Samuel T. Cosby

Address: 2002 S. Mason Rd Apt 615, Katy, TX 77450 • Phone: (832) 790-0951 • Email: samueltc@byu.net

Work Experience

Design Engineer

June 2007-Present

Dow Chemical Company

Houston, TX

- Piloted using laser scan technology on retrofit capital projects to enable remote piping design, Ş which expands the labor resource pool, and reduces labor costs by up to 40%
- Led or co-led piping design on various capital projects ranging in size from \$25MM-\$75MM §
- Trained new hires from another culture in creation and optimization of piping specifications §
- Developed flow correlations for an engineering design aid to ensure proper valve selection Ş

Crude Oil Scheduler - Intern

Summer 2006 ExxonMobil Oil Corporation Fairfax, VA Saved \$500,000 by optimizing delivery schedules of crude oil from tankers and pipelines to the § Beaumont refinery

Research Assistant

2005-2006

- BYU Chemical Engineering Department
- Developed novel processes that prepare silicon oxide for the growth of copper nanowires §
- § Co-authored proceedings paper entitled "Substrate Preparation for Nanowire Fabrication by Selective Metalization of Patterned Silane Monolayers" for the Electrochemical Society

Instructor

2004-2005

Missionary Training Center

Trained classes of 8-12 volunteer representatives in organizational skills, leadership, Spanish § language, and Latin American culture

Education

Bachelor of Science in Chemical Engineering

Baomoron	er eereniee in eriennear Engineering
2001-2007	Brigham Young University (BYU)
C Manua	

- Magna Cum Laude §
- § GPA: 3.93
- Dean's List for 5 semesters Ş

Service and Leadership

AIChE Fundraising and Publicity Officer

AIChE Student Chapter 2004-2007 Provo, UT § Raised over \$2000 to buy holiday gifts for needy families in collaboration with United Way

Math Tutor

2007-Present Volunteers in Public Schools

§ Tutored middle school students in need of supplemental math instruction

Volunteer Representative

2002-2004 Church of Jesus Christ of Latter-Day Saints San Salvador, El Salvador Co-directed the service activities of about 150 representatives from 8 different countries Ş

Skills and Activities

- Fluent in Spanish §
- Eagle Scout §
- § Hobbies include playing piano and organ, reading, running, and camping

Provo, UT

Provo, UT

Provo, UT

- Houston, TX

Home Address: 248931 Avenida Veraneo Lake Forest, CA 92630

JOE ENGNEER

GPA: 2.77

Local Address: 621 E. 420 N. Apt.#103 Provo, UT 84606

Education

Brigham Young University 2005-Present

- Studying Chemical Engineering
- Graduate in 2011

Work Experience

- Golf Car Attendant/ Course Maintenance June 2005-August 2005
 - o Drove golf carts to garage to charge
 - o Worked on course, safety requirements such as hard hats
- Car Prep Enterprise Rent-A-Car July 2004-December 2004
 - o Cleaned cars and drove them to pick people up

Service

Voluntary Representative, The Church of Jesus Christ of Latter-day Saints,

Frankfurt, Germany 2005-2007

- o Conducted presentations for groups and individuals
- o Supervised 8 other individuals
- o Planned and facilitated weekly meetings
- o Obtained legal documents allowing residency in the country for others

Awards

Earned Eagle Scout Award at age of 14

Hobbies

Soccer, Ultimate Frisbee, Sports in general

Dallan R. Prince

865 N 160 W Apt. 96 Provo, UT 84604 (512) 554-1042 prince@byu.net

EDUCATION

BS IN CHEMICAL ENGINEERING - BRIGHAM YOUNG UNIVERSITY, Provo, Utah

- Graduation expected summer 2010; GPA 3.92/4.00
- Brigham Young Scholar, full tuition; Robert C. Byrd Scholarship
- Co-President, BYU Biomedical Engineering Club, May 2008 present

MANOR HIGH SCHOOL, Manor, Texas

- Salutatorian, 2004; **GPA 4.00**/4.00
- National Honor Society President
- Texas All-State Symphonic Band 2003, 2004
- Texas Boy's State
- Editor-in-Chief, *The Lariat* (Student Newspaper)

WORK EXPERIENCE

RESEARCH ASSISTANT – ADVANCED COMBUSTION ENGINEERING RESEARCH CENTER

Brigham Young University, Department of Chemical Engineering, March 2008 – present

- Wrote standard operating manual for pressurized (up to 15 atm) flat flame burner.
- Developed and recommended improvements in design and procedure.
- Cut routine repairs and associated costs by approximately 50% and \$100/mo.
- Explored flow rates and reactor configurations to meet standards for data analysis.
- Built specialized thermocouples to be placed in 1400°C flame.
- Designed, built and installed internal ignition device for use at high pressure.

