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**PAPERS AUTHORED**

**Archival Journal Papers Published (1983 - )**

**1983**

1. Fernando, H.J.S. and Long, R.R., "The Growth of a Grid-Generated Mixed Layer in a Two-Fluid System," *Journal of Fluid Mechanics*, **133**, 377-395, 1983.

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4. Fernando, H.J.S. and Long, R.R., "The Growth of a Shear-Free Mixed Layer in a Linearly Stratified Fluid," *Physics of Fluids*, **28(10)**, 2999-3005, 1985.

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5. Fernando, H.J.S., "A Discussion on the Dynamics of Jets in Two-Layer Stratified Fluids," *ASCE Journal of Hydraulics Engineering*, **112(11)**, 1107-1111, 1986.
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15. Fernando, H.J.S., "Note on Interfacial Mixing in Stratified Flows," *Journal of Hydraulics Research*, **27(3)**, 463-465, 1989.
16. Boyer, D.L., Davies, P.A., Fernando, H.J.S. and Zhang, X., "Linearly Stratified Flow Past a Horizontal Circular Cylinder," *Philosophical Transactions of the Royal Society (London)*, Series A, **328**, 501-528, 1989.
17. Fernando, H.J.S., "Oceanographic Implications of Laboratory Experiments on Diffusive Interfaces," *Journal of Physical Oceanography*, **19(11)**, 1707-1715, 1989.
18. Fernando, H.J.S., "Buoyancy Transfer Across a Diffusive Interface," *Journal of Fluid Mechanics*, **209**, 1-34, 1989.
19. Chen, R-r., Fernando, H.J.S. and Boyer, D.L., "Formation of Isolated Vortices in a Rotating Convecting Fluid," *Journal of Geophysical Research (Atmospheres)*, **94(D15)**, 18,445-18,453, 1989.

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## **INVENTION DISCLOSURE:**

Disclosure ID: D-0283; Title - ANN Extrapolation (2020), University of Notre Dame, IDEA Center.

## **KEYNOTE/INVITED PRESENTATIONS AT CONFERENCES/WORKSHOPS**

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26. Fernando, H.J.S. "Challenges in Tackling Urban Environmental Problems: An Example of a Rapidly Growing City," IAI Institute for Urbanization and Global Change Research in Latin America, Mexico City, Sep 27 to October 8<sup>th</sup>, 2004.
27. Fernando, H.J.S., "Air Pollution in Urban Settings," Invited Speaker, NSF Workshop on Sensors for Environmental Observatories, Seattle, WA Nov 30 – Dec 02, 2004.
28. Fernando, H.J.S. "Challenges in Tackling Urban Environmental Problems: An Example of a Rapidly Growing City," William Mong Distinguished Lecture in Engineering and Computer Sciences, Hong Kong University, 2004.
29. Fernando, H.J.S. "Urban Environments: Effects of Global Change and Extreme Events," Keynote Speaker, Joint Houston-London Conference at the Shell Oil Auditorium, Rice University on Climate Change, Extreme Events and Coastal Cities, February 9-10, 2005.
30. Fernando, H.J.S. "The Sumatra Tsunami in Sri Lanka," Invited Speaker, Urgent Meeting on Tsunami Research, March 18, 2005, Institute of Civil Engineers and Lighthill Institute of Mathematics, London, 2005.
31. Fernando, H.J.S. "Coherent Structures in Fluid Mechanics: Their Role in Mixing and Transport in Environmental Flows," Invited Speaker, Proceedings, GTP Workshop on Coherent Structures in Atmosphere and Ocean, NCAR, July 11-14, 2005.
32. Fernando, H.J.S. "Observations Following the Sumatra Tsunami in Sri Lanka," Conference on Infrastructure Reconstruction, College of Engineering, University of Calgary, October 21, 2005.
33. Fernando, H.J.S. "Small Scale Turbulence and Mixing in Stratified Shear Flows," Invited Speaker, Conference on Emerging Paradigms in Non-Linear Sciences, Los Alamos National Laboratory, Jan26-Jan 28, 2006.

