

K.C. Fugelsang
Curriculum Vitae

Associate Professor of Enology and Winemaster,
California State University, Fresno.

EDUCATION:

M.A. Biology. California State University, Fresno. 1972

**B.A. Botany and Zoology. California State University,
Fresno. 1969.**

**Visiting Research Scholar. Department of Viticulture &
Enology. University of California, Davis. 1989-91**

PROFESSIONAL SOCIETIES AND ORGANIZATIONS:

American Society for Enology and Viticulture. (1973)

American Society of Wine Educators. (1977)

American Society for Microbiologists (1985)

Society of Industrial Microbiologists (1985)

Sociedade Portuguesa de Viticultura E Enologica (Honorary-1999)

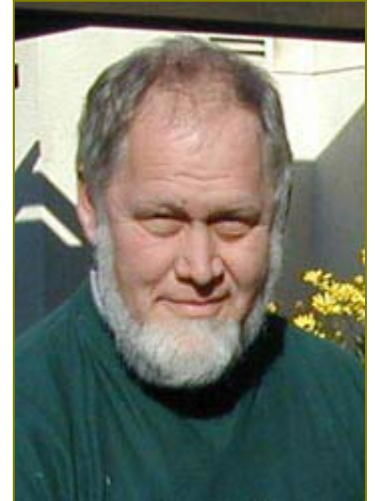
OTHER SOCIETIES:

Phi Kappa Phi. National Honor Society (1972-present). Member, Executive Committee (1988-95) and Chapter President (1990-91)

Who's Who in America (1979 - present)

PROFESSIONAL ACTIVITY/RECOGNITION:

- 1. Recipient (co-recipient) of 35 research grants (2005-1974) from California Agricultural Institute (CATI), Agricultural Research Initiative (ARI), American Vineyard Foundation, Wine Institute, California Competitive Grant Program and private industry totaling near \$3,000,000.**
- 2. Recipient (co-recipient) of donations exceeding \$1,000,000. in the form of facilities, equipment, supplies, grapes and technical services since 2000.**
- 3. Coordinator/Co-Coordinator: 18 regional, national and international conferences including International Wine Microbiology Symposium (April, 2006), International Barrel Symposium (2001), Fresno State-Pall Filters workshops (2000-05), Fresno State's Central Coast Issues Conference (2000-2005), the Winemaster's Weekend (2000-2005) and Wine Spoilage Microbiology (1997). Collectively, these have involved over 5,000 participants.**
- 4. C.S.U.F. Alumnus of the Year ("Top Dog") 2004. College of Sciences and Mathematics: Class of 1969.**
- 5. Recipient: "Outstanding Research and Scholarly Activity." College of Agricultural Sciences & Technology, C.S.U.F. 2003.**
- 6. Recipient: "University Employee of the Year." 1990-91.**



7. Recipient: "Excellence in Teaching Award." Department of Enology and School of Agricultural Sciences and Technology. 1990.
8. Recipient: "Service to the Enology Program." The C.S.U.F. Enology Society and the Enology Program. 1985.
9. Co-recipient: "Claude Laval Award for Innovative Technology." 1990.
10. Author (co-author) of 12 text and reference books and over 125 technical papers.
11. Adjunct Professor, Virginia Tech. Blacksburg, VA.
12. Reviewer: 9 national and international professional journals:
 - *Am. J. Enology and Viticulture* (U.S.).
 - Chapman and Hall, Publishers (U.S.).
 - *Enzyme and Microbial Technology* (U.S.)
 - *FEMS Microbiology Letters* (International)
 - *Food Control* (European)
 - *J. Food Composition and Analysis* (U.S.)
 - *J. Industrial Microbiology* (International)
 - *J. Industrial Microbiology and Biotechnology* (European)
 - *Practical Winery and Vineyard* (U.S.)
13. Department nominee (co-nominee): Faculty Publications Awards: 1998, 1999 and 2004.
14. Member: Advisory Committee to the California State Fair (Sacramento, CA).
15. U.S. Delegate: *Organization Internationale de La Vigne et du Vin* (O.I.V). Paris, France. 1994.
16. Professional Wine Judge: State, national and international wine competition.
17. 158 Gold, double-gold, Best of Class and California, silver and bronze awards associated with the Fresno State Commercial Wine Program.
18. "Science Mentor" Fresno and Clovis Unified School Districts. 1985- present.
19. Assistant Scout Master, BSA Troop 209, Fresno CA.