BAKERY STAFF – GREAT HARVEST BREAD CO., Austin, Texas, summer 2007

• Solved problem with dough-processing machine and trained staff to prevent it.

COMPUTER TECHNICIAN – MANOR I.S.D., Manor, Texas, summers 2002, 2003
Installed, networked and maintained computers on 5 campuses.

OTHER

High-Risk Youth Mentor, *IMPACT Program*, *BYU*, Payson, UT, Sep 2007 – May 2008 Missionary, *Church of Jesus Christ of Latter-day Saints*, Oregon, June 2005 – June 2007

- Planned and led weekly training meetings of 10-12 other missionaries.
- Started and taught ESL classes in several cities.
- Organized first-ever regional social to unify Spanish-speaking church members.

Spanish, fluent in reading, writing and speaking.

Eagle Scout, Boy Scouts of America

Interests: music composition, piano, trumpet, wood-working, amateur inventing, lawn care, mountain biking, basketball, soccer, volleyball, ping-pong and ultimate frisbee.

Gregory Davis Gibby 533 E 400 S Provo, UT 84606

533 E 400 S Provo, UT 84606 (801) 375-2348 gibbyg@et.byu.edu

Objective	To obtain employment for the summer of 2000		
Education	Bachelor of Science, Chemical Engineering December 2000, Brigham Young University GPA 3.16 / 4.00		
	Completed classes in Thermodynamics, Fluid Mechanics, Materials, Heat and Mass Transfer, Kinetics, Organic and Physical Chemistry, Statistical Quality Control, Partial Differential Equations, Finite Element Modeling		
Experience	Teaching Assistant, Math Tutorial Lab, BYU, Provo, UT		
	 * Help students with math assignments at skill levels ranging from college algebra to partial differential equations * Work while going to school full time 		
	Missionary, Church of Jesus Christ of Latter-day Saints October 1995- October 1997		
	* Volunteer representative of the Church in the Spanish speaking communities of Riverside and San Bernardino counties of Southern California		
Skills	Software: MS Office, Mathcad, Borland C++, Visual C++, Netscape Composer		
	Programming Languages: C, FORTRAN, HTML Languages: English, Spanish		
Awards	Eagle Scout National Merit Scholar Two time State Champing We at		
1.000	Two-time State Champion Wrestler		
Hobbies	Creative Writing, Listening to Rock and Roll, History		
References	Available on request		

	Thomas A. Knotts IV 380 North 1020 East #310 Provo, UT 84606 (801) 371-6710 tak@et.byu.edu		
Objective	To obtain an internship and gain experience while benefitting the company in the field of chemical engineering.		
Education	B.S. in Chemical Engineering Expected Graduation: April 2001 <i>Emphasis: Materials and Semiconductors</i> BRIGHAM YOUNG UNIVERSITY Cumulative GPA: 3.86/4.0		
	Related Courses: Chemical Thermodynamics, Science of Engineering Materials, Semiconductor Processing(with clean room experience) Related Skills: Proficient in the Spanish Language Computer Programming Languages: Fortran, Java, Visual Basic		
Experience	Research Assitant Apr 99-Present AIChE DIPPR PROJECT 801 • Developed and standardized predictive quantum mechanical methods for various		
	 Utilized these predictive methods to prepare thermodynamic values for 21 new compounds added to the database in 1999 		
	Sales Representative Nov 98-Apr 99 LIVING SCRIPTURES INCORPORATED		
÷	 Represent the company in providing quality media to the community Build confidence between company and customers Honored for being in the top 15% of sales staff in volume sold 		
Volunteer Work	Missionary/Church Representative Jul 96-Aug 98 THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS • Taught Christian principles to families and individuals • Conducted weekly training meetings for local leaders and other volunteers • Increased participation in religious activity 250% •		
	 American Cancer Society Volunteer Team captain of Relay For Life team of 12 Helped raise +\$45,000 total, a 400% increase over the previous year 		
	 Sub For Santa Volunteer Responsible to contact 20 local businesses to donate merchandise Helped raise \$2000 		
Organizations and Honors	Member of the Local Chapter of AIChE Eagle Scout Award from the BOY SCOUTS OF AMERICA University Scholarship from BRIGHAM YOUNG UNIVERSITY Scholarship from the DEPARTMENT OF CHEMICAL ENGINEERING Salutatorian Graduate form NORTHRIDGE HIGH SCHOOL President of DESERET TOWERS RESIDENCE HALLS at Brigham Young University Dean's List of COLLEGE OF ENGINEERING at Brigham Young University		
Interests	Singing, Dancing, Hiking, Volunteer Work, Mountain Biking, Public Speaking, Writing, Basketball, Racquetball, Family Time		
References	Available upon request		

