

Mr. Thomas Dean Mahin

Most recently acquired academic qualification:

BS Environmental Engineering, University of Texas at Austin

Career:

Thomas Mahin is a section chief with the Massachusetts Department of Environmental Protection (MDEP) in the USA. He is also chair of the MDEP's odor policy workgroup.

He has given presentations at technical conferences in numerous cities in the USA and Canada and was a keynote speaker at the 1st IWA Conference on Odors and VOCs at Sydney, Australia in 2001.

Major Committee Memberships:

He was the chair of the Water Environment Federation's (WEF) Air Quality Committee from 1998 - 2001. He is currently chair of a WEF task force that is rewriting and combining WEF's Odors and Toxic Air Emission's manuals of practice. He was co-chair of the WEF Odors and Toxic Emissions Specialty Conferences in 2000 and 2002.

Other Distinctions (Awards, etc.):

Water Environment Federation Service Award MDEP Outstanding Performance Award Major Publications:

- "Comparison of Different Approaches Used to Regulate Odors Around the World", Proceedings of the 1st IWA Conference on Odor and VOCs: Measurement, Regulation and Control Techniques, Sydney, Australia, March 25-28, 2001 & published in *Water Science and Technology*, Vol 44 No 9 pp 87-102.
- "Odor Measurement and Public Perception" (Mahin, T.) included in WEF 2001 publication: Odor and Corrosion Prediction and Control in Collection Systems and Wastewater Treatment Plants.
- "When is a Smell a Nuisance? An Overview of Different Approaches Taken Around the World in Setting Odor-Control Regulations" (Mahin, McGinley and Pope). May, 2000 issue of *Water Environment & Technology*.
- "Elements of Successful Odor Laws" (McGinley, Mahin and Pope). Proceedings of the Odor and VOCs Emissions 2000 WEF Specialty Conference, Cincinnati, Ohio April 16-19, 2000.
- "Overview of Different Approaches Used in Odor Regulations and Policies" (Mahin and Pope), Proceedings of the Water Environment Federation (WEF) 1999 Annual Conference (WEFTEC99) New Orleans, La.
- "Odor Dispersion: Models and Methods" (Pope, Mahin and Diosey).
 Proceedings of the WEF 1999 Annual Conference (WEFTEC99) New Orleans, La., USA.
- "Using Odor Intensity Ratings During Complaint Investigations to Determine Whether Nuisance Conditions Exist" (Mahin, T.). Proceedings of the WEF 1998 Annual Conference (WEFTEC98) Orlando, Fl., USA.
- "Odor Modeling Using D/T Levels" (Mahin, T.). February, 1998 issue of *Water Environment & Technology.*
- Using Dispersion Modeling of Dilutions to Threshold (D/T) Odor Levels to Meet Regulatory Requirements for Composting Facilities" (Mahin, T.). Proceedings of the Air & Waste Management Association's 90th Annual Meeting & Exhibition, June 8-13, 1997, Toronto, Ontario, Canada.
- "Massachusetts Odor Policy and Design and Dispersion Modeling Technical Guidance" (Mahin, T.). Proceedings of WEF Specialty Conference Control of Odors and VOCs Emissions, April 20-23, 1997, Houston, Texas.
- "Comparing a New Odor Policy to Permit Conditions at a Massachusetts Composting Facility" (Mahin, T.). January, 1997 issue of *Biocycle*.
- "Odor Policy for Composting Facilities" (Mahin, T.). December, 1995 issue of *Biocycle.*



Prof. Dr. Sang Jin Park

Born on January 03, 1957 at Yesan in Korea

Most recently acquired academic qualification:

- 1983 Graduated from Korea University (MS)
- 1993 Completed the doctor's course from the Korea University(Ph.D)

Career:

1995-present	Professor, Dept of Civil & Environmental Eng. Dean of Student
	Affairs, Woosong University
1985-1995	Research fellow, Dept. of Environmental Eng., Korea Institute of
	Construction Technology under Ministry of Construction
1992-1993	Visiting Scholar, Resource Utilization Lab., Tokyo Institute of
	Technology in Japan
1983-1985	Section chief, Dept. of Water & Wastewater, Korea Engineering
	Consulting Cooperation
1979-1981	Professor, Dept. of Civil Eng., Korean 3 rd Military Academy

Major Committee Memberships:

President, Korean Society of Odor Research & Engineering Chairman, Korean Research Group of Odor & VOC Director, Korean Society of Environmental Engineers Representatives, Korean Society for Atmospheric Environment

Major Publications:

• Sangjin Park, et. al., "Control of Odor and VOCs Emissions Using Biofiltration :

A Case Study of Styrene", Proceeding of 3rd IWA International Conference on Odour and VOCs (2003 Abstract accepted)

- Sangjin Park, et. al., "Removal of Odor Emitted from Composting Facilities Using Ceramic Biofilter", Journal of Water Science and Technology, Vol. 44, No. 9, pp. 301-308 (2001)
- Park S. J. et. al., "Evaluation of Porous Ceramic as Microbial Carrier of Biofilter to Remove Toluene Vapor", Jour. of Environmental Technology, Vol. 22, pp. 47-56 (2001)
- Sangjin Park, et al., "Evaluation of Porous Ceramic As Microbial Carrier of Biofilter to Remove Tolune Vapor", Proceeding of the International Conference on Water, Environment, Ecology, Socio-ecomomics and Health Engineering, pp. 258-268 (1999.10)



Mr. Sung Bong Yang

Born on May 27, 1953

Most recently acquired academic qualification:

