JEFFREY S. KNUTSEN **TEACHING PROFESSOR, CHARLES C. GATES FACULTY FELLOW**

Paul M. Rady
Mechanical Engineering
UNIVERSITY OF COLORADO **BOULDER**

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EDUCATION

Ph.D.	Chemical and Biological Engineering University of Colorado, Boulder, CO Dissertation: "Membrane Bioseparations: Cellulase Recovery, Particle Deposition, and Second Osmotic Virial Coefficients" Advisor: Prof. Robert H. Davis	2005
B.S.	Chemical Engineering, University of Minnesota	1999

TEACHING EXPERIENCE

4/2023 – Present	Teaching Professor Paul M. Rady Mechanical Engineering, University of Colorado, Boulder, CO
8/2021 – 4/2023	Associate Teaching Professor Paul M. Rady Mechanical Engineering, University of Colorado, Boulder, CO
8/2018 – 8/2021	Senior Instructor Mechanical Engineering, University of Colorado, Boulder, CO
9/2012 – 8/2018	Instructor Mechanical Engineering, University of Colorado, Boulder, CO
1/2012 – 8/2012	Lecturer Mechanical Engineering, University of Colorado, Boulder, CO
6/2009 – 12/2011	Adjunct Instructor Mechanical Engineering, University of Colorado, Boulder, CO Chemical and Biological Engineering, University of Colorado, Boulder, CO
1/2009 – 8/2011	Adjunct Instructor Chemical Engineering, Colorado School of Mines, Golden, CO
8/2002 – 12/2002	Graduate Teaching Assistant – Transport Phenomena (CHEN 5210) Chemical and Biological Engineering, University of Colorado, Boulder, CO

9/2001 – 12/2001	Graduate Teaching Assistant – Mass Transfer (CHEN 3220) Chemical and Biological Engineering, University of Colorado, Boulder, CO

PROFESSIONAL EXPERIENCE

1/2008 – 8/2011	Postdoctoral Research Assistant
	Chemical Engineering, Colorado School of Mines, Golden, CO "Fundamental Understanding of Rheology of Biomass Slurries for Bio-Refinery Applications"
	Chemical and Biological Engineering, University of Colorado, Boulder, CO "Sugar and Enzyme Recovery During Saccharification with High Solids Loading"
5/2005 – 12/2007	Scientific & Engineering Consultant, ChemRisk, Inc., Boulder, CO
5/2002 – 9/2002	Research Assistant, FeRx, Inc., Aurora, CO
5/2001 – 9/2001	Research Assistant, National Renewable Energy Laboratory, Golden, CO

AWARDS AND HONORS

2018	Charles A. Hutchinson Memorial Teaching Award
2017	Department of Mechanical Engineering: Outstanding Service Award
2015-Present	Charles C. Gates Faculty Fellow, Department of Mechanical Engineering
2014	John and Mercedes Peebles Innovation in Education Award
2013	Department of Mechanical Engineering: Outstanding Undergraduate Educator Award
2013	Marinus Smith Recognition Award: significant impact on undergraduate population
2002	Leadership in Biotechnology Certificate, Chemical and Biological Engineering, University of Colorado
2001-2004	NIH Leadership in Pharmaceutical Biotechnology Fellow
2001	National Science Foundation Scholarship
2000-2004	Graduate Assistance in Areas of National Need Fellow
2003	Outstanding Paper Awards, Graduate Student Annual Research Symposium
2002	Outstanding Teaching Assistant for Graduate Courses
2002	Outstanding Paper Awards, Graduate Student Annual Research Symposium

