temperature oxidation behavior of nanostructured Ni-Al coatings on superalloy”, *Journal of Alloys and Compounds*, In Press,
49. A. Rahman, R. Jayaganthan, **Satya Prakash**, V. Chawla and Ramesh Chandra, “Cyclic high temperature oxidation behaviour of sputtered Cr/Al multilayer coatings on superalloy”, *Surface Engineering*, 2008 (in press).
50. Singh, H., Puri, D., and **Prakash, S.**, (2007), “Some Observations on the High Temperature Oxidation behaviour of Plasma Sprayed Ni_3Al Coatings,” *Mater. Sci. Eng. A*, Vol. 444, pp. 242-250.

51. Singh, H., Sidhu, B.S., Puri, D., **Prakash, S.**, (2007), "Use of Plasma Spray Technology for deposition of High Temperature Oxidation/Corrosion Resistant Coatings -A Review," Mater. Corros., Vol. 58, No. 2.
52. Singh, H., Puri, D., **Prakash, S.** and Maiti, R., (2007), "Characterization of Oxide Scales to evaluate High Temperature Oxidation behavior of Ni-20Cr Coated Superalloys," Mater. Sci. Eng. A, Vol.464, Issues 1-2, pp. 110-116
53. Anupam Singhal, **Satya Prakash** and V.K. Tewari, (2007), "Trials on sludge of lime treated spent liquor of pickling unit for use in the cement concrete and its leaching characteristics", Building and Environment, Vol. 42, No. 1, pp. 196-202,
54. Anupam Singhal, **Satya Prakash** and V.K. Tewari, (2007) "Characterization of stainless steel pickling bath sludge and its solidification/stabilization", Building and Environment, [Volume 42, Issue 1](#), January 2007, Pages 196-202
55. Anupam Singhal, **Satya Prakash** and V.K. Tewari, (2007) "Utilization of treated spent liquor sludge with fly ash in cement and concrete", Building and Environment, ELSEVIER (Press)[doi:10.1016/j.buildenv.2007.02.002](https://doi.org/10.1016/j.buildenv.2007.02.002).
56. H.S.Sidhu, B.S.Sidhu, S. Prakash (2007) Hot Corrosion Behavior of HVOF Sprayed Coatings on ASTM SA213-T11 Steel, Journal of Thermal Spray Technology, Volume 16, Number 3 / September, 2007 pp 349-354
57. H.Singh, D.Puri, **S. Prakash**. and Hira, D.S., (2007), "Investigations on the Role of Plasma Sprayed NiCrAlY and Ni-20Cr Coatings to combat Hot Corrosion," [Materials Science and Technology](#), Volume 23, Number 6, June 2007 , pp. 736-744(9)
58. Sidhu, B.S., Singh, H., Puri, D., Prakash, S., (2007), "Wear and Oxidation behaviour of Shrouded Plasma Sprayed Fly Ash Coatings," Tribology International, Vol. 40, pp 800-808.
59. B.S.Sidhu, and **S. Prakash**, (2007), "Analytical Studies on the Behaviour of Nickel- and Cobalt-Based Shrouded Plasma Spray Coatings at Elevated Temperature in Air," [Oxidation of Metals](#), Volume 67, Numbers 5-6, June 2007 , pp. 279-298(20)

60. B.S.Sidhu, and **S.Prakash**, (2006), "Studies on the Behaviour of Stellite-6 as Plasma Sprayed and Laser Remelted Coatings in Molten Salt Environment at 900C under Cyclic Conditions," *Journal of Materials Processing Technology*, Vol. 172, pp. 52-63.
61. Singh, H., Puri, D., **Prakash, S.** and Srinivas, M., (2006), "Characterisation of High Temperature Oxide Scales for Plasma Sprayed NiCrAlY coated Ni - and Fe -base Superalloys," *Anti Corros. Method M.*, Vol. 53, No. 5, pp. 283-295.
62. T.S Sidhu, **S. Prakash**, R.D. Agrawal, (2006) "Hot Corrosion Behaviour of HVOF Sprayed NiCrBSi Coatings on Ni- and Fe- Base Superalloys in Na₂SO₄-60%V₂O₅ Environment at 900⁰C, *Acta Materialia*, Vol. 54, No. 3, pp. 773-784.
63. T.S. Sidhu, **S. Prakash**, and R. D. Agrawal, (2006), "Hot Corrosion Performance of a NiCr Coated Ni-based Alloy," *Scripta Materialia* (Elsevier), Vol. 55, No. 2, pp. 179-182.
64. T.S Sidhu, **S. Prakash**, R.D. Agrawal, (2006), "Characterisation of NiCr Wire Coatings on Ni- and Fe- Based Superalloys by HVOF techniques", *Surface and Coatings Techniology*, Vol. 200, No. 18-19, pp. 5542-5549.
65. T.S. Sidhu, **S. Prakash**, and R.D. Agrawal, (2006), "Performance of High Velocity Oxy-Fuel Sprayed Coatings on a Fe-Based Superalloy in Na₂SO₄-60%V₂O₅ Environment at 900⁰C. Part I: Characterisation of the Coatings, *J. Mater. Engg. Perform.* (ASM International), Vol. 15 No. 1, pp. 122-129.
66. T.S. Sidhu, **S. Prakash**, and R.D. Agrawal, S., (2006), "Performance of High Velocity Oxy-Fuel Sprayed Coatings on a Fe-Based Superalloy in Na₂SO₄-60%V₂O₅ Environment at 900⁰C. Part II: Hot Corrosion Behaviour of the Coatings, *J. Mater. Engg. Perform.* (ASM International), Vol. 15, No.1, pp. 130-138.
67. T.S. Sidhu, **S. Prakash**, and R.D. Agrawal, (2006), "Hot Corrosion and Performance of Nickel Based Coatings," *Current Science*, Vol.90, No.1, pp. 41-47.
68. H.S. Sidhu, B. S. Sidhu, and **S. Prakash**, (2006), "Mechanical and Microstructural Properties of HVOF sprayed WC-Co and Cr₃C₂-NiCr

coatings on the boiler steels using LPG as fuel gas,” Journal of Materials Processing Technology- Vol. 171, pp 77-82.

69. H.S. Sidhu, Sidhu, B. S. and Prakash, S., (2006), “Erosion and wear behavior of the HVOF sprayed NiCr and Stellite-6 coatings by using LPG as the fuel gas”, accepted for publication to Surface and Coatings Technology.
70. H.S. Sidhu, B.S. Sidhu and **S. Prakash**, (2006), “Role of HVOF Coating in Improving Hot Corrosion Resistance of ASTM SA-210 GrA1 Steel in Presence of $\text{Na}_2\text{SO}_4\text{-V}_2\text{O}_5$ salt deposits, Surface and Coatings Technology, Vol. 200, pp, 5386
71. Anupam Singhal, **Satya Prakash** and V.K. Tewari, “A study on sludge minimization during the treatment of pickling effluent”, Journal of Environmental Science & Engineering, NEERI, NEERI, Vol.48, No 2, pp. 109-112, Nagpur, India.
72. Sidhu, B. S. and Prakash, S., (2006), “Erosion-Corrosion of as Plasma Sprayed and Laser Remelted NiCrAlY Bond Coats in Working Conditions of Coal Fired Boiler,” communicated to corrosion.
73. Sidhu, H. S., Sidhu, B. S. and Prakash, S., (2006), “Characteristic Parameters of HVOF sprayed NiCr and Stellite coatings on the boiler steels using LPG as fuel gas”, communicated to Journal of Material Processing Technology.
74. Sidhu, H. S., Sidhu, B. S. and Prakash, S., (2006), “Wear and Erosion characteristics HVOF developed $\text{Cr}_3\text{C}_2\text{-NiCr}$ and WC-Co coatings”, communicated to Wear.
75. Sidhu, H. S., Sidhu, B. S. and Prakash, S., (2006), “Review on the part of HVOF thermal spray coating in improving resistance to wear”, communicated to Surface and Coatings Technology.
76. S.B. Mishra, K. Chandra and **S. Prakash**, (2006), “Erosion Corrosion performance of NiCrAlY coating produced by Plasma Spray process in a Coal Fired thermal Power Plant, Engineering Failure Analysis Accepted for Publication.
77. T.S. Sidhu, **S. Prakash**, and R. D. Agrawal, (2006) “Studies of the Metallurgical and Mechanical Properties of High Velocity Oxy-Fuel Sprayed

