

April, 1985

## CURRICULUM VITAE

KATZ, Morris

### PERSONAL DATA:

Born April 7, 1901, Kiev, Russia

Arrived in Canada in 1905

Citizenship: Canadian - Married, 5 children

### Early Education:

Mount Royal Public School, Montreal, Quebec,  
1907-1913

Montreal, High School, 1913-1917

### University:

McGill University, Montreal, B.Sc. 1926, Chemical  
Engineering

Awarded British Association Medal and University  
Bursary for Graduate Study

McGill University, M.Sc., 1927, Chemistry

McGill University, Ph.D., 1929, Organic Chemistry  
and Biochemistry

McGill University, Demonstrator in Chemistry,  
1926-1929



**PROFESSIONAL CAREER:**

Chemist	National Research Council of Canada, Associate Committee on Trail, B.C. Smelter Fumes	1929-1931
Assistant Research Chemist	National Research Council of Canada	1931-1936
Associate Research Chemist	National Research Council of Canada	1936-1947
Consultant	Directorate of Chemical Warfare of Canada	1940-1945
Research Scientist	Defence Research Board of Canada	1947-1951
Scientific Service Officer	Defence Research Board of Canada	1951-1955
Consultant and Director	Environmental Assessment Occupational Health Division Dept. of National Health and Welfare, Canada	1956-1965
Professor	Graduate School in Sanitary Science and Engineering, Syracuse University, Syracuse, N.Y.	1965-June, 1969
Professor	Dept. of Chemistry and Division of Natural Science, York University	July, 1969 - June, 1980
Professor Emeritus	York University	July, 1980 -



TEACHING ASSIGNMENTS AT YORK DURING PAST 5 YEARS:

Chemistry 600.63

M.Sc. Thesis



**GRADUATE SUPERVISION:**

Students currently under supervision (jointly with Associate Professor E. Lee-Ruff):

Ph.D.	Henry Kruk
Ph.D.	Kathy Isles, M.D.
Ph.D.	C. Chan

Examining Committees at York during past 5 years:

Ph.D.	S. Maddukuri	April 1977
Ph.D.	M. Ibrahim	April 1978
Ph.D.	T. Sakuma	October, 1978
M.Sc.	V. Wei Liu	December, 1980
Ph.D.	Bernard Kunz	March, 1981
M.Sc.	John D. Collins	March, 1982
Ph.D.	Robert Miller	October 1983

Students completing degrees:

Ph.D. Thesis

Gale, S.B. - Kinetics of Photochemical Oxidation of Sulfur Dioxide in Dilute Gas-Air Mixtures, Syracuse University, Syracuse, N.Y., June, 1968.

Ph.D. Thesis

Bjorklund, J. - Photochemical Oxidation of Sulfur Dioxide in Presence of Nitrogen Dioxide and Unsaturated Hydrocarbons, Syracuse University, Syracuse, N.Y., September, 1969.

Ph.D. Thesis

Pierce, R.C. - Polynuclear Aromatic Hydrocarbon Content in Relation to Particle Size Distribution of Suspended Particulate Matter, York University, Toronto, Ontario, August, 1975.

Ph.D. Thesis

Lane, D.A. - Gas Chromatographic Analysis and Photodecomposition Studies of Atmospheric Polycyclic Aromatic Hydrocarbons, York University, Toronto, Ontario, August, 1975.

Ph.D. Thesis

Sakuma, Takeo - Application of Mass Spectrometry to the Analysis of Polycyclic Aromatic Hydrocarbons and Related Compounds in the Environment, York University, Toronto, September, 1978.

Master's Thesis

Tipping, H. - Measurement of Low Concentrations of Sulfur Dioxide in Air by Sodium Nitroprusside Impregnated Paper Reagent, Syracuse University, Syracuse, N.Y., May, 1968.



**GRADUATE SUPERVISION (continued)**Master's Thesis

Bradstreet, J.W. - Development of New and Improved Methods of Measurement and Analysis of Atmospheric Sulfur Oxides, Syracuse University, Syracuse, N.Y., August, 1968.