NICOLE L. HATCH

EDUCATION			
	1995–Present	Brigham Young University	Provo, UT
	 Chemical Engi 	neering, Graduating with Honors, Apr	ril 2000. GPA 3.5
EXPERIENCE			
	1999, Summer	Massachusetts Institute of Technology	Cambridge, MA
	Research Assitant, 1 Served as a mem	Bitoechnology Process Engineering Center aber of the Liver Bioreactor design team	
	 Characterized potential liver stem cell's, kinetics and senescence factors 		
	1998–Present	Brigham Young University	Provo, UT
	Cancer Research As	sistant, Honors Thesis	
	 Isolated, sequend 	ced, and cloned COX-2 for NSAID activity	ty testing.
	1997, Sept. to Dec.	United States Senate	Washington, DC
	Student Intern, Offic	ce of Senator Robert F. Bennett	
	 Researched legisla 	ative issues, prepared briefs and recommend	led action.
	 Represented the office at meetings and briefings, reported on proceedings. 		
- A.	 Responded to cor 	nstituent inquires, both written and verbal.	
	1996–1999, Summe	rs Dura Pharmaceuticals	San Diego, CA
	Engineering Intern,		
	 Designed, wrote, 	and performed experimental protocols and	process validations.
	 Member of team 	which optimized design and production of a	new inhaler.
	 Characterized and calibrated Wright Nebulizers for use in clinical trials. 		
	 Analyzed data from 	m Emitted Dose and Anderson Cascade Im	apactor tests.
ORGANIZATION	15		
	1995–Present Regional Student Repre	Society of sentative • Regional Conference Registration Cha	Women Engineers
	1995–Present American Institute of Chemical Engineers Vice Presdident • Career Fair Coordinator • United Way fundraising		
	1997–January to Ap Staff member – edited, j	ril Insight, Honor formatted, and assisted with publishing	rs Scholarly Journal

AWARDS AND RECOGNITIONS

Finalist for the Brigham Young University's Presidential Scholarship • Trustee Scholarship • Who's Who Among American High School Students 1995 • AP Scholar with Distinction

12266 CRISSCROSS LANE • SAN DIEGO, CA 92129 • PHONE (619) 484-4915 • EMAIL NLH24@EMAIL.BYU.EDU SCHOOL ADDRESS • 855 EAST 700 NORTH # 6 • PROVO, UT 84606 • PHONE (801) 378-7270

