

Résumé of

JUSTIN DANIEL MEYER

OBJECTIVE: Engineering position supporting manufacturing and/or R&D

EXPERIENCE:

STEVENS INSTITUTE OF TECHNOLOGY, CBME DEPARTMENT, Hoboken, NJ

Candidate for Ph.D. in Materials Engineering (expected May, 2006)

- Constructed and maintained several Chemical Vapor Deposition systems
- Explored deposition of multiple thin films on various substrates
- Characterization of films using microscopy and other techniques
- Awarded patent no. 6,808,760: "Method for preparing α -dialuminum trioxide nanotemplates", W.Y. Lee, Y.-F. Su, L. He, and J. D. Meyer, October 2004

Teaching Assistant for Materials Engineering Lab (9 terms)

- Instructed 30-50 students through 11 materials processing modules
- Developed new lab modules, including technical writing and data analysis
- Maintained laboratory equipment and stockroom
- Created a Manual of Procedures & Safety for Teaching Assistants
- Awarded the **Graduate Fellowship Award for Excellence in Teaching** (2003)

GE AIRCRAFT ENGINES, ENGINEERED MATERIALS TECH. LAB., Cincinnati, OH

Engineering Contractor (summers of 1999, 2000, 2001)

- Explored elemental doping of a NiAl coating for aircraft engine turbine blades
- Established integrated database for analyzing process conditions
- Analyzed historical and current data to determine processing parameters
- Developed methodology for applying experimental sol-gel coating
- Evaluated coating process using a 3-D experimental matrix

STEVENS INSTITUTE OF TECHNOLOGY, OFFICE OF RESIDENCE LIFE (ORL), 1997 – current

Resident Director (RD) (3 years)

- Supervised 9-13 Resident Assistants (RAs) and two residence halls
- Assessed program & staffing requirements; implemented changes
- Implemented 360° evaluative processes at RD and RA levels

Chair: RA Selection Committee, RA Council, Duty Coordinator (4 years)

- Managed several task-oriented ten-member RA committees
- Rebuilt a six-week, five-phase selection process for 80-100 applicants
- Developed a bi-annual staff evaluation process for ~1000 residents
- Managed staff duty rosters and schedules for multiple staffs

SAINT-GOBAIN/NORTON INDUSTRIAL CERAMICS CORP. Northboro R & D Ctr., Northboro, MA

Lab Technician (summer and school vacation periods, 1994–95)

- Managed the microscopy sample preparation laboratory
- Prepared mounts for TEM, SEM, microprobe, image analysis, and mech. testing
- Developed Manual of Procedures for preparing materials to test specifications

EDUCATION: STEVENS INSTITUTE OF TECHNOLOGY, Hoboken, NJ

DOCTOR OF ENGINEERING, MATERIALS ENGINEERING, expected May, 2006

Dissertation: Effects of Polyelectrolytes on the Morphological Evolution and Control of Thin Al₂O₃ Films on Complex Substrates.

Internships: **AGTSR Industrial Intern** (3 summers)

MASTER OF ENGINEERING, MATERIALS ENGINEERING, May, 2000

Thesis: Morphology and High-temperature Stability of an Amorphous Alumina Coating Deposited by Metal Organic Chemical Vapor Deposition on Various Substrates.

Honors: **Robert C. Stanley Fellow** (3 years)

BACHELOR OF ENGINEERING, MATERIALS ENGINEERING, May, 1997

Senior Project: *In Situ* Thickness Measurements by Laser Reflectance for Improved MOCVD Process Development.

Honors: **Edwin A. Stevens Scholar** (4 years)

Eugene P. Polushkin Prize for distinguished work in metallurgy
National Society for Collegiate Journalists, Medal of Merit Award

SKILLS:

Laboratory: SEM & TEM sample preparation; TIG & MIG welding; leak testing; ion milling; pump repair; system controls integration; furnace construction; RF power generation; basic OSHA compliance standards and procedures; others.

Analysis: SEM/EDX/BSE; ellipsometry; advanced XRD; optical microscopy; simple AFM; and DLS; Adept at TEM, EMPA, GDMS, and PLS data interpretation.

Testing: Tensile testing and sub-types; various types of hardness testing; Substantial familiarity with numerous forms of non-destructive evaluation; others.

Software: SigmaPlot 8.0; MiniTab[®] 12; Mathcad[®] 11; LabView 7.0; ANSYS/Ed[®]; AutoCAD R13; KaleidaGraph[™] 3.0; Scion Image; Adobe[®] PhotoShop[®] 5.0; MS[®] Office Professional; OpenOffice.org 1.x; many others.

Op. Systems: MS[®] Windows[™] (-3.1x, -98[®], -NT[®] 5.0, -2000 Prof., -XP); GNU/Linux 2.4 and 2.6 (RedHat[™], Mandrake[™] 9.x, other distributions).

Languages: Familiar with ANSI C, C++, BASIC, and HTML.

Computers: Highly proficient with all x86-based PCs and compatible hardware; competent with server hardware and basic networking systems hardware.

INTERESTS: High-power model rocketry; joinery; music; media restoration and archiving; cycling; racquetball.

PUBLICATIONS: Available upon request; selected items at www.JustinDanielMeyer.com.

REFERENCES: Available upon request.