Master's Thesis

Kerr, Jr., Robert Spender - Evaluation of Airborne Particulate Matter on Filter Paper by Optical Methods, Syracuse University, Syracuse, N.Y., January, 1970.

Master's Thesis

Kurtz, Joel, M. - Aerosols in the Respiratory Tract, York University, May, 1972.

Master's Thesis

Fast, D.A. - The Identification of Polycyclic Hydrocarbons in Water and Their Photochemistry in Solution, York University, October, 1973.

Master's Thesis

Ho, Andrew Ming-Fong - Distribution of Polycyclic Aromatic Hydrocarbons in Air of Ontario Cities as Influenced by Major Emission Sources, York University, October, 1977.

Master's Thesis

Tosine, Helle Mall - Capillary Gas Chromatographic Analysis of Aqueous Benzo(a)pyrene Photodecomposition, York University, May, 1978.

Master's Thesis

Chan, Cecilia Chi-Ling - Particle Size Distribution and Photodecomposition of Polycyclic Aromatic Hydrocarbons, York University, May, 1979.

Garbe, Lawrence - The Effect of Acid Rain upon the Environment (review essay), York University, March, 1985.



## POSTDOCTORAL FELLOWS, RESEARCH ASSOCIATES:

Postdoctoral:	Dr. H.K. Moe	1971-1973
	Dr. D.M. Brunette	1974-1975
Research Associates:	Dr. M.F. Salamone	1976 - April, 1981
	Dr. A.S. Raj	May, 1981 - to date
	Dr. R.K. Sharma	May, 1981 - to date



**UNIVERSITY SERVICE:**

Council of Faculty of Science  
Council of Faculty of Graduate Studies  
Member of Examining Committees (see page 4)



**NATIONAL AND INTERNATIONAL RESPONSIBILITIES:**

- Editor, Intersociety Committee, comprising members from 13 U.S. National Scientific and Engineering Societies, concerned with development of a manual of Methods of Air Sampling and Analysis of Pollutants. 1st Edition, 1972 (480 pages); 2nd Edition, 1977 (984 pages), published by American Public Health Association, Washington, D.C.
- Chairman for Canada, Technical Advisory Board on Transboundary Air Pollution, International Joint Commission (U.S. and Canada) 1949-1965.
- Expert Advisory Panel on Air Pollution, World Health Organization, Geneva, Switzerland, 1964-1973.
- Air Pollution Committee, International Cooperation on Research, Organization for Economic Cooperation and Development, Paris, France, 1960-1962.
- Methods of Atmospheric Sampling and Analysis, Committee D-22, American Society for Testing and Materials, 1962-1981.
- Air Pollution Control, American Chemical Society.
- Air Pollution Control, American Society of Mechanical Engineers.
- National Research Council of Canada, Associate Committee on Scientific Criteria for Environmental Quality, 1970-1978.
- Ontario Department of Health, Committee on Environmental Quality, 1972-1975.
- Board of Environmental Affairs, Chemical Institute of Canada, 1973-1975.
- Senior Scientist Steering Group on Pollution Abatement, U.S. Department of Army, Munitions Plants, 1973-1975.



**MEMBERSHIP IN SCIENTIFIC AND PROFESSIONAL SOCIETIES:**

Engineering Institute of Canada  
Fellow, Chemical Institute of Canada  
American Chemical Society  
American Society for Testing and Materials  
American Industrial Hygiene Association  
American Association for Advancement of Science  
Air Pollution Control Association (United States)  
Fellow, American Public Health Association  
American Society of Chemical Engineers

**CHAIRMAN OF COMMITTEES:**

Review Committee on Publication of Reports on Scientific Criteria for Air Contaminants, National Research Council of Canada, 1972-1976.

Air Pollution Control, Canadian Standards Association, 1963-1965.

Purity of Compressed Air, Diving Equipment, Canadian Standards Association, 1964-1965.

Purity Standards for Breathable Compressed Air, Z-86, American Standard Association, 1964-1965.

Technical Programme Committee, 1965, Air Pollution Control Association (U.S.).

Symposium on Chemistry of Air Pollutants, 1962, American Chemical Society.