PUBLICATIONS:

(a) Books/Manuals:

Fugelsang, K.C. *The Analytical Laboratory: A Safety Manual*. Department of Viticulture & Enology, C.S.U. Fresno. Aug., 2005.

Fugelsang, K.C. *The Microbiology Laboratory: a Safety Manual*. Department of Viticulture & Enology, C.S.U. Fresno. Sep., 2005.

Fugelsang, K.C. *The ABC's of Packaging, a Primer for Winemakers*. Haworth Press, Inc., Binghamton, NY. 2005 (in press).

Fugelsang, K.C. *Wine and Winemaking*. World Book Encyclopedia. 2004.

Fugelsang, K.C. *Non-Grape Wine Production and World Culture*. The Encyclopedia of Food and Culture. Charles Scribner and Sons, Publishers. 2002.

Fugelsang, K.C. *Wine Microbiology*. Chapman & Hall Pub. Co. New York, N.Y. 1996.

Fugelsang, K.C., and Edwards, C. *Wine Microbiology: Practical Applications and Procedures*. Springer Publishers, New York. January, 2006.

Nury, F.S. and K.C. Fugelsang. *The Winemaker's Guide to Production of Grape and Fruit Wines*. Western Tananger Press, 1977.

Zoecklein, B.W., Fugelsang, K.C. and B.H. Gump. *Wine Analysis and Production*. Chapman Hall Publishers, New York 1996.

Zoecklein, B.W., Fugelsang, K.C. and B.H. Gump. *Wine Analysis and Production 2nd edition*. Springer, Publishers, New York 2006 (in press).

Zoecklein, B.W., Fugelsang, K.C., and B.H. Gump. *Analisis y Produccion de Vino*. Aspen Publishers, 2001.

Zoecklein, B.W., Fugelsang, K.C., Gump, B.H., and F.S, Nury. *Production Wine Analysis*. Van Nostrand Reinholt Publishing Co., New York. 1990.

(b) Chapters in Books:

Fugelsang, K.C., Osborn, M.M., and C.J. Muller. *Brettanomyces and Dekkera: Their Implications in Winemaking*. In: *Analysis, Characterization and Technological Advances in Wine and Beer Production*. American Chemical Society Symposium Series. Washington, D.C. B.H. Gump, ed. 1992.

Gump, B.H., Zoecklein, B.W. and K.C. Fugelsang. Prediction of Prefermentation Nutritional Status of Grape Juice – The Formol Method. In: *Methods in Molecular Biology* (J.M. Walker, ed). Human Press, Inc. Totowa, New Jersey, 2001.

Muller, C.J., Wahlstrom, V.L., and K.C. Fugelsang. Capture and Use of Volatile Flavor Constituents Emitted during Wine Fermentations. In: *Analysis, Characterization and Technological Advances in Wine and Beer Production*. American Chemical Society Symposium Series. Washington, D.C. B.H. Gump, ed. 1992.

Zoecklein, B.W., Gump, B.H., and K.C. Fugelsang. Nutritional Status of Grape Juice. In: *Methods in Molecular Biology*. Humana Press, Inc. Totowa, New Jersey. 2001.

(c) Papers (peer reviewed):

Clark, J.C., B.H. Gump, and K.C. Fugelsang. 1988. Factors Affecting Induced Calcium Tartrate Precipitation from Wines. *Am. J. Enol. and Vitic.* 39:(2) 55-61.

Fugelsang, K.C. 1998. *Brettanomyces*: Dr. Jekyll ou Mr. Hyde des Vins? *Biofutur* 182:22-23.

Fugelsang, K.C. 1996. *Zygosaccharomyces bailli*: A Spoilage Yeast Isolated from Wine. *CATI Technical Bull.* 960804.

Fugelsang, K.C, 1993. Control of Wine Spoilage Microorganisms. Proc. Trilateral Faculty Exchange Seminar (C.S.U.F., Kon-Kuk University, Korea, and National Chung Hsing University, Taiwan). Fresno, California.

Fugelsang, K.C. 1990. Utilization of Killer Yeast in Wine Production -A Review. *Practical Winery and Vineyard*. May-June.

Fugelsang, K.C. 1987. Preparation of Yeast Starters in Commercial Wine Production. *Practical Winery and Vineyard*. July/August.