34. Fernando, H.J.S., "Air Circulation and Contaminant Dispersion in Cities," Keynote Speaker, NATO Advanced Research Workshop on Planetary Boundary Layer, 18-22 April, Dubrovnic, Croatia, 2006.
35. Fernando, H.J.S. and Lozovatsky, I., "Turbulence and Mixing in Strongly Stratified Layers of Natural Flows," Keynote Speaker, 10<sup>th</sup> European Workshop on Physical Processes in Natural Waters, June 26-28, 2006, University of Granada, Spain.
36. Fernando, H.J.S., "Particle Laden Flows: from Geophysical to sub-Kolmogorov Scales," Keynote Closing Speaker, Euromech Colloquium 477, University of Twente, June 21-33, 2006.
37. Fernando, H.J.S., "Flow, Turbulence and Transport in Complex Terrain Airsheds: From Meso to Street Canyon Scales," Keynote Speaker, NCAR GTP Workshop on Turbulence and Scalar Transport in Roughness Sublayers, September 26-28, 2006.
38. Fernando, H.J.S., Princevac, M. Calhoun, R. and Hunt, J.C.R., "Stable Atmospheric Boundary layer Over Complex Terrain," Invited Speaker, Stable Atmospheric Boundary Layer Workshop, Sedona, Arizona, November 12-16, 2006.
39. Calhoun, R., Retallack, C., Christman, A. and Fernando, H.J.S., "Nocturnal Valley Flow in T-Rex," Invited Talk, Stable Atmospheric Boundary Layer Workshop, Sedona, Arizona, November 12-16, 2006.
40. Fernando, H.J.S., "Small Scale Mixing in Stably Stratified Flows," Invited Speaker in the AFOSR Workshop on "Challenges of Multi-scale Atmospheric Turbulence," Tempe, AZ, Dec 14-15, 2006.
41. Fernando, H.J.S. "Transport and Small Scale Mixing in Topographically Dominated Stably Stratified Flows," Keynote Speaker, Sixth International Symposium on Stratified Flows, Perth, Australia, December 11-14, 2006.
42. Fernando, H.J.S., "Coral Observations Following Sumatra Tsunami in Sri Lanka," IIHR-Asia Pacific Division Meeting, Hong Kong, Inaugural Thematic Paper, January 15-16, 2007.
43. Fernando, H.J.S. "Tsunamis: A Journey through their Manifestation and Aftermath," *American Society of Limnology and Oceanology (ASLO)*, Keynote Union Session Speaker, Annual Conference, Santa Fe, February 2-7, 2007.
44. Fernando, H.J.S., "Particle Laden Flows in Geophysics," Invited Speaker, Explosive Volcanism Workshop, Integrating Numerical and Laboratory Models of Explosive Eruptions with Deposits: Understanding Explosive Volcanic Sedimentation, Prescott, Arizona, March 31-April 4, 2007.
45. Fernando, H.J.S., "Urban Atmospheric Boundary Layer Dynamics," Invited Speaker, *SIAM Conference on Mathematical and Computational Issues in the Geosciences*, In Session MS15, High Performance Computing and Mathematical Modeling of Atmospheric Flows, Santa Fe, New Mexico, March 19-22, 2007.
46. Fernando, H.J.S., "Air Quality in Phoenix Area," Conference on "Rome Experience to the ATMOSFERA Production in Milan: A Project for the Air Quality in Big Cities," Invited Speaker, April 23, Campidoglio, Rome, 2007.
47. Park, K.Y. and Fernando, H.J.S., "ASU's version of MM5/Urbanized: Input Data on Land Use and Improvement of Physics," Invited Talk, NUDAPT (National Urban Database and Access Portal Tool) Workshop, US Environmental Protection Agency, April 18-20, Salt Lake City, Utah, 2007.