Measurement of Long Range Transport of Pollutants and Acid Precipitation, National Research Council of Canada, 1981 - 1982, Chairman of Conference, August 30-September 3, Ottawa, 1982. Proceedings, NRCC/CNRC No. 20642.



CONSULTING AND INDUSTRIAL EXPERIENCE:

Air and Water Pollution Control	Consultant to International Bank for Reconstruction and Development Washington, D.C. ("World Bank")	1971-1975
Air Polluton	Consulting Member, Council of Technical Advisors to New York State Air Pollution Control Board	1966-1969
Air Pollution Survey and Control Onondaga County, N.Y.	Consultant to Syracuse University Research Corporation	1966-1969
Investigations of air pollution problems, effects on vegetation and source control procedures for sulphur dioxide	Nickel-Copper Smelters in Sudbury District, Ontario and Ontario Department of Mines	1947-1965
Assessment of pollution problems involving air and water quality, forest growth and other factors from nickel smelting operations in Northern Manitoba	Consultant Arbitrator to International Nickel Company and Manitoba Government. Organization of joint studies and plan for arbitration of damage claims.	1958-1959
Air Pollution. Assessment of sources, nature and quantities of emissions. Diffusion of pollutants and recommended control procedures.	Consultant to group of ten industries in Sarnia, Ont. area	1957-1958
	Consultant to group of industries in Montreal East, Quebec.	1958-1960



**HONOURS AND AWARDS:**

- 1937 Coronation Medal for scientific services, National Research Council of Canada.
- 1937 Letter of Appreciation from Prime Minister William Lyon Mackenzie King of Canada, for scientific services.
- 1938 Letter of Citation from General A.G.L. McNaughton, President, National Research Council of Canada.
- 1956 Plummer Medal, Engineering Institute of Canada.
- 1965 Frank A. Chambers Award, Air Pollution Control Association, United States, in recognition of scientific contributions.
- 1969 R.S. Jane Memorial Award and Lecturer, Canadian Society for Chemical Engineering.
- 1971 Doctor of Science Degree, honoris causa, awarded by McGill University.
- 1981 Doctor of Science Degree, honoris causa, awarded by York University.
- 1981 M.D. Thomas Gold Medal, awarded by American Society for Testing and Materials for analytical contributions to Committee D-22: Standard Methods of Atmospheric Sampling and Analysis.

**BIOGRAPHICAL REFERENCES:**

- American Men of Science, 10th Edition, Catell Press, Tempe, Arizona, 1960
- Engineers of Distinction, Second Edition, Published by Engineers Joint Council, New York, 1973.
- American Men and Women of Science, 14th Edition, Vol. IV, Published by R.R. Bowker Co., New York, 1979.
- International Who's Who in Education, Second Edition, Published by International Biographical Centre, Cambridge, England.
- Dictionary of International Biography, Volume 18, International Biographic Centre, Cambridge, England, 1984.



GRANTS AND CONTRACTS SINCE 1977:

## Biological Effects of Polycyclic Aromatic Hydrocarbons and Related Environmental Pollutants

	<u>Amount</u>	<u>Year</u>
Contract-NRC-Supply & Services Canada OSU-77-00192	\$29,994	1977
Contract-NRC-Supply & Services Canada OSU-77-00358	21,055	1978

## Chemical Identification and Biological Assays of Airborne and Waterborne Mutagens (Carcinogens)

	<u>Amount</u>
Ontario Ministry of Environment (OME) Provincial Lottery Fund Grant, Project 78-010-33	
Fiscal Year 1978-79	\$ 88,709
Fiscal Year 1979-80	141,836
Fiscal Year 1980-81	134,670

## Chemical Identification and Biological Assay Studies of Environmental Mutagens, Promoters and Inhibitors

	<u>Amount</u>
OME, Provincial Lottery Grant, Project 81-055-33 Year #1, Oct. 1, 1981 - Sept. 30, 1982	\$134,880
NRC, Supply and Services Contract, OSU 81-00108, similar project June 15, 1981 - Sept. 15, 1981	\$ 24,245
OME, Provincial Lottery Grant, Project 81-055-33 Year #2, Oct. 1, 1981 - Sept. 30, 1983 Year #3, Oct. 1, 1983 - Sept. 30, 1984	\$157,378 160,586

