Curriculum Vita

ROCHEFORT, Willie E. (Skip)
Associate Professor of Chemical Engineering
Director, OSU and College of Engineering Pre-college K-12 Outreach Programs

DEGREES

B.S., Chemical Engineering, University of Massachusetts, 1976
M.S., Chemical Engineering, Northwestern University, 1978
Ph.D., Chemical Engineering, University of California at San Diego, 1986

ACADEMIC POSITIONS

Research Assistant, Chemical Engineering Department, University of Massachusetts, 1975-1976
Teaching and Research Assistant, Chemical Engineering Department, Northwestern University, 1976-1978
Teaching and Research Assistant, Department of Applied Mechanics and Engineering Sciences, University of California at San Diego, 1981-1986
ChE Undergraduate Laboratory Instructor, Department of Applied Mechanics and Engineering Sciences, University of California at San Diego, 1982-1986
NSF Postdoctoral Research Fellow, Ecole Superieure de Physique et Chimie (ESPCI), Laboratoire d'Hydrodynamique et Mecanique Physique, Paris, France, 1986-1987
ChE Undergraduate Laboratory Instructor, Chemical Engineering Department, University of California at Santa Barbara, 1987-1988
Postoctoral Research Associate, Chemical Engineering Department, University of California at Santa Barbara, 1988-1989
Staff Research Engineer, Chemical Engineering Department, University of California at Santa Barbara, 1989-1990
Instructor (part-time), Chemistry Department, San Francisco State University, 1992
Associate Professor (tenure track), Department of Chemical Engineering, Oregon State University, 1993-1999
Honors College Faculty, Oregon State University Honors College, 1997-present
Associate Professor (tenured), Department of Chemical Engineering, Oregon State University, 1999
Director, OSU Pre-college K-12 Outreach Programs 2003 - 2013
Director, COE Pre-college K-12 Outreach, 2005 – present
Executive Director, OSU Precollege K-12 Outreach Programs, 2013 - present

NON-ACADEMIC POSITIONS

- *Polymer Engineer*, Kodak Apparatus Division, Rochester, New York, 1976 (summer)
- *Member of Technical Staff*, AT&T Bell Laboratories, Murray Hill, NJ, 1979 - 1981
- *Senior Research Engineer*, Dow Chemical Research Center, Walnut Creek, CA, 1990 - 1992
- *Project Leader*, Dow Chemical Research Center, Walnut Creek, CA, 1992 - 1993

Consultant

Patent Litigation – polymer expert witness, 1990 - present
AMTEK, Lebanon, OR 1999 – present
NIKE IHM, Beaverton, OR 2000 – present
Timberline Tool, Whitefish Montana, 2002 – present

FIELDS OF SPECIALIZATION

Polymer and Biomaterials – Rheological, Thermal, and Molecular Characterization
Non-Newtonian Fluid Mechanics (Gels, Colloids and Rheologically Complex Systems)
Polymer Processing (Liquid Crystal Polymers; Composites; Recycled Plastics)
Undergraduate Engineering Education and K-12 Science Curriculum Development

Awards and Nominations

2014 Saturday Academy Creativity in Education Award
2013 Undergraduate Research Mentor of the Year
2012 National AIChE Student Chapter Advisor of the Year
2012 OSU Honors College Eminent Professor Award
2011 Fellow, American Institute of Chemical Engineers
2010 OSU University Outreach and Engagement Award
2009 UHC Outstanding Senior Thesis Mentor
2008 UHC Outstanding Professor - Nomination
2007 OSU Mortar Board Top Professor Award
2005 Loren D. McKinley Science Educator Award
2004 OSU Dar Reese Excellence in Advising Award
2004 College of Engineering Austin-Paul Faculty Advising Award
2002 OSU Honors College Outstanding Faculty – Honorable Mention
1999 ASEE Dean's Teaching Award (Pacific Northwest Section)
1999 Finalist – Corvallis Chamber of Commerce Outstanding Educator Award
1998 National AIChE Student Chapter Advisor of the Year
1998 ASEE Dow Outstanding New Faculty Award (Pacific Northwest Section)
1998 OSU Greek Community Outstanding Professor Award
1997 University Faculty Advisor of the Year (ASOSU)
1996 Loyd Carter Award – OSU College of Engineering Outstanding Teacher
1996 OSU Nominee for Henry Dreyfus Teacher-Scholar Award Competition
1986 NSF Post-Doctoral Fellowship: U.S.-France Exchange for Scientists and Engineers