REFERENCES AVAILABLE UPON REQUEST

333 E. 1600 S. A Orem, Ut 84058

Phone (801) 434-9593 E-mail rdb28@email.byu.edu

Richard D. Bridge

Education	1004 1005 1007 5	An and a second second second		
Lucation	1994 - 1995; 1997 - Pres	ent Brigham Young Unive	ersity Provo, Utah	
	Ondergraduate - Chem	ical Engineering		
	GPA 3.33/4.0			
Objective	Obtain an internship for the	summer of 2000		
Work owneries a				
work experience	Aug 30, 1999 - Present	Brigham Young University	Provo Litab	
	Fluids teacher's assis	stant	r 1000, Otan	
	Summer 1999	Anex Marketing	Collinso Colliforni	
	Sales Manager	Apox Marketing	Salinas, California	
	Doubled elieptele et leest			
	 Doubled clientele of local Troiped menseed and 	pest control branch		
	 Trained, managed and m Mointained the bishead or 	notivated door to door sales represe	entatives	
	 Waintained the highest sa Sold more consult. 	ales per representative average in t	he company	
	- Sold more accounts than	any other manager		
3	Summer 1000			
	Summer 1998	Apex Marketing	Houston, Texas	
	Sales Rep.			
	 Produced on average \$4(0,000 of cold account business a m	onth	
	 Assisted manager in daily 	processing of sells, organize service	ce routs, etc.	
	 Heceived multiple nation 	wide company awards for most sell	s in one day	
	 Lead the North and South Houston branches in sells every month 		nonth	
	 Trained other sales reps f 	orm North and South Houston		
Volunteer experience	May, 1995 - June, 1997		Rostov, Russia	
	Ministering Representative of the Church of Jesus Christ of Latter-Day			
	Saints			
	 Represented the church and provided community service in Russia 			
	 Directed an trained 60 other representatives 			
	 Spoke daily in Russian 			
	Summer 1994		Oakley, Utah	
Donation Organizer		and the second second		
	 Organized and oversaw the mass gathering of donated items 			
	 Assembled and managed 20 people 			
	 Gathered for eight days 			
	 Provided a diesel trailer fu Dessert Industries 	Il of clothes, blankets, and appliane	ces to be sent to the	
Interests and	I enjoy racquetball, camping	, computers, learning, and being	with my wife.	

Cassandra Richardson 393 N. 600 E. #5, Provo, UT. 84606 (801) 375-7946

EDUCATION Bachelor of Science, Brigham Young University Chemical Engineering, emphasis: Biomedical and Microelectronics Expected Graduation: June 2000, GPA: 3.37 Horace and Martha Larsen Scholarship, 4 year recipient

EXPERIENCE Laboratory Assistant

summers 97,99

- University of Michigan, EECS Dept. Ann Arbor, MI
- · performed comparative study of two materials used for micro electrodes
- · gained experience doing independent research to contribute to the team
- assisted graduate students in designing and performing experiments
- developed mechanical polishing technique to improve cross-section SEM visuals of micro electrodes

Independent Sales Representative

Southwestern Book Co., Evansville, IN

· operated entrepreneurial business selling educational material door-to-door

- · earned 200 unit club award based of sales
- earned Gold Award for working 75(+) hours for the 12 week period
- · developed communication, money-management and problem solving skills

Curriculum Development

Brigham Young University, Chem. Dept. Provo UT

 researched and developed Inorganic Chemistry experiments to fit students' ability level and time constraints of class

Pool Manager

Rolling Hills Water Park, Ypsilanti, MI

- · trained and motivated lifeguard staff
- · resolved patron concerns
- developed stress management skills working with emergency situations

Volunteer Representative

The Church of Jesus Christ of Latter-Day Saints, Johannesburg, South Africa

- · trained, supervised and motivated other representatives
- · increased personal adaptability working with people from multiple cultures
- · developed interpersonal and leadership skills

SKILLS	Dektak 8000 Surface Profiler	Reactive Sputtering
	Perkin-Elmer PHI 5400 ESCA System	Philips Teaching SEM
	Mechanical Polishing using Diamond Film	S

- AFFILIATIONS AICHE: Junior Representative Sub-for-Santa Coordinator ETJC representative SWE: High School Conference Coordinate
 - SWE: High School Conference Coordinator

REFERENCES Available upon request

fall 1997-1999

summers 94,95

spring 96

summer 96

SANJIV DEVNANI

345 E, 500N, Apartment 12, Provo, Utah 84606.Telephone (801)-379-0987Email sad27@email.byu.edu

OBJECTIVE

To secure a challenging position with an employer, where I can use my educational qualifications, leadership skills and work experience in a progressive work environment.

EDUCATION

- Brigham Young University
- Pursuing BS Chemical engineering
- Expected graduation April 2002.

Relevant courses and projects

- Introduction to chemical engineering. Project, Design of a plant to convert meta-xylene and ortho-xylene and para-xylene
- Elementary process of Chemical principles. Project, Design of a plant to produce acetic anhydride from coal.
- Fluid mechanics (currently enrolled)
- Material science (currently enrolled)

<u>SKILLS</u>

- Adept at interpersonal communication
- Fluent in speaking and writing English and Hindi
- Knowledge of Mathcad, Microsoft Excel and Word
- Fortran programming

WORK EXPIERENCE

- Information Technology services (April 1999 current). Working with the media equipment on campus, deal with trouble shooting problems and assist teachers to use the equipment.
- Custodial services (May 1998-June 1998)

PERSONAL

Member of AIChE

I enjoy travelling, backpacking and listening to music. Like to participate in Track and Field and currently playing Rugby for BYU.