1988 Ph. D. in Chemistry, Department of Chemistry, Korea Advanced Institute of Science and Technology, Korea

Career:

- 1981 Full-time Assistant at Department of Industrial Chemistry, Ulsan Institute of Technology
- 1985 Assistant Professor, Department of Chemistry, University of Ulsan
- 1995 Professor, School of Chemistry and Life Science, University of Ulsan

Major Committee Memberships:

Korean Society of Odor Research and Engineering Korean Society for Atmospheric Environment Korean Chemical Society

Major Publications:

- Investigation of Emission Inventory and Strategy of Reduction of Odor at Siwa-Banwol Industrial Zone, National Institute of Environmental Research, 2003, Korea
- Management of Odor and Emission Source in Korea, Ministry of Environment, 2001, Korea
- Measurement of Odorous Compounds at Industrial Area in Korea, National Institute of Environmental Research, 2002, Korea



Mr. Robert William Sneath

Most recently acquired academic qualification:

Post Graduate Diploma Power Engineering 1971

Career:

- 1990-2003 Head of the Silsoe Research Institute Odour laboratory and a member of the CEN/TC264/wg2/Odours working group that formulated the European Standard EN13725 Air Quality-Determination of odour concentration by dynamic olfactometry. Project Leader in Environment Research Group; Research into Greenhouse Gas emissions from agricultural livestock production. Research into the application and development of electronic nose technology for detection of food contaminants.
- 1981-1990 Silsoe Research Institute, Senior Research Scientist, Research on odour and emission control from aerobic treatment of wastes: recently Project Leader:- Methane and Nitrous Oxide Emissions from livestock buildings and manure, olfactometry and.)
- 1977-1981 NIAE (National Institute for Agricultural Engineering), Silsoe Research into the application of preservatives to hay
- 1974-1977 NIAE Research into aerobic treatment to improve handling and disposal of livestock wastes to reduce water pollution.

Major Committee Memberships:

CEN/TC264/WG 2 Odours BSi (British Standards Institution) EH/2/1 Stationary Source Emissions

Major Publications:

- Sneath. R.W. & Persaud. K.C. (2003) Chapter 15 Correlating Electronic Nose and Sensory Panel Data, pp 377-397 in "Handbook of Machine Olfaction". Eds Pearce, Schiffman, Nagle, Gardner. Wiley-VCH Verlag GmbH & Co. KgaA, Boschstrase 12, 69469 Weinheim, Germany.
- SNEATH, R.W. European odour Concentration Measurements by Dilution Olfactometry. Invited presentation at ECRO2002, Erlangen, Nurenburg, Germany. 23-27 July 2002
- Robertson, Hoxey, Demmers, Welch, Sneath, Stacey, Fothergill, Filmer, Fisher; (2002) Commercial-scale studies of the effect of broiler-protein intake on aerial pollutant emissions. Biosystems Engineering 82 (2) 217-225
- SNEATH, R. W. (2001). Chapter 7 `Olfactometry and the CEN standard, prEN 13725`, pp 130-154 in "Odours in Wastewater Treatment: Measurement, Modelling and Control". Eds. R Stuetz and F. Frechen. IWA.Publishing, Alliance House, 12 Caxton Street, London SW1H 0QS, UK.
- O. PAHL, A.G. WILLIAMS, R.W. SNEATH (2002) Reduction Of Ammonia and Odour Emissions From Pig Slurry Under Slats Using Oil And Foam Layers. Environmental Technology Vol. 23. Pp395-403
- BROWN, L., SYED, B., JARVIS, S.C., SNEATH, R.W., PHILLIPS, V.R., GOULDING, K.W.T., & LI, C. (2002) Development and application of a mechanistic model to estimate emission of nitrous oxide from UK agriculture. Atmospheric Environment 36 (2002) 917-928
- PHILLIPS, V.R.; LEE, D.S.; SCHOLTENS, R.; GARLAND, J.A.; SNEATH, R.W. (2001) A review of methods for measuring emission rates of ammonia from livestock buildings and slurry or manure stores. Part 2 Assessment of techniques for measuring flux rates, concentrations and air flows. Journal of Agricultural Engineering Research, Vol 78 1, 1-14H
- MARK R. THEOBALD, C. MILFORD, K.J. HARGREAVES, L.J. SHEPPARD, E. NEMITZ, Y.S. TANG, V.R. PHILLIPS, R. SNEATH, L. McCARTNEY, F.J. HARVEY, I.D. LEITH, J.N. CAPE, D. FOWLER, M.A. SUTTON, (2001) Potential For Ammonia Recapture by Farm Woodlands: Design And Application of A New Experimental Facility, In Optimizing Nitrogen Management in Food

and Energy Production and Environmental Protection: Proceedings of the 2nd International Nitrogen Conference and Policy. The Scientific Worldl 1(S2), 791-801

- SNEATH, R. W., PHILLIPS, V. R., DEMMERS, T. G. M., BURGESS, L.R., SHORT, J. L., WELCH, S. K. (1997) Long term measurements of greenhouse gas emissions from UK livestock buildings. 5th International Livestock Environment Symposium, Minneapolis, USA, 29-31 May 1997,
- EVANS, P.; PERSAUD, K.C.; McNEISH, A.S.; SNEATH. R.W.; HOBSON. N.; MAGAN, N. (2000(Evaluation of a radial basis function neural network for the determination of wheat quality from electronic nose data. Sensors and Actuators 'B', 69 348-359