Graduate, Undergraduate and High School Student Research and Training

Graduate Students

Changyong (Lance) Kim, M.S. ChE, 1995
Abed Al-Amri, M.S.ChE, 1995
Hardeepak (Happy) S. Gill, M.S. ChE, 1996
Charles Lind, M.S., Washington State University, 1996 (co-advisor for thesis work at OSU)
Zafar Malik, M.S. ChE, 1997
Manish Giri, M.S. ChE, 1998
Shih-Wei Ho, M.S. ChE, 1998
Dai-Wei (David) Yu, M.S. ChE, 1998
Bin Xu, M.S. ChE, 1999
Dick Caseli, M.S. Materials Science, 1999
David Gaibler, M.S. ChE, 2001
Brian Jones, M.S. ChE, 2001
Yorick Wauhaus, M.S. ChE, 2001
Brandon Barrett, M.S. ChE, 2001
Diana Djokoto, M.S. ChE, 2003
John Hunt, M.S. ChE, 2003
Cheryl Carbone, M.S. Materials Science, 2004
Danielle Leiske, M.S. ChE, 2004
Jim Kearns, M.S. Materials Science, 2004
Abigail Kimerling, Ph.D. Chemical Engineering - UMass, Amherst (August, 2006)
Rebecca Bader, Ph.D. Materials Science (December, 2006)

Kevin Harris, M.S. ChE (June 2007)
Sara Tracy, M.S. ChE (June, 2008)
Jan Trenkel, M.S. Materials Science (December, 2008)
Dan Foster, M.Eng ChE (June, 2011)
Nathan Kolibaba, M.Eng ChE (March, 2013) (co-advisor)
Nicholas Kraaz, MS (expected June 2014)

University Honors College Theses **(1999 – present)**
Dan Euhus, UHC, 1999
Eric Davis, UHC, 1999
Eric MacKender, UHC 2000 (co-advisor with Milo Koretsky)
Kristi Keefe, UHC, 2002
Eric Mock, UHC, 2003
Neil Geisler, UHC, 2004
Wyatt Tenhauff, UHC, 2004 (co-advisor with Milo Koretsky)
Rachel Hinton, UHC, 2004
Heidi Schmidt, UHC Senior Thesis, 2005
Katie Wiegandt, UHC Senior Thesis, 2005
Hannah Tuinstra, UHC Senior Thesis, 2006
Emily Lahman , UHC Senior Thesis (Ag Economics), 2006 (co-advisor with David Hackleman)
Nick Boehm, UHC Senior Thesis, 2007
Kelly Perry, UHC Senior Thesis, 2007
Kari Varin, UHC Senior Thesis, 2009
Paul Dornath, UHC Senior Thesis, 2010
Sara Varin, UHC Senior Thesis, 2011
Audrey Oldenkamp, UHC Senior Thesis, 2014

UHC Senior Thesis Committees
Dan Braman, UHC, 2000 (co-advisor with Goran Jovanovic)
Rick Osburn, UHC, 2000 (co-advisor with Goran Jovanovic)
Brandon Barrett, UHC 2000
Yosuke Yamamoto (2003)
Warren Gray (2009)
Anna Putnam (2009)
Marsha Lampi- UHC, 2012
Josh Breen, UHC, 2013

Current UHC Senior Thesis Mentorships
Vanessa Kung, expected June 2014
Nathan Hinkle, expected June 2015 (MECOP)

Senior Projects
Josh Ellis, BioE Senior project, 2003
Ryan Kubota, BioE Senior Project, 2004
Sara Tracy, ChE Senior Project, 2006
Staci Van Norman, Senior Project, 2010