References available on request.

Marcus Boyer

1250 South 900 East Springville, UT 84663 (801) 489-3459 meb@et.byu.edu

Objective Seeking internship for the summer of 2000

Education

Brigham Young University B.S. in Chemical Engineering Expected Graduation: Spring 2001 Provo, UT Cumulative GPA: 3.98 / 4.0

Courses to be completed be May 2000: Themodynamic, Kinetics, Heat and Mass Transfer, Materials Science, Fluid Dynamics, Physical Chemistry, Organic Chemistry, Advanced Engineering Mathamatics

Experience

AICHE Design Institute for Physical Properties Data (DIPPR) May 1999-present Research assistant collecting data and making predictions for physical properties of industrially important coompounds.

B.Y.U. School of Management Computer Lab August 1998- May 1999 Computer Lab Assistant offering technical assistance to lab users

R.I.S.E. Inc. May 1996-August 1996 Care Provider assigned to accompany and assist mentally disabled children in and outside of school

Kevin Coleman Construction Summers 1992,1993,1994 Carpenter's assistant building wood-frame houses

Voluntary religious service August 1996- August 1998 Involved in teaching and humanitarian service in the country of Hungary

Awards/	Contract of Contra
Achievements	Howard W. Hunter Presidential Scholar
	Deseret News Science Sterling Scholar
	Department Outstanding Freshman, Sophomore
	Eagle Scout; High School Valedictorian
Skills	Proficient in Hungarian speech, reading, writing
	Acquainted with Spreadsheets, MathCad, Word Processing, Database
Interests	Accomplished vocal soloist, Volunteer peer tutor
	Enjoy tennis, piano, music, drama

References Available upon request

Nancy Ann Vincent

(801)370-2378	. #49 Provo, Ut 84604 nav@email.byu.edu
Objective	Obtain a full time position in Chemical Engineering after graduation
Education	Brigham Young University
	B.S. in Chemical Engineering Expected graduation April 2000 GPA: 3.83
Honors	•Received a University Scholarship to Brigham Young University for the 1996-97, 97-98, 98-99, and 99-2000 school years.
	•Member of the College of Engineering Deans List for Winter 1997 and Winter 1998(min 3.9 GPA)
Work Experience	Research Assistant, BYU 4/98-7/98 ; 9/99-present
	•Conducted experiments on human blood to test external influences on blood microemboli formation.
	 Performed phlebotomy on donors when needed. Optimized techniques used to run experiments such as minimizing
~	quenching time. •Innovated a new way to prevent blood spills from syringes and the
	Constant Pressure Filtration machine. •Gathered recently published research relating to the study
	•Participated in research meetings and discussed new ideas relating to the platelet aggregation mechanism under study.
	Process Engineering Intern, Motorola 5/99-8/99
	 Gathered process specifications from each process owner, updated and unified formats, and created a location on central server for easy access. Ran tests to create a second-of-a-kind tool to match the original. Worked with various groups to coordinate initiation of the tool.
	 Learned and applied etch chemistry involved with creating recipes for a new metal etch process.
	•Performed tests on 9600 metal etchers to research endpoint faults according to differing chemical triggers. Created recipe change to a different endpoint trigger while ensuring results mimicked previous manufacturing specs. Presented results to division staff.
	Manufacturing Intern, Novacap 5/97-7/97
	 Responsible for finding a new way to strip palladium termination off of capacitors.
	 Tested machinery to set specifications required to optimize process.
Volunteer Work	New Student Orientation Counselor at BYU 9/98
	•Helped incoming freshmen feel welcome and get acquainted with each other. Led them through week long orientation activities on campus.

BRIAN D. SPEARS

Current address:

744 E 750 N #7 Provo, UT 84606 (801) 370-2287 bds56@email.byu.edu

Permanent address:

218 Saint Paul S1. Boonsboro, MD 21713 (301) 432-2355

Education

Brigham Young University,	August 1999-Present	
Expected Graduation Date: December 2003		Honors Program, Scholarship recipient
GPA: 3.52	Major: Chemical Engineering	Minors: Physics, Chemistry
The Johns Hopkins University, Baltimore, Maryland		Attended: August 1996-May 1997
GPA: 3.76 (Dean's list)	Major: Biology	Minor: Writing

Experience

Combustion Research Assistant. Brigham Young University. September 2001-present.