## Chemical and Mutagenic Activity of Adsorbed Polycyclic Aromatic Hydrocarbons and Oxidation Products (with E. Lee-Ruff)

	<u>Amount</u>
Strategic Grant, NSERC, No. G0915	
First instalment, Nov. 1, 1982 - Oct. 31, 1983	\$ 50,000
Second instalment, Nov. 1, 1983 - Oct. 31, 1984	53,000

## Structural and Electronic Influences of Synthetic Polynuclear Aromatic Hydrocarbons and Derived Oxidation Products on Mutagenic Activity (with E. Lee-Ruff and J.A. Heddle)

Strategic Grant, NSERC, No. G1573	
November 1, 1984 - October 31, 1985	\$ 56,800
November 1, 1985 - October 31, 1986	57,000
November 1, 1986 - October 31, 1987	59,000



INVITED PRESENTATIONS AT OTHER UNIVERSITIES:

Queen's University, Kingston )  
McMaster University, Hamilton ) (records of dates not available)  
University of Western Ontario, London )

Appraisal of Prof. J.M. Beekman's qualifications and research publications for promotion - Faculty of Engineering Science, University of Western Ontario, November, 1975.

Evaluation of Doctorate Program in Engineering Science, University of Western Ontario, at request of Appraisals Committee of Ontario Council of Graduate Studies - July to November, 1976. (Visits and interviews with all staff members in Engineering Science.)

Evaluation of Prof. T.C. Hutchinson's research publications and qualifications - University of Toronto, for E.W.R. Steacie Prize at request of National Research Council, November, 1977.



PRESENTATIONS AT CONFERENCES AND SYMPOSIA: (since 1976 only)

- Katz, M., Heddle, J.A. and Salamone, M.F. Chemical identification and mutagenic activity of polycyclic aromatic hydrocarbons in atmospheric particulate matter. Presented at VIth World Congress on Air Quality, Paris, France, May 16-20, 1983. (To be published in Proceedings)
- Salamone, M.F., Beltz, P. and Katz, M. (1982). The effect of 5,6-benzoflavone on the mutagenicity of polycyclic aromatic hydrocarbons. In: Polynuclear Aromatic Hydrocarbons: Physical and Biological Chemistry. Editors, M. Cooke, A.J. Dennis and G.L. Fisher, Sixth International Symposium, Battelle Press, Columbus, Ohio, pp.687-694.
- Salamone, M.F., Heddle, J.A., Gingerich, J. and Katz, M. (1982). On the complexities of risk estimates, metabolic activation and chemical mixtures. In: Progress in Mutation Research, Vol. 3, K.C. Bora et al., Elsevier, Holland, pp.179-185.
- Katz, M., Heddle, J.A. and Salamone, M. (1981). Mutagenic activity of polycyclic aromatic hydrocarbons and other environmental pollutants. In: Polynuclear Aromatic Hydrocarbons: Chemical Analysis and Biological Fate. Editors, M. Cooke and A.J. Dennis, Battelle Press, Columbus, Ohio, pp.519-528.
- Salamone, M.F., Heddle, J.A. and Katz, M. (1980). Mutagenic activity of 41 compounds on the in vivo micronucleus assay. In: Short-term Tests for Carcinogens: Report of the International Collaborative Program. Editors, F. de Serres and J. Ashby, Chap. 66, Elsevier, Holland, pp.686-697.
- Katz, M., Sakuma, T. and Tosine, H. (1980). The analysis of polynuclear aromatic hydrocarbons in the air and water environments. In: Hydrocarbons and Halogenated Hydrocarbons in the Aquatic Environment. Editors, B.K. Afghan and D. Mackay, Plenum Press, New York, pp.121-130.
- Katz, M., Chan, C., Tosine, H. and Sakuma, T. (1979). Relative rates of photochemical and biological oxidation (in vitro) of polynuclear aromatic hydrocarbons. In: Polynuclear Aromatic Hydrocarbons. Editors, P.W. Jones and P. Leber, Ann Arbor Science, Ann Arbor, Michigan, pp.171-190.
- Lane, D.A. and Katz, M. (1977). The photodecomposition of benzo(a)pyrene, benzo(b)fluoranthene and benzo(k)fluoranthene under simulated atmospheric conditions. In: Advances in Environmental Science and Technology, Vol. 8, Part 2. Editor, I.H. Suffet, Wiley Interscience, New York, pp.137-154.
- Katz, M. and Pierce, R.C. (1976). Quantitative distribution of polynuclear aromatic hydrocarbons in relation to particle size or urban particulates. In: Carcinogenesis, Vol. 1, Polynuclear Aromatic Hydrocarbons - Chemistry, Metabolism and Carcinogenesis. Editors, R. Freudenthal and P.W. Jones, Raven Press, New York, pp.413-429.