48. Park, K.Y. and Fernando, H.J.S., "ASU's version of MM5/Urbanized: Applications" NUDAPT Invited Talk (National Urban Database and Access Portal Tool) Workshop, US Environmental Protection Agency, April 18-20, Salt Lake City, Utah, 2007.
49. Fernando, H.J.S., "Urban Heat Island in Phoenix," Invited Presentation at the Urban heat Island Taskforce/City Council, City Hall. May 15, 2007.
50. Fernando, H.J.S., "Tales of Troubled Waters: Sumatra Tsunami, Katrina Storm Surge and Cognates," NATO (Security through Science Program) Workshop on Aral Sea, Keynote Speaker, Girona, Spain, July 11-14, 2007. (50)
51. Mahalov, A., Nicolaenko, B. and Fernando, H.J.S., "High Performance Computing of Environmental Flows," Invited Paper, Multi-Scale Mathematics in Defense Research and It's Spin-Offs, Lighthill Institute of Mathematics, Workshop, May 31-June 2, 2007.
52. Di Sabatino, S. and Fernando, H.J.S., "Turbulent Mixing Scenario during Evening Transition," Invited Paper, Turbulent Mixing and Beyond, The Abdus Salam International Centre for Theoretical Physics, Trieste, August 18-26, 2007.
53. Fernando, H.J.S. "Some Non-Linear Problems Associated with Modeling of Urban Air Flows," Keynote Speaker, First Basil Nicolaenko Distinguished Lecture Series in Non-Linear Sciences, Arizona State University, October 8, 2007.
54. Fernando, H.J.S., "Urban heat Island in Phoenix," City of Phoenix, Invited Speaker and Moderator, Continuous learning Institute, October 6, 2007.
55. Fernando, H.J.S. "Wading in Troubled Waters: Tsunamis, Storm Surges and Stressed Environments," Keynote Speaker, 5<sup>th</sup> International Symposium on Environmental Hydraulics, Tempe, AZ 4-7, 2007.
56. Fernando, H.J.S. "Anthropogenic Exacerbation of Natural Disasters," Mini-Conference on "A Dynamic Approach to Mitigation of Natural Disasters," Keynote Speaker, International Infrastructure Renewal & Reconstruction, University of Calgary, April 10-11, 2008.
57. Fernando, H.J.S., "Journeying Through Some Stressed Ecosystems," Invited Speaker, National Academy of Engineering, Regional Meeting and Sustainability Symposium, Tempe, Arizona, April 2008.
58. Fernando, H.J.S., "Urban heat Island of Phoenix," Invited Speaker, Weather Workshop, National Weather Service, Phoenix, May 13, 2008.
59. Fernando, H.J.S., "Technology Infusion for Atmospheric Boundary layer Research; Observations and Experiments on Multi-scale Turbulence Phenomena," Keynote Speaker, Geophysical Turbulence Phenomena; Observing the Turbulent Atmosphere: Sampling Strategies, Technology and Applications. Theme of the Year Workshop, National Center for Atmospheric Research, Boulder, CO, May 28-30, 2008.
60. Fernando, H.J.S., "Episodic Events in Nature; The Role of Turbulence, Waves and Mixing," 2<sup>nd</sup> NATO Workshop on Aral Sea, Invited Speaker, Tashkent, Uzbekistan, October 22-24, 2008.
61. Fernando, H.J.S., "Fluid Mechanics of Urban Environments," Invited Speaker, American Physical Society Fluid Dynamics Meeting, San Antonio, Texas, *Bull. Am. Phys. Soc.* **53(15)**, 212, 2008.
62. Fernando, H.J.S. and Voropayev, S.A., "Shallow Flows in the Atmosphere and Oceans: Geophysical and Engineering Applications," Keynote Speaker, Proceedings, International Symposium on Shallow Flows, Hong Kong, December 10-12, 2008.