Fugelsang, K.C., and Cone, C.C. 1989. Status of American Research on Utilization of Killer Yeasts in Commercial Winemaking. Proc of the First International Conference on Killer Yeasts. Bordeaux, France.

Fugelsang, K.C., and Gump, B.H. 1992. Evaluation of Analytical Methodology for Carbon Dioxide in Wines. *Practical Winery and Vineyard*, May-June: 66-70.

Fugelsang, K.C., and Muller, C.J. 1996. *In vitro* Effect of Red Wine on *Helicobacter pylori*. Proc. of the International Wine and Health Symposium. Reno, NV. pp. 43-47.

Fugelsang, K.C., and Muller, C.J. 1995. Dotazione azotata del mosto e pratiche di cantina. *Vigne Vini (Revista Italiana di Viticoltura e di Enologia)* 4:42-45.

Fugelsang, K.C., and Muller, C.J. 1989. A Method to Reduce Ethyl Carbamate Levels in Peach Distillates. *Res. Bull. California Agricultural Tech. Inst. No. 890102*.

Fugelsang, K.C. and Zoecklein, B.W. 2003. Population Dynamics and Effects of *Brettanomyces bruxellensis* Strains on Pinot Noir (*Vitis vinifera* L) Wines. *J. American Society of Enology and Viticulture* 54(4).

Fugelsang, K.C. and Zoecklein, B.W. 1992. Technology of Malolactic Fermentation in Wines. *Practical Winery and Vineyard*. May-June, 38-47.

Fugelsang, K.C., Callaway, D.E., Toland, T., and Muller, C.J. 1997. Coating Agents for Cork. *Australian and New Zealand Wine Ind. Journal* 12(2):185-89.

Fugelsang, K.C., Callaway, D.E., Osborn, M.M. and Muller, C.J. 1995. A Sampling Guide: Assuring Cork Quality. *Practical Winery and Vineyard*. Jan-Feb. 15-23.

Fugelsang, K.C., Muller, C.J., Gump, B.H., and Osborn, M.M. Control of Spoilage Yeasts with Use of Carbon Monoxide. Proc. of the Wine Spoilage Microbiology Symposium. (K.C. Fugelsang, ed.). California State University, Fresno. March 8, 1996.

Fugelsang, K.C., Osborn, M.M. and Muller, C.J. *Brettanomyces* and *Dekkera* sp in Wine and Juice. Proc. Annual Conference of the American Chemical Society. San Francisco, CA. June 1995.

Fugelsang, K.C., Osborn, M.M., and Muller, C.J. 1994. Utilization of Carbon Monoxide in Control of Wine Spoilage Yeasts. Proc. of the 75th Meeting of the O.I.V., Paris, France, June 6-10.

Fugelsang, K.C., Toland, T., Callaway D., and Muller, C.J. Physical-Chemical Properties of Cork Coating Agents. Proc. of the Second International Oak and Cork Symposium, June 5-6, 1995. San Francisco, CA.

Fugelsang, K.C., Toland, T., Osborn, M.M., Wahlstrom, V.E., and Muller, C.J. 1996. Effect of Fluoride on Fermentative Properties of Wine Yeasts. *Am. J. Enol. Vitic.* 47(2):55-56.

Fugelsang, K.C. Wahlstrom, V.E., and McCarver, Kevin 1991. Stuck Fermentations. *Practical Winery and Vineyard*. May-June: 49-60.

Gu, S., Du, G., Zoldoske, D., Hakim, A., Cochran, R., Fugelsang, K.C., and Jorgensen, G. 2004. Effect of Irrigation Amount on Water Relations, Vegetative Growth, Yield and Fruit Composition of Sauvignon Blanc Grape Vines Under Partial Root Zone Drying and Conventional Irrigation in the San Joaquin Valley of California, USA. *J. Horticultural Science and Biotechnology*: 79(1).

Gu, S., Cochran, R.C., Du, G., Hakim, A., Fugelsang, K.C., Ledbetter, J., and Verdegaal, P.S. 2005. Effect of Training-Pruning Regimes on *Eutypa* Dieback and Performance in Cabernet Sauvignon Grapevines. *J. Horticultural Science & Biotechnology* 80(3):313-318.

Gump, B.H., Zoecklein, B.W., Fugelsang, K.C., and Winton, R.S. 2003. Comparison of Analytical Methods for the Prediction of Pre-fermentation Nutritional Status of Grape Juice. *American Journal for Enology and Viticulture* 53(4):325-29.