Undergraduate Research (1999- present) **(HHMI, URISC, SBI funding in bold)**

Jason Hower (’99 –‘02), Kevin Harris (’99-02), Erik Meuhlenkamp (’99-01), Kwame Adom (’99-’02), Szabolcs Farkas (’00-’02), Raz Ali (’01), **Neil Geisler (’01, HHMI),** Cory Rogers (’01), Janelle Mangini (’01-’02), Asrar Mohammed (’02), Tarek Fadel (’02), Danielle Leiske (’02, HHMI), **Sara Tracy (’04-’05, HHMI and URISC)**, Chandra Corley, (’04), Virginia McMakin (‘04), Julie Meloy (’04), Alex Cook (’05), Beth Beaudry (’05), Tesia Dobrydnia (’05), Paul Pierogovski (’05), **Elizabeth Spencer (’05, HHMI)**, Matthew Crews (’05), Katherine Volmert (Cornell, ’05), Kari Varin (’06), Colette Griffith (’06), **Staci Van Norman (’06 – ’10, Intel WME ’08, Native American ‘09)**, Kelsey Childress (’07), Trevor Chart (’07), Kayla Pierson (’06, ’07 Johnson), **Paul Dornath (’06 – ’10, HHMI ’08, SBI ‘09)**, Alia Mulder-Rosi (’07), **Nikki Buck (UC-Berkeley HHMI ’08), Haley Thompson (Princeton HHMI ’08)**, **Brian Mahoney (SBI ‘09),** Ian Braly (Johnson ’08), Birdie Cicarelli (’08), Mike Knapp (’08), **TJ McDonald (BEST ’08)**, Nikole Wilkins (MIME ’08), Coralie Backlund (’08), Christa Rose (UC-Davis ’08), **Nick Kraaz (’09-’12, SBI ‘11)**, Jenny Lauder (’09-‘10), **Marsha Lampi (URISC and HHMI 2009)**, Marshall Lake (Johnson ’10, ‘11), Elyssa Trejoe (Johnson, ’10 – ‘12), **Shannon Cahill-Weisner (HHMI 2010),** Audrey Oldenkamp (’10-‘12), Tara Krishnan (’09-‘11), Jessica McKiernan (’10), Rose Felber (’10), Stephanie Silliman (CMU, SBI ’10), Alex Vian (’11), **Monica Kolinska (URISC and HHMI 2011), Camille Violet (HHMI and Johnson 2011),** Nick Agalzoff (Johnson 2012), Kaylee Duchateau (Johnson 2012), Kayla Al-Khaledy (Johnson 2012), Vanessa Kung (UHC, 2012), Mikayla Koeltzow (2012), Audrey Oldenkamp (UHC, 2012), **Nathan Hinkle (URISC, 2012), Stephanie Walker (URISC 2013),** Curran Gahan (2013), **Regan Cronin (2013 Intel WME)**

HS Student Research: Jason Hower (’98-’99) Adam Welander (’99-’01), Jamie Bergen (’99), Annie Gai (’00-‘01), Hai Le (’01-’02), Meghaan Smith (’01-’02), Kira Elsasser (’01-’02), Erica Zaworski (’04), Neil Lakin (Oregon Episcopal ’04), Paul Dornath (Benson HS ’05), Kyle McVay (McKay HS ’07), Christa Rose (CVHS ’07), Coralie Backlund (CHS ’07), Alia Mulder-Rosi (PHS ’09), Tara Krishnan (CHS ’08, ‘09), Laura Beaudry (CVHS ’08, ‘09), Marshall Falk (PHS, ’09), Jenna Browning-Kamins (PHS ’09), Jessica McKiernan (PHS ‘09), Talia Helman (Silverton HS, ’12), Jolynn Meza Wynkoop (West Albany HS ’12), Alisson Lind (CVHS ’13), Heidi Oldenkamp (Canby HS, ’13), Claire Rodman (CHS, ’13), Gabby Fief (West Albany, ’13)

