

PUBLICATIONS of C. D. Kolstad:

Books

Spatial Environmental and Resource Economics, Edward Elgar (forthcoming, 2000)

Environmental Economics, Oxford University Press (2000), 400 pp.

Measuring the Demand for Environmental Quality, North-Holland, Amsterdam (1991), 370 pp., edited with John Braden.

Currently Active Working Papers

"Learning About Climate Sensitivity from the Instrumental Record," unpublished manuscript, with D. Kelly, M. Schlesinger and N. Andronova.

"A Model of Auction Equilibrium with Costly Information Acquisition," under review at *Economic Theory*, with R.M. Guzman.

"Do Lax Environmental Regulations Attract Foreign Investment?," UCSB Economics Dept. working paper #6-95R; revision requested, *Env. and Res Econ.*, with Y. Xing.

"The Demand for Synthetic Fuels: Contingent Valuation of Quality - Differentiated Factors of Production," under review at *Energy J.*, with J. Braden, R. Woock and J. Machado.

"Efficiency and the Non-enforcement of Penalties," with J. Leitzel (also Hoover Institution working paper E-92-2).

"Bidding Behavior under Costly Information Acquisition: An Experimental Study," working paper, with R.M. Guzman.

Refereed Journal Articles

"Solving Infinite Horizon Growth Models with an Environmental Sector," *Computational Economics* (forthcoming), with D. Kelly.

"Malthus and Climate Change: Betting On a Stable Population," *J. Env. Econ. and Mgmt.* (forthcoming), with D. Kelly.

"Valuing Beach Recreation Lost in Environmental Accidents," *J. Water Resources Planning & Mgmt* (forthcoming), with R. Deacon.

"Energy and Depletable Resources: Economics and Policy, 1973-98," *J. Env. Econ. and Mgmt.* (forthcoming).

"Information and the Divergence Between Willingness-to-accept and Willingness-to-pay," *J. Env. Econ. and Mgmt.*, **38**:66-80 (1999), with R.M. Guzman.

"Bayesian Learning, Growth and Pollution," *J. Econ. Dyn. And Control*, **23**:491-518 (1999), with D. Kelly.

"Research Trends and Opportunities in Environmental and Resource Economics," *Environmental and Resource Economics*, **11**:383-97 (1998), with R. Deacon, D. Brookshire, A. Fisher, A. Kneese, D. Scrogin, V. Smith, M. Ward and J. Wilen.

"Cost Functions and Nonlinear Prices: Estimating a Technology with Quality-Differentiated Inputs," *Review of Economics and Statistics*, **80**:444-53 (1998), with M. Turnovsky.

"Learning and Stock Effects in Environmental Regulation: The Case of Greenhouse Gas Emissions," *J. Env. Econ. and Mgmt.*, **31**:1-18 (1996).