Gump, B.H., Glossner, Steven, Fugelsang, K.C., and Muller, C.J. 1996. Monitoring Selected Variables in Oak-Aged Wines by Gas Chromatography. *CATI Research Publication* #960501.

Marko, S.D., Dormedy, E.S., Fugelsang, K.C., Dormedy, D.F., Gump, B.H., and Wample, R.L. Analysis of Oak Volatiles by Gas Chromatography Mass Spectrometry (GCMS) After Ozone Sanitation. *American Journal for Enology and Viticulture* 56(1):46-51.

McMahon, H., Zoecklein, B.W., Fugelsang, K.C., and Jasinski, Y. 1999. Quantification of Glycosidase Activities in Selected Yeast and Lactic Acid Bacteria. *J. Ind. Microbiol. and Biotech.* 23:198-203.

Muller, C.J., and Fugelsang, K.C. 1997. Red Wine But Not White: The Importance of Fully Characterizing Wines in Health Studies. *American J. Clinical Nutrition* 66(2):447.

Muller, C.J., and Fugelsang, K.C. 1996. 3a,6a-Dimethylglycoluril, The Product of the Interaction of Urea and Diacetyl, as a Source of Post-Bottling Ethyl Carbamate in Wine. *CATI Bull.* 960502.

Muller, C.J., and Fugelsang, K.C. 1996. Post-Bottling Hydrogen Sulfide in Wines: 2,4,6-Trimethyl-1,3,5-trithiane as a Source. *CATI Bull.* 960303.

Muller, C.J. and Fugelsang, K.C. 1994. Take Two Glasses of Wine and See Me in the Morning. *Lancet* 343:1428-29.

Muller, C.J. and Fugelsang, K.C. 1994. Antioxidants in Food - Another Look. *Am. J. Clin. Nutr.* 60(3):456-57.

Muller, C.J., and Fugelsang, K.C. 1994. Hydrogen Sulfide and Corkiness - Any Relationship? *Practical Winery and Vineyard* Mar-April. 35-36.

Muller, C.J., and Fugelsang, K.C. 1993. Gentic Acid: An Aspirin-like Constituent in Wine. *Practical Winery & Vineyard* Sep-Oct. 45-47.

Muller, C.J., and Fugelsang, K.C. 1992. Capture and Utilization of Fermentation Volatiles in Winemaking. Proc. of the Ann. Meeting of the Am. Chem. Society. San Francisco, CA.

Muller, C.J., Fugelsang, K.C., and Gump, B.H. utilization of Cull Fruits in Production of Fuel Alcohol. California Department of Food and Agriculture. Sacramento, CA. 1986.

Muller, C.J., Fugelsang, K.C., Striegler, K.E., and Wineman, D.R. 1994. Salicylic Acid - A Rootstock Defense? *Practical Winery and Vineyard* Mar-Apr. 17-19.

Todd, David, R., Cynthia Castronovo, K.C. Fugelsang, B.H. Gump, and C.J. Muller. Ethanol Emission Control from Wine Fermentation Tanks Using Charcoal Adsorption: A Pilot Study. *CATI Bull.* #900705.

Toland, T., Fugelsang, K.C., and Muller, C.J. 1996. Comparison of Four Methods for Estimation of Protein Instability in White Wines. *American Journal of Enology and Viticulture* 47:111-113.

Toland, T., Fugelsang, K.C., and Muller, C.J. 1995. Comparison of Four Methods for Estimation of Protein Instability in White Wines. Proc of the South African Society for Enology and Viticulture. International Congress. Cape Town, SA Nov. 12-15, 1995.

Wahlstrom, V.E., and K.C. Fugelsang. 1987. Utilization of Yeast Hulls in High and Low Temperature Fermentation of Grape Wines. *CATI Bull.*

Wahlstrom, V.L., Fugelsang, K.C., and Muller, C.J. 1996. Effect of Fluoride on Fermentation Rate and Population Density of Fourteen Strains of *Saccharomyces* sp. *CATI Bull.* 960102.