- Wrote computer program for three-dimensional modeling of biomass pyrolysis in a reactor
- · Built laminar flow reactors for testing of biomass combustion
- Wrote Standard Operating Procedures for combustion lab

Patent Proofreader. Workman, Nydegger & Seeley Law Firm. May 2001-September 2001.

· Edited U.S. patents for scientific, technical and grammatical accuracy

Physics Teaching Assistant. Brigham Young University. September 2000-May 2001.

- Taught and tutored approximately 100 physics students per week
- Graded homework and tests

Youth Counselor. CES Youth and Family Services. May 2000/01/02-August 2000/01/02.

- Supervised approximately 830 participants between 14-18 years of age
- Developed and taught 11 lessons per week
- · Planned and administered team-building and personal-development activities

Environmental Chemistry Research Assistant. Brigham Young University. January 2000-June 2000.

- Tested efficiency of new air filtration equipment to result in increased particle deposition
- Specialized in analytical tests to determine particle composition on environmental air flow filters
- Assisted in building portable testing sites

Volunteer Representative. The Church of Jesus Christ of Latter-day Saints. Angeles City, Philippines. July 1997-July 1999.

- Supervised and trained approximately 40 other volunteers
- Functioned as office manager and personal secretary to the Mission President at mission headquarters; wrote training manual for this assignment
- Coordinated all travel and housing for 175 volunteers, wrote training manual for this assignment
- Taught public theological lessons, prepared and taught free English lessons

Activities

- Eagle Scout
- Recipient of Army ROTC Tier 1A, 4 year scholarship award--\$21,000 per year
- President of religious education program: presided over 9 teachers and 7 other staff members
- Teacher improvement coordinator for religious education: rated and taught 30 teachers
- Financial and statistical clerk for 150 member church organizational unit
- BYU Ballroom Dance: performing team and open couple competitor

Skills

- Visual Basic, C++, LABVIEW, Microsoft Office, Mathcad, Windows 95/98 & NT
- Speak and write fluent Filipino (Tagalog), speak and write conversant French and Ilokano

Dear Recruit Manager,

My name is Dong Zeng, a Ph.D student in the Dept. of Chemical Engineering, Brigham Young University. I will graduate in the June, 2005 and am looking for a combustion engineer position. I have 9 years experience of combustion engineering and research, and two year work experience as a project engineer working with power plant.

I also have a master and a bachelor degree in Thermal Engineering. Both of my Ph.D and master work focus on combustion area. With experience from combustion and pollutants emission research, I am proficient at developing and optimizing combustion system. I designed and built a combustion reactor, a flat-flame burner. I specialize in combustion kinetic, transport analysis, CFD and numerical analysis, fuel chemistry, and process control. I have published several papers as the first author and gave presentations in several symposiums. Additionally, my work experience of project engineer enhances my capability to plan and lead a research or engineering project.

Thank you for your time and consideration.

Dong Zeng

Dong Zeng

Email: dzeng@et.byu.edu Office: (801) 422-8087 Mobile: (216) 308-4701

TARGET POSITION: COMBUSTION Engineer (Chemical, thermal engineer)

EDUCATION:

- Ph. D. Chemical Engineering, Brigham Young University, June. 2005
- M. S. Thermal (Mechanical) Engineering, Southeast University, China, 1999
- B. S. Thermal (Mechanical) Engineering, East China Institute of Metallurgy, China, 1996

TECHNIQUE SKILLS:

- Design chemical reactor, furnace, and burner; tested and optimized instrument.
- Perform combustion engineering analysis, analysis of combustion kinetic (gas, coal, biomass, etc.), heat and mass transfer, fluid mechanic, thermodynamic, process control, numerical calculation.
- Model transport, chemical process using CFD (Fluent, Chemkin),
- Master material and gas analysis techniques: ICP, element analysis, surface area, FTIR, TGA, etc.
- Autocad, C, FORTRAN programming, etc., and Mathcad, Office, image processing,

EXPERIENCE:

Research Assistant, Brigham Young University, 2000.8-present

- Successfully finished DOE project 'Fundamental Investigation of Fuel Transformations in Combustion and Gasification Technologies''.
- Designed and built high-pressure flat-flame burner (Optimized Honeycomb Burner) and automatic

control system, performed burner test, coal pyrolysis, char high-temperature oxidation, and char TGA oxidation experiments.