ASE HS Students: Jason Hower (’97), Adam Welander (’98), Annie Gai (’99), Hai Le (’00), Tim Cooke (’01), Stephanie Hobbs (’01); six High School students in summer 2002; seven HS students in summer 2003; eleven HS students in summer 2004; seven HS students in summer 2005; Sara Varin (Thurston HS ’06), Megan Blass (CVHS ’06), Tara Krishnan (CHS ’07), Jessica McKiernan (PHS ’08), Monique Handloser (PHS ‘08), Jamie Clark (CHS ’08), Audrey Oldenkamp (Canby HS ’09), Rose Felber (PHS ’09), Shannon Cahill-Weisner (Home School,’09), Talia Helman (Silverton HS ’10), Alejandra Gonzalaz (Corvallis HS ’10), Jolyn Meza-Wynkoop (West Albany HS ’10), Katherine Banowitz (CVHS, ’11), Neda Kazerouni (CVHS, ‘11), Courtney Fisher (CVHS, ‘11), Molli Trejo (CVHS, ‘14), Heidi Oldenkamp (Canby HS, ‘12), Allison Lind (CVHS, ‘12), Emma Brazell (CVHS, ‘15), Marisa Thierheimer (CVHS, ’14), Risha Prasad (CVHS, ’14), Dylan Wirth (West Albany HS, ’15)

K-20 Outreach Activities

• Executive Director, OSU Precollege K-12 Programs (2013 – present)
• Director, OSU Precollege K-12 Programs (2003 – 2013)
• Director, COE Precollege K-12 Programs (2005 – present)

Summer Experience in Science and Engineering for Youth (SESEY)
• co-director (with Christine Kelly, BioE) and founder of the program.
• $31,000 funding from *Dreyfus Foundation* and *OSU Pre-College Programs*
• Summer research program for women and minorities underrepresented in science and engineering.
• **1997** - 24 High School participants (19 girls, 5 boys) and one HS science teacher.
• **1998** - 21 High School participants (19 girls, 2 boys).
• **1999** - 25 High School participants (19 girls, 6 boys)
• **2000** - 24 High School participants (19 girls, 5 boys)
• 2001 – 26 High School Participants (21 girls, 5 boys)
• 2002 – 35 High School Participants (29 girls, 6 boys)
• 2003 – 26 High School Students (19 girls, 7 boys) and one HS math teacher
• 2004 – 40 High School Students (34 girls, 6 boys)
• 2005 – 36 High School Students (28 girls, 8 boys)
• 2006 – 46 High School Students (38 girls, 8 boys)
• 2007 – 53 High School Students (42 girls, 11 boys)
• 2008 – 47 High School Students (36 girls, 12 boys)
• 2009 – 61 High School Students (48 girls, 13 boys)
• 2010 – 61 High School Students (49 girls, 12 boys)
• 2011 – 41 High School Students (31 girls, 10 boys)
• 2012 – 52 High School Students (41 girls, 11 boys)
• 2013 – 63 High School Students (52 girls, 11 boys)
Total Participants = 681 HS Students

Saturday Academy E-Camp – Middle School Engineering Camp
- co-founder (with Ellen Ford) and camp director
• 2003 - 2013: One week summer camp for 24 MS students

SKIES – Spirited Kids in Engineering and Science
- co-founder (with Karen Swanger, KidSpirit) and director
• 2003 – 2013: 10 week K-5 summer camp for 40 students per week**.**

Apprenticeships in Science and Engineering (ASE) for High School Students (8 week research program)
• 1997- $2500 from *NYPRO Oregon* to fund high school student (Jason Hower, Corvallis High School)
• **1998** - $2500 from *NASA Space Grant Program* (Adam Welander, Central High School, Independence, OR)
• **1999** - $2500 from *NASA Space Grant Program* (Annie Gai, Sheldon High School, Eugene, OR)
• **2000** - $2500 from *NASA Space Grant Program* (Hai Le, McKay High School, OR)
• **2001** - $5400 from *NASA Space Grant Program* and *Amtek LLC (*Stephanie King, Newport HS & Tim Cook)
• 2002 – Six (6) High School students; HHMI, Space Grant, ETIC funding
• 2003 – Seven (7) High School Students; HHMI, Space Grant, ETIC, Hewlett Foundation
• 2004 – Eleven (11) High School Students; HHMI, Space Grant, ETIC, Hewlett Foundation
• 2005 – Seven (7) High School Students; HHMI, Space Grant, ETIC, Hewlett Foundation