COURSES TAUGHT AT CU BOULDER AND THE COLORADO SCHOOL OF MINES

Spring 2026	Thermodynamics 1 (two sections)	MCEN 3012
Fall 2025	Component Design	MCEN 3025
	Thermodynamics 1	MCEN 3012
Summer 2025	Finite Element Analysis (remote)	MCEN 4173/5173
Spring 2025	Component Design (two sections)	MCEN 3025
Fall 2024	Dynamics	MCEN 2043
Fall 2024	Heat Transfer	MCEN 3022
Summer 2024	Finite Element Analysis (remote)	MCEN 4173/5173
Spring 2024	Component Design (two sections)	MCEN 3025
Fall 2023	Thermodynamics 1 (two sections)	MCEN 3012
	Materials Science	MCEN 2024
Spring 2023	Component Design (two sections)	MCEN 3025
Fall 2022	Thermodynamics 1 (two sections)	MCEN 3012
	Statics	MCEN 2023
Summer 2022	Computational Methods	MCEN 3030
Spring 2022	Finite Element Analysis	MCEN 4173/5173
	Heat Transfer (two sections)	MCEN 3022
Fall 2021	First-Year Engineering Projects	GEEN 1400
	Fluid Mechanics	MCEN 3021
Spring 2021	Heat Transfer (two sections)	MCEN 3022
Fall 2020	Materials Science	MCEN 2024
	First-Year Engineering Projects	GEEN 1400
	Fluid Mechanics	MCEN 3021
Spring 2020	Graduate Heat Transfer	MCEN 5042

	Finite Element Analysis	MCEN 4173/5173
Fall 2019	Heat Transfer	MCEN 3022
	First-Year Engineering Projects	GEEN 1400
	Fluid Mechanics	MCEN 3021
Spring 2019	Graduate Heat Transfer	MCEN 5042
	Thermodynamics 1	MCEN 3012
Fall 2018	Computational Methods	MCEN 3030
	Fluid Mechanics (two sections)	MCEN 3021
Spring 2018	Computational Methods (two sections)	MCEN 3030
	Thermodynamics 1	MCEN 3012
Fall 2017	Fluid Mechanics (two sections)	MCEN 3021
Spring 2017	Fluid Mechanics	MCEN 3021
	Thermodynamics 1	MCEN 3012
Fall 2016	Statics and Structures	MCEN 2023
	First-Year Engineering Projects	GEEN 1400
Spring 2016	Dynamics	MCEN 2043
	Data Analysis & Measurements Laboratory	MCEN 3208
Fall 2015	Mechanics of Solids	MCEN 2063
	Measurements Laboratory	MCEN 3208
Spring 2015	Mechanics of Solids	MCEN 2063
	First-Year Engineering Projects	GEEN 1400
Fall 2014	Thermodynamics 1	MCEN 3012
	Dynamics	MCEN 2043
	Computational Methods	MCEN 3030
Summer 2014	Fluid Mechanics	MCEN 3021
Spring 2014	Statics and Structures	MCEN 2023
	Measurements Laboratory 2	MCEN 4047
	First-Year Engineering Projects	GEEN 1400
Fall 2013	Thermodynamics 1	MCEN 3012
	Dynamics	MCEN 2043
Summer 2013	Fluid Mechanics	MCEN 3021
Spring 2013	Fluid Mechanics	MCEN 3021
	Thermodynamics 1	MCEN 3012
	Mechanical Engineering Design Project 2	MCEN 4085

Fall 2012	Fluid Mechanics	MCEN 3021
	Thermodynamics 1	MCEN 3012
	Mechanical Engineering Design Project 1	MCEN 4045
Spring 2012	Mechanical Engineering Heat Transfer	MCEN 3022
	Junior-Level Dynamics	MCEN 3043
	Sophomore-Level Dynamics	MCEN 2043
Fall 2011	Thermodynamics 1	MCEN 3012
	Chemical Engineering Heat Transfer	CHEN 3210
Summer 2011	Chemical Engineering Field Sessions 1 & 2, CO School of Mines	CHEN 312/313
Spring 2011	Chemical Process Principles Laboratory, CO School of Mines	CHEN 202
	Chemical Engineering Thermodynamics Lab, CO School of Mines	CHEN 358
Summer 2010	Fluid Mechanics	CHEN 3200 / GEEN 3853
Spring 2010	First-Year Engineering Projects	GEEN 1400
	Chemical Process Principles Laboratory, CO School of Mines	CHEN 202
	Chemical Engineering Thermodynamics Lab, CO School of Mines	CHEN 358
Summer 2009	Fluid Mechanics	CHEN 3200 / GEEN 3853
Spring 2009	Chemical Process Principles Laboratory, CO School of Mines	CHEN 202
	Chemical Engineering Thermodynamics Lab, CO School of Mines	CHEN 358