**BOOKS, CHAPTERS IN BOOKS:**

- Katz, M. et al. Effect of Sulphur Dioxide on Vegetation. National Research Council of Canada, Publication No. 815, Ottawa, Canada, 1939 (447 pages).
- Advances in Catalysis, Vol. V: "The Heterogeneous Oxidation of Carbon Monoxide", Academic Press, New York, 1953.
- Air Pollution Handbook, "City Planning, Industrial Plant Location and Air Pollution", Section 2, pp.1-53, McGraw Hill Book Co., New York, 1956.
- Air Pollution, Monograph Series No. 46, "The Physical and Chemical Nature of Air Pollution", pp.97-158, World Health Organization, Geneva and New York, 1961.
- Air Pollution, 2nd Edition, Vol.II, (A.C. Stern, editor), "Analysis of Inorganic Gaseous Pollutants", pp.53-113, Academic Press Inc., New York, 1968.
- Contribution to series "Science Through Discovery, K-6", Sections on Air Pollution for Pupils' and Teachers' Manuals, L.W. Singer, Co. Inc., New York, 1968.
- Measurement of Air Pollutants, Guide to the Selection of Methods (pp.123), World Health Organization, Geneva, 1969.
- Air Pollution Manual, 2nd Edition, Part I, Chap.3, "Sources of Air Pollution", pp.65-94, American Ind. Hygiene Assoc., Detroit, Michigan, 1972.
- Katz, M., Editor, Methods of Air Sampling and Analysis, U.S. Intersociety Committee, 1st Edition, published by American Public Health Association, Washington, D.C., 1972 (pp.480).
- Collection of Airborne Particles for Analysis of Polycyclic Organic Matter, In: "Particulate Polycyclic Inorganic Matter", pp.253-260, U.S. National Academy of Sciences, Washington, D.C., 1972.
- Katz, M., Nitrogen Compounds and Oxidants. In. Air Pollution, Third Edition, Vol.III, Measuring, Monitoring and Surveillance of Air Pollutions, Editor, A.C. Stern, pp.259-305, Academic Press, New York, 1976.
- Katz, M., The Canadian Sulphur Problem. In: Chap. 1, Sulphur and its Inorganic derivatives, Associate Committee on Scientific Criteria for Environmental Quality, NRCC No. 15015, Ottawa, 1977.
- Katz, M., Hydrogen Sulfide - Sampling and Analysis. In: Monograph, "Hydrogen Sulfide", pp.117-139, U.S. National Research Council, University Park Press, Baltimore, Md., 1977.
- Katz, M., Editor, Methods of Air Sampling and Analysis, Second Edition, Intersociety Committee (U.S.), p.984, published by American Public Health Assoc., Washington, D.C., 1977.



BOOKS, CHAPTERS IN BOOKS (continued):

Katz, M., Analysis of polycyclic aromatic hydrocarbons in atmospheric suspended particulate matter, Method 6. pp.69-74; 101-125; 193-213. In: Manual on Methods of Analysis of Polycyclic Aromatic Hydrocarbons, International Agency for Research on Cancer, Lyon, France, 1979.



LIST OF PRINCIPAL PUBLICATIONS:

Numerous industrial and government research and technical reports representing confidential and other classified information are not listed below.

1. "The Milling and Testing of Flour". Can. Chem & Met. 11:87 (1927)

Studies of Polymers and Polymerization (with G.S. Whitby, formerly Director, Division of Chemistry, National Research Council of Canada).

