

ATMOSPHERIC MODELLING

1 WEB RESOURCES

Editor	Country	Title	Link	Description	Contents
EPA	USA	Air Quality Modeling Group (AQMG).	EPA's Support Center for Regulatory Atmospheric Modeling	Web site	Documentation and guidance for air quality models, including downloadable computer code, input data, and model processors.
NOAA	USA	Air Resources Laboratory	http://www.arl.noaa.gov/atmos/Disp.php	Website	Development, evaluation, and application of air quality models; improvement of approaches for predicting atmospheric dispersion of hazardous materials; and the generation of new insights into air-surface exchange and climate variability and trends.
Open directory Project	--	Air Dispersion modelling	http://www.dmoz.org/Science/Environment/Air_Quality/Air_Disp...	List of links	Atmospheric dispersion including software and consultants
ADMLC	UK	Atmospheric Dispersion Modelling Liaison Committee	http://www.admlc.org.uk/index.htm	Website	Access to ADMLC published works and modeling guidelines.
Wikipedia	English	Atmospheric dispersion modeling	http://en.wikipedia.org/wiki/Atmospheric_dispersion_modeling	Webpage	Definition and list of links
Wikipedia	France	Modélisation de la dispersion atmosphérique	http://fr.wikipedia.org/wiki/Mod%C3%A9lisation_de_la dispersion_atmosph%C3%A9rique	Webpage	Definition and list of links
Wiki	--	Atmospheric dispersion	http://atmosphericdispersion.wikia.com/wiki/Main_Page	Wiki	Gathers international community of atmospheric dispersion modelers
Direction du suivi de l'état	Canada (French)	Guide de la modélisation de	http://www.mddep.gouv.qc.ca/air/atmosphere/guide-mod-	PDF	Orienter la démarche des utilisateurs de modèles de dispersion atmosphérique.

de l'environnement		la dispersion atmosphérique	dispersion.pdf		
Forum for Air Quality in Europe	Europe	FAIRMODE	http://fairmode.eu.eea.europa.eu/	Website	Focus on coordinating and gathering information from modellers and users within Europe, developing guidance and recommendations on air quality modelling for modelers, users and the European Commission, providing harmonised tools and methodologies for model benchmarking and assessment, providing recommendations for scientific research in air quality modelling
European Topic Centre on Air Pollution and Climate Change Mitigation	Europe	Model Documentation System	http://acm.eionet.europa.eu/	Website	Detailed list of models and search tool to provide guidance to any model user in the selection of the most appropriate model for his application
ERCOFTAC - QNET	Europe	Boundary layer flow and dispersion over isolated hills and valleys	http://qnet-ercoftac.cfms.org.uk/w/index.php/AC_5-05	Abstract	Introduction to environmental flows
COST 732	Europe	Quality Assurance and Improvement of Micro-Scale Meteorological Models"	http://www.mi.uni-hamburg.de/fileadmin/files/forschung/techmet/cost/cost_732/pdf/BestPractiseGuideline_1-5-2007-www.pdf	PDF	published guidelines and recommendations
HARMO	Europe	Initiative on "Harmonisation within Atmospheric Dispersion Modelling for	http://www.harmo.org/	Website	Model validation kit Workshops and conferences Proceedings

		Regulatory Purposes"			
INERIS	France	Méthodes pour l'évaluation et la prévention des risques accidentels (DRA-006) □-12	http://www.ineris.fr/centredoc/46web.pdf	PDF	Dispersion atmosphérique (Mécanismes et outils de calcul)
Riso	Denmark	The BOLUND experiment	http://www.springerlink.com/content/r78052840x476825/	Open access article	Intercomparison of models based on the Bolund experiment (flow over a steep, 3D hill).
INERIS	France	Principes généraux de la modélisation de la dispersion atmosphérique	http://www.clic-rhonealpes.com/medias/visualiser/359/INERIS_Principes_modelisation_dispersion_2009-05-12.pdf	Powerpoint	Main principles behind atmospheric modelling.
AIR4EU	Europe	Air quality assessment by monitoring and modelling for regulated pollutants in Europe	http://www.air4eu.nl/	Website	Guidance document on best practices for the combined use of monitoring methods and models to assess Air Quality in Europe from hotspot/street level to continental level for various users on local, regional, national and European level and for various purposes.
TRAPOS	Europe	Optimisation of Modelling Methods for Traffic Pollution in Streets	http://www2.dmu.dk/atmosphericenvironment/Trapos/TheBook/TRAPOS_Book.pdf	PDF	Summary of the main conclusions of the working group on modelling methods for traffic pollution in urban environment

2 BOOKS

Arya, S. Pal (1998). Air Pollution Meteorology and Dispersion (1st Edition ed.). Oxford University Press. ISBN 0-19-507398-3.