EDUCATIONAL RESOURCES DEVELOPED

2024 – Present	Prepared interactive self-study modules for Heat Transfer, for example https://learncheme.com/quiz-yourself/interactive-self-study-modules/lumped-capacitance-method-for-analyzing-transient-conduction-problems/lumped-capacitance-method-for-analyzing-transient-conduction-problems-intro/
2022 – 2024	Prepared interactive self-study modules for Fluid Mechanics, available at https://learncheme.com/quiz-yourself/interactive-self-study-modules/
2011 – Present	Prepared numerous screencasts, concept questions, interactive simulations, and course packages, available at www.LearnChemE.com

ADVISING EXPERIENCE

2025 – Present	Faculty mentor for the CU Boulder Railroad Club
2019 – Present	Faculty mentor for the CU Boulder Racing Team (Formula SAE)
2024	Undergraduate Independent Study Advisor: Reece Baumhoff "Design & Manufacturing of Mountain Bike Suspension"
2024	Undergraduate Independent Study Advisor: Quintin Smith "Engineering in Steam Locomotives"
2024	Undergraduate Independent Study Advisor: Ian Farrar "Geometrical Design and Manufacturing of a Street Trials Bicycle", sponsored by Black Sheep Bikes
2024	Thesis Defense Committee Member, Nathan Albu, "Thermal Design of the Lunar Micrometeroid Monitor", M.S. Candidate in Mechanical Engineering
2022	Dissertation Committee Member, Cary Faulkner, "Advanced Modeling of HVAC Operation for Sustainable and Resilient Office Buildings During the COVID-19 Pandemic", Ph.D. Candidate in Mechanical Engineering
2019	Undergraduate Independent Study Advisor: Eric Ortolano, Nathan Clair, Alex Guerrero "Geometrical Design and Manufacturing of Bicycle Frames", sponsored by Black Sheep Bikes
2016	Dissertation Committee Member, Curt Benjamin Hansen, "Buried Explosion-Induced Characterization by Geotechnical Centrifuge Modeling", Ph.D. Candidate in Mechanical Engineering
2015	Dissertation Committee Member, James R. Browning, "Effects of Right Ventricular Diastolic Dysfunction on Coherent Flow Structures in the Human Right Atrium and Right Ventricle", Ph.D. Candidate in Mechanical Engineering
2015	Dissertation Committee Member, Birendra Adhikari, "Separation Challenges and Optimizations of Sustainable Algal and Lignocellulosic Based Biofuels", Ph.D. Candidate in Mechanical Engineering
2015	Faculty mentor for the student organization "Engineers Speak"
Spring 2013	Undergraduate Independent Study Advisor: Jeffrey Carlson studied combustion and automotive engine design. He also compiled and reviewed resources for a future course in combustion.
2013	Faculty mentor for the Colorado Boulder Rocketry Association (COBRA)