2. "Polymerization of Indene, Cinnamal Fluorene and Some Derivatives of Indene", J. Am. Chem. Soc. 50:1160, (1928).
3. "The Prolysis of Polyindenes and the Polymerization of Diindene", Can. J. Res. 4:344, (1931).
4. "The Polymerization of Engenol, Safrole and the Corresponding Iso-compounds", Can J. Res. 4:487, (1931).
5. "The Vulcanization of Methyl Rubber", Can. J. Res. 6:398, (1932).
6. "Synthetic Rubber". (with G.S. Whitby), Ind. and Eng. Chem. 25:1204 and 1338, (1933).

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7. "The Composition of Blown Alberta Bitumen". Can. J. Res. 10:435-451, (1934).

Studies of Atmospheric Pollution and Experimental Investigations of Effect of Sulphur Dioxide on Plants in Connection with International Smelter Smoke Problem in Area of Trail, B.C. and Stevens County, Washington State. Trail Smelter Question Documents.

- 
8. Documents Series B (Dominion of Canada, Kings Printer, Ottawa, 1936). "Sulphur Dioxide Content of the Atmosphere, 1930-1935". Appendix B-1, pp.1-36.
  9. "Sulphur Content of Vegetation in Northern Stevens County, Washington", Appendix B-2, pp.1-27.
  10. Documents Series C. (Dominion of Canada, Kings Printer, Ottawa, 1936). "Effect of Sulphur Dioxide on Yellow Pine and Douglas Fir" (with A.W. McCallum). Appendix C-4, pp.1-107.
  11. Documents Series D. (Dominion of Canada, Kings Printer, Ottawa, 1936). "Agriculture Conditions in the Northport Area, Stevens County Growing Season 1934", (with G.A. Ledingham), Appendix D-1, pp.1-31.
  12. "Effect of Sulphur Dioxide on Barley", Appendix D-3, pp.1-133.
  13. "Effect of Sulphur Dioxide on Alfalfa", Appendix D-4, pp.1-16.



LIST OF PRINCIPAL PUBLICATIONS (continued):

14. Documents Series BB. (Dominion of Canada, Kings Printer, Ottawa, 1937). "Soil and Water Investigations of the Northport Area, Stevens County, Washington", (with F.A. Wyatt), Appendix BB-1, pp.1-82.
15. "Report on Sulphur Dioxide Content of the Atmosphere, 1936", Appendix BB-2, pp.1-23.
16. "Sulphur Content of Douglas Fir and Yellow Pine in Northern Stevens County, Washington, 1935", (with A.W. McCallum), Appendix BB-5, pp.1-8.
17. Documents Series CC (Dominion of Canada, Kings Printer, Ottawa, 1937). "Effect of Sulphur Dioxide on Height Increment in Yellow Pine and Douglas Fir", Appendix CC-2, pp.1-7 (with A.W. McCallum)
18. "Effect of Sulphur Dioxide on Conifers" (with A.W. McCallum) . Appendix CC-3, pp.1-35.
19. Documents Series DD (Dominion of Canada, Kings Printer, Ottawa, 1937). "Effect of Dilute Sulphur Dioxide on Alfalfa", 1935. Part I (with G.A. Ledingham). Appendix DD-1, pp.1-265.
20. Part II. "Effect of Dilute Sulphur Dioxide on Alfalfa, 1936". Appendix DD-3, pp.1-112.
21. "Effect of Sulphur Dioxide on Stomatal Behaviour of Alfalfa". (with G.A. Ledingham). Part II. Appendix DD-3A, pp.1-23.
22. Trail Smelter Question. "Sulphur Dioxide Content of the Atmosphere 1937 to 1940" Supplement to Canadian Documents Series B and BB (with F.H. Chapman). King's Printer, Ottawa, 1940.
23. Morris Katz and Sophie Halpern, "Oxidation of Carbon Monoxide in Air by Silver Permanganate and Various Metallic Oxides, Ind. Eng. Chem., 42:345-352 (1950).
24. Morris Katz, G.A. Grant and R. Riberdy, "Kinetic Studies with Silver Permanganate and Zinc Oxide", Can. J. Research 8, 28:299-314, (1950).
25. G.A. Grant, Morris Katz and R. Riberdy, "Effect of Method of Preparation on Activity of Solid Silver Permanganate Reagents", Can. J. Technology 29, No. 12:511-519 (1951).
26. Morris Katz, L.G. Wilson and R. Riberdy, "Chemical Composition in Relation to Activity of Solid Silver Permanganate Reagents", Can. J. Chem., December (1951).
27. Morris Katz, R. Riberdy and G.A. Grant, "Determination of Low Concentrations of Carbon Monoxide by Use of Thermistors in a Thermal Cell", Can. J. Technology, 30:303-310 (1952).



