



Dr. Lawrence Choon Chiaw Koe

Most recently acquired academic qualification:

1983 PhD, University of Queensland, Australia

Career:

2002 Associate Professor at the Nanyang Technological University, Singapore
Director, Environmental Engineering Research Centre, NTU
Director and Chairman of the Board of Directors, Aromatrix Pte Ltd

Major Committee Memberships:

Chairman, Air & Water Management Association, Singapore Chapter
Chairman, IES Technical Committee on Environmental Engineering
Chairman, SAC – Singlas Committee on Environmental Engineering

Other Distinctions (Awards, etc.):

- Recipient of the Michael Flynn Award for presenting the best paper at the 1983 Australian Water and Wastewater Association's Biennial Convention in Sydney.
- Innovation Award 2001 by Singapore's Enterprise Challenge Unit for the trial application of bioscrubber technology to remove sewage odour at Kranji Sewage Treatment Works.
- Enterprise Challenge Award 2003 for most successful innovation

Major Publications:

- Koe, LCC and Y. Wu, Removal of Toluene in waste gases by a biotrickling filter. *Journal of Institution of Engineers*, 41, 3 (2001): 30-35 (Singapore)
- Koe, LCC, A Arellano and J Mc Gregor, Investigating the haze transport from 1997 biomass burning in Southeast Asia: Its impact upon Singapore. *Atmospheric Environment*, 35, no. 15 (2001): 2723-2734. (United States)
- Koe, LCC and F Yang, Evaluation of a pilot-scale bioscrubber for the removal of hydrogen sulphide. *Water and Environment Management*, 14, 6 (Dec 2000): 432-435. (United Kingdom)
- Koe, LCC, J McGregor and A Arellano, Southeast Asia Regional Haze Modelling. *Journal of Institution of Engineers*, 40, 5 (2000): 50-57 (Singapore).
- Koe, LCC and F Yang, A bioscrubber for Hydrogen Sulphide removal. *Water Science and Technology*, 41, 6 (2000): 141-145. (United Kingdom)
- Koe, LCC, Witherspoon, J, Tan, N C, Regan, M, Daigger, G and T Card, Buried treasure. *Water Environment and Technology*, July (2000): 30-35 (USA)

Dr. Masahiro Osako

Born on August 29, 1963



Most recently acquired academic qualification:

Doctor of Engineering, Graduate School, Kyoto University

Career:

1991-1995 Researcher, National Institute of Public Health

1995-2000 Senior Researcher, National Institute of Public Health

2000- Senior Researcher, National Institute for Environmental Studies

Major Committee Membership, etc.:

Guest Associate Professor, Graduate School, Tokyo Institute of Technology

Guest Researcher, National Institute of Science and Technology Policy

Other Distinctions (Awards, etc.):

1991 Scientific Award from JOREA

2000 Award for Encouragement from the Japan Society of Waste Management Experts

Mr. Jun-ichi Kita

Born on May 09, 1957



Most recently acquired academic qualification:

Graduated from Kyoto University with B.A. at Chemical Engineering in 1981

Career:

Entered Shimadzu Corporation in 1981, studied in IR sensors, X-ray sensors, High temperature superconductor sensors and odor sensors in central research lab. at Shimadzu and then belonged to Analytical Instrument Div. from 1996.

Major Publications:

Aroma science series 21 [6] analysis and evaluation of odor molecules



Prof. Franz Bernd Frechen

Most recently acquired academic qualification:

Ph.D. from RWTH (Technical University) Aachen, Germany, in 1988

Career:

Studied Civil Engineering at the RWTH (Technical University) Aachen, finished 1980.
Received a Ph.D. from RWTH (Technical University) Aachen, Germany, in 1988 concerning Odour emissions of wastewater facilities (magna cum laude)

1988-1993 Employee and shareholder of a mid-sized engineering and consultant company (55 employees)

1994-1996 Foundation of own consultant company for odour and wastewater technology

since 1996 Full Professor and Head of the Dept. of Sanitary and Environmental Engineering, University of Kassel

Major Committee Memberships:

International Water Association:

Chairman of the Specialist Group on Odours and Volatile Emissions

And member of other Specialist Groups

German Association for Water, wastewater and waste:

Member, Main Committee on "Domestic wastewater Treatment"

Chairman, Committee on "Emissions of wastewater facilities"

Member, Committee on "Odour emissions from sewerage systems"

And others

Major Publications (only English, only related to odour):

- Book Editor (together with Richard Stuetz, Cranfield University): Odours in Wastewater Treatment - Measurement, Modelling and Control, 2001, IWA Publishing, London
- Environmental Pollution by Odorous Emissions of Domestic and Toxic Waste Landfills - Basics, Present Situation and Reduction by Waste Gas Treatment Techniques
- Aktuelle Entwicklungen in der Umweltschutztechnik, Hrsg.: Umweltbundesamt Wien und Internationale Gesellschaft für Umweltschutz, Essen 1989, Westarp Wissenschaften, Essen
- Odour Emissions and Controls, Sanitary Landfilling: Process, Technology and Environmental Impact, Hrsg. Christensen, T. H.; Cossu, R.; Stegmann, R., London 1989, S. 425ff, Academic Press Limited, London
- Odor Emissions of large WWTP's: Source Strength Measurement, Atmospheric Dispersion Calculation, Immission Prognosis, Countermeasures - Case Studies - Water Science and Technology, 1992, Vol 25, Nr. 4-5, S. 375ff
- Effect of aerobic pre-treatment of waste on odour emissions, IV. International Landfill Symposium, Cagliari, 11.-15.10.1993
- Odour Emissions of Wastewater Treatment Plants - recent German Experiences, Wat. Sci. Tech., Vol. 30, No. 4, S. 35 - 46, 1994
- A new model for estimation of odour emissions from landfill and composting facilities , 5th International Landfill Symposium, Cagliari, Sardinia, Proceedings Volume I, S. 815, 1995, CISA
- Odour Emissions and Control, Landfilling of Waste: Biogas, Hrsg. Christensen, T. H.; Cossu, R.; Stegmann, R.
- Effect of Aerobic Treatment on Odour Emissions - Results from Large-Scale Technical Plant Operation, Sixth Intern. Landfill Symposium, Cagliari, Vol. 1, S. 555ff., 1997
- Odour Emission Capacity of Wastewaters - Standardization of Measurement Method and Application, Wat. Sci. Tech., Vol. 38, No. 3, S. 61 - 68, 1998, together with Köster, W.
- Anaerobic treatment of biowaste - odour emissions and control technologies at a full size treatment plant, 7th International Landfill Symposium, Cagliari, Sardinia, Proceedings Volume V, S. 421, 1999, CISA
- Determination of and measures against odour emissions from sewerage systems, 11th European Sewage and Refuse Symposium, Liquid wastes

section, S. 181, GFA, 1999

- Odour measurement and odour policy in Germany, *Wat. Sci. Tech.*, Vol. 41, No. 6, S. 17 - 24, 2000
- Prediction of odorous emissions, in: *Odours in Wastewater Treatment - Measurement, Modelling and Control*, S. 201, IWA Publishing, London, 2001
- Regulations and Policies, in: *Odours in Wastewater Treatment - Measurement, Modelling and Control*, S. 16, IWA Publishing, London, 2001