DEPARTMENTAL, COLLEGE, AND CAMPUS SERVICE ACTIVITIES

2024 – Present	Member of Mechanical Engineering Personnel Committee

2021 – Present	Member of Biomedical Engineering Undergraduate Committee
2023	Department co-coordinator for the 2023-2024 ABET reaccreditation of the Bachelors of Science in Mechanical Engineering
2020 – 2023	Member of Mechanical Engineering Undergraduate Committee
7/2021	Chair of Instructor Search Committee
8/2020	Chair of search committee for the Director for the Western Colorado University – CU Boulder Partnership Program
2019 – 2020	Developer of industry-based problems in support of Student Experiential Education (SEE)
2016 – 2018	Department coordinator for the 2017-2018 ABET reaccreditation of the Bachelors of Science in Mechanical Engineering
2018	Member of Departmental Action Team – Teaching Quality Framework
2012 – 2018	Member of Mechanical Engineering Undergraduate Committee
2012 – Present	Co-Op Committee Member, Mechanical Engineering Representative
8/2017	Facilitated Workshop on technology in the classroom during the New Faculty Orientation for the College of Engineering and Applied Science
1/2017	Facilitated a workshop for the Graduate Teacher Program (GTP): “The Use of a Tablet PC and Clickers in a Flipped Engineering Classroom”
8/2016	Facilitated Workshop on technology in the classroom during the New Faculty Orientation for the College of Engineering and Applied Science
4/2016	Spring Industry Advisory Council meeting participant, provided course review of new Measurements / Data Analysis course (MCEN 3047)
1/2016	Instructor Search Committee Member
10/2015	Fall Industry Advisory Council meeting participant, provided course review of Dynamics (MCEN 2043)
8/2015	Facilitated Workshop on technology in the classroom during the New Faculty Orientation for the College of Engineering and Applied Science
8/2014	Facilitated Workshop on technology in the classroom during the New Faculty Orientation for the College of Engineering and Applied Science
3/2014	Facilitated a seminar on the effective use of Tablet PCs and the effective use of clickers in the classroom for a FLASH event
10/2013	Fall Industry Advisory Council meeting participant, provided course review of Fluid Mechanics (MCEN 3021)

8/2013	Facilitated workshop on effective teaching of large classes during the Department of Mechanical Engineering faculty retreat
4/2013	Spring Industry Advisory Council meeting participant, provided course review of Thermodynamics 2 (MCEN 3032)
3/2013	Co-facilitated ClickerStarter for Engineering Faculty workshop
11/2012	Invited Seminar “Effective student interaction in and out of the classroom" presented on Behalf of the BOLD Center, sponsored by NSF ENGAGE grant
10/2012	Industry Advisory Council meeting participant, provided course review of Manufacturing Processes and Systems (MCEN 4026)
Fall 2012	Teaching with Technology Faculty Seminar participant with ASSETT, OIT, and the University Libraries
2012	Peer reviewer for *Acta Mechanica*

GRANTS

2017	Engineering Excellence Fund “LearnMechE for Undergraduate Mechanical Engineering Courses”, John Falconer, Jeffrey Knutsen, Keith Regner, Janet deGrazia
2016	Engineering Excellence Fund “LearnMechE for Undergraduate Mechanical Engineering Courses”, John Falconer, Jeffrey Knutsen, Janet deGrazia, Nathan Nelson, Katherine McDanel
4/2012-12/2012	Engineering Excellence Fund “Heat Sensing Lab Instrumentation for Courses in Heat Transfer” $3,024.81, Jeffrey Knutsen, Jeremy Gilsdorf, Mark Borden
2007-2008	Colorado Center for Biorefining and Biofuels (C2B2) seed grant with RH Davis
2002	Beverly Sears Dean’s Small Grant Award
2000	Biotechnology Small Grant – Colorado Institute for Research in Biotechnology

PEDAGOGICAL COURSEWORK AND SEMINARS ATTENDED

2024	CTL/ASSETT teaching workshop, Equitable & Inclusive Engagement Practices for Learner Success, Maximizing Student Engagement with Modern iClicker Questions and Peer Instruction
2020	Hertzberg, J. R. & Knutsen, J. S. (2020, November 22-24). Active Engagement in the Time of COVID. 73rd Annual Meeting of the APS Division of Fluid Dynamics (virtual), Chicago, IL, United States.

