



Newsletter

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MAY 1981

PRESIDENT'S CORNER

In the last issue, mention was made of our great interest in how the Reagan Administration would come down on environmental and natural resources issues. As proposed cuts in the 1982 budget are being announced, as the key sub-cabinet appointees are being named to take over policy-making in the environmental agencies, and as the staff around them takes shape, this will be even clearer. A lot has been said, and even more speculated, about what the real impact will be on the environment, environmental engineering, and environmental engineering education.

We know the general direction things will be moving in. But two things suggest that we watch carefully (as we work to promote a better understanding and appreciation of our positions) before drawing perhaps premature overly pessimistic conclusions. First, really senior officials have only recently started surfacing their proposals and plans. For example, Interior Secretary Jim Watt gave his first public speech as Secretary on resource issues on March 23rd; and we haven't heard much at all from EPA Administrator-designee Anne Gorsuch.

Second, according to recent legitimate polls, the American people still have a strong interest in a clean environment and a decent quality of life. Since this also includes voters and taxpayers, we should remain hopeful that essential and result-producing efforts and programs will continue. And this will require competent manpower.

Meanwhile, things are moving right along with AEEP. Committee chairmen are at work, and membership in all our committees will be filled out very soon. These committees involve a large proportion of our membership, and this is where most of the work is done and the substantial accomplishments of AEEP achieved.

I look forward to seeing a large number of our membership at the Purdue Industrial Waste Conference. Details have been provided elsewhere, but don't forget the workshop on Monday, May 11th and our general business meeting at noon Tuesday the 12th.

At our Board of Directors meeting preceding the Purdue conference, we will be dealing with a lot of matters of importance to you and AEEP. One I plan to raise for our Board's consideration is "What can we do, as an organization, to make a bigger difference, to have a bigger impact, to achieve more for the profession and the public?" I'd like to hear directly from you if you have any thoughts or ideas you believe would be helpful to the Board as we deal with this. Thanks in advance for your input.

Ben Dysart

AEEP RESEARCH AWARDS

AEEP recognizes outstanding research activity through the annual presentation of three separate research awards. These awards are made possible through the cooperation of the ENGINEERING-SCIENCE COMPANIES and the NALCO CHEMICAL COMPANY. Persons interested in making application for the ENGINEERING-SCIENCE/AEEP Award for the best doctoral thesis "relevant to environmental engineering practice" (\$2000 to be divided equally between the student and the primary research advisor) or the NALCO/AEEP Award for the best doctoral thesis "dealing with industrial waste or combined municipal and industrial waste" (\$2500 to be divided equally between the student and the primary research advisor) should contact John Novak as soon as possible.

Dr. John Novack Department of Civil Engineering University of Missouri Columbia, MO 65201 (314) 882-6269

IMPORTANT AEEP MEETINGS AT PURDUE

AEEP will sponsor a one-day workshop prior to the Purdue Industrial Waste Conference. This year's workshop will be held on Monday, May 11, 1981, and is entitled "Contaminant Transport in Groundwater." The workshop will be conducted by Professors John Cherry, Paul Roberts, and Albert Valocchi and will be held in Room 214 of the Stewart Center. Registration will begin at 8:30 a.m. and the workshop session will begin at 8:45 a.m. There is no fee for the workshop but all attendees, both members and students, are urged to pre-register by contacting:

Professor Paul V. Roberts Civil Engineering Department Stanford University Stanford, California 94305 (415) 497-1073

GENERAL BUSINESS MEETING

The membership is reminded of the general business meeting to be held at noon, Tuesday, May 12, in the Faculty Lounge on the second floor of the Memorial Student Union Building. The meeting will include a soup and salad buffet luncheon, at a cost of \$7.00 per person, and will feature Don Riddell, current President of AAEE, as the speaker.

The **exact** number of people who plan to attend the luncheon must be known by Monday, May 11th. A head count will be taken at the AEEP Workshop on Monday of those people attending the workshop who plan to attend the luncheon. Persons who plan to attend the luncheon, but not the workshop, should notify Don Lauria by phone or mail prior to May 6, 1981.

Dr. Donald T. Lauria Department of Envir. Science University of North Carolina Chapel Hill, NC 27514 (919) 966-1023

PEOPLE IN THE NEWS

The U.S. Agency for International Development has announced the appointment of Dr. John H. Austin to the post of Environmental Engineer, Division of Water Supply and Sanitation, Office of Health. He will provide guidance in human resource development and training delivery system development in water supply and sanitation for AID's overseas programs.

Austin has served the academic and training community in the environmental field for 30 years. Most recently he served as Vice President of the Maxima Corporation. He has been a professor at the University of Illinois (Urbana), Clemson University and the University of Maryland. He has had extensive experience in developing countries including service in Viet Nam with AID. In addition, he has been instrumental in developing performanced-based training courses and curricula for the Environmental Protection Agency as well as for state agencies, foreign governments and professional organizations.