63. Hunt, J.C.R., Eames, I., Westerweel, J., Davidson, P.A., Voropayev, S., Fernando, H.J.S., and M. Braza, Thin Shear Layers – The Key to Turbulence Structure? Keynote Paper (by J.C.R.Hunt), Proceedings, International Symposium on Shallow Flows, Hong Kong, December 10-12, 2008.
64. E.R. Pardyjak and H.J.S. Fernando, “The Effect of Surface type on the Decay of Turbulence in the Surface Layer during Evening Transition,” Invited Paper, European Meteorological Society, 9th EMS / 9th ECAM, EMS2009-531, 02 Oct 2009.
65. Princevac, M., Fernando, H.J.S. and Hunt, J.C.R., Thermally Driven Flows in Complex Terrain: Field, Laboratory and Analytical Investigation," Invited Paper, International Symposium on Multi-Phase Flow in Atmospheric Boundary Layer", October 16th to 19th, Lanzhou, China, 2009. (50)
66. Fernando, H.J.S and Lozovatsky, I., Topographic Influence on Internal Waves, Keynote Speaker, Turbulence and Internal Waves in Mediterranean Sea (TURBINTERMED) Workshop, March 10-12, Toulon, France, 2010.
67. Fernando, H.J.S. “Environmental Hydraulics and Sustainability: Some Lessons from Recent Past,” Keynote Address, 6<sup>th</sup> International Symposium on Environmental Hydraulics, Athens, Greece, 23-25 June, 2010.
68. Fernando, H.J.S., “Water Resources: Changes over Next 20 Years,” Invited Speaker, 1<sup>st</sup> IAHR Summit on Hydro-Environmental Engineering and Research, “The Engineering and Research Contribution to Global Water Security, Athens, June 14, 2010.
69. Ovenden, N., Shaffer, S. And Fernando, H.J.S. “Investigations of Environmental and Terrain Effects on the Propagation of Freeway Noise, Invited Paper, Acoustical Society of America (ASA), Seattle May 23 and 27, 2011.
70. Fernando, H.J.S. “Sustainable Coastal Cities: Role of Environmental Hydraulics,” Invited Speaker, Future of Environmental Hydraulics (Symposium in honor of Heinz Stefan). University of Minnesota, St. Anthony Falls Hydraulics Laboratory, May 11, 2011.
71. Fernando, H.J.S. “Flow and Dispersion through Urban Canopies,” Invited Speaker, Symposium Honoring Professor C.C. Mei, American Academy of Arts and Sciences, Boston, May 20, 2011.
72. Fernando, H.J.S., Pol, S., Nath, C., Voropayev, S., Webb, S. and Lord, D., “Jets, Plumes and Double Diffusion under Confinement – And their Role in Fluid Mechanics of US Strategic Petroleum Reserves,” Invited Speaker, Gehard H. Jirka Memorial Colloquium on Environmental Fluid Mechanics,” June 3-4, Karlsruhe, Germany, 2011
73. Fernando, H.J.S., Climate Impacts on Urban Areas, Workshop on Asian Climate Change and Variability: Trends and Policy, Invited Speaker, Divecha Center for Climate Change, IIS Bangalore, July 20 to 22, 2011.
74. Fernando, H.J.S. “Toward Sustainable and Secure Coastal Zones: Role of Waves, Tides, Sediments and Turbulence,” Inaugural Keynote Speaker, 6<sup>th</sup> International Symposium on Asian and Pacific Coasts (APAC 2011), Hong Kong, December 14-16, 2011.
75. Fernando, H.J.S. “Sustainable and Secure Coastal Zones: Role of Waves, Tides, Sediments and Turbulence,” Invited Speaker, 5<sup>th</sup> Annual CENSAM (Center for Environmental Sensing and Modeling) Workshop, MIT-Singapore Alliance, Jan 12-13, 2012.
76. Fernando, H.J.S. “Air Quality at Different Spatial Scales: Panel Discussion,” Invited Speaker, 5<sup>th</sup> Annual CENSAM (Center for Environmental Sensing and Modeling) Workshop, MIT-Singapore Alliance, Jan 12-13, 2012.