(d) International Presentations (as an invited speaker):

Fugelsang, K.C. An Understanding of Critical Quality Control Points in Winemaking. Yerevan Technical University. Yerevan, Armenia. May, 2005

Fugelsang, K.C. Understanding and Control of *Brettanomyces* and other Spoilage Microbes in the Winemaking Process. Yerevan Technical University. Yerevan, Armenia. May, 2005

Fugelsang, K.C.. Implementation of Total Quality Control Program in Production of Grape Juice, Concentrate and Brandy. Winemaker's Technical Group. Yerevan, Armenia. May, 2005.

Fugelsang, K.C. 1999. Evaluation of Ten Strains of *Brettanomyces bruxellensis* in Winemaking. University of Stuttgart, Stuttgart, Germany. June, 2000.

Fugelsang, K.C., Gump, B.H., and Zoecklein, B.W. 1999. Analytical Methodology for

Determination of Utilizable Nitrogen Content of Grape Musts. Annual Meeting of the Eastern Society for Enology and Viticulture. St. Katherine's Bay, Ontario, Canada.

Fugelsang, K.C. and Muller, C.J. Education of Enologists and Viticulturists: The Fresno State Model. Universidade de Tras-Os-Montes e Alto Douro. Oporto, Portugal. June 6-8, 1999.

Fugelsang, K.C. *Microbial Involvement and Chemical Instabilities in Table Wines*. Proc. of the ROC-USA Workshop on Grape Production and Processing. Taichung, Taiwan. Jan. 8-10, 1986.

Fugelsang, K.C., Osborn, M.M., and Muller, C.J. 1994. *Utilization of Carbon Monoxide in Control of Wine Spoilage Yeasts*. Proc. of the 75th Meeting of the O.I.V. Paris, France, June 6-10.

Lightly, F., Fugelsang, K.C., and Muller, C.J. *Studies on the Feasibility of Grape Pomace Composting in California*. Proc. of the South African Soc. for Enol. Vitic. International Congress. Cape Town, SA Nov. 12-15, 1995.

(e) Other Selected Presentations (Invited Speaker):

****Cantacuzene, N.O.m Dormedy, E.S., Smilanick, J.L., Fugelsang, K.C., Wample, R.L., Bacon, J.J., and Dormedy, D.F. 2003. Treating Brettanomyces in Oak Cubes with Gaseous and Aqueous Ozone. Annual meeting of the American Society for Enology and Viticulture. 2003. Reno, NV.**

****Awarded “Best Student Paper.”**

Fugelsang, K.C. 2005. Chloroanisoles: Cork-derived or Environmental? 20th Annual Mid-America Wine & Grape Conference. Osage Beach, Missouri. Also published in Proceedings.

Fugelsang, K.C. 2004. *Brettanomyces*: Growth Studies of 7 Strains in Pinot Noir Table Wine. International *Brettanomyces* Symposium. The American Society for Enologists and Viticulturalists, San Diego, CA.

Fugelsang, K.C. 2004. “Quality Control Points for Wineries-HACCP-Like Plans.” Annual Meeting of the Washington Association of Wine Grape Growers. Yakima, WA.

Fugelsang, K.C. 2004 “Involvements and Control of *Brettanomyces*, *Dekkera* and *Zygosaccharomyces* in Wine.” Ohio Grape and Wine Symposium. Huron, OH.

Fugelsang, K.C. Presentation of selected wines produced by students at the California Sate University, Fresno commercial winery. U.S. Congressional Wine Caucus. Washington, D.C. November 18-19, 2003.

Fugelsang, K.C. 2003. Effects of Alcohol on Wine Aroma and Flavor. Virginia Vintner’s Annual Technical Conference. Charlottesville, VA.

Fugelsang, K.C. 2003. Alternative Closures: A Technical Look. Unified Wine and Grape Symposium. Jan., 2003. Sacramento, CA.

Fugelsang, K.C. 2003. Utilization of Alcohol Management as a Production Tool in Warm Climate Winemaking. Annual Meeting of the American Society for Enology and Viticulture. Pre-Conference Symposium: “Warm Climate Viticulture.” Reno, NV.

Fugelsang, K.C. 2003 Natural and Alternative Closures: Winemaker’s Concerns. Wine Closures Conference. 28th Annual Conference of the American Society of Enology and Viticulture-Eastern Section Annual Meeting. Corning, NY.

Fugelsang, K.C. 2002. Utilization of Cross-flow Technology in Premium Wine Production. Annual Meeting of the Texas Wine and Grape Association. Junction, TX

Fugelsang, K.C. 2002. Utilization of Reverse Osmosis for Alcohol Management and “Sweet Spot” Identification in Red Wine.” Napa Valley Wine Technical Conference. Napa, CA.