CALL FOR PAPERS IAWPR DISPOSAL OF WASTES AT SEA

The International Association on Water Pollution Research announces a specialized conference on "Disposal of Sludge at Sea" to be held September 29-October 1, 1981 in London. The object of this conference will be to examine the extent of pollution of the sea arising from the disposal of sludge and the scientific evidence by which pollution from this source has been measured, to review the conditions under which sludge disposal at sea may be hygienically practiced without ecological damage or adverse economic effects, and to assess the effectiveness of existing legal powers to control the disposal of sludge at sea. Papers on original or novel work are solicited. Contact: The Secretary-Treasurer, IAWPR, Alliance House, 29-30 High Holborn, London WC1V 6BA, UK.

OCEAN POLLUTION 1981 THE NORTH ATLANTIC

The Woods Hole Oceanographic Institution together with the Bedford Institute of Oceanography are co-sponsoring an international conference on chemical contamination of the North Atlantic Ocean. It will be held October 19-23, 1981 at the Lord Nelson Hotel, Halifax, Nova Scotia, Canada. Contact: Dr. J. Vandermeulen, Bedford Institute of Oceanography, Dartmouth, N.S. Canada B2Y 4A2.

The conference, through invited and contributed papers, will focus on the state and processes of chemical contamination of the marine environment of the North Atlantic offshore, including the waters of the Gulf of St. Lawrence, Davis Strait and the Gulf Stream. There will be special emphasis on speciation and motility of contaminants (fossil fuels, hydrocarbons, synthetic organics, pesticides, heavy metals), especially as relating to recent marine deposits and available baseline information.

If interested in presenting a paper, send abstracts by May 1, 1981 to Dr. J. Farrington, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543 USA.

NEW JOURNAL ANNOUNCED ENVIRONMENTAL TECHNOLOGY LETTERS

A new journal, published in England under the direction of an international editorial board is announced. North American editorial board members include W. Wesley Eckenfelder, Jr., and James W. Patterson. The stated objective of the journal is to achieve rapid publication of referred manuscripts, with publication of accepted manuscripts occurring within 60-90 days of their submission. An introductory library subscription price of \$25.00 is offered. Subscription requests should be submitted to:

Environmental Technology Letters 12 Clarence Road Kew, Surrey TW9 3NL ENGLAND

AVAILABILITY OF PROCEEDINGS FOURTH CONFERENCE ON ENVIRONMENTAL ENGINEERING EDUCATION

The Proceedings of the Fourth Conference on Environmental Engineering Education, co-sponsored by AEEP and the American Academy of Environmental Engineers and held June 19-21, 1980, at the University of Toronto, are now available. Conference registrants should receive their copy of the Proceedings within a couple of weeks. Other individuals who wish to purchase a copy of the Proceedings should send a check for \$20 (\$10 if an AEEP member) to:

Environmental Engineering
Education Conference
c/o Pritzker Department of
Environmental Engineering
Illinois Institute of Technology
3200 South State
Alumni Building — Room 102
Chicago, Illinois 60616

ENERGY CONSERVATION: RETROFIT OF MUNICIPAL WASTEWATER TREATMENT FACILITIES

The Department of Energy and the Argonne National Laboratory are sponsoring the National Conference on Energy Conservation by Retrofit of Municipal Wastewater Treatment Facilities, June 23 to 25, 1981, at the Biltmore Hotel in Los Angeles. The program will emphasize new research and development in this important area for new technology. Experts in the field will chair the technical sessions, review the latest advances, and look at future developments and what these portend for municipal and county administrators. The sponsors hope to evoke interest among and bring together professionals involved with all phases of wastewater treatment, retrofit and pollution engineering, energy conservation and research, as well as from industry and local, State amd Federal agencies.

For information please contact:

Ms. Barbara Broomfield
Energy and Environmental Systems Division
Building 12
Argonne National Laboratory
91700 South Cass Avenue
Argonne, IL 60439
312/972-7474

DEADLINE FOR OCTOBER NEWSLETTER

Items to be included in the next issue should be received by the Editors no later than August 21, 1981. Please submit any items of general interest to the profession to:

J.F. Judkins, Jr. and J. M. Morgan Co-Editors, AEEP NEW/SLETTER Department of Civil Englimeering Auburn University, AL 36849 (205-826-4320)

WELCOME TO NEW AEEP MEMBERS

Stephen M. Crane Dept. of Civil Engineering L.S.U. Baton Rouge, LA 70803 (504) 388-8442 ext. 43

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Dipak Roy Dept. of Civil Engineering L.S.U. Baton Rouge, LA 70803 (504) 388-8442

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Environmental Engineering
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Troy, N.Y. 12181

Aaron A. Jennings Dept. of Civil Engineering Univ. of Notre Dame Notre Dame, IN 46556 (219) 283-4202

Gene F. Parkin Dept. of Civil Engineering Drexel University Philadelphia, PA 19104 (215) 895-2268

AAEE

The American Academy of Environmental Engineers will hold oral and written examinations for those environmental engineers who wish to be certified in a specialty as Diplomates in the Academy on July 21, 1981. Applications must be received no later than May 15th on forms available on request from the Office of the Executive Director, American Academy of Environmental Engineers, P.O. Box 1278, Rockville, Maryland, 20850.