77. Fernando, H.J.S., “Mixing in Stratified Shear Layers, including the Effects of Topography, Invited Speaker, Workshop on Physical Processes in the Bay of Bengal and Monsoon ISO. 5-7 March, Indian Institute of Sciences, Bangalore, 2012.
78. Fernando, H.J.S., Pardyjak, E., Zajic, D., De Wekker, S.J.F., and Pace, J., The Mountain Terrain Atmospheric Modeling and Observations (MATERHORN) Program: The First Field Experiment (MATERHORN-X1), Invited Paper, *American Geophysical Union*, Fall Meeting, Abstract # A12D-01, 2012.
79. Fernando, H.J.S., Climate Change in Urban Areas, Invited Talk, Conference on Climate Change and the Common Good: Security, Sustainability and Policy, University of Notre Dame, Apr 8-10, 2013.
80. Fernando, H.J.S., Bhat, G.N. and Sharma, A., The Battle of Fluids: Air, Water and Climate, Keynote Speaker, 35<sup>th</sup> IAHR World Congress, Chengdu, China, September 8-13, 2013.
81. Fernando, H.J.S., From Laboratory to Climate: Understanding of Multi-scale Processes through Observations, Invited Speaker, *Mémorial Gabriel Chabert d'Hières Prospective sur la nouvelle plate-forme Coriolis*, Université Joseph Fourier, Grenoble, France, 2014.
82. Fernando, H.J.S. Urban Fluid Mechanics, Presentation at the *Honoris Causa Ceremony*, Université Joseph Fourier, Grenoble, 2014.
83. Fernando, H.J.S., Urbanization and Climate Change in Urban Metropolises, Distinguished Lecture, *Hong Kong Jockey Club Advanced Institute Lecture*, Hong Kong University of Science and Technology, 12<sup>th</sup> December, 2014.
84. Fernando, H.J.S., Turbulence and Fluxes in the Atmospheric Boundary Layer: Implications from Urban Street Canyon to Climate Scales, *Enrico Marchi Award Lecture*, Italian Hydraulics Association, June 12, 2015.
85. Fernando, H.J.S., Meteorology and Air Quality in Urban Areas in Complex Terrain: Effects of Climate Change and Rapid Expansion, Invited Lecture, 23<sup>rd</sup> (Korean Academy for Science and Technology International Symposium on “*Fine Particles: Causes, Impact and Mitigation*”, Diamond Hall, Plaza Hotel, Seoul, Korea, 17 September 2015.
86. Fernando, H.J.S., Hacker, J., Katopodes Chow, F., Pardyjak, E., and de Wekker, S.F.J., The Mountain Terrain Atmospheric Modeling and Observations (MATERHORN) Program (2011-2016), Invited Lecture, 20th Annual George Mason University (GMU) Conference on Atmospheric Transport and Dispersion Modeling, GMU Fairfax, Virginia June 14-16, 2016.
87. Fernando, H.J.S., Kit, E., Sukorianski, S. and Hocut, C.M., Turbulent Bursts in the Stable Atmospheric Boundary Layer, Invited Lecture, IMA Conference on Turbulence, Waves and Mixing, Wednesday 6 – Friday 8 July 2016, King’s College Cambridge, UK, 2016.
88. Fernando, H.J.S., Intraseasonal Oscillations in Equatorial Atmosphere and Oceans. IAHR Fluid Mechanics Plenary Lecture, 8<sup>th</sup> International Symposium on Stratified Flows, San Diego, CA, August 29-September 1, 2016.
89. Fernando H.J.S, University of Notre Dame, Notre Dame, IN; and Conry P, and Sharma A: Effects of Climate Change on Cities: Dynamical Downscaling to Pedestrian Scale, Invited Presentation. American Meteorological Society Annual Meeting, Paper 3.5, January 22-27, Seattle, USA, 2017.
90. Fernando, H.J.S., Climate Change in Cities, Invited Speaker, Workshop on Urban Microclimate: From Research to Application, Singapore, 26<sup>th</sup> April, 2017.

91. Fernando, H.J.S. Perdigão Project –EU-USA Scientific Collaboration on Wind Energy Meteorology/Physics, Invited Speaker, International Electrochemical Commission (IEC) Meeting, Vila Velha Del Rodao, Portugal, June 14, 2017.
92. Fernando, H.J.S., Research Initiatives in the Indian Ocean to understand monsoon weather and climate change impact, Guest of Honor Speech, NARA Scientific Sessions, Sri Lanka, 2017.
93. Fernando, H.J.S. Complex Terrain Atmospheric Boundary Layer, Workshop on the Future of Atmospheric Boundary Layer Observations, *National Academies of Science, Engineering and Medicine*, Invited Speaker, 2017.
94. Fernando, H.J.S. Effects of Climate Change on Urban Areas, Invited Speaker, Symposium on Hydro-environment Research for Smart Cities (in honor of Professor Joseph Hun-Wei Lee’s 65<sup>th</sup> Birthday), Hong Kong University of Science and Technology, Hong Kong, 2017.
95. Fernando, H.J.S., ‘Coastal Sustainability in the Face of a Changing Climate,’ Invited Speaker, UMCES Environmental Summit 2018 (Environmental Intelligence for the 21st Century), November 30, 2018, Baltimore, MD, USA.
96. Fernando, H.J.S., Pirro, A., Perez, J., Wijesekera, H., and Conry, P., Monsoon Intraseasonal Oscillations in Equatorial Atmosphere and Oceans., Invited Speaker, 6th Norway/Scotland Waves and Hydrodynamics Symposium in Edinburgh 8-10 May 2019.
97. Fernando, H.J.S., Observational Strategies of PBL Over Complex Terrain, Invited Speaker, First Workshop for Science and Meteorology with Artificial Intelligence in Research and Technology for Beijing 2022 Winter Olympics (SMART WS-1), Institute of Urban Meteorology, Beijing, China, October 24, 2019.
98. Fernando, H.J.S., “Whither Environmental Fluid Mechanics,” Keynote (Vision) Lecture, International Association of Hydro-environment Engineering and Research, 85th Anniversary Summit, Beijing, December 14-17, 2020.