• **2006** – Two (2) High School Students; ETIC
• **2007** – One (1) High School Student; ETIC
• **2007** – Three (3) High School Students, PCP Funds
• **2008** – Three (3) High School Students, PCP Funds
• **2009** – Three (3) High School Students, PCP Funds
• **2010** – Three (3) High School Students, Saturday Academy Portland ETIC Funds
• **2011** – Four (4) High School Students, Saturday Academy Portland ETIC Funds and PCP Funds
• **2012** – Three (3) High School Students, Saturday Academy Portland ETIC Funds and PCP Funds
• **2013** – Three (3) High School Students, Saturday Academy Portland ETIC Funds and PCP Funds

• **Midsummer Conference** -- Workshop on "Plastics in Daily Life" (July 1996 through 2011)
• **Midsummer Conference** ('05 – '09) Plenary Lecture *"The What, Where, How, and Why of Choosing a College"*
• **Year-End Conference** -- Chairperson of Technical Sessions (August '96 through '10)
• ***Intel Northwest High School Science Expo*** (1997, 2001 – 2011, Head Judge, Engineering)
• ***Intel International Science and Engineering Fair*** **(ISEF)** (Head Judge, Engineering, 2004 - 09)
• ***Intel International Science and Engineering Fair*** **(ISEF)** (OSU Special Awards Judge, 2004-09)

Service Activities – Oregon State University

School of CBEE

• First Year Student Advisor, September 2005 – present
• Johnson Scholars and Interns, Program Coordinator, 2004 – present
• Undergraduate Curriculum Committee (1994 - present)
• CBEE Scholarship Committee (1994 - present)
• Head Academic Advisor, March 2003 – September 2005
• AIChE Student Chapter (CBEE Student Club) Advisor (1993 – present)
• CBEE High School Outreach Coordinator (1994 - present)
- Beaver Open House (1993 - present); Kaleidoscope Minorities Program ('96 - '05)
• Graduate Admissions Committee (9/93 - 6/95)
• Coordinator of Undergraduate Laboratory Improvement Funding Campaign (1996-98)

College of Engineering

• Task force for the revision of *Introduction to Engineering Curriculum* (summer, 1995)
• Initiator and coordinator of *COE Freshman Poster Competition* (1995)
• COE Awards and Recognition Committee ('97, '98)
• COE Diversity Committee (2004-06)
• COE Women and Minorities in Engineering Ambassadors (Faculty Advisor 2004 - present)
• Director, Center for Outreach in Science and Engineering for Youth (COSEY) Fall 2005- present)

University

• Honors College Faculty (1997 – present)
• University Student Awards and Recognition Committee (1996 – 1998, 2007-2009)
- Chairperson - '96, '97, '98, '09 Waldo-Cummings Sophomore Academic Excellence Award
• OSU Precollege Programs Advisory Board (Shirley Lucas, Chairperson) (1997- 2003)
• Director, OSU Precollege Programs (2003- 2013);
• Executive Director, OSU Precollege Programs (2013-present)

Professional Societies

American Institute of Chemical Engineers (AIChE)

• OSU AIChE Student Chapter Advisor, 1993 – present
• AIChE National Student Chem-E Car Competition – Chair, Rules Committee ('97- present)
• Student Chapters Committee (SCC) -- AIChE National ('97 – present)
- SCC Executive Committee 2007-2011, Chair 2009-10
• AIChE Pacific Northwest Regional Liason (1997- present)
• Oregon Section AIChE -- Executive Committee ('93 – '03), Chair '03-'08

Technical Association of the Pulp and Paper Industry (TAPPI)

• OSU TAPPI Student Chapter Advisor, 1993 - present
• Pacific Section TAPPI-- OSU Representative on Executive Committee, 1993 - present

American Society of Engineering Education (ASEE), 1993 - present

• Chemical Engineering Division; Freshman Engineering Programs

American Chemical Society (ACS), 1993 - present

Society of Rheology, 1976 – present; *2007 AIP Liaison Committee on Underrepresented Minorities*

Journal Reviewer: AIChE Journal; Journal of Rheology; Macromolecules; Polymer; Journal of Polymer Science; Polymer Engineering and Science.

