

Kevin J. Chaput
kchaput@purdue.edu
3702 Sweet Valley Ln. Apt.C2
Lafayette, Indiana 47909
(321) 543-6679

OBJECTIVE: To utilize my metallurgy background to contribute to the development of innovative casting techniques and further the understanding of difficulties that arise through current casting methods.

EDUCATION

Purdue University, West Lafayette, IN

- **MS/ PhD in Materials Science & Engineering**, May 2014
- Project: Investment casting of maraging steels for applications requiring a high degree of fatigue resistance
- Graduate GPA: 4.0

University of Florida, Gainesville, FL

- **Bachelor of Science in Materials Science & Engineering**, May 2010
- Specialty: Metals
- Upper Division: 3.86
- Cumulative GPA: 3.71

EXPERIENCE

Development of Castable Fatigue Resistant Steels, Fall 2010- Present

MSE Department at Purdue University, West Lafayette , IN

- Evaluated microstructure of vacuum casted parts through metallography and scanning electron microscopy (SEM)
- Tested fatigue properties of the alloys and compared with wrought counterparts
- Assisted with the setup of the new Purdue casting center.

Phase Observation of Nickel Superalloy, Fall 2009-Spring 2010

MSE Department at the University of Florida, Gainesville, FL

- Subjected superalloys to an array of heat treatments at certain homogenizing temperatures to discover their phases and high temperature properties
- Observed different phases and mechanical deformation through metallograph
- Used Vicker's Hardness tests to observe the presence of desired phases and to test effectiveness of heat treatment regimen

Failure Analysis and Processing KEEP Internship, Summer 2009

National Aeronautics and Space Administration (NASA), Cape Canaveral, FL

- Mounted and polished samples for scanning electron microscopy (SEM) analysis
- Determined cause for unexpected catastrophic failure for given products and suggested mechanisms to prevent failure
- Recognized the requirements for a certain part and recommended the best material after considering cost, requirements, and safety

Solid Lubricant Research, Spring 2008- Summer 2008

MSE Department at the University of Florida, Gainesville, FL

- Learned how to operate, repair, and modify a Quartz Crystal Microbalance
- Tested the durability and quality of materials in ultra high vacuum (UHV) surroundings to test their ability to be used in extreme environments
- Modified hydrophobic and hydrophilic characteristics of different substrates

HONORS/ACTIVITIES

Purdue Materials Engineering's/College of Engineering's Teaching Assistant of the Year (2011)

Graduate Student Representative on the Purdue Head Search Committee (2011)

Ross Fellowship (2010) – 1 year support from Purdue University awarded to doctoral students to be used towards research project

ASM Undergraduate Design Competition (2010) - Placed 3rd for design project completed for MSE capstone course

Vladimir Grodsky Memorial Scholarship Recipient (2009) - Merit based scholarship presented to top students in MSE

Department at the University of Florida

College of Engineering's Dean's List (2006-2010) - Semester GPA of 3.2 with completion of at least 14 credit hours

Materials Advantage Member (2009-Present)

REFERENCES

Available upon request