- Stellite-6 Coatings on Ni and Fe- Based Superalloys,” *Surf. Coat. Technol.* (Elsevier), Vol. 201, No. 1-2, pp 273-281
78. T.S. Sidhu, **S. Prakash**, and R.D. Agrawal, (2006) “Characterisations of HVOF Sprayed NiCrBSi Coatings on Ni- and Fe- Based Superalloys and Evaluation of Cyclic Oxidation Behaviour of Some Ni-Based Superalloys in Molten Salt Environment” [Volume 515, Issue 1](#), 25 September 2006, Pages 95-105 *Thin Solid Films* (Elsevier),
 79. T.S. Sidhu, **S. Prakash**, and R. D. Agrawal, (2006), “Hot Corrosion studies of HVOF sprayed Cr_3C_2 -NiCr and Ni-20Cr Coatings on Nickel Based Superalloy at 900°C ,” *Surf. Coat. Technol.*, Vol. 201, Issues 3-4, pp. 792-800
 80. T.S. Sidhu, **S. Prakash**, and R. D. Agrawal, (2006) “Hot Corrosion Resistance of HVOF Sprayed Coatings on a Ni-Based Superalloy in Molten Salt Environment,” *J. Therm. Spray Technol.* (ASM International), Vol. 15, No. 3.
 81. T.S. Sidhu, **S. Prakash**, and R. D. Agrawal, (2006), “Hot Corrosion Studies of HVOF NiCrBSi and Stellite-6 Coatings on a Ni-Based Superalloy in an Actual Industrial Environment of a Coal Fired Boiler,” *Surface and Coatings Technology, Volume 201, Issues 3-4, 5 October 2006, Pages 1602-1612*
 82. T.S. Sidhu, **S. Prakash**, and R.D. Agrawal,(2006), “Evaluation of Hot Corrosion Resistance of HVOF Coatings on a Ni-Based Superalloy in Molten Salt Environment,” *Mater. Sci. Engg. A* (Elsevier), *Volume 430, Issues 1-2, 25 August 2006, Pages 64-78*
 83. T.S. Sidhu, **S. Prakash**, and R. D. Agrawal, (2006), “Performance of HVOF sprayed Cr_3C_2 -NiCr Coating in Actual Boiler Environment of a Thermal Power Plant,” *Mater Letters* (Elsevier), Under Review.
 84. T.S Sidhu, **S. Prakash** and R.D. Agrawal, (2006) “Characterisations and Hot Corrosion Resistance of Cr_3C_2 -NiCr Coating on Ni-base Superalloys in an aggressive Environment,” *J. Therm. Spray Technol.* (ASM International), [Volume 15, Number 4 / December, 2006](#)
 85. B.S.Sidhu, and **S. Prakash**, (2006), “Performance of NiCrAlY, Ni-Cr, Stellite-6 and Ni3Al coatings in Na_2SO_4 -60% V_2O_5 environment at 900°C

under cyclic conditions,” Surface & Coatings Technology ,2006 ,201 (3-4)
:1643-1654

86. B.S. Sidhu and **S. Prakash** (2006), “Nickel-Chromium Plasma Spray Coatings: A Way to Enhance Degradation Resistance of Boiler Tube Steels in Boiler Environment,” Journal of Thermal Spray Technology, [Volume 15, Number 1 / March, 2006](#), pp 131-140
87. Pankaj vashishtha, **S. Prakash**, Ajay Shrivastva, “A Review of Recent Trends in Preform Design and Optimization in Forging,” Manufacturing Technology Today, Issue -3 , Volume -5 March 2006.
88. Singh, H., Puri, D. and Prakash, S., (2006), “High Temperature Oxidation Behaviour of Plasma Sprayed NiCrAlY Coatings on Ni-Based Superalloys in Air,” Trans. Indian I. Metals, Vol. 59, pp. 215-227.
89. Singh, H., Puri, D., Prakash, S. and Rao V.V.R., (2006), “On the High-Temperature Oxidation Protection Behaviour of Plasma Sprayed Stellite-6 Coatings,” Metall. Mater. Trans. A, Vol. 37, pp. 3047.
90. Singh, H., Puri, D., Prakash, S. and Phase, D.M., (2006), “Cyclic Oxidation Behavior of some Plasma Sprayed Coatings in Na₂SO₄-60%V₂O₅ Environment,” J Mater. Eng. Perfor, Vol 15, No. 6, pp. 729-741.
91. S.B. Mishra, K. Chandra and **S. Prakash**, (2006), “Characterisation and Erosion Behaviour of Plasma Sprayed NiCrAlY and Ni-20Cr Coatings on a Fe-based Superalloy,” Journal of Tribology, Vol. 128, 469, pp.1-7.
92. S.B. Mishra, **S. Prakash** and K. Chandra, (2006), “Studies on Erosion Behaviour of Plasma Sprayed Coatings on a Ni-Based Superalloy”, Wear, Vol. 260, Issue 4-5, pp. 422-432.
93. S.B. Mishra, K. Chandra, **S. Prakash** and B. Venkataraman, (2006), “Erosion Performance of Coatings Produced by Shrouded Plasma Spray Process on a Co-Base Superalloy,” Surface and Coatings Technology, accepted for publication.
94. N.Arivazhgan, Surendra Singh and **S.prakash**,(2006)”High Temperature Corrosion Studies on Friction Welded Dissimilar metals, Materials Science and Engineering B, [Volume 132, Issues 1-2](#), 25 July 2006, Pages 222-227.

95. T.S Sidhu, **S. Prakash**, R.D. Agrawal, (2005)“Studies on the Properties of High Velocity Oxy-Fuel Thermal Spray Coatings for Higher Temperature Applications” *Physicochemical Mechanics of Materials*” Vol. 41, No.6 , pp 80-95.
96. T.S.Sidhu, **S. Prakash**, and R.D.Agrawal, (2005), “Hot corrosion of some superalloys and role of high velocity oxy-fuel spray coatings – a review”, *Surface and Coatings Technology*, Vol. 198, pp.441-446.
97. T.S.Sidhu, **S. Prakash** and R.D.Agrawal, (2005), “State of the Art of HVOF Coating Investigations-A Review”, *Marine Techno. Soc. J.*, Vol. 39, No.2, pp.55-65
98. B.S. Sidhu, and **S. Prakash**, (2005), “Effect of Laser Remelting on Hot Corrosion behaviour of Ni₃Al and Ni-20Cr Plasma Sprayed Coatings Corrosion, Vol. 61, No.11, pp, 1098-1106.
99. Harpreet Singh, Devendra Puri and **S. Prakash**, (2005), ‘Some studies on hot corrosion performance of plasma sprayed coatings on a Fe-based superalloy’, *Surface and Coatings Technology*, Vol. 192, No. 1, pp. 27-38.
100. B. S. Sidhu, D. Puri and **S. Prakash**, (2005), ‘Mechanical and metallurgical properties of plasma sprayed and laser remelted Ni-20Cr and Stellite-6 coatings’, *Materials Processing Technology*, Vol. 159, No. 3, pp. 347-355.
101. B.S.Sidhu, and **S.Prakash**, (2005), High-Temperature Oxidation Behavior of NiCrAlY Bond Coats and Stellite-6 Plasma-Sprayed Coatings, *Oxidation of Metals*, 63(3-4), pp. 241-259.
102. B.S.Sidhu, and **S.Prakash**, (2005), “Degradation Behaviour of Ni₃Al Plasma Sprayed Boiler Tube Steels in Actual Conditions of Energy Generation System,” [*Journal of Materials Engineering and Performance*](#), Vol. 14, No. 3, pp. 356-362
103. B.S.Sidhu, and **S. Prakash**, (2005), “Evaluation of the Behaviour of Shrouded Plasma Spray Coatings in Platen Superheater of Coal Fired Boilers,” communicated to *Metallurgical and Materials Transactions A*.