NSF Course and Curriculm Development Review Panel

• June '95, July '96, July '97 (Panel Chairperson)

NSF SBIR Review Panel – Sustainable Energy and Materials (2006, 2007, 2009, 2010)

PUBLICATIONS (*indicates principle author(s))

Technical Journals

W.E. Rochefort*, G.G. Smith, H. Rachapudy, V.R. Raju, and W.W. Graessley, "Properties of Amorphous and Crystallizable Hydrocarbon Polymers, II. Rheology of Linear and Star-Branched Polybutadiene," *J. Polymer Science: Polymer Physics Ed*., **17**, 1197 (1979)

C.M. Vrentas*, W.E. Rochefort*, G.G. Smith, and W.W. Graessley, "Comparison of Eccentric Rotating Disk and Oscillatory Measurements of Dynamic Moduli in Polymer Liquids," *Polymer Eng. and Science*, **21** (5), 285 (1981)

Dale S. Pearson*, Ann Mera, and Willie E. Rochefort, "Concentration Dependence of the Viscosity of Polyisoprene Solutions," *ACS Polymer Preprints*, **22** (1), 102 (1981)

Dale S. Pearson* and Willie E. Rochefort*, "Behavior of Concentrated Polystyrene Solutions in Large-Amplitude Oscillatory Shear Fields," *J. Polymer Science: Polymer Physics Ed.*, **20**, 83 (1982)

W.E. Rochefort*, S. Middleman, and P.C. Chau*, "An Innovative Chemical Engineering Process Laboratory," *Chemical Engineering Education*, **19** (3), 150 (1985)

Willie E. Rochefort* and Stanley Middleman, "Effect of Molecular Configuration on Xanthan Gum Drag Reduction" *AIP Proc: Polymer-Flow Interactions*, Y. Rabin, Ed., **137**, 117 (1985)

W.E. Rochefort*, T. Rehg, and P.C. Chau, "Trivalent Cation Stabilization of Alginate Gel for Cell Immobilization," *Biotechnology Letters*, **8**, 115 (1986)

Willie E. Rochefort* and Stanley Middleman, "Rheology of Xanthan Gum: Salt, Temperature, and Strain Effects in Oscillatory and Steady Shear Experiments," *J. Rheology*, **31** (4), 337 (1987)

Willie E. Rochefort* and Stanley Middleman, "Relationship Between Rheological Behavior and Drag Reduction for Dilute Xanthan Gum Solutions," *Drag Reduction in Fluid Flows: Techniques for Friction Control*, Sellin and Moses, Ed., p. 69, Ellis Horwood Publishers (1989)

W.E. Rochefort*, R. McHugh, and S. Middleman, "Xanthan Gum Drag Reduction in a Recirculating Flow Loop: Multiple Pass Stability Studies," *Drag Reduction in Fluid Flows: Techniques for Friction Control*, Sellin and Moses, Ed., p.319, Ellis Horwood Publishers (1989)

W.E. Rochefort*, G.W. Heffner, D.S. Pearson, R.D. Miller, and P. Cotts, "Rheological and Rheooptical Studies of Poly (alkylsilanes)," *Macromolecules*, **24**, 4861 (1991).