Fugelsang, K.C. 2001. Methods for Measuring Protein and Bitartrate Stability in White and Red Wines. Annual Meeting of the Texas Wine and Grape Association. Junction, TX

Fugelsang, K.C. 1998 Barrel Sanitation: Utilization of Ozone vs. Chemical Treatment of Previously Used Cooperage. Proceedings of the Am. Soc. for Enol. Vitic. (Eastern Section), St. Louis, Mo. July, 1998.

Fugelsang, K.C. 1995. Yeast Starter Preparation: The First Step in Minimizing "Stuck" Fermentations. Proc. of the Annual Meeting of the Society for Industrial Microbiology. San Jose, CA. Aug. 6-11.

Fugelsang, K.C. 1995 Utilization of Native and Commercial Yeasts in Wine Fermentation. Proc. American Soc. For Industrial Microbiology. San Jose, CA. Aug 6-11.

Fugelsang, K.C. 1995. Interactions Between Native Yeast and Bacteria in Cases of Wine Spoilage. Proc. of the Grape and Wine Tech. Conf. Sacramento, CA. Feb. 2-4.

Fugelsang, K.C. 1993. Origins of Trichloroanisol (TCA) in Wine Cork. Regional Cork Suppliers Symposium. Napa, CA.

Fugelsang, K.C. 1991. Microbial Instabilities - Problem Fermentations. Testimony before the State Assembly Select Committee on California Wine Production and Economy. Sacramento, CA. Oct. 16, 1991.

Fugelsang, K.C. 1990. Comparative Evaluation of Methodology for Protein Evaluation in Table Wines. Cellulo Corp. Industry Technical Symposium. Fresno, CA.

Fugelsang, K.C. 1989. Utilization of low sulfite protocol in white wine production. 4th Annual Brewers and Vintners Conference. Shell Beach, CA.

Fugelsang, K.C. 1988. Utilization of Pears in Production of Wine and Spirits. Annual Conference of California Pear Growers. Sacramento, CA.

Fugelsang, K.C. 1987. Utilization of Killer Yeasts in Wine Production. Presented at the Wine Industry Tech. Seminars. Monterey, California.

Fugelsang, K.C. 1987. Involvements of *Brettanomyces* and *Dekkera* sp. in Winemaking. Winter Meeting of the American Society of Microbiologists. Palm Springs, CA.

Fugelsang, K.C. Microbial Involvement and Chemical Instabilities in Table Wines. Proc. of the ROC-USA Workshop on Grape Production and Processing. Taichung, Taiwan. Jan. 8-10, 1986.

Fugelsang, K.C. and Gump, B.H. 2002. Comparison of Analytical Methods for Prediction of Pre-fermentation Nutritional Status of Grape Juice. Central California Research Symposium. April 18, 2002. California State University, Fresno.

Fugelsang, K.C. and Muller, C.J. 1995. Origin and Impact of Flavor and Odor-Active Microbial Metabolites in Cork. Proc. of the 10th Annual Midwest Regional Grape and Wine Conference, Osage Beach, Missouri.

Fugelsang, K.C. and Wahlstrom, V.E. 1990. Killer Yeasts: Their Utilization in Winemaking. Brewers and Vintners Conference. Shell Beach, CA.

Fugelsang, K.C., Osborn, M.M., and Muller, C.J., 1993. *Brettanomyces* sp. and *Dekkera* sp. in Wine and Juice. Proceedings of the Annual Conference of the American Chemical Society. San Francisco, CA.

Fugelsang, K.C., Osborn, M.M., and Muller, C.J. *Brettanomyces* and *Dekkera* sp. The Dr. Jekeyl's and Mr. Hydes of Winemaking. Wine Ind. Tech. Symp. Rohnert Park, CA. Jan. 31, 1992.

Fugelsang, K.C., Felten, S., and Nury, F.S. 1977. Application of Quantitative Descriptive Analysis in Wine Sensory Taste Panels. Annual Meeting of the American Society for Enology and Viticulture. San Diego, California.

Fugelsang, K.C., Gifford, J., and Nury, F.S. 1981. Further Studies on the Use of Q.D.A. in Wine Sensory Taste Panels. Proc. of the Wine Institute Technical Symposium. Santa Rosa, CA.

