

RESUME



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PROFESSIONAL POST: Chairman of Shanghai Environment Sensitive

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1. Graduated in 1965 from the department of metal physics at Beijing University of iron and Steel Technology, which is now renamed as University of Science and Technology, Beijing , with my first paper “Study of Matensitic Transformation of Cu-Al alloy by electron microscope” guided by Prof. Ke.
2. After graduation, I have been working in Shanghai Research Institute of Materials till now. During 1965 to 1972, I engaged in microanalysis of metal mainly with SEM and TEM. I set up a special laboratory and systematic test methods to evaluate and examine the qualities of metallic components for engineering usage.
Moreover, I carried out a series of studies on failure analysis which were found simulative to improving materials’ qualities.
3. Since 1973, my research interests have been turned to the study of stress corrosion cracking, hydrogen embrittlement and corrosion fatigue-environment sensitive fracture by means of electron-fractography, fracture mechanics and electrochemical methods. I started with self made test machines, and have studied for more than 14 years on testing methods as well as mechanisms of SCC, HF and CF mainly for high strength Steels, low carbon Steels, stainless Steels, titanium in several systems. Finished more than 10 big engineering projects and got 7 prizes.
4. From Oct. 1988 to Jan. 1990 and May 1992 to Nov.1992, I was invited to Newcastle University to do some cooperative research work as a guest member of staff on Environment Sensitive Fracture of Stainless Steels, and published nearly 10 papers.
5. Created a low alloy Steel, ND Steel which has highest resistance ability to sulfur dew point corrosion used in oil refinery and power plant in current time.
6. I was invited to visit Hiroshima University and have lectures for graduated students, then attended “ASIAN Symposium on Corrosion and protection in oil and Gas Operations, Oil Refineries, and Petrochemical Industries” held in Osaka Japan in June 1994.
7. I was a general secretary, organized 94’ International Conference on Esc with the university of Newcastle upon Tyne U.K. 4-9 Sept, 1994 Guilin China. The Conference was successful.
8. Created new alloy Steel—08Cr2AlMo have a high resistance to H₂S and Cl⁻ used for heat exchanger in oil refinery.
9. In 2001 I was a co-chairman of the second ESCC in Hiroshima Japan.
10. I have been the author and co-author of 4 books and published over 200 papers.

Publications

● Book:

1. The Electro microscopy on Metal, New Metallic Materials Press, Beijing, 1975
2. Failure Analysis and Protection of Engineering Metallic Components, Science and technical Press,

Shanghai, 1980

3. Wear and Fracture, Shanghai Jiaotong University Press, 1985
4. Environment Sensitive Fracture of Steels, Chemical Engineering Press, Beijing, 1988

● Papers(main)

1. Effect of Strength of Steels on the Susceptibility to Stress Corrosion Cracking, 9th ICMC Proceedings, Vol.3, pp.557-564, Toronto Canada, 1984
2. The Fracture Behavior of CrNiMo low alloy Steels in NaOH Solution, IMMB(International Symposium on Microstructure and Mechanical Behaviour of Materials) Proceedings, Oct. 21-24, 1985, Xian, P.R.China
3. The Fracture Behaviour of Pressure Vessels for Growth of Cultured Quartz Crystals, 5th Asian-Pacific Corrosion Control Conference, 22-28, Nov.,1987, Australia
4. Changes of Crack Growth Morphology in Steel under Corrosion Fatigue Condition, Acta Metallurgical Sinica, Vol. 16, No.4, p.452-462, 1980
5. Effect of Strength on SCC Susceptibility of Steel 34CrNi3Mo in Naoh Solution Acta Metallurgical Sinica, Vol. 19, No.2, p.A134-141,1983
6. Fracture Morphology of Steel under Corrosion Fatigue Condition, J. of Chinese Society of Corrosion and Protection. Vol.2, No.3, p.25-32, 1982
7. A Study of SCC Mechanism of 34CrNi3Mo Steel in Aqueous NaOH Solution, J. of Chinese Society of Corrosion and Protection, Vol.3, No.1, p.33-40, 1983
8. Effect of Strength on Corrosion Fatigue Behaviour of low alloy Steels in Artificial Seawater, Acta Metallurgical Sinica, Vol. 22, No.3, p.A275-282,1986
9. Effect of Some Detergents on the Susceptibility to Hydrogen Embrittlement of 20G Steel, J. of Chinese Society of Corrosion and Protection, Vol.6, No.1, p.59-64, 1986
10. SCC Behaviour of Annealed 316 Stainless Steel in low Oxygen 5-PPM Chloride Content Water at 300C, Corrosion Science, Vol.30(1988), No.6/7, p.555
11. The Stress of Corrosion Cracking of Annealed Type 316 Stainless Steel in High Temperature Water. "Corrosion 90", Las Vegas, USA., p494
12. The Stress Corrosion Cracking of Annealed Type 316 Stainless Steel in High Temperature Water. Corrosion, NACE, Nol.46(1990),p.621
13. Effect of Hydrogen by The Fracture of A Commercial Duplex Stainless Steel. Corrosion Science, Vol.32(1991), No.1, p.23
14. Effect of Structure Orientation on the Susceptibility of Duplex Stainless Steel to Hydrogen Embrittlement. Corrosion Science, Vol.47(1991), No.10. p.792
15. Crack Initiation and Propagation of 2205 Duplex Stainless Steel in Hydrogen Gas. 7th APCCC, Vol.1(1991), IAP, p414
16. Evaluation of Resistance to Hydrogen Embrittlement of Duplex Stainless 2205. APCS-91, Beijing, P.R.China, Vol.1(1991), p208
17. Phase Transformation and Cracking Behaviour of 316C Stainless Steel under Cathodic Charging. Acta Metallurgical Sinica, 1993
18. The Mechanism of ND Steel Resistance to Sulfur Dewpoint Corrosion, Proceeding of "Asian Symposium on Corrosion and protection in Oil and Gas Operations, Oil Refineries, and Petrochemical Industries", Osaka, Japan, 21-24 June 1994. p203
19. Hydrogen-Induced Cracking Susceptibility of 18Mn5Cr Non-Magnetic Alloy Steels, Proceedings of International Conference on Environment Sensitive-Fracture, Guilin, China, 4-9 Sept. 1994. p.390
20. ND Steel-High Resistance to Sulfur Dewpoint Corrosion. The Third Pacific Rim International Conference on Advanced Materials and Processing, Honolulu, Hawaii, USA, July 12-16, 1998, Vol.1, p.155
21. 08Cr2AlMo Steel for Heat Exchanger in H₂S and Cl Medium. Proceeding of the 9th International Manufacturing Conference, Hong Kong, 16-17, Aug. 2000, Vol.1, p.1
22. Resistance to Sulfur Corrosion of Steel-ND and 08Cr2AlMo. Proceedings of The Second International Conference on ESCC. Hiroshima, Japan. Oct. 29-Nov.2, 2001