104. H.Singh, D.Puri, and **S. Prakash**, (2005), "Corrosion Behaviour of Plasma Sprayed Coatings on a Ni-base Superalloy in Na_2SO_4 -60% V_2O_5 Environment at 900°C ," Metall. Mater. Trans. A, Vol. 36, No 4, pp. 1007-1015.
105. H.Singh, D. Puri and **S. Prakash**, (2005), "Studies of Plasma Spray Coatings on a Fe-base Superalloy, their Structure and High Temperature Oxidation Behaviour," Anti Corros. Method M., Vol. 52, No. 2, pp. 84-95.
106. **S. Prakash**, D.Puri, and H.Singh, (2005), "Hot Corrosion Behaviour of Plasma Sprayed Coatings on a Ni-Based Superalloy in Na_2SO_4 -60% V_2O_5 environment," ISIJ Int. Vol.45, No.6, pp. 886 -895.
107. S. B. Mishra, K. Chandra, **S. Prakash** and B.Venkataraman, (2005), "Characterisation and Erosion Behaviour of a Plasma Sprayed Ni_3Al Coating on a Fe-Based Superalloy", Materials Letters, Vol. 59, Issue 28, pp.3694-3698.
108. M. R. Ramesh, S. K. Nath and **S. Prakash**,(2005),"HVOF Coatings for Boiler Tube Protection Against Coal Ash Corrosion and Erosion", Abstract published in International journal of Minerals, Metals and Materials Engineering, Vol.58,No.5.pp.A-69.
109. B. S. Sidhu, D. Puri and **S. Prakash**, (2004), 'Characterisations of plasma sprayed and laser remelted NiCrAlY bond coats and Ni_3Al coatings on boiler tube steels', Material Science and Engineering A, Vol. A368, pp 149-158.
110. B.S. Sidhu and **S. Prakash**, (2004), "Erosion-Corrosion of Plasma as Sprayed and Laser Remelted Stellite-6 Coatings in a Coal Fired Boiler," Wear. Volume, 31 May 2006, Pages 1035-1044
111. B.S. Sidhu and **S. Prakash**, (2004), "Erosion-Corrosion of as Plasma Sprayed and Laser Remelted NiCrAlY Bond Coats in Working Conditions of Coal Fired Boiler," communicated to corrosion.
112. B. S. Sidhu and **S. Prakash**, (2003), 'Evaluation of the corrosion behaviour of plasma-sprayed Ni_3Al coatings on steel in oxidation and molten salt environment at 900°C ', Surface and Coatings Technology, Vol. 166, No. 1, pp. 89-100.

113. B. S. Sidhu and **S. Prakash**, (2003), 'Studies on the behaviour of Ni-20Cr plasma spray coatings applied on boiler tube steels in molten salt (Na_2SO_4 -60% V_2O_5) environment at 900°C', British Corrosion Journal, in Press.
114. B. S. Sidhu and **S. Prakash**, (2003), 'Plasma spray coatings of Ni-20Cr on boiler tube steel and evaluation of its oxidation behaviour at 900°C in air', "Journal of Corrosion Science and Engineering." Vol. 6 pp.
115. P. Youngyuth, P.K. Ghosh, P.C. Gupta, A.K. Patwardhan and **S. Prakash**, 'Influence of microstructure on the fatigue properties of multipassed submerged arc C-Mn steel weld deposit', Int. J. Join. Mater. 5, 1, (1993), pp. 31-38.
116. **S. Prakash**, K.C. Sharma, N.S. Bindra & M.L. Mehta, 'Failure Investigation of an as rolled low carbon base alloy steel plate', published in Advanced Materials and Processes, ASM, 1987.
117. R.N. Sharma and **S. Prakash** 'Hot corrosion of nickel base superalloys in varying salt atmosphere between 700°C – 950°C', Transactions of the Metal Finishers Association of India, Jan. – March 1990.
118. S. Chandra, J.L. Pandey and **S. Prakash**, 'High temperature oxidation of kanthol alloy', published in Trans. JIM.
119. J.L. Pandey, **S. Prakash** and M.L. Mehta, 'Effect of small concentration of zirconium on high temperature oxidation behaviour of Fe-15Cr-4Al', J. of Arch. Elsenhuttenwes (1985).
120. **S. Prakash** and Horvath Zoltan, 'Effect of titanium oxide content of bausite charge on the settling properties of the redmud', Publications of the Technical University for heavy industry MISKOLC, Series B Metallurgy, Vol. 34, (1981), FASC pp. 91-1107.
121. **S. Prakash** and Horvath Zoltan, 'Study on the effect of increase in TiO_2 content of the bauxite charge on the settling ability of the redmuds, Published in ACTA Technica, Hungaria, Budapest, Hungary. TOMUSGO (1-1), pp 15-27 (1980).
122. **S. Prakash** and Horvath Zoltan, 'Study on caustificability of the redmuds obtained from the digestion of titanium rich bausite charges', publications of

- the Technical University of Heavy Industry MISKOLC Series B Metallurgy, Vol. 34, (1981), FASC pp. 91-107.
123. **S. Prakash** and Horvath Zoltan, 'Behaviour of titanium minerals in the titanium rich Indian bauxite during its digestion by Bayer's Process', Publications of Technical University of Heavy Industry MISKOC, Series B Metallurgy 34 (1979) FASC 1 pp. 43-63.
 124. **S. Prakash** and M.N. Saxena, 'Some aspects of centrifugal casting', Special Foundry Number, JR of Engineers, 1971.
 125. P. Youngyuth, P.K. Ghosh, P.C. Gupta, A.K. Patwardhan and **S. Prakash**, Influence of microstructure of tensile properties of multipass SAW C-Mn steel deposit, Mater. Trans. JIM, 34, 6(1993) pp. 533-540.
 126. S.N. Tewari and **S. Prakash** 'A review on the role of magnesium oxide as an inhibitor of Hot oil ash corrosion', Materials Science and Technology, May 1998 Vol. 14, p. 467-471.
 127. Gitanjali, Surendra Singh and **S. Prakash**, (2002), 'Effects of MgO & CaO on the hot corrosion of Fe-base superalloy Superfer-800H in Na₂SO₄-60%V₂O₅ environment', British Corrosion Journal, Vol.37, No.1, pp 56-62.
 128. J.L. Pandey, **S. Prakash** & M.L. Mehta, 'Effect of Zirconium Concentration on High Temperature Cyclic Oxidation of Fe-15Cr-4Al at 1150°C, J. Electrochemical Society, Vol. 135, No. 1, Feb. 1988.
 129. J.L. Pandey, **S. Prakash** & M.L. Mehta, 'Effect of Zr concentration on nodule formation during cyclic oxidation of Fe-15-Cr-4Al alloy at 1300°C,' Oxidation of Metals, Vol. 29, p. 1 (1988).
 130. J.L. Pandey, **S. Prakash** and M.L. Mehta, 'Effect of Zr and Y alloying addition on high temperature oxidation of Fe-15Cr-4Al, J. Less Common Metals, 1989.
 131. **S. Prakash**, V.K. Tewari and Akhil Gupta, 'Effect of Liquid Zinc on Armco Iron with relevance of pots used in galvanizing steel', Research, Arch. Eisenhüttenwesen 58 No. 5, 1987, pp. 220.