Fugelsang, K.C., Johns, C., and Nury, F.S. 1978. The Effect of Fermenting Juice Acidity on the Rate of Malic Acid Conversion by Different Malolactic Organisms. Annual Meeting of the American Society for Enology and Viticulture. San Diego, CA.

Fugelsang, K.C., and Johns, C. 1978. Studies on the Metabolic By-Products of Different Malolactic Organisms. Annual Meeting of the American Society for Enology and Viticulture, San Diego, CA.

Fugelsang, K.C., Rodriguez, S.R. and Madsen, L. 2005. Application and Experience with Cross-flow Micropore Filtration in Wine and Juice Processing. 20th Annual Mid-America Wine & Grape Conference. Osage Beach, Missouri. Also published in Proceedings.

Fugelsang, K.C., Zoecklein, B.W. and Gump, B.H. 1998. Pre-Conference Workshop: "Grape and Wine Analysis. Annual Meeting of the Eastern-Section of the American Society for Enology and Viticulture. Arlington, VA.

Gu, Sanliang, Hakim, A., Guoquian, D., Fugelsang, K.C. and Hodson, G.C. 2002. Relationship of Wine Ethyl Carbamate Potential to Vine and Fruit N-Status as Influenced by Rootstock, Clone, Training, Irrigation and Soil in Chardonnay, Sauvignon blanc, Cabernet Sauvignon and Syrah Grapevines. Ann. Meeting of the American Society for Viticulture and Enology. Portland, OR.

Gu, Sanliang, Hakim, A., Guoquian, D., Fugelsang, K.C. and Hodson, G.C. 2002. Effect of Arginine Addition to Must on Wine Urea, Ethyl Carbamate and EC Potential in Chardonnay and Cabernet Sauvignon Grapevines. Ann. Meeting of the American Society for Viticulture and Enology. Portland, OR.

Gump, B.H., J. Clark, and K.C. Fugelsang. 1985. Bitartrate Stability in Red and White Table Wines. Proc. of the Wine Industry Technical Symposium, Santa Rosa, CA.

Gump, B.H., K.C. Fugelsang, and J. Clark. 1985. Kinetics and Stoichiometry of Induced Calcium Tartrate Precipitation in Wine. Annual Meeting of the American Society for Enology and Viticulture. Reno, NV.

Muller, C.J., K.C. Fugelsang, and B.H. Gump. Utilization of Cull Fruits in Production of Fuel Alcohol. California Department of Food and Agriculture Publication. 1986

Osborn, M., and K.C. Fugelsang. Mixed Fermentations in Wine-making. Brewers and Vintners Conf. Shell Beach, CA. April, 1991.

Petrucci, V.E., and K.C. Fugelsang. 1976. Thinning of Varietal Grapes and Wine Quality. Wine Industry Technical Symposium. Davis, California.

Sullivan, P., Fugelsang, K.C. and Gump, B.H. 2002. Effects of Microoxygenation on Red Wine Quality. Ann. Meeting of the American Society for Enology and Viticulture. Portland, OR.

Wahlstrom, V.E., Burr, Scott, Fugelsang, K.C. and Muller, C.J. 1991. Effect of Fluoride on Fermentation. Annual Meeting of the Soc. for Enol. and Vitic. Seattle, WA.

Williams, K., K.C. Fugelsang, and F.S. Nury. 1979. Utilization of *Schizosaccharomyces pombe* and *S. octosporus* in Deacidification of Fermenting Musts. Annual Meeting of the American Society for Enology and Viticulture. Las Vegas, NV.

(f) Environmental and other Special Projects of Importance to the Wine Industry (subsequent publications noted above).

• Environmental Issues:

- 1. Alternative Energy Projects (1979-82).**
- 2. Ethanol Emissions Project (1984-1988). C.S.U.F., Air Quality Resources Board and the California Wine Institute. "Evaluation of Volatile Emissions from Red and White Fermentations." \$200,000.00**

• Wine and Health Issues (1989-2003).

- 1. "Ethyl Carbamate Formation in Wine and Distilled Products." CATI, American Vineyard Foundation and the California Wine Institute.\$100,000.00**

- **Wine Packaging Issues (1980-present).**
 1. **Evaluation of Innovative Technology for Sterilization of Juice and Wine (Claude Laval Award) \$ 10,000.00**

12/05