#### **CONFERENCE PROCEEDINGS (Refereed, National and International)**

1. Fernando, H.J.S., “Peat: Its Origin and Nature,” Karmantha, **10**(October), 16-19, 1977.
2. Herath, K. and Fernando, H.J.S., "Use of Solar Panels for the Domestic Lighting in Sri Lanka," Paper for the *Symposium on Policy on Energy*, Institute of Engineers, Sri Lanka, 1980.
3. Fernando, H.J.S., "A Note on the Peat Resources in Sri Lanka," *Peat as an Energy Alternative II*, Inst. Gas Tech., I.I.T., Chicago, ISPEA Trans., 109-118, 1981.
4. Fernando, H.J.S. and Long, R.R., “Mixed Layer Growth in Stratified Fluids,” *The Ocean Surface: Wave Breaking, Turbulent Mixing and Radio Probing* (Eds. Y. Toba and H. Mitsuyasu), 541-546, 1985.
5. Fernando, H.J.S., “Molecular Diffusive Effects in Stratified Turbulent Mixing,” *Advances in Aerodynamics, Fluid Mechanics and Hydraulics* (Eds. R. Arndt, S. Heinz, C. Farell and S. Peterson), 997-1004, 1986.
6. Fernando, H.J.S., "Evolution of a Series of Convecting Layers Separated by Diffusive Density Interfaces," *Proceedings of the International Symposium on Buoyant Flows* (Ed. G. Noutsopoulos), Athens, Greece, 348-358, 1986.

7. Fernando, H.J.S. and De Silva, I.P.D., "Collapse of a Turbulent Patch in a Stratified Fluid," *Eighth Symposium on Turbulence and Diffusion, American Meteorological Society*, 283-284, 1988.
8. Fernando, H.J.S. and De Silva, I.P.D., "On the Growth and Collapse of a Turbulent Patch in a Stratified Fluid," *Transport Phenomena in Turbulent Flows* (Eds. M. Hirata and N. Kasagi), Hemisphere Publishing, 545-556, 1988.
9. Fernando, H.J.S. and De Silva, I.P.D., "On the Lengthscales of Stratified Turbulence," *Proceedings 4th Asian Congress of Fluid Mechanics*, A174-177, 1989.
10. Fernando, H.J.S., "Turbulent Mixing Across Density Interfaces: A Review of Laboratory Experiments and Their Oceanographic Implications," (Invited Paper), *'Aha Hulikoa, Winter Hawaiian Workshop Proceedings*, Institute of Geophysics, University of Hawaii, 205-218, 1989.
11. Fernando, H.J.S. and Ching, C.Y., "An Experimental Study on Thermohaline Staircases," *Proceedings of the Conference on Double Diffusion in Oceanography*, Woods Hole Oceanographic Inst., (Ed. R. Schmidt) WHOI Report # 91-20, 141-150, 1989.
12. Fernando, H.J.S., "Turbulent Mixing in the Presence of a Stabilizing Buoyancy Flux," *Stratified Flows* (Eds. E.J. List and G. Jirka), American Society of Civil Engineers, 447-453, 1990.
13. Noh, Y. and Fernando, H.J.S., "The Interaction Between Turbulence Structure and Diffusion of Suspended Particles," *Proceedings of the 2nd IUAPPA Conference on Air Pollution* (Eds. K-R. Cho, D-S. Kim, J-G. Na and S-C. Yoon), Seoul, Korea, 185-202, 1991.
14. Fernando, H.J.S. and Stephenson, P.H., "Mixing Across Sheared Stratified Interfaces," *Proceedings, Environmental Hydraulics* (Eds. J.H.W. Lee and Y.K. Cheung), Balkema Publishing, 391-396, 1991.
15. De Silva, I.P.D., Montenegro, L.M., Brandt, A. and Fernando, H.J.S., "Experiments on the Interaction of Internal Gravity Waves With Mean Shear," *Fifth Asian Congress of Fluid Mechanics* (Eds. K-S. Chang and D.H. Choi), Korea, 988-991, 1992.
16. Fernando, H.J.S., Perera, M.A.J.M. and Boyer, D.L., "Trapping of Internal Gravity Waves in an Inversion," *Proceedings of the 11th Australasian Fluid Mechanics Conference*, Hobart, 1165-1168, 1992.
17. Davies, P.A., Boyer, D.L., Fernando, H.J.S. and Zhang, X., "On the Flow Generated by the Unsteady Motion of a Circular Cylinder Through a Linearly Stratified Fluid," *Proceedings of the 11th Australasian Fluid Mechanics Conference*, Hobart, 1021-1024, 1992.
18. Fernando, H.J.S., Perera, M.A.J.M. and McGrath, J., "Turbulent Mixing Across Density Interfaces: Some New Concepts and New Results," *18th International Congress of Theoretical and Applied Mechanics*, Israel, 54-55, 1992.
19. Davies, P.A., Boyer, D.L., Fernando, H.J.S. and Zhang, X., "Wake Flows in Stratified Fluids," *Waves and Turbulence in Stratified Fluids* (Eds. S.D. Mobbs and J.C. King), Clarendon Press, 301-322, 1993.
20. Noh, Y. and Fernando, H.J.S., "The Generation of Stratification in Shear-Free Turbulence by an Imposed Buoyancy Flux," *Near Wall Turbulent Flows* (Eds. R.M.C. So, C.G. Speziale and B.E. Launder), Elsevier, 367-375, 1993.