2016	ABET Symposium, April 17-15, Fort Lauderdale, FL
2015	7th Annual NAE Frontiers of Engineering Education Symposium, Irvine, CA
2013	FTEP workshop: "Effective use of Clickers"
2013	FLASH teaching event: "Using the Student Feedback Loop to Improve Your Course, Just in Time"
2012	Teaching with Technology Faculty Seminar
2009-2011	Pedagogy Seminar Series, Colorado School of Mines
2009	Fundamentals of College Teaching (SYGN 600) CO School of Mines
2009	"Effective Teaching: A Workshop" by RM Felder and R Brent, CU Boulder

PEER-REVIEWED TECHNICAL ARTICLES AND BOOK CHAPTERS

1. Stickel JJ, JS Knutsen and MW Liberatore (2014) "Connecting large amplitude oscillatory shear rheology to steady simple shear rheology and application to biomass slurries." *Applied Rheology.* **24-5:** 53075.
2. Sahmel J, S Gaffney, J Knutsen, B Epstien and D Paustenbach (2014) "Determinants of Carbon Monoxide Exposure Inside a Motor Home During On-Board Generator Use." *International Journal of Vehicle Safety*. **7:** 409-424.
3. Stickel JJ, JS Knutsen and MW Liberatore (2013) "Response of elastoviscoplastic materials to large amplitude oscillatory shear flow in the parallel-plate and cylindrical-Couette geometries." *Journal of Rheology*. **57:** 1569-1596.
4. Hollins DM, BD Kerger, KM Unice, JS Knutsen, AM Madl, JE Sahmel and DJ Paustenbach (2013) "Airborne benzene exposures from cleaning metal surfaces with small volumes of petroleum solvents." *International Journal of Hygiene and Environmental Health*. **216:** 324-332.
5. Knutsen JS, BD Kerger, B Finley and DJ Paustenbach (2013) "A calibrated human PBPK model for benzene inhalation with urinary bladder and bone marrow compartments." *Risk Analysis*. **33:** 1237-1251.
6. Williams PRD, J Sahmel, JS Knutsen, J Spencer and AL Bunge (2010) "Dermal Absorption of Benzene in Occupational Settings: Estimating Flux and Applications for Risk Assessment." *Critical Reviews in Toxicology* **41:** 111-142.
7. Knutsen JS and MW Liberatore (2010) "Rheology Modification and Enzyme Kinetics of High-Solids Cellulosic Slurries: An Economic Analysis." *Energy & Fuels* **24:** 6506-6512.
8. Knutsen JS and MW Liberatore (2010) "Rheology modification and enzyme kinetics of high solids cellulosic slurries." *Energy & Fuels* **24:** 3267-3274.
9. Smith BT, JS Knutsen and RH Davis (2010) "Empirical Evaluation of Inhibitory Product, Substrate, and Enzyme Effects During the Enzymatic Saccharification of Lignocellulosic Biomass." *Applied Biochemistry and Biotechnology* **161:** 468-482.
10. Paustenbach DJ, JS Knutsen, DM Hollins, JE Sahmel and AK Madl (2010). "Comparison of modeled and measured concentrations of airborne benzene from the use of petroleum-based solvents spiked with low levels of benzene." *Chemico-Biological Interactions* **184:** 296-298.
11. Sahmel J, M Boeniger, JS Knutsen, W ten Berge and MC Fehrenbacher (2009). "Dermal Exposure Modeling." in *Mathematical Models for Estimating Occupational Exposure to Chemicals, 2nd Edition*. ed. CB Keil, CE Simmons and TR Anthony. Fairfax, VA, American Industrial Hygiene Association.