 Analyzed sample including techniques: elemental composition. ICP, BET surface area, SEM and image processing.

 Preformed CFD analysis of furnace using Fluent, kinetic analysis (Chemkin), modeled coal pyrolysis, char oxidation process, optimized coal combustion model code.

 Composed technical reports, papers, gave presentations in symposium; trained undergraduates as assistants; assisted class teaching, tutored students, TA for combustion modeling course.

Project Engineer, 1999.4-2000.6

- Planed and leaded renovation projects of several power plants. Be familiar with power plant.
- Control project budget, execution, field service, system test, project closeout, further customer support.
- Prepared technical documents and gave presentations to customers, supported sales in business negotiation.

Research Assistant, Southeast University, 1996.9-1999.4

- Designed and built a plug flow furnace with a gas-fired burner, and an electronic heating system.

- Conducted coal, petroleum-coke combustion experiments, measured gas emission using FTIR, analyzed

NOx/N2O emission mechanisms of combustion process in fluid bed condition

(medium temperature) and plug flow Reactor condition (high temperature).

- Modeled NOx emission process of coal combustion, worked in power plant to collect combustion samples.

Interns, 1995.11-1996.1, 1994.11-1995.1

- Operated two industrial heating furnaces. Have industrial management experience.

Undergraduate, East China Institute of Metallurgy, 1992.9-1996.7

Joined a project of CFD simulation of coal-fired burner design, used AutoCAD to design burner parts.
 Was student body leader, actively organize activity, community service.

SELECTED PUBLICATIONS (PEER-REVIEWED):

 Zeng, D., T. H. Fletcher, "The Effect of Pressure on Coal Pyrolysis and Char Morphology," accepted by Energy and Fuels.

 Zeng, D., M. Clark, T. Gunderson, W. C. Hecker, and T. H. Fletcher, "Swelling Properties and Intrinsic Reactivities of Coal Chars Produced at Elevated Pressures and High Heating Rates" *Proc. Comb. Inst.* 2004, 30, 2213-2221.

 Zeng D., S.Z Zheng., S. Cai, "Study on N₂O Formation in Coal Fired- Fluidized Bed, Thermal Power Generation, 2000, 175, 17-19.

- Zeng D., S.Z Zheng, J.H. Chao, S. Cai, "Study on Properties of NO Reduction by Coal Reburning in EFR, Environmental Science, 1999, 20, 67-70.

- Zeng, D., S.Z. Zheng, S. Cai, "Chars' Properties & Influence on Char-N N₂O Conversion", J. of Eng. for Thermal and Power, 1998, 13, 429-431.

- Cao J.H., Zeng D., "The Stabilization of Magnetic FBC", Journal of Chemical Industry and Engineering, 1999, 50, 786-791.

REFERENCE:

Dr. Thomas H. Fletcher

- Dr. William C. Hecker

- Mr. Guobin Lan

(Professor at BYU)

(Professor at BYU)

(Vice General Manager, Jinzhi Company)

Detailed contact of reference will be provided via requested.