- Schnelle, Karl B. and Dey, Partha R. (1999). Atmospheric Dispersion Modeling Compliance Guide (1st Edition ed.). McGraw-Hill Professional. ISBN 0-07-058059-6.
- Barrat, Rod (2001). Atmospheric Dispersion Modelling (1st Edition ed.). Earthscan Publications. ISBN 1-85383-642-7.
- Beychok, Milton R. (2005). Fundamentals Of Stack Gas Dispersion (4th Edition ed.). author-published. ISBN 0-9644588-0-2.
- Center for Chemical Process Safety (1999). Guidelines for Chemical Process Quantitative Risk Analysis (2nd Edition ed.). American Institute of Chemical Engineers, New York, NY. ISBN 978-0-8169-0720-5.
- Center for Chemical Process Safety (1996). Guidelines for Use of Vapor Cloud and Source Dispersion Models, with Worked Examples (2nd Edition ed.). American Institute of Chemical Engineers, New York, NY. ISBN 978-0-8169-0702-1.
- Cooper, J.R., Randle, K. and Sokh, R.G. (2003). Radioactive Releases
- European Process Safety Centre (1999). Atmospheric Dispersion, 1st Edition, Rugby: Institution of Chemical Engineers. ISBN 0852954042.
- Hanna, S. R., Briggs, G. A., & Hosker, R. P. (1982). *Handbook on Atmospheric Diffusion*. U.S. Department of Energy, Technical Information Center. DOE/TIC-11223.
- Hanna, S.R. and P.J.Divas (1996). Guidelines for Use of Vapor Cloud Dispersion Models, 2nd Edition, Wiley-American Institute of Chemical Engineers. ISBN 0816907021.
- Hanna, S. R. and D. G. Strimaitis (1989). Workbook of Test Cases for Vapor Cloud Source Dispersion Models, 1st Edition, Center for Chemical Process Safety, American Institute of Chemical Engineers. ISBN 0816904553.
- Hanna, S.R. and P.J.Divas (1996). Guidelines for Use of Vapor Cloud Dispersion Models, 2nd Edition, Wiley-American Institute of Chemical Engineers. ISBN 0816907021.
- Hanna, S. R. and Britter, R.E. (2002). Wind Flow and Vapor Cloud Dispersion at Industrial and Urban Sites, 1st Edition, Wiley-American Institute of Chemical Engineers. ISBN 081690863X
- Perianez, Raul (2005). Modelling the dispersion of radionuclides in the marine environment : an introduction, 1st Edition, Springer. 3540248757.
- Pielke, Roger A. (2001). Mesoscale Modeling, 2nd Edition, Elsevier. 0125547668.
- Schnelle, Karl B. and Dey, Partha R. (1999). Atmospheric Dispersion Modeling Compliance Guide, 1st Edition, McGraw-Hill Professional. ISBN 0070580596.
- Tiwary Abhishek and Colls, Jeremy (2010). Air Pollution (3rd Edition ed.). RootLedge (UK).ISBN 0-203-87196-0.

- Turner, D.B. (1994). Workbook of Atmospheric Dispersion Estimates: An Introduction to Dispersion Modeling (2nd Edition ed.). CRC Press. ISBN 1-56670-023-X.
- U.S. Environmental Protection Agency (1993). *Guidance on the Application of Refined Dispersion Models for Hazardous/Toxic Air Releases*. Office of Air Quality Planning and Standards, EPA-454/R-93-002.
- U.S. Environmental Protection Agency (1999). *Risk Management Program Guidance for Offsite Consequence Analysis* (Appendices). Office of Solid Waste and Emergency Response, EPA 550-B-99-009.
- U.S. Environmental Protection Agency (1999). *Technical Background Document for Offsite Consequence Analysis for Anhydrous Ammonia, Aqueous Ammonia, Chlorine, and Sulfur Dioxide*. Chemical Emergency Preparedness and Prevention Office.
- U.S. Environmental Protection Agency (2009). *Chapter 4: Offsite Consequence Analysis*. In *General Guidance on Risk Management Programs for Chemical Accident Prevention* (40 CFR Part 68). Office of Solid Waste and Emergency Response, EPA 555-B-04-001.
- Zannetti, P. (1990). Air pollution modeling : theories, computational methods, and available software, Van Nostrand Reinhold. ISBN 0442308051.

3 CONFERENCES AND JOURNALS

- Advances in Air Pollution Modeling for Environmental Security (NATO Workshop).*
International Conference on Air Pollution
International Technical Meeting on Air Pollution Modeling and Its Application (11th).
International Conference on Air Quality – Science and Application