12. Knutsen JS and MW Liberatore (2009) “Rheology of High-Solids Biomass Slurries for Biorefinery Applications.” *Journal of Rheology* **53:** 877-892.
13. Roche CM, CJ Dibble, JS Knutsen, JJ Stickel and MW Liberatore (2009) "Particle Concentration and Yield Stress of Biomass Slurries During Enzymatic Hydrolysis at High-Solids Loadings." *Biotechnology and Bioengineering* **104:** 290-300.
14. Stickel JJ, JS Knutsen, MW Liberatore, W Luu, DW Bousfield, DJ Klingenberg, CT Scott, TW Root, MR Ehrhardt and TO Monz (2009) "Rheology measurements of a biomass slurry: an inter-laboratory study." *Rheologica Acta* **48:** 1005-1015.
15. McAtee BL, EP Donovan, SH Gaffney, W Frede, JS Knutsen, and DJ Paustenbach (2009) “Historical Analysis of Airborne Beryllium Concentrations at a Copper Beryllium Machining Facility (1964–2000).” *Annals of Occupational Hygiene* **53:** 373-382.
16. Knutsen JS and RH Davis (2009) “Direct Visual Observation of Microfiltration Membrane Fouling and Cleaning.” Chapter 2 in *Monitoring and Visualizing Membrane Based Processes*. ed. C Güell, M Ferrando and F López. Weinheim. Wiley-VCH.
17. Murbach DM, AK Madl, KM Unice, JS Knutsen, PS Chapman, JL Brown and DJ Paustenbach (2008) “Airborne Concentrations of Asbestos Onboard Maritime Shipping Vessels (1978-1992).” *Annals of Occupational Hygiene* **52:** 267-279.
18. S Gaffney, E Moody, M McKinley, J Knutsen, A Madl and D Paustenbach (2008) “Worker Exposure to Methanol Vapors During Cleaning of Semiconductor Wafers in a Manufacturing Setting.” *Journal of Occupational and Environmental Hygiene* **5:** 313-324.
19. Williams PRD, JS Knutsen, C Atkinson, AK Madl and DJ Paustenbach (2007) "Airborne Concentrations of Benzene Associated with the Historical Use of Some Formulations of Liquid Wrench." *Journal of Occupational and Environmental Hygiene* **4:** 547-561.
20. Ferriby LL, JS Knutsen, M Harris, KM Unice, P Scott, P Nony, LC Haws and DJ Paustenbach (2007) "Evaluation of PCDD/F and dioxin-like PCB serum concentration data from the 2001-2002 National Health and Nutrition Examination Survey of the United States population." *Journal of Exposure Science and Environmental Epidemiology* **17:** 358-71.
21. Knutsen JS and RH Davis (2006) “Deposition of foulant particles during tangential flow filtration.” *Journal of Membrane Science* **271:** 101-113.
22. Knutsen JS and RH Davis (2004) “Cellulase retention and sugar removal by membrane ultrafiltration during lignocellulosic biomass hydrolysis.” *Applied Biochemistry and Biotechnology* **113-116:** 585-599.
23. Knutsen JS and RH Davis (2002) “Combined sedimentation and filtration process for cellulase recovery during hydrolysis of lignocellulosic biomass.” *Applied Biochemistry and Biotechnology* **98:** 1161-1172.
24. Mores WD, JS Knutsen and RH Davis (2001) “Cellulase recovery via membrane filtration.” *Applied Biochemistry and Biotechnology* **91-93:** 297-309.
25. Chaffin KA, JS Knutsen, P Brant and FS Bates (2000) “High-strength welds in metallocene polypropylene/polyethylene laminates.” *Science* **288:** 2187-2190.
26. Crawford NRM, JS Knutsen, et al. (1998) “Splitting the coordinated nitric oxide in $Co(CO)_3(NO)$ leads to a nanocrystalline conductive oxonitride of cobalt.” *Chemical Vapor Deposition* **4:** 181-185.