(B) International and National Conferences:

132. Manoj Mittal, S. K. Nath, Satya Prakash, "Characterization and Mechanical properties of hydroxyapatite/alumina coatings on metallic body implants" In 2nd International Conference on Production & industrial Engineering (CPIE 2010), NIT-Jalandhar India, Published in CD, J21
133. Gurbhinder Singh, Khelendra Agrawal, Surendra Singh, Satya Prakash, "Hydroxyapatite coating for bio implants and problems associated with coating technique: a review", In 2nd International Conference on Production & industrial Engineering (CPIE 2010), NIT-Jalandhar India, Published in CD, J007
134. Manoj Mittal, S. K. Nath, Satya Prakash, "The effect of bond coat on mechanical properties of plasma sprayed hydroxyapatite/alumina composite coating", In International Conference on Emerging trends in Mechanical Engineering (ICETME-2011), held at Thapar University, Patiala, Punjab, India.
135. Gurbhinder Singh, Surendra Singh and Satya Prakash, (2011), "Role of reinforced materials in thermal sprayed hydroxyapatite coating on bio implants: A Review", Materials Science & Technology 2010, Symposium: held on 10/17/2010 - 10/21/2010 at Houston, USA.
136. Sapra Pawan Kumar, Singh Surendra, Prakash Satya, Kumar M Annanth, Elevated Temperature Erosion Response of Detonation Gun Sprayed coatings, 4th World Tribology Congress (WTC IV), held from 6th - 11th September, 2009 in Kyoto, Japan.
137. Sapra Pawan Kumar, Singh Surendra, Prakash Satya, "Hot corrosion behavior of Alumina Titania coatings in molten sodium sulphate-vanadium pentoxide environment" Materials Science & Technology 2009, Symposium: Surface Protection for Enhanced Materials Performance, held from 10/25/2009 - 10/29/2009 at Pittsburgh, PA, USA.
138. Gitanjaly, Harpreet Singh and Satya Prakash, "High Temperature Corrosion of Some Superalloys in the Presence of MgO as an Oxide Additive." Materials Science & Technology 2009, Symposium: Surface Protection for Enhanced Materials Performance, held from 10/25/2009 - 10/29/2009 at Pittsburgh, PA, USA.

139. Pawan Kumar Sapra, Surendra Singh, **Satya Prakash** "Performance of Fe-based Superalloy Superalloy-800 in the Real Service Environment of the Boiler, International Symposium "Fundamental Corrosion Research in Progress" NACE Northern Area Eastern Conference "Minimizing Infrastructure Corrosion" October 26-28, 2008 in Toronto, Ontario, Canada.
140. Pawan Kumar Sapra, Surendra Singh, **Satya Prakash**, N Arivazhagan, High temperature erosion behavior of detonation gun-sprayed alumina-titania coatings under simulated coal-fired boiler atmospheres, (Paper No. iCAT 295) iCAT 2008: 2nd International conference on advanced tribology 3rd-5th December 2008, Singapore
141. Hazoor S. Sidhu, Buta S. Sidhu and S. Prakash Wear Characteristics of HVOF Deposited Cr₃C₂-NiCr and WC-CO Coatings by using LPG as the Fuel Gas (Paper No. iCAT 017) iCAT 2008: 2nd International conference on advanced Tribology 3rd-5th December 2008, Singapore
142. R. A. Mahesh, R Jayaganthan, **S. Prakash**, (2007), "Some studies on the hot corrosion behaviour of superalloys in aggressive environment at 900°C", International conference on Processing and Fabrication of Advanced Materials (PFAM 16), 17-19 Dec, 2007, Singapore.
143. Subhash Kamal, R Jayaganthan, **S. Prakash**, (2007), "Cyclic oxidation and Hot corrosion behaviour of Ni-and Fe based superalloys in molten salt environment at 900°C", International conference on Processing and Fabrication of Advanced Materials (PFAM 16), 17-19 Dec, 2007, Singapore.
144. A. Rahman, R. Jayaganthan, **S. Prakash**, V. Chawla, (2007) High Temperature Oxidation Behaviour of Nanostructured Ni-Al Coating on Superalloy, 16th International conference on Processing and Fabrication of Advanced Materials (PFMA 16), 17-19 December 2007, Singapore, pp. 693-703.
145. **Singh, H.**, Hira, D.S., Puri, D., and Prakash, S. (2006), "Characterisation of Oxide Scales for Plasma Sprayed Ni-20Cr Coatings Oxidized at 900°C under Cyclic Conditions," Proc. MS&T'06 Material Science and Technology 2006 Conference and Exposition: Processing, October 15-19 held at Cincinnati, Ohio, USA, pp.315-323

146. **Kumar Ravinder**, Tewari V.K, and Prakash, S. (2006), “Studies on High Temperature Oxidation Performance of Shielded Metal Arc Weldments in 1cr-0.5Mo Boiler Tube steel,” Proc. MS&T’06 Material Science and Technology 2006 Conference and Exposition: Processing, October 15-19 held at Cincinnati, Ohio, USA, pp. 339-345
147. S.B. Mishra, K. Chandra and **S. Prakash**, “An Overview on Erosion Behaviour of Plasma Sprayed Coatings,” Accepted for oral presentation in the COM 2006 - 45th International Conference of Metallurgists organized by METSOC - the Metallurgical Society of CIM held at Montreal, Quebec, Canada from October 1-4, 2006.
148. Singh, H., Puri, D. and **Prakash, S.**, (2006), “Cyclic Oxidation Behaviour of Plasma Sprayed Stellite-6 Coated Ni-base Superalloys,” International Thermal Spray Conference and Exposition (ITSC 2006) held at Seattle, Washington, USA from May 15-17, 2006.
149. Singh, H., Puri, D. and **Prakash, S.**, (2006), “On the Role of Plasma Sprayed Ni₃Al Coatings to Combat Hot Corrosion,” International Surface Engineering Congress 2006 (ISEC 2006) held at Seattle, Washington, USA from May 15-17, 2006.
150. Singh, H., Puri, D. and **Prakash, S.**, (2006), “Investigations on the Role of Plasma Sprayed Ni₃Al Coatings in developing Hot Corrosion Resistance,” 9th Punjab Sci. Congress, Feb.7-9, held at Guru Nanak Dev Dental College and Research Institute, Sunam, INDIA.
151. Chawla, V., Sidhu, B. S. and Prakash, S. (2006), “State of Art: Applications of Mechanical Alloyed Nanomaterials-A Review,” Proc. Int. Conf., “Advances in Materials and Materials Processing,” held at IIT, Kharagpur, India, 3-5 February, pp. 464-473.
152. Tiwana J. S., Sidhu, B. S., Garg H. K. and Gupta R., (2006), “An Introduction to Rapid Prototyping Technologies,” Proc. National Conf., “Advancements & Futuristic Trends in Mechanical & Materials Engineering,” held at GZS CET, Bathinda (Pb.), India 13-14th October, pp. 165-172.