21. Ayotte, B.A. and Fernando, H.J.S., "Laboratory Studies Related to Open-Ocean Deep Convection," *Ninth Conference on Atmospheric and Oceanic Waves*, San Antonio, Texas, 249-251, 1993.
22. Berman, N.S., Brazel, A.J., Boyer, D.L., Fernando, H.J.S. and Chen, R-r., "Air Quality in Nogales," *Southwest Center for Environmental Research Policy Meeting*, Mesa, AZ, March 26-27, 1993.
23. Berman, N.S., Chen R-r., Fernando, H.J.S., Boyer, D.L. and Celada, R.A., "Combined Physical and Numerical Modeling for the Analysis of Wind Fields in Complex Terrain," *Proceedings of the Special Conference on "The Role of Meteorology in Managing the Environment in the 90's*, VIP-29, Air and Water Management Association, Pittsburgh, PA, 296-303, 1993.
24. Fernando, H.J.S., Davies, P.A., Ayotte, B.A., Mofor, L.A. and Ching, C.Y., "Turbulent Plumes, Thermals and Convection in Oceans," *NATO Advanced Research Workshop on "Recent Advances in the Fluid Mechanics of Turbulent Jets and Plumes*," Vianna do Castello, Portugal, Kluwer Academic, 357-373, 1993.
25. Etling, D. and Fernando, H.J.S., "On the Influence of Background Rotation on Turbulent Jets," *NATO Advanced Research Workshop on "Recent Advances in the Fluid Mechanics of Turbulent Jets and Plumes*," Vianna do Castello, Portugal, Kluwer Academic, 401-411, 1993.
26. Fernando, H.J.S., Hunt, J.C.R. and Carruthers, D.J., "Turbulence, Waves and Mixing at Stratified Density Interfaces: Modeling and Experiments," (Invited Paper), *Fourth IMA Conference on Stably Stratified Flows* (Eds. I. Castro and N. Rockliff), 175-200, 1994.
27. Chen, R-r., Fernando, H.J.S., Berman, N.S., Boyer, D.L. and Brazel, A.J., "Change of Atmospheric General Circulation Due to Global Warming: Inferences From a Physical Model," In: *Proceedings, International Specialty Conference on Global Climate Change: Science, Policy and Mitigation Strategies*, Phoenix, AZ, April 5-8, 1994.
28. Fernando, H.J.S., "Turbulence and Mixing at Density Interfaces," (Invited Paper), *Fourth International Symposium on Stratified Flows*, Grenoble, June 29-July 2, 1994.
29. De Silva, I.P.D., Montenegro, L.M., Fernando, H.J.S. and Brandt, A., "Some Observations Related to Evolving Kelvin-Helmholtz Billows," *Fourth International Symposium on Stratified Flows*, Grenoble, June 29-July 2, 1994.
30. Folkard, A., Davies, P.A. and Fernando, H.J.S., "Measurements of Turbulent Patch in a Rotating Linearly Stratified Fluid," *Fourth International Symposium on Stratified Flows*, Grenoble, June 29-July 2, 1994.
31. Redondo, J.M., Fernando, H.J.S. and Pares, S., "Cloud Entrainment by Internal or External Turbulence," *Mixing in Geophysical Flows* (Eds. J.M. Redondo and O. Metais), U.P.C. Press, Barcelona, 1994.
32. Fernando, H.J.S. and De Silva, I.P.D., "Generation of Turbulence in Stably Stratified Boundary Layers," *Proceedings, Sixth Asian Congress of Fluid Mechanics* (Eds. Y.T. Chew and C.P. Tso), Singapore, 330-333, 1995.
33. Stegen, G.R., Fernando, H.J.S. and Ching, C.Y., "Evolution of Turbulent Jets in Stratified Media," *Proceedings, Sixth Asian Congress of Fluid Mechanics* (Eds. Y.T. Chew and C.P. Tso), Singapore, 951-957, 1995.
34. Ching, C.Y. and Fernando, H.J.S., "Turbulent Jets and Plumes in Rotating Fluids," Tenth ASCE Engineering Mechanics Specialty Conference, Boulder, CO, 1994.