- "Fundamental Irreversibilities in Stock Externalities," *J. Public Economics*, **60**:221-33 (1996).
- "Foreign Direct Investment, Exchange Rate Variability and Demand Uncertainty," *Int'l Economic Review*, **36**:855-73 (1995), with L. Goldberg.
- "Is Technical Change Embodied in the Capital Stock or New Investment?," *Journal of Productivity Analysis*, **5**:385-406 (1994), with J-K Lee.
- "Hotelling Rents in Hotelling Space: Product Differentiation in Exhaustible Resource Markets," *J. Env. Econ & Mgmt.*, **26**:163-180 (1994).
- "George Bush vs. Al Gore: Irreversibilities in Greenhouse Gas Accumulation and Emission Control Investment," *Energy Policy*, **22**:771-78 (1994).
- "The Specification of Dynamics in Cost Function and Factor Demand Estimation," *Review of Economics and Statistics*, **75**:721-26 (1993), with J-K Lee.
- "Measuring the Energy Efficiency and Productivity Impacts of Embodied Technical Change," *Energy Journal*, **14**:33-55 (1993) with E. Berndt and J.-K. Lee.
- "A Model of Homogeneous Input Demand Under Price Uncertainty," *American Economic Review*, **81**:514-538 (1991) with F. Wolak.
- "Computing Cournot-Nash Equilibria," *Operations Research*, **39**:739-748 (1991) with Lars Mathiesen.
- "Ex Post Liability for Harm vs. Ex Ante Safety Regulation: Substitutes or Complements?," *American Economic Review*, **80**:888-901 (1990) with T. Ulen and G. Johnson.
- "Acid Deposition Regulation and the U.S. Coal Industry," *Energy Policy*, **18**:845-852 (1990).
- "Clean Air and Energy: Reform of the PSD Provisions of the Clean Air Act," *J. Air Poll. Control Assn.*, **40**:177-184 (1990).
- "Derivative Evaluation and Computational Experience with Large Bi-Level Mathematical Programs," *J. Opt. Theory & Applic.*, **65**:485-499 (1990) with L. Lasdon.
- "Aggregate Source/Receptor Relations for the Economic Analysis of Ambient Regulations," *J. Air Poll. Control Assn.*, **39**:824-830 (1989) with M. Williams.
- "Shapley Values as Ex Ante Measures of Relative Market Power: An Application to the Western US Coal Market," *Resources and Energy*, **10**:293-314 (1988) with F. Wolak.
- "Necessary and Sufficient Conditions for Uniqueness of a Cournot Equilibrium," *Rev. Econ. Stud.*, **54**:681-690 (1987) with Lars Mathiesen.
- "Uniformity vs. Differentiation in Regulating Externalities," *J. Env. Econ. & Mgmt.*, **14**:386-399 (1987).
- "Imperfectly Competitive Equilibria in International Commodity Markets," *Amer. J. Agric. Econ.*, **68**(1):27-36 (1986), with A. Burris.
- "Conjectural Variation and the Indeterminacy of Duopolistic Equilibria," *Canadian J. Economics*, **19**:656-677 (1986) with F. Wolak.
- "Empirical Properties of Economic Incentives and Command-and-Control Regulations for Air Pollution Control," *Land Economics* **62**:250-268 (1986).
- "A Short-Run Capital-Labor-Energy Model of Fuel Demand in the Manufacturing Sector of Seven Major OECD Countries," *OPEC Review*, **10**(2):179-214 (Summer 1986), with A. Bopp, R. Pendley and F. Wolak.
- "Strategy and Market Structure in Western Coal Taxation," *Rev. Econ. Stat.*, **67**(2):239-249 (1985), with F. Wolak.
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- "Competition in Interregional Taxation: The Case of Western Coal," *J. Political Economy*, 91(3):443-460 (1983), with F. Wolak.
- "The Structure of International Steam Coal Markets," *Natural Resources J.*, 23:859-891 (Oct. 1983), with D. S. Abbey.
- "Alternative Air Quality Policy Options in the Four Corners Region," *Southwestern Rev. of Mgmt. and Econ.*, 1(2):29-58 (Summer 1981), with J. F. Roach, A. V. Kneese, and M. D. Williams.
- "Air Quality Implications of a Nuclear Moratorium: An Alternative Analysis," *The Energy Journal*, 2(3):33-48 (July 1981), with Anthony Bopp, Verne Loose and Robert Pendley.
- "American Indians and National Energy Policy," *J. of Energy and Development*, 5(2):221-251 (Spring 1980), with Robert E. Pendley.
- "Thermal Evolution Models for the Valles Caldera with Reference to a Hot-Dry-Rock Geothermal Experiment," *J. of Volcanology and Geothermal Res.*, 3, pp. 197-218 (1978), with T. R. McGetchin.
- "Temperature Coefficient of Resistivity of Silicon and Germanium Near Room Temperature," *Solid-State Electronics*, 11, 639 (1968), with W. M. Bullis, F. H. Brewer and L. J. Swartzendruber.