153. Chawla, V., Puri D., Sidhu, B. S., Praksh, S. and Singla M., (2006), "State of Art: Corrosion in Thermal Power Plants and Preventives Measures: a review," Proc. National Conf., "Advancements & Futuristic Trends in Mechanical & Materials Engineering," held at GZS CET, Bathinda (Pb.), India 13-14th October, pp. 294-302.
154. Singh, H., Sidhu, B. S. and Prakash, S., (2006), "Review on The Part of HVOF Thermal Spray Coating in Improving Resistance to Wear," Proc. National Conf., "Advancements & Futuristic Trends in Mechanical & Materials Engineering," held at GZS CET, Bathinda (Pb.), India 13-14th October, pp.303-310.
155. Chawla, V., Praksh, S, Puri D. and Sidhu, B. S., (2006), "State of Art: Nanomaterials: a review," Proc. Int. Conf., "Advances in Mechanical Engineering," held at BBSEC, Fatehgarh (Pb.), India 1-3rd December, Module-I, pp. 244-249.
156. Chawla, V., Praksh, S, Puri D. and Sidhu, B. S., (2006), "Plasma Sprayed Coatings for Protection against Hot Corrosion in Energy Generation and Coal Gasification Systems: a review," Proc. Int. Conf., "Advances in Mechanical Engineering," held at BBSEC, Fatehgarh (Pb.), India 1-3rd December, Module-III, pp. 176-181.
157. Tiwana, J. S., Sidhu, B. S., Garg, H. K. and Prakash, S., (2006), "Review of detonation Gun Coatings to Improve Surface Resistance," Proc. Int. Conf., "Advances in Mechanical Engineering," held at BBSEC, Fatehgarh (Pb.), India 1-3rd December, Module-III, pp. 192-195.
158. T.S Sidhu, **S. Prakash** and R.D. Agrawal, (2006) "Characterisations and Corrosion Resistance of HVOF Sprayed Cr_3C_2 -NiCr Coating on Ni-base Superalloys at 900 °C in Molten Salt Environment, International Thermal Spray Conference & Exposition May 15-18, 2006 , Seattle, Washington, USA.
159. Bala, N., Singh, H. and Prakash, S., (2006), "Thermal Spray Coating Processes for Steam generating Plants," Proc. International Conference on 'Advances in Mechanical Engineering (AME2006),' December 1-3, held at BBSB Engg. College, Fatehgarh Sahib, INDIA, pp.275-280.

160. Kaur, M., Singh, H. and Prakash, S., (2006), "Use of WC-Co and Cr₃C₂-NiCr HVOF Spray Coatings to enhance Erosion-Corrosion Resistance of Boiler Steels," Proc. International Conference on 'Advances in Mechanical Engineering (AME2006),' December 1-3, held at BBSB Engg. College, Fatehgarh Sahib, INDIA, pp.288-294.
161. Arivazhagan, N., Singh, S., **Prakash, S.** and Reddy, G.M., (2005), "High Temperature Hot Corrosion Studies on Friction Welded Dissimilar Metals," Proc. of Symposium W Advanced Materials and Polymers for defense and Aerospace Applications (ICMAT 2005 and ICAM 2005), Singapore, " pp.5.
162. Arivazhagan, N., Jayaganthan, R., Singh, S. and **Prakash, S.**, (2005), "A Study on the High Temperature Hot Corrosion Behaviour of Nanostructured Ni-base Alloys," Proc. of Symposium W Advanced Materials and Polymers for defense and Aerospace Applications (ICMAT 2005 and ICAM 2005), Singapore, " pp.7.
163. Singhal, A., **Prakash, S.** and Tewari, V.K., (2005), "Leaching Characteristics of Untreated and Treated Pickling Sludge and Its Solidification/Stabilisation," Int. Conf. on Emerging Trends in Mineral Processing and Extractive Metallurgy, ICME-2005, RRL, Bhubaneswar, pp.306-319.
164. S. Mishra, **S. Prakash** and K. Chandra, (2005) "Solid Particle Erosion Behaviour of a Plasma Sprayed Ni₃Al Coating on a Fe-Based Superalloy", Abstract published in the proceedings of MATERIAIS 2005 - III International Materials Symposium and XII Portuguese Materials Society Meeting, held at University of Aveiro, Portugal, pp.299.
165. S.B. Mishra, K. Chandra and **S. Prakash**, (2005) "Solid Particle Erosion Behaviour of Plasma Sprayed Coatings" Published in the proceedings of MetaVista-2005 symposium (16th-18th Feb.), held at Department of Metallurgical Engineering, Institute of Engineering & Technology, Pune-411005, Maharashtra, India.
166. M.R.Ramesh,S.K.Nath and **S.Prakash**,(2005)"HVOF Coatings for Boiler Tube Protection Against Coal Ash Corrosion and Erosion " Presented in

NMD-ATM 2005 organised by The Indian Institute of Metals on November 14-16,2005.

167. T.S Sidhu, **S. Prakash** and R.D. Agrawal, (2005), "Characterisation of NiCrBSi Coatings on Ni- and Fe- Base Superalloys by HVOF Techniques", International Conference on Surfaces, Coatings and Nanostructured Materials" 6-9 September 2005, University of Aveiro, Portugal. Paper No. FO-17.
168. S.B. Mishra, **S. Prakash** and K. Chandra, "Characterisation and Erosion of Plasma Sprayed Coating on a Ni-Based Superalloy," Published in the Proc. of the "Conference on Materials Degradation: Innovation, Inspection, Control and Rehabilitation", held at METSOC, Calgary, Alberta, Canada on August 21-24, 2005, pp. 403-414.
169. S.B. Mishra, K. Chandra and **S. Prakash**, "Solid Particle Erosion Behaviour of Plasma Sprayed Coatings on a Fe-Based Superalloy," Published in the Proc. of the "World Tribology Congress III", held at Washington Hilton, Washington D.C., USA, on September 12-16, 2005.
170. **Prakash, S.**, Puri, D. and Singh, H., (2005), "Cyclic Oxidation Behaviour of Plasma Sprayed Stellite-6 Coated Ni-Base Superalloys in Air and in Na_2SO_4 - 60% V_2O_5 Environment," Proc. 'Materials Degradation: Innovation, Inspection, Control and Rehabilitation Symposium, COM 2005,' August 21-24, held at Calgary, Alberta, CANADA, pp 415-434.
171. Bala, N., Singh, H. and **Prakash, S.**, (2005), "An Overview on Advanced Thermal Spray Coating Processes," presented at National Conference on 'Energy, Environment, Ecosystem and Sustainable Development (EEESD-2005),' August 4-5, held at BBSB Engg. College, Fatehgarh Sahib, INDIA.
172. Kaur, M., Singh, H. and **Prakash, S.**, (2005), "Role of Thermal Spray Technologies in Surface Engineering," presented at National Conference on 'Energy, Environment, Ecosystem and Sustainable Development (EEESD-2005),' August 4-5, held at BBSB Engg. College, Fatehgarh Sahib, INDIA.
173. Ramesh, M.R., Nath, S. K., and **Prakash, S.**, (2005) "High Temperature Corrosion and Erosion Resistant Coatings", Published in the proceedings of

MetaVista–2005 symposium (16th-18th Feb.), held at Department of Metallurgical Engineering, Institute of Engineering & Technology, Pune-411005, Maharashtra, India.

