

Min “Alex” Feng

1 Mount Hope Terrace, Worcester, MA 01602 • (774) 312-1206 • alex.feng07@gmail.com

EDUCATION

Worcester Polytechnic Institute (WPI), Worcester, MA

Master of Science in Materials Science and Engineering (GPA: 3.5), May 2013

Dalian Maritime University (DMU), Dalian, China

Bachelor of Engineering in Science in Materials Science and Engineering (GPA: 3.0), June 2011

PROJECT EXPERIENCE

Research Assistant, Advanced Casting Research Center, WPI, November 2011- present

- Prepare eutectic Al-Fe alloy for making car engine. Manage to find the formula of proper composition for alloys by determine the critical cooling rate for different composition of Al-Fe alloy and improving the result by alloying and heat treatment.

Graduation thesis, Laboratory of Marine Anticorrosion and Antifouling, DMU, August 2010-June 2011

- Prepared environmental friendly antifouling paint with the coating treatment of Cu_2O by using rosin and acrylic resin, tested and performed as desired
- Measured mechanical properties of low surface energy coating including water and oil contact angle, roughness and adhesion properties by using water angle measurements, surface roughness tester TR100, FZ-11 adhesion tester

Research Assistant, Laboratory of Sintering Technology, DMU, January 2010-August 2010

- Organized laboratory experiments by using cutting machine and polishing machine
- Ran oxidation resistant tests for SiAlON Ceramics by measuring the gained weight per square centimeter after heating at the temperature of 1100°C and 1300°C . Results showed that the oxidation resistant of the ceramics increased with the doping of BN from 5wt% to 10wt%

Research Assistant, Institute of Manufacture and Repair of Marine Machines, DMU, November 2009-June 2010

- Used “Thermo Calc” software to simulate heat-treatment and composition of some Ni-Cr-Fe-C-Mo-Si-Cu alloys in order to extend the lifespan of vitriol pump which is submitted corrosion of vitriol and rush of liquid with solid particles by studying its phase diagrams and metallurgical microstructures
- Presented research findings that the Ni-based alloy can be effectively strengthened by sigma phase precipitation at the temperature from 1023K to 1073K at the 4th International Conference on Thermal Processing Modeling and Computer Simulation as the only undergraduate student

RELATED EXPERIENCE

Technician Intern, Guangdong KEXINDA Technology Co., Ltd, Foshan, China, January 2011-March 2011

- Participated in Low Temperature Co-fired Ceramic (LTCC) research and development (R&D) by learning it's principle and try to find best formula by prepared LTCC with different formula
- Assisted on diamond and Abrasive Tools research and development to identify a suitable release agent and experimented best formula

Technician Intern, Prosperity Lamps and Components Limited, Henan, China, July 2010-August 2010

- Control cold-pressing process by monitoring temperature fluctuate from 215°C to 225°C
- Supervised Heat-Treatment and Surface modification

SKILLS

Software: Thermo-Calc, Microsoft Word, Excel, PowerPoint, Mathcad, Matlab, Auto CAD, Pro\Engineer, Movie maker, SQL Server, Photoshop, Flash

Laboratory Equipment: Laser particle size analyzer, ultraviolet spectrophotometer, water angle measurements, surface roughness tester TR100, FZ-11 adhesion tester, thermo chamber, cutting machine and polishing machine

Materials Tests: Brinell/Vickers Hardness test, X-Ray diffraction (XRD), Differential Scanning Calorimetric (DSC), optical microscope, electron microscopy, water bath heating

Metal Working Practice: Electric welding, gas welding, CNC

Foreign Languages: Fluent in Mandarin, Cantonese

PROFESSIONAL DEVELOPMENT

Presenter, 4th International Conference on Thermal Processing Modeling and Computer Simulation (ICTPMCS 2010), "Phase diagram simulation and heat-treatment of a Ni-based alloy for high-temperature vitriol pump", Journal of Materials Science and Technology (SCI)

Co-author, 16th Annual Meeting of the National High-tech Ceramics, 2010, "The Influence of BN Content in β -SiAlON on Flexural Strength at High Temperature and Oxidation Resistance Properties" and "Effects Of C_6H_5COOH Content On Porosity And Mechanical Property Of β -SiAlON Porous Ceramics", Journal of Materials Engineering (EI)

Membership

The Materials Information Society (ASM International)

Association for Iron & Steel Technology (AIST)

The Minerals, Metals & materials Society (TMS)

Materials Advantage Student Program

LEADERSHIP

President of DMU Brass Ensemble, September 2007-October 2010

Led 10 members to visit Southeast Asia for marine communication

Organized concerts including funds raising, arranging rehearsals, decorating auditoriums, and giving performances

Arranged, coordinated and facilitated a music summer camp for more than 50 members

ACTIVITIES

Volunteer, Dalian Workers' Nursing Home, Dalian, China October 16, 2010

Volunteer, "Earth Hour" at Xinghai Square, Dalian China, April 23, 2010

Volunteer, Dalian Zhoushuizi Airport, Dalian, China September 1, 2009

Member, Student Union, September 2007- September 2008

Member, College Basketball Team, October 2007-June 2008

AWARDS

Certificate IV in Materials Science and Engineering Professional Skills Competition, DMU, October 2010

"Outstanding Student Leader" of DMU, October, 2009-2010

Scholarship of DMU, October, 2010