Chapters in Books

- "Integrated Assessment Models for Climate Change Control," Ch 4, pp 171-97 in H. Folmer and T. Tietenberg (Eds.), *International Yearbook of Environmental and Resource Economics 1999/2000: A Survey of Current Issues* (Edward Elgar, Cheltenham, UK, 1999), with D. Kelly.
- "Integrated Assessment Modelling of Climate Change," in W.D. Nordhaus (Ed), *Economics and Policy Issues in Climate Change* (Resources for the Future, Washington, DC, 1998).
- "Uncertainty, Learning, Stock Externalities and Capital Irreversibilities," Chapter 2 in E. van Ierland and K. Górká (Eds.), *Economics of Atmospheric Pollution*, pp 17-30 (Springer-Verlag, Berlin, 1996).
- "The Implications of Learning About Uncertainty for United States/European Greenhouse Gas Policy," chapter 14 in J. B. Braden, H. Folmer and T. S. Ulen (Eds.), *Environmental Policy with Political and Economic Integration* (Edward Elgar, Cheltenham, UK, 1996).
- "Normas Anticontaminación: Enfoques Pasados e Innovaciones," [Regulating Pollution: Past Approaches and Innovations] in Juan Ignacio Varas (Ed.), *Economía del Medio Ambiente en América Latina [The Economics of Ambient Environment in Latin America]*, pp 209-24 (Ediciones Universidad Católica de Chile, Santiago, 1995).
- "The Timing of CO₂ Control in the Face of Uncertainty and Learning," in E.C. van Ierland (ed), *International Environmental Economics* , pp 75-96 (Elsevier, Amsterdam, 1994).
- "Buying Energy and Non-Fuel Minerals: Final, Derived and Speculative Demand," Chapter 20 in *Handbook of Natural Resources and Energy Economics*, Vol. III, A.V. Kneese and J.S. Sweeney (eds.), Handbooks in Economics series, K.J. Arrow and M.D. Intrilligator (eds.) (North-Holland, Amsterdam, 1993), with M. Slade and R. Weiner.
- "Natural Resource Use and the Environment," Chapter 26 in *Handbook of Natural Resources and Energy Economics*, Vol. III, A. V. Kneese and J. S. Sweeney (eds.), Handbooks in

- Economics series, K. J. Arrow and M. D. Intrilligator (eds.) (North-Holland, Amsterdam, 1993), with J. Krautkraemer.
- "The Law and Economics of Hazardous Materials Transportation: Regulating Harm by Administrative Agency and by Tort Liability," Chapter 15 in Transportation of Hazardous Materials: Issues in Law, Social Science and Engineering, Leon Moses and Dan Lindstrom (Eds) (Kluwer Academic Publishers, Boston, 1993), with T. Ulen.
- "Environmental Demand Theory," in Braden and Kolstad (eds.), *Measuring the Demand for Environmental Quality*, North-Holland, Amsterdam (1991), with J. Braden.
- "Computing Equilibria in Imperfectly Competitive Commodity Markets," in O. Guvenen, W.C. Labys and J-B. Lesourd (eds.), *International Commodity Market Models. Advances in Methodology and Applications*, Chapman-Hill, London (1990), with L. Mathiesen.
- "Pollution Possibility Frontiers," pp 273-287 in B. Lev, J. A. Bloom, A. S. Gleit, F. H. Murphy, and C. Shoemaker (eds.), *Strategic Planning in Energy and Natural Resources* (North-Holland, Amsterdam 1987).
- "Computing Dynamic Spatial Oligopolistic Equilibrium in an Exhaustible Resource Market: the Case of Coal," *Quantitative Methods for Market-Oriented Economic Analysis over Space and Time*, W.C. Labys, T. Takayama and N.D. Uri (eds.), Avebury (Gower), Aldershot, UK (1989).
- "Clean Air and Energy: From Conflict to Reconciliation," pp. 163-191 in *Paradoxes of Western Energy Development*, Cyrus M. McKell et al. (eds.) (Westview Press, Boulder, Colorado, 1984), with W. D. Schultze and M. D. Williams.
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Proceedings

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- "Estimating Hedonic Price Functions for Coal," *Proc.*, 1986 North American Meeting of Int'l Assn. of Energy Economists, Cambridge, Massachusetts, November 1986, pp. 73-75 (1987) with M. Turnovsky.
- "Using Shapley Values to Measure Market Power in the Western US Coal Market" *Proc.*, 1986 North American Meeting of Int'l Assn. of Energy Economists, Cambridge, Massachusetts, November 1986, pp. 248-53 (1987) with Frank Wolak.
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- "The Effect of Producer and Consumer Behavior on Prices and Trade in the International Steam Coal Market," Coal Consumers Conference, Tel Aviv (June 1986).
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