35. Fernando, H.J.S., Strang, E.J., and Hunt, J.C.R., "Turbulent Mixing in Nature; Mechanisms and Parameterizations," (Invited Paper), Proceedings, IUTAM Conference on "*Physical Limnology*," Broom, Australia, September 10-14, 1995.
36. Manasseh, R., Ching, C.Y. and Fernando, H.J.S., "The Isolated Propagating Flow: A hybrid Between a Solitary Wave and a Density Driven Bore," *Proceedings of the 12th Australasian Fluid Mechanics Conference*, University of Sydney, Australia, 10-15 December 367-370, 1995.
37. Ching, C.Y., Cole, G.S., Montenegro, L., Fernando, H.J.S. and Fox, P. "The Use of Horizontal Turbulent Jets as a Means to Improve Water Quality in Swimming Areas of Lakes," *Proceedings of the International Conference on Advances in Mechanical Engineering (ICAME, Des. 20-22, 1995)*, (Ed. T.S. Mruthyunjaya), Narosa Publishing House, New Delhi, India, 1996.
38. Durbin, P.A., Hunt, J.C.R., Kevlahan, N.K.R. and Fernando, H.J.S., "Non-Local Effects of Shear in Turbulent Flows," Sixth European Turbulence Conference, Lausanne, 1996.
39. Kit, E., Fernando, H.J.S. and Ching, C.Y., "Frequency spectra of scalar and velocity fluctuations at entraining stratified interfaces," Sixth European Turbulence Conference, Lusanne; In: *Advances in Turbulence VI*, Eds. S. Suvrilakis, L. Machiels and P.A. Monkewitz, Kluwer Academic Publishers, 595-597, 1996.
40. Voropayev, S. and Fernando, H.J.S., "Vortex Quadrupoles and Propagation of Grid Turbulence," Sixth European Turbulence Conference, Sixth European Turbulence Conference, Lusanne; In: *Advances in Turbulence VI*, Eds. S. Suvrilakis, L. Machiels and P.A. Monkewitz, Kluwer Academic Publishers, 149-152, 1996.
41. Colomer, J., Robles, A. and Fernando, H.J.S. "Investigation of Resuspension and Sedimentation of Particles by Vertical Jets," Sixth International Conference on Flow Modeling and Turbulence Measurements, Tallahassee, Florida, September 8-10, In: *Flow Modelling and Turbulence Measurements VI*, (Eds. Chen, C.-J., Shih, C., Lienau, J. and Kung, R.), Balkema Publishing, Rotterdam, 789-796, 1996.
42. Neves, M.J., Fernando, H.J.S. and Neves, A.A. "Deposition of Particles from a Vertical Jet," Proceedings of the 11th ASCE Engineering Mechanics Conference, 442-445, Ft. Lauderdale, May 22-26, 1996.
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