LIST OF PRINCIPAL PUBLICATIONS (continued):

28. Morris Katz, R. Riberdy and G.A. Grant, "Reaction Kinetics and Adsorption of Water Vapour by Solid Silver Permanganate Reagents", DRCL Report No. 96, Defense Research Board of Canada.
29. G.A. Grant and Morris Katz, "Thermal Decomposition of Silver Permanganate", Can. Chemistry, 32:1068-1077 (1954).
30. Morris Katz and John Katzman, "The Rapid Determination of Low Concentrations of Carbon Monoxide in Air", Can. J. Research, F, 26:318-330 (1948).
31. G.A. Grant, Morris Katz and R.L. Haines, "A Modified Iodine Pentoxide Method for the Determination of Carbon Monoxide", Can. J. Technology 29:43-51 (January, 1951).
32. Morris Katz, "The Detection and Oxidation of Carbon Monoxide", Chemistry in Canada, 3, No. 10:181-184 (1951).
33. Morris Katz, "The Heterogeneous Oxidation of Carbon Monoxide", Advances in Catalysis, Vol. V (Editors, W.G. Frankenburg, V.I. Kimarewsky and E.K. Rideal), Academic Press Inc., New York, N.Y., (1953).
34. Morris Katz, "Atmospheric Pollution and its Control", Modern Sanitation, Part I, June 1950, Part II, July 1950.
35. Morris Katz, "Photoelectric Determination of Atmospheric Sulphur Dioxide", Anal. Chem. 22:1040-1047 (August, 1950).
36. Morris Katz and R.J. Cole, "Recovery of Sulphur Compounds from Atmospheric Contaminants", Ind. Eng. Chem., 42:2248-2269, (November, 1950).
37. Morris Katz, "Application of Diffusion Theory to Dispersion of Stack Gas in the Atmosphere", DRCL Report No. 110, September, 1952, Defense Research Board of Canada.
38. Morris Katz, "Sulphur Dioxide in the Atmosphere and its Relation to Plant Life", Ind. Eng. Chem. 41:2450-2465 (November, 1949).
39. Morris Katz, "The Atmospheric Pollution Problem in Canada", Chemistry in Canada, (August, 1952).
40. Morris Katz, "Sulphur from Industrial Wastes", Chemistry in Canada, (September, 1952).
41. Morris Katz, "Some Fundamental Air Pollution Problems", Industrial Health Review, 4: No. 1 (October, 1952, Ottawa).
42. Morris Katz, "Sources of Pollution", Proceedings of the Second National Air Pollution Symposium, Stanford Research Institute, (May, 1952).



LIST OF PRINCIPAL PUBLICATIONS (continued):