174. **Prakash, S.**, Sidhu, T.S. and Singh, H., (2005), 'Hot corrosion induced by Na₂SO₄ and/or V₂O₅ salt environments' presented and published in TRANSMAT EXPO 2004, An International Exhibition and Conference on Advancements in Materials and Processes held at Mumbai, November 8-10.
175. Singh, H., Puri, D. and Prakash, S., (2005), "Corrosion Behaviour of Plasma Sprayed Coatings on a Ni-base Superalloy in Na₂SO₄-60%V₂O₅ Environment at 9000C," Metall. Mater. Trans. A, Vol. 36, No 4, pp. 1007-1015.
176. Sachin V. Phadke and **S. Prakash**, 'Role of shielding gases in GMA welding', presented at METTLE-04, National Institute of Technology, Trichi, Feb. 9-10, 2004.
177. Harpreet Singh, Devendra Puri and **S. Prakash**, 'Hot corrosion of some superalloys and role of plasma spray coatings-a review', presented at 7th Punjab Science Congress held at GNDU, Amritsar on Feb. 7-9, 2004.
178. Singh, H., Puri, D. and **Prakash, S.**, (2004), "High Temperature Oxidation Behaviour of Plasma Sprayed NiCrAlY Coatings on Ni-Based Superalloys in Air," Inter. Sympos. of Research Scholars on 'Mater. Sci. & Eng.,' Dec., 20-22, IITM, Chennai, INDIA and *to be published Trans. Indian I. Metals*.
179. Singh, H., Puri, D. and **Prakash, S.**, (2004), "An Overview of High Temperature Oxidation of Metals and Alloys," Indo-Japan Conf. on 'Damage Tolerant Design and Materials,' Dec., 16-18, IITM, Chennai, INDIA, pp.151-156.
180. S.B. Mishra, **S. Prakash** and K. Chandra, (2004) "Erosion of Some Superalloys and Role of Plasma Spray Coatings –A Review", Presented and published in the proceedings of the Indo Japan Conference on Damage Tolerant Design and Materials, held at Mechanical Engineering Department, Indian Institute of Technology Madras, Chennai, December 16-18, 2004, pp.220-225.

181. T.S, Sidhu, **S. Prakash**, R.D.Aggarwal, (2004), “Hot Corrosion behaviour of Nickel based Coatings”, presented and published in Indo-Japan Conference on “Damage Tolerant Design and Materials”, held on December 16-18, at IITM, Chennai, pp.157-162.
182. T.S Sidhu, R.D. Agrawal and **S. Prakash**, (2004), “Hot Corrosion of Some Superalloys and Role of High-Velocity Oxy-Fuel Spray Coatings—A Review,” 2nd International Conference on Technological Advances of Thin Films & Surface Coatings, THIN FILMS 2004, 13-17 July, 2004, Singapore, Paper ID: 34-TCR-A801.
183. S.B. Mishra, **S. Prakash** and K. Chandra, (2004), “Characterisation of Plasma Sprayed NiCrAlY, Ni-20Cr And Ni₃Al Coatings on a Ni-Based Superalloy Inconel 718”, Presented and published in the proceedings of the ‘International Symposium of Research Students on Material Science and Engineering’, held at Metallurgical and Materials Engineering Department, Indian Institute of Technology Madras, Chennai, December 20-22, pp.1-8.
184. Sidhu, T.S., **Prakash, S.**, Aggarwal, R.D., (2004), “Hot Corrosion behaviour of Nickel based Coatings”, presented and published in Indo-Japan Conference on “Damage Tolerant Design and Materials”, held on December 16-18, at IITM, Chennai, pp.157-162.
185. Gitanjaly, Surendra Singh and **S. Prakash** (2003), ‘Effect of superficially applied oxides on the hot corrosion behavior of Fe- and Ni-Base Superalloys in Na₂SO₄-60%V₂O₅’, Presented in International Conference, “2nd Surface Engineering Congress and Exposition,” held at Indianapolis (USA) on 15-18th September, 2003.
186. B. S. Sidhu and **S.Prakash**, (2003), ‘Oxidation kinetics of boiler tube steels at 900⁰C’, Presented in 6th Punjab Science Congress, 7-9th Feb. 2003, SLIET, Longowal, India.
187. B. S. Sidhu and **S.Prakash**, (2003), ‘Studies of the plasma spray coating for protection against hot corrosion’, Presented in International Conference, “Advances in Materials and Processes for Industrial Applications,” held at Pune (India) on 25-27th September 2003.

188. B. S. Sidhu, D. Puri and **S. Prakash**, 'Utilisation of fly ash to develop hot corrosion and wear resistant coatings', Presented in International Conference, "2nd Surface Engineering Congress and Exposition," held at Indianapolis (USA) on 15-18th September, 2003.
189. Harpreet Singh, Buta Singh and **S. Prakash**, 'Characterisation of plasma sprayed fly ash coating', presented at XIII National Conference of Indian Society of Mechanical Engineers, December 30-31, 2003, IIT Roorkee.
190. **S. Prakash**, Surendra Singh and Arivazhagan N. 'Weldability and corrosion effect of dissimilar metal combinations', presented at XIII National Conference of Indian Society of Mechanical Engineers, December 30-31, 2003, IIT Roorkee.
191. R.N.Sharma, Gitanjaly and **S. Prakash**, 'Hot corrosion of an iron base turbine alloys', presented at XIII National Conference of Indian Society of Mechanical Engineers, December 30-31, 2003, IIT Roorkee.
192. Buta Singh Sidhu, Anjan Chattopadhyaya and **S. Prakash**, 'Role of coatings for protection against hot corrosion and erosion in energy generation system', Paper presented in 5th Punjab Science Congress, held in Patiala, February 7-9, 2002.
193. Sidhu, B. S. and **Prakash, S.**, (2002), 'Development of hot corrosion resistant coatings', Poster presentation in International Conference on Advances in Materials and Materials Processing, 1-3rd Feb. 2002, IIT, Kharagpur, India.
194. **S Prakash**, 'Contamination of water from industrial effluents and remedial measures with special reference to new concepts of waste water treatment & global efforts', Invited Talk, National Seminar on Monitoring and Management of Pollutants in Water Resources, held at R.R.L. Bhubhaneswer, Aug. 9, 2002.
195. Gitanjaly, Surendra Singh & **S.Prakash**, 'Effect of superficially applied CeO₂ and Y₂O₃ on the hot corrosion behaviour of Fe-and Ni- base Superalloys in Na₂SO₄-60%V₂O₅', presented at International congress on Emerging Corrosion Control Strategies for the New Millennium held at India Habitat center, New Delhi Feb. 20-22, 2002.

196. K.Shahi, V.K. Tewari and **S. Prakash**, 'Hot corrosion studies on nickel base alloy MA-754 in Na_2SO_4 & NaCl environment in temperature range of 700°C - 900°C ', Proc. National Seminar on Advances in Materials & Processing, Nov. 9-10, 2001, Deptt. of Met. & Mat. Engg., IIT Roorkee.
197. D.Puri, V.K. Tewari and **S. Prakash**, 'Role of fluxes on aluminothermic reduction of red mud', Proc. National Seminar on Advances in Materials & Processing, Nov. 9-10, 2001, Deptt. of Met. & Mat. Engg., IIT Roorkee.
198. Gitanjaly, Surendra Singh and S. Prakash, 'Hot corrosion-an Overview', Proc. National Seminar on Advances in Materials & Processing, Nov. 9-10, 2001, Deptt. of Met. & Mat. Engg., IIT Roorkee.
199. Gitanjaly, Surendra Singh and **S.Prakash**, 'Effects of additives on the hot corrosion behavior of Superalloy 800H', Presented in National Seminar on Advances in Materials & processing held on Nov. 9 to 10, 2001, Metallurgical & Materials Engg. Dept, I.I.T, Roorkee.
200. **S. Prakash**, Surendra Singh, Buta Singh Sidhu and Amitesh Madeshia, 'Tube failures in coal fired boilers', Proc. National Seminar on Advances in Materials & Processing, Nov. 9-10, 2001, Deptt. of Met. & Mat. Engg., IIT Roorkee.
201. Ghanshyam, Gitanjaly and **S. Prakash**, 'Role of CeO_2 in inhibiting the hot corrosion of Ni-base alloy superni-601 in Na_2SO_4 -60% V_2O_5 environment', Tenth National Congress on Corrosion Control, Sep. 6-8, 2000. Karaikudi, Tamil Nadu.
202. S.N. Tewari, Gitanjaly and **S. Prakash**, 'Hot Corrosion of Fe-, Ni-&Co-based alloys in Na_2SO_4 - V_2O_5 environment and role of inhibitors', ISOMALM-2000, Oct. 3-6, 2000 at IGCAR, Kalpakkam.
203. Rajiv Lochan, Gitanjaly and **S. Prakash**, 'Emissions from metallurgical industries', International Conference on Environmental Management in Metallurgical Industries, Dec. 15-16, 2000 at BHU, Varanasi.
204. S.K. Jain, Gitanjaly and **S. Prakash**, 'Noise pollution in metallurgical industries', International Conference on Environmental Management in Metallurgical Industries, Dec., 15-16, 2000 at BHU, Varanasi.