B. Ernst*, M. M. Denn, P. E. Pierini, and W. E. Rochefort, "Rheological Properties of Liquid Crystalline Solutions of cis-poly(p-phenylenebenzobisoxazole) in Polyphosphoric Acid (PBO/PPA)," *J. Rheology*, **36** (2), 289 (1992)

A. Greiner*, W.E. Rochefort, K. Greiner, H-W Schmidt, and D.S. Pearson, "Formation of Thermoreversible Gels from Liquid Crystalline Polyesters," *Makromol. Chem., Rapid Commun.*, **13**, 25 (1992)

M.-R. Fuh and W.E. Rochefort*, "Analysis of Residual Phosphorous in PBO Film by X-Ray Fluorescence Spectroscopy," *TALANTA*, **41** (12), 2087-2090 (1994)

P. Mather*, N. Grizzuti, G. Heffner, M. Ricker, W.E. Rochefort, M. Seitz, H.-W. Schmidt, and D.S. Pearson, "Synthesis and Characterization of a Semiflexible Liquid Crystalline Polyester with a Broad Nematic Region," *Liquid Crystals*, **17** (6), 811-826 (1995)

G.W. Heffner*, W.E. Rochefort*, and D.S. Pearson, "Characterization of Poly(3-octylthiophene) II. Melt Rheological Characterization," *Polymer Engineering and Science*, **35**, 868 (1995)

D. Roitman*, R. Janek, J. McAlister, R. Wessling, W.E. Rochefort*, "Rigid Rods or Semiflexible Chains? A Comparitive Study of the Solution Behavio of cis-PBO and trans-PBT in Methanesulsonic Acid (MSA)," *Bulletin of the American Physical Society*, **40**, 289 (1995)

Andreas Greiner* and Willie E. Rochefort*, "Thermoreversible Gelation of Rigid Rod-Like and Semirigid Polymers," *Mechanical and Thermophysical Properties of Polymer Liquid Crystals*, Chapter 14, W. Brostow, ed., Chapman and Hall Publishers (1996)

Bin Xu*, John Simonsen, and W.E. Skip Rochefort, "Mechanical Properties and Creep Resistence in Polystyrene/High Density Polyethylene Blends," *Journal of Applied Polymer Science* , **76**, 1100-1108 (2000)

Bin Xu*, John Simonsen, and W.E. Skip Rochefort, "Creep Resistance of Wood-filled Polystyrene/High Density Polyethylene Blends," *Journal of Applied Polymer Science* (accepted December, 1999)

Manish Giri*, John Simonsen, and W.E. Skip Rochefort, "Dispersion of Pulp Slurries Using Carboxy Methyl Cellulose," *TAPPI Journal* (accepted, December 1999)

Chang*, Koretsky, Kimura, Hackleman, Rochefort , "Microlelectronics Processing in the Undergraduate ChE Laboratory", Chemical Engineering Education (summer 2003).

Rebecca Bader* and W.E. Rochefort, "Rheological Characterization of Photopolymerized Poly(vinyl alcohols) for use in nucleus pulposus replacement, *Journal of Biomedical Materials Research, Part A*, Vol.86, pp. 494-501, 2008

Valmikanathan P. Onbattuvelli, Willie E. Rochefort, John Simonsen, Seong-Jin Park, Randall M. German, and Sundar V. Atre, "Studies on the Thermal Stability and Degradation Kinetics of Pd/PC Nanocomposites", *J. Applied Polymer Sci.*, vol.118, issue 6, pg. 3602-3611, 2010

Andrew Freeman, Glenn Buttermann, Brian Beaubien, and Willie Rochefort, "Compressive Properties of Nucleus, Annulus, and Fibrous Repair Tissue", *J. Biomechanics 2013*

Conference Proceedings (reviewed)

Milo Koretsky*, W.E. Skip Rochefort*, and William F. Reiter, "An Interdisciplinary Laboratory for Printed Circuit Board Design and Manufacturing," *Proceedings of the ASEE National Meeting*, Milwaukee, WI, Session 2613, June 1997

W.E. Skip Rochefort, "A Traditional Material Balances Course Sprinkled with "Non-Traditional" Experiences," *Proceedings of the ASEE National Meeting*, Seattle, WA, Session 1313, June 1998

W.E. Skip Rochefort, "Leadership and Mentoring in Undergraduate Engineering Programs," *Proceedings of the ASEE National Meeting*, Seattle, WA, Session 2213, June 1998