43. Morris Katz, "The Greater Detroit-Windsor Air Pollution Study", American Ind. Hygiene Assoc. Quarterly 13:4 (December, 1952).
44. Morris Katz and A.W. McCallum, "The Effect of Sulphur Dioxide on Conifers", Chapter 8, 84-96, "Air Pollution", Proceedings of U.S. Technical Conferences on Air Pollution, McGraw-Hill Book Co., New York, N.Y.
45. Morris Katz and G.D. Clayton, "Instrumentation and Analytical Techniques for the Continuous Determination of Air Contaminants", Proceedings of the American Society for Testing Materials, 53:1136-1158, (1953).
46. Morris Katz, "Recent Developments in Atmospheric Pollution", Chemical Engineering and Manufactured Gas Production Conference, May, 1954), Pittsburgh, American Gas Association CEP-54-23.
47. Violet C. Shore and Morris Katz, "Measurement and Identification of Aerosol Contaminants by Microscopic and X-Ray Diffraction Techniques", American Ind. Hygiene Assoc. Quarterly 15:297-303 (1954).
48. Morris Katz, "Atmospheric Pollution: A Growing Problem in Public Health", American Journal Public Health, 45:298-305 (March, 1955).
49. Morris Katz, "City Planning, Industrial Plant Location and Air Pollution", Chapter 2 in "Air Pollution Handbook" - Editors, Stanrod Research Institute, McGraw-Hill Book Co., New York (1956).
50. Morris Katz, "Analytical Methods and Instrumentation in Air Pollution", Anal. Chem. 27:692-694 (May, 1955).
51. Morris Katz, "Nature, Distribution and Dispersion of Contaminants in the Urban Environment", Eng. Journal (Eng. Inst. of Canada) 38:No. 4, (April, 1955).
52. Morris Katz and V.C. Shore, "Air Pollution Damage to Vegetation", Journal Air Pollution Control Assoc. 5: No. 3 (November, 1955).
53. V.C. Shore and Morris Katz, "Identification of Some Polynuclear Aromatic Hydrocarbons in the Atmosphere", Analytical Chem. 28:1399 (September, 1956).
54. Morris Katz, "Atmospheric Pollution and Public Health", Canadian Journal of Public Health, 47:395-400, (September, 1956).
55. G.E. Moore, A.F.W. Cole and Morris Katz, "The Concurrent Determination of Sulphur Dioxide and Nitrogen Dioxide in the Atmosphere", Journal Air Pollution Control Assoc., Vol. 7, No. 1 (May, 1957).
56. Morris Katz, "A National Atmospheric Pollution Programme", Occup. Health Review, 9: No. 1 (1957).



LIST OF PRINCIPAL PUBLICATIONS (continued):

57. Morris Katz, H.P. Sanderson and M.B. Ferguson, "Evaluation of Air-borne Particulates in Atmospheric Pollution Studies", Anal. Chem., 30:1172 (1958).
58. Morris Katz, and H.P. Sanderson, "Filtration Methods for Evaluation of Aerosol Contaminants", Special Technical Publication No. 250, American Society of Testing Materials, (1958).
59. Morris Katz, "The Control of Air Pollution in Canada", In: Proc. International Clean Air Conference, London (1959).
60. Morris Katz, "The Standardization of Methods of Sampling and Analysis", In: Proc. International Clean Air Conference, London, (1959).
61. Morris Katz, "Report on the Pollution of the Atmosphere in the Detroit River Area". Prepared for the Technical Advisory Board and the International Joint Commission with assistance of A.F.W. Cole, G.E. Moore, H.P. Sanderson and G.G. Nidecker of Dept. of National Health and Welfare of Canada in cooperation with Mr. Arthur C. Stern and staff of the Taft Sanitary Engineering Center, U.S. Public Health Service, Washington, D.C. and Ottawa, Canada, 1969 (a printed report of 241 pages).
62. Morris Katz, "Federal Activities in Atmospheric Pollution", Occup. Health Review, 11: No. 1 (1959).
63. R.E. Munn and Morris Katz, "Daily and Seasonal Pollution Cycles in the Detroit-Windsor Area", Int. J. Air Poll., 2:51 (1959).
64. Morris Katz, R.P. Rennie and Z. Jegier, "Air Pollution Hazards from Diesel Locomotive Traffic in a Railway Tunnel", A.M.A. Archives of Industrial Health, 20:493 (1959).
65. R.P. Rennie, Z. Jegier and Morris Katz, "Effect of Diesel Locomotive Operation on Atmospheric Conditions in a Railway Tunnel", Can. J. Chem. Engr., 123 (August, 1960).
66. R.E. Munn and Morris Katz, "Air Pollution Levels Associated with a 49-Hours Inversion at Detroit-Windsor", Bull. of American Met. Soc., 41: No. 5, 245 (1960).
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