205. Gitanjaly and **S. Prakash**, 'Review on effect of additives on the hot Corrosion', Nov. 22-24, 1999, 5th NACE International Conference, New Delhi.
206. **S. Prakash**, V.K. Tewari & D. Puri 'Metallothermic reduction of red mud waste of alumina plant', Indus-Russian IITP workshop-cum-exhibition on SHS technology and products March 20-22, 1999, Hyderabad.
207. D. Puri, V.K. Tewari and **S. Prakash**, 'Trials as production of ferro titanium alloy by aluminothermic reduction of red mud', paper presented at INCAL 98, International conference on Aluminium 1998 held on Feb. 11-13, 1998 at New Delhi.
208. Deepak Saxena, Gitanjaly and **S. Prakash**, 'Sulfidation behaviour of the Incoloy MA-956 alloy', Nov. 14-17, 1998, IIT Kanpur.
209. A.M. Ranade, Gitanjali, V.K. Tewari and S. Prakash 'Hot corrosion studies on steel weldments'. Recent Advances in Metal casting & Welding Technology (RAMCWT-98) Sept. 25-26, 1998.
210. R.N. Sharma and **S. Prakash** 'Hot Corrosion of Iron base turbine alloys in combustion gas environments', presented in the symposium on localized corrosion and environmental cracking held in Jan., 1997, at Indira Gandhi Centre for Atomic Research, Kalpakkam, India.
211. S.N. Tewari and **S. Prakash**, 'Studies on the hot corrosion behaviour of some superalloys in $\text{Na}_2\text{SO}_4\text{-V}_2\text{O}_5$ ', Presented in National Conference on "Localized Corrosion and environmental Cracking" at Indira Gandhi Centre for Atomic Research, Kalpakkam, held on 22-24 Jan., 1997.
212. S.N. Tewari and **S. Prakash**, 'Studies on the hot corrosion behaviour of superni 600 in $\text{Na}_2\text{SO}_4\text{-V}_2\text{O}_5$ ', Environmental International Conference on Corrosion by NACE at IIT, Bombay, Dec., 1997.
213. S.N. Tewari and **S. Prakash**, 'Studies on the hot corrosion behaviour of superni 718 in $\text{Na}_2\text{SO}_4\text{-V}_2\text{O}_5$ environment and its prevention with MgO addition', National Symposium by NCCI, Karnikudi, Hyderabad, Sept. 1997.
214. Atul Kumay, S.N. Tewari and **S. Prakash** 'The role of inhibitors on hot corrosion behaviour of Superni 75 in $\text{Na}_2\text{SO}_4\text{-V}_2\text{O}_5$ environments under cyclic

- conditions', National Seminar on surface engineering at the Institution of Engineers Jaipur, sept. 1997.
215. T.K. Jha, S.N. Tewari, S.C. Singh and **S. Prakash** 'Studies on Stellite coatings' National convention of Metallurgists National Scientist and National Seminar on Surface Engineering 5th and 6th Sept., 1997 Jaipur.
216. R.N. Sharma and **S. Prakash** 'Hot Corrosion behaviour of an Iron base super alloy in salt environment at elevated temperatures', presented in National symposium of Research Scholars on 'Metals and Materials research' at IIT Madras held on 4-5 July, 1996.
217. R.N. Sharma and **S. Prakash** 'Thermo chemistry involved in hot corrosion of super alloy in sodium sulphate-vanadium pentaoxide', presented in International Conference on Advanced Thermochemistry and Ferrous Metallurgy at Banaras Hindu University, Varanasi held on 14-16 Oct., 1996.
218. S.N. Tewari, R.N. Sharma and **S. Prakash**, A Review paper on 'Fire side corrosion in boilers' Presented in National Metallurgical Laboratory, Jamshedpur held on 11-12 April 1995.
219. R.N. Sharma and **S. Prakash** 'Hot corrosion of a Nickel-base alloy at intermetallic temperatures'. First National Conference on Corrosion and its control organized by NACE International India Section, held on Nov. 28-30, 1995, IIT, Bombay, p. 45.
220. V.K. Tewari, **S. Prakash** and R.R. Bhargava, 'Stress Corrosion Cracking studies based on fracture mechanics approach a concept for evaluating material performance', presented and published in the proceedings of first annual conference of Indian Society of Industrial and applied mathematics held at University of Roorkee, Roorkee, Feb. 4-7, 1993 pp. 36.
221. N. Nagendra, N. Kaushik, V.K. Tewari and **S. Prakash** 'High temperature oxidation of Duplex steel in Air and Hydrogen sulphide in isothermal and cyclic condition', National Conference on Corrosion of Metals and Alloys in Industry, Fe. 26-28, Bombay, 1992.

222. **S. Prakash** and V.K. Tewari 'Role of continuing education in the area of corrosion and protection' National Conference on Continuing Education, Roorkee, Oct., 4-5, 1991.
223. R.N. Sharma and **S. Prakash** 'Hot corrosion of nickel base superalloys in varying salt atmosphere between 700°C – 950°C', Transactions of the Metal Finishers Association of India, Jan. – March 1990.
224. D. Saxena, P.S. Misra, **S. Prakash** and M.L. Mehta, 'Processing of ODS Fe-Cr-Al alloy using conventional P/M route', Silver Jubilee Nat. Seminar on 'Alloy Design and Dev', Department of Metallurgical Engineering, UOR, Roorkee, March 10-11, 1989.
225. D. Puri and **S. Prakash**, 'Aluminium thermic reduction of red mud', Silver Jubilee Nat. Seminar on 'Alloy Design and Devl.' Department of Metallurgical Engineering, UOR, Roorkee, March 1-11, 1989.
226. R. Rathi, **S. Prakash**, V.K. Tewari, P.S. Mishra and A.K. Patwardhan, 'Effect of cold-deformation on high temperature oxidation of copper', Silver Jubilee National Seminar on 'Alloy Design & Development', Department of Metallurgical Engineering, UOR, Roorkee, March 10-11, 1989.
227. D. Saxena, **S. Prakash** and M.L. Mehta, 'Sulphidation behaviour of commercial INCOLOY MA 956 at high temperature', Silver Jubilee Nat. Seminar on 'Alloy Design', Department of Metallurgical Engineering Department, UOR, Roorkee, March 10-11, 1989.
228. D. Saxena, **S. Prakash** and M.L. Mehta, 'Effect of Y-addition on high-temperature sulphidation of the Fe-15Cr-4Al alloy', Silver Jubilee Nat. Seminar on Silver Jubilee Nat. Seminar on 'Alloy Design and Dev.', Department of Metallurgical Engineering Department, UOR, Roorkee, March 10-11, 1989.
229. S. Kumar and **S. Prakash**, 'Production of iron-powder from millscale', Silver Jubilee Nat. Seminar on 'Alloy Design and Development', Department of Metallurgical engineering UOR, Roorkee, March 10-11, 1989.