355 CHERRY LANE PROVO, UT 84604 PHONE (801) 310-7514 • E-MAIL SAMGOODRICH@GMAIL.COM

SAMUEL SCOTT GOODRICH

OBJECTIVE

		~~
To gain some experience and save mone EDUCATION	ey to continue my studies at Brigham Yo	bung University.
Brigham Voung University BS (Themical Engineering	Provo UT
-Estimated Graduation April 2010	GPA 3.4/40	11000, 01
Mountain View High School	Jun. 2004 GPA 3.45	Bend, OR
WORK EXPERIENCE		
IdaTech LLC	June 2008-August 2008	Bend, OR
Intern		
 Helped develop methods for minu 	tely measuring specific gravity difference	es of methanol and water
 Installed the electrical systems on a 	a tactical fuel cell generator for the milita	ary
 Repaired and ran a stand-alone design 	sulfurization module to provide fuel for	the tactical generator
IdaTech LLC	April 2007-August 2007	Bend, OR
Intern		
 Helped develop the iGen system; system 	a propane steam reforming, hydrogen p	urification and fuel cell integrated
 Helped design the reactor and bu Field Point Modules to be able to 	ilt the various test systems including sat run LabView	fety procedures and wiring up the
IdaTech LLC	Jan. 2005-March 2005	Bend, OR
Intern		
 Built reactors for a new method o by doing it myself in the lab and sl 	f steam reforming diesel saving the com nop instead of having each of the parts l	npany tens of thousands of dollar aser cut
Abel Fire Equipment	Jun. 2004 – Aug. 2004	Diamond Springs, CA
Camp Equipment Manager		
 Coordinated 3 other employees in crews 	n providing laundry, shower, kitchen, g	generator, and tent service to fire
 Repaired systems and helped build 	l new portable service systems	
 Drove water trucks and maintained 	d the portable shower, laundry and kitch	en units with water
L. Scott Goodrich Construction	Jun. 2003 – Sep. 2003	Bend, OR
Construction Worker	5 1	,
SKILLS		
Portuguese-Read, write and speak	MathCAD Photoshop	
AWARDS RECEIVED		
Eagle Scout Award		
 National Honor Society Scholars 	hip Jun. 2004	
VOLUNTEER WORK		
Ministering Representative, The ChuPrepared and taught up to 12 less	rch of Jesus Christ of Latter Day Saints : sons daily in Portuguese	in São Paulo, Brazil 2 Years
 Conducted weekly training meeti 	ngs and trained 20 other volunteers	
Humanitarian Volunteer, MozambioConducted math and science class	que ses in Portuguese to 80 students attendir	2 Months ng Teacher's College
 Taught English at One World Un 	iversity to 40 students	-
 Handed out thousands of information 	ation pamphlets on AIDS and HIV in lo	cal neighborhoods
 Taught Economics to six different 	t classes of 40 students each at a local hi	gh school

EMILY S. NELSEN

Permanent Address: 1969 Meadow Dr., SLC, UT 84121 Local Address: 745 N 100 E B106, Provo, UT 84606

EDUCATION:

Chemical Engineering, Brigham Young University, Provo, Utah Class standing: Junior GPA: 3.87/4.0 scale

2007-2011

Summer 2009

July 2008

Cell Phone: (801)-831-3018

Home Phone: (801)-944-5476 emilynelsen@gmail.com

WORK EXPERIENCE:

Nanotechnology Research Assistant, Brigham Young University January 2008-present

- Documenting group outreach program activities to local public schools
- Prepared SiO₂ surfaces using polymer chemistry to attach nanocircuits
- Co-authored a technical paper published by *Langmuir* (American Chemical Society publication)

Biochemical Fellowship, American Heart Association, WSA

- Isolated heparan sulfate precursor (a biological molecule) from E. coli bacteria
- Organized efficient schedule to produce two 20 L cultures of E. coli weekly
- Increased large scale production of HS precursor by 400% over 10 weeks

Research Collaborator, Berlin, Germany

- Traveled to Germany to collaborate with Dr. Helmut Schlaad at *Max-Planck Institute of Colloids and Interfaces*
- Advanced research of SiO₂ surface modification by learning polymer synthesis
- Executed research that led to the publication of a technical paper

Department Chair Assistant, Chemical Engineering Dept. Oct 2007-Aug 2008

- Provided inter-department information through bimonthly news letters
- Compiled and analyzed data for Dr. Richard Rowley's (Dept. Chair) research group
- Organized and assembled the department faculty and staff hall display

SERVICE:

Service Committee Chair, BYU Chapter of AIChE April 2009-present

- Organize AIChE service that helps the community, schools, and other BYU students
- Meet weekly with the AIChE presidency and council to discuss BYU AIChE events

Chemistry Tutor, Tutor Outreach to Provo Schools September 2007-April 2009

• Help improve students' grades and conceptual understanding by offering individual help on chemistry homework

Mentor, MSM Mentoring September 2007- present
 Spend one afternoon a week with sixth graders, encouraging the decision to participate in higher level education

HONORS:

Heritage Scholarship, Brigham Young University	2007-2011		
• Recipient of 8 semesters of full tuition at BYU			
Electronics for Imaging Scholarship, Society of Women Engineers	September 2008		
• Awarded \$4,000 for academic achievements and involvement in school and the			
community			
Outstanding Freshman and Sophomore Award, ChemE Dept. April 2008, 200			
Recognized for outstanding academic performance			
Undergraduate Research Grant, Biochemistry and Chemistry Dept.	Spring 2009		
• Granted \$1,500 to help further undergraduate research interests in the chemistry field			