CONFERENCE PRESENTATIONS

1. Hertzberg, J. R. & Knutsen, J. S. (2020, November 22-24). Active Engagement in the Time of COVID. 73rd Annual Meeting of the APS Division of Fluid Dynamics (virtual), Chicago, IL, United States.
2. JS Knutsen. Electronic Resources for Mechanical and Chemical Engineering Courses. 7th Annual Frontiers of Engineering Education Symposium, October 25-28, 2015. Irvine, CA.
3. Stickel JJ, JS Knutsen and MW Liberatore. Response of an elastoviscoplastic material to oscillatory shear flow in the parallel plate and cylindrical Couette geometries. The Society of Rheology 84th Annual Meeting, February, 2010. Pasadena, CA.
4. Knutsen JS and MW Liberatore. Rheology modification and enzyme kinetics of high solids cellulosic slurries. The Society of Rheology 82nd Annual Meeting, October 24-28, 2010. Santa Fe, NM.
5. Knutsen JS and MW Liberatore. Linear and nonlinear rheological investigations of high-solids biomass slurries for bio-refinery applications. The Society of Rheology 82nd Annual Meeting, October 24-28, 2010. Santa Fe, NM.
6. Knutsen JS, MW Liberatore, JJ Stickel, CJ Dibble and CM Roche. Investigating the changing rheology of high-solids biomass slurries during enzymatic saccharification. 31st Symposium on Biotechnology for Fuels and Chemicals, May 3-6, 2009. San Francisco, CA.
7. Knutsen JS and MW Liberatore. Enzo-rheology: Investigations of High-Solids Biomass Slurries for Bio-Refinery Applications. The XVth International Congress on Rheology, August 3-8, 2008. Monterey, CA.
8. Knutsen JS, JR Kuykendall, BD Kerger and DJ Paustenbach. Comparing Equal Delivered Doses of Airborne Benzene for 8 hr/day Steady Exposure vs. Peak Exposure Regimens Using a PB-PK Model. American Industrial Hygiene Conference and Exposition, May 31 – June 5, 2008. Minneapolis, MN.
9. Knutsen JS, DM Murbach, DJ Paustenbach and AK Madl. Comparison of Modeled and Measured Concentrations of Airborne Benzene from the Use of Petroleum-Based Solvents Spiked with Low Levels of Benzene. American Industrial Hygiene Conference and Exposition, May 31 – June 5, 2008. Minneapolis, MN.
10. Knutsen JS and TE Widner. Characterization of Operations in the First U.S. Building that Produced Plutonium Components for Atomic Weapons to Support Estimation of Airborne Effluents and Doses to Members of the Public. Abstract #MAB4-O-08. International Conference on Environmental Epidemiology and Exposure, September 2-6, 2006. Paris, France.
11. Paustenbach DJ, JR Kuykendall, BL Finley, JM Warmerdam, PP Moy. (presented by J.S. Knutsen). Factors Affecting Bioaccessibility and Bioavailability of Hexavalent Chromium and Dioxin Contaminants in Soil and Their Relevance to Risk Assessment. Abstract #MS1-05. International Conference on Environmental Epidemiology and Exposure, September 2-6, 2006. Paris, France.
12. Knutsen JS and RH Davis. Motion of a sphere over a rough permeable surface due to viscous shear flow – A new model for membrane fouling. North American Membrane Society annual meeting, June 26-30, 2004. Honolulu, HI.
13. Knutsen JS and RH Davis. Cellulase Retention and Sugar Removal During Lignocellulosic Biomass Hydrolysis. 25th Symposium on Biotechnology for Fuels and Chemicals, May 4-7, 2003. Breckenridge, CO.
14. Knutsen JS and RH Davis. Cellulase Retention and Sugar Removal by Ultrafiltration During Lignocellulosic Biomass Hydrolysis. North American Membrane Society annual meeting, May 11-15, 2002. Long Beach, CA.
15. Knutsen JS and RH Davis. Combined sedimentation and filtration process for cellulase recovery during hydrolysis of lignocellulosic biomass. 23rd Symposium on Biotechnology for Fuels and Chemicals, May 6-9, 2001. Breckenridge, CO.
16. Knutsen JS, WD Mores and RH Davis. Cellulase recovery via membrane filtration. North American Membrane Society annual meeting, May 23-27, 2000. Boulder, CO.