230. **S. Prakash** & V.K. Tewari, 'Entrepreneurship Development in Metallurgical Engineering, Interaction between Institutions and Industries through STEPS (III STEP), Feb. 20-21, 1988, Roorkee.
231. **S. Prakash** & D.B. Goel, 'Pollution and its control in Metallurgical Industries', Seminar on 'Sensors for Environmental Monitoring' organized by Institution of Engg., Roorkee April 1-2, 1988.
232. D. Puri & **S. Prakash**, 'Recovery of values from Red Mud, waste of Aluminium Extraction Plants', Proceedings of National Seminar on Pollution through Metallurgical operations, Jan. 27-29, p. I-5, R.E.C. Srinagar.
233. **S. Prakash**, V.K. Tewari & A.K. Patwardhan, 'Inspection of Bright Steel Bars' published in the proceedings of symposium held in Delhi on Bright Steel bars organized by S.I.S.I. Ministry of Industries, Govt. of India.
234. **S. Prakash** and V.K. Tewari, 'Entrepreneurship development in metallurgical engineering', National Seminar on Interaction between Institutions and Industries through STEP (IIT STEP), Science and Technology Entrepreneurship Park, Roorkee, U.O.R., Roorkee, Feb. 20-21, 1988, Published in Proceedings, pp. II. 33-II. 34.
235. **S. Prakash**, 'Trials on making cement from Red Mud', National Workshop on Plastics & Polymers in Building and building materials and building materials technologies and pollution abatement, New Delhi, March 11-12, 1987.
236. **S. Prakash** & D.B. Goel, 'Utilisation of Dross of Aluminium Melting', IBID.
237. J.L. Pandey, **S. Prakash** & M.L. Mehta, 'Efforts of varying Zirconium concentration and 1wt% yttrium on high temperature oxidation of Fe-15wt%Cr-4wt%Al alloy', Paper presented at 41st Annual Technical Meeting of Indian Institute of Metals Trivandrum, Nov. 12-14, 1987.
238. **S. Prakash** & D. Saxena, 'High Temperature corrosion problem in thermal power plants with special reference to sulphidation-oxidation environment', proceeding of All India seminar on Metallurgical Problems in Power Projects, I.E. (INDIA), Lucknow, Oct. 30-31, 1987, p. 309.

239. V.K. Tewari & **S. Prakash**, 'Cavitation Corrosion of Hydroturbines', Proceedings of All India Seminar on Metallurgical Problems in Power Projects, I.E. (India) Lucknow, Oct. 30-31, 1987, p. 406.
240. D. Saxena, S. Prakash, M.L. Mehta and I.P. Saraswat, 'Sulphidation studies of Fe-15Cr-4Al alloy with Y & Zr addition at 850°C', Proceedings 10th International Conference on metallic Corrosion held in Madras, Nov. 7 to 11, Vol. IV, p. 3495, 1987.
241. J.L. Pandey, **S. Prakash** & M.L. Mehta, 'Effect of Zirconium on isothermal and cyclic oxidation of Fe-15wt% Cr-4wt% Al alloy in the temperature range of 1000-1300°C', Proceeding 10th International Conference of Metallic Corrosion, held in Madras, Nov. 7 to 11, Vol. IV, p. 3507, 1987.
242. **S. Prakash**, S.B.L. Bhatnagar, S. Kapoor, V.K. Tewari, A.K. Patwardhan & K.L. Goyal, 'Prolonged effect of Hydrogen sulphide and carbon dioxide on Duplex Steel', Preseted in the 10th International Conference of Metallic Corrosion, Madras, 7 to 11th Nov. 1987.
243. **S. Prakash**, J.L. Pandey & M.L. Mehta, 'Effect of Zr on high temperature oxidation of Fe-15Cr-4Al alloy', proceedings of 9th International congresson Metallic Corrosion, held in Toronto, Canada, (June 3 to 7, 1984).
244. **S. Prakash** and Ved Bhushan, 'Some aspects of centrifugal casting with special reference to effect of variables', paper presented in Seminar on Solidification & Casting, held at Roorkee (Oct. 12 to 13, 1984).
245. J.L. Pandey, **S. Prakash** & M.L. Mehta, 'Effect of Zr on wart formation during high temperature oxidation Fe-15Cr-4Al alloy', International Symposium on Light Metals and 37th Annual Technical Meeting of Indian Institute of Metals', Varanasi (15-17 Nov. 1983).
246. N.P. Saxhan, J.L. Pandey, V.K. Tewari & **S. Prakash**, 'Aluminothermic reduction of redmud from Hindustan Aluminium Corporation, Renukoot', Symposium on Metallothermic Process in Metal and Alloy Extraction', held at Nagpur, Dec. 28-30, 1983 sponsored by D.A.E.
247. **S. Prakash**, B. Singh & V.K. Tewari, 'Effect of flocculants and variables on the settling of the red mud from HINDALCO Renukoot', 37th Annual

Technical meeting of Indian Institute of Metals held at BHU, Varanasi 15-17, Nov. 1983.

248. **S. Prakash** and Horvath Zoltan, 'Physico-chemical, mineralogical and technical investigations of Indian bauxite from Amarkantak and Phutkapalhar with special reference to TiO_2 content. Paper presented at IVth Yugoslav International Symposium on Aluminium, Titograd, Yugoslavia, (21st – 23rd April, 1982).
249. **S. Prakash** and Horvath Zoltan 'Physico chemical mineralogical and technological investigation on the Indian Bauxite from Bharat Aluminium Corporation Korba with special reference to TiO_2 content', paper presented and published in proceedings of DST Sponsored Seminar on Hydrometallurgy held at UCIL Juduguda, Oct. 31-Nov. 1, 1980.
250. **S. Prakash** and Horvath Zoltan, 'Physico-chemical and mineralogical examination on the Indian Bauxite from Phutkapalhar and Amarkantak, presented at the conference on Aluminium Metallurgy Research, Development and Technology at Bangalore, 1979.
251. **S. Prakash** and Horvath, Zoltan, 'Caustification studies on the redmuds from titanium rich bauxite charges, paper presented at conference on Aluminium Metallurgy Research, Development and Technology at Bangalore, 1979.
252. **S. Prakash** and Horvath Zoltan, 'Effect of increase in TiO_2 content of the bauxite charges on the settling properties of the redmuds'. Paper presented at Annual Meeting of Indian Institute of Metals at Hyderabad, 1979.
253. **S. Prakash** & R.H. Tupkary, 'Effect of foreign constituents on the reduction kinetics of iron-oxide by Hydrogen', paper presented at Annual Technical Meeting of Indian Institute of metals, Bombay, Nov. 13-15, 1969

International/National Conference Attended Abroad in Last Five Years.

1. S&T'06 Material Science and Technology 2006 Conference and Exposition: Processing, October 15-19 held at Cincinnati, Ohio, USA and presented two Papers

2. International Conference Materials Science & Technology 2009 (MS&T 09) held at Pittsburg, U.S.A. during October 25-29, 2009 and presented two research papers
3. National Conference on latest advancements in Science, Engineering and Research (LASER-2011) held at Baba Farid Group of Institutions, Bathinda, and Punjab during May 26-27, 2011 and delivered Key Note Address.