W.E. Skip Rochefort* and Michelle Bothwell, "Recruitment and Advising of High School Students for Non-Traditional" Groups," *Proceedings of the ASEE National Meeting*, Seattle, WA, Session 3213, June 1998

ASEE National Meeting (Nashville, June 2003)

• "Microlelectronics Processing in the Undergraduate ChE Laboratory" Koretsky (presenter), Chang, Kimura, Hackleman, Rochefort,

• "OSU GK-12 Program for the Delivery of Science Content to Oregon Schools" Rochefort (presenter), Arp. Haak, Lytton

AIChE National Meeting (San Francisco, November, 2003)

• "Microlelectronics Processing in the Undergraduate ChE Laboratory", Chang (presenter), Koretsky, Kimura, Hackleman, Rochefort

ASEE National (Salt Lake City,Utah June 2004)

• " Everything I know I learned in Kindergarten: Synergisms between K-12 Outreach and Recruitment and Retention of Women in Engineering", Rochefort (presenter), Levien, Momsen and Ford

• K-12 Outreach Initiatives, K-12 Division (Session Moderator)

ASEE National (Portland, OR June 2005)

• "Use of Wireless Laptops to Enhance a First-Year Engineering Orientation Course", Rochefort (presenter) and Levien

• ChE Division Local Arrangements Chair

ASEE National (Vancouver, Canada, June 2011)

• ***Special Session: New and Evolving Cultures in Chemical Engineering Departments***

"The Integration of Chemical, Biological, and Environmental Engineering B.S. Degree Programs into a Cohesive School", Rochefort and Levien (accepted)

• ***Special Session: What Works to Retain Students in Chemical Engineering Programs***

"Recruiting and Retaining Students in Chemical Engineering Through First Year Experience Courses, First Year Student Research Experiences, and K-12 Outreach Activities", Rochefort and Levien (accepted)

• ***Special Session: The Impact of the Gulf Coast Oil Spill on Chemical Engineering Education***

"Gulf Coast Oil Spill Clean-up Technologies Using Absorbent Materials"
Stephanie E. Silliman, Audrey G. Oldenkamp, and Dr. Skip Rochefort (accepted)

Orthopedic Research Society (ORS) 56th Annual Meeting, March, 2020, New Orleans, LA
"Compressive Properties of Nucleus, Annulus, and Fibrous Repair Tissue"
Andrew Freeman (1); Glenn Buttermann (2); Brian Beaubien (3); Willie Rochefort (4)
Institutions: 1. Biomechanics, Excelen, Minneapolis, MN, USA. 2. Surgery, Midwest Spine Institute, Stillwater, MN, USA. 3. Development, Zyga Spine, Minneapolis, MN, USA. 4. Chemical Engineering Department, Oregon State University, Corvallis, OR, USA.

PATENTS

R.H. Bowman, W.E. Rochefort, M.-B. Liu, and P.E. Pierini, "Process for Coagulating, Washing, and Leaching of Shaped Polybenzazole Articles," U.S. Patent 5,292,469 (March 8, 1994)

L. Reddy, W.E. Rochefort, M.-B. Liu, and P.E. Pierini, "Convective Leaching of Polybenzazole Films," U.S. Patent 5,292,470 (March 8, 1994)

P.E. Pierini, R.H. Bowman, W.E. Rochefort, and M.-B. Liu, "Process for Coagulating and Washing Lyotropic Polybenzazole Films," U.S. Patent 5,302,334 (March 12, 1994)

Y. So, S.J. Martin, C. Chau, R.A. Wessling, A. Sen, K. Katsuhiko, D.B. Roitman, and W.E. Rochefort, "Polybenzazole Fibers Having Improved Tensile Strength Retention," U.S. Patent 5,552,221 (September 3, 1996)

Willie E. Rochefort, Kenneth H. Green, Staci Van Norman, Nick Wananmacher, "Polyethylene Pipe Patch Systems and Methods", European Patent (November, 2010), US Patent (November 2013)