AAEE is the only known organization exclusively dedicated to work actively for improvement of environmental engineering standards in the areas of science and technology as well as professional conduct. Areas of specialty recognized by the Academy are: General Environmental Engineer, Air Pollution Control Engineer, Industrial Hygiene Engineer, Radiation Protection Engineer, Solid Waste Management Engineer, and Water Supply and Wastewater Engineer.

The Academy was organized in 1955 to improve the practice, elevate the standards, and advance the cause of environmental engineering to better serve the public. It is sponsored by the Air Pollution Control Association, the American Institute of Chemical Engineers, the American Public Health Association, the American Public Works Association, the American Society for Engineering Education, the American Society of Civil Engineers, the American Water Works Association, the Association of Environmental Engineering Professors, the National Society of Professional Engineers, and the Water Pollution Control Federation. Membership numbers over 2,000 Diplomates throughout the United States and several foreign countries.

Upon certification, each applicant becomes a Diplomate of the American Academy of Environmental Engineers. Requirements for certification include good moral and professional character, graduation with a degree in engineering from a qualified institution, registration as a professional engineer in one of the states of the United States or provinces of Canada, eight years of professional environmental engineering experience--four of which must be in responsible charge--and satisfactory completion of written and oral examinations given by the Academy.

USED OIL - THE HIDDEN ASSET

The Association of Petroleum Re-refiners announces the largest international conference to date on used oil recovery and reuse. The 4th International Conference - "Used Oil - The Hidden Asset" - will be held September 28 - October 1, 1981, at Caesars Palace, Las Vegas. Cosponsored by the U.S. Department of Energy and the National Bureau of Standards, the conference will be an intensive learning experience on the use of a neglected natural resourse - "Used Oil."

The objective is to increase the recycling of used oil in the public and industrial sectors - to provide information on classifying used oil for recovery - to assist in choosing the most effective and cost efficient recovery methods - and to support state and community leaders in their efforts to establish used oil recovery programs.

The program will featue open-discussion meetings and recovery equipment exhibits. Highlights include -

- used oil recovery under RCRA
- · environmental considerations
- current legislation and regulations affecting used oil recovery
- · by-product utilization and waste water treatment
- · industrial inplant reclamation
- detecting hazardous contamination
- · methods of recovery financing
- spill clean-up
- · establishing user specifications
- · used oil collection programs
- · technical and equipment exhibits

For registration and exhibitor information contact:

USED OIL - THE HIDDEN ASSET Association of Petroleum Re-refiners 2025 Pennsylvania Avenue, N.W. Suite 913

Washington, D.C. 20006 202/833-2694

ACADEMIC MARKET PLACE

SCHOOL: Illinois Institute of Technology

POSITION: Assistant Professor

QUALIFICATIONS: Ph.D. in Engineering, interest in Industrial Pollution Control

RESPONSIBILITIES: Research, graduate and undergraduate teaching

APPLICATION DEADLINE: Open

CONTACT:

Dr. James W. Patterson
Department of Environmental Engineering
Illinois Institute of Technology
Chicago, IL 60616
(312) 567-3535

SCHOOL: Drexel University

POSITION: Open

QUALIFICATIONS: Ph.D. in Chemical Engineering

RESPONSIBILITIES: Research, graduate and undergraduate teaching in hazardous wastes and general chemical engineering.

APPLICATION DEADLINE: Open

CONTACT:

Dr. Donald Coughanour Dept. of Chemical Engineering Drexel University Philadelphia, PA 19104

SCHOOL: Drexel University

POSITION: Open

QUALIFICATIONS: Ph.D. in Engineering

RESPONSIBILITIES: Research, graduate and undergraduate teaching in air pollution and the appropriate department.

APPLICATION DEADLINE:

CONTACT:

Dr. P.W. Purdom Environmental **Studies** Institute Drexel University Philadelphia, PA 19104 As a service of the AEEP Membership, the Board of Directors has decided to publish the titles of theses completed each academic year. Only those lists submitted by the membership will be included in the listing. The next directory will appear early next fall for the 1980-81 work.

Time interval: July 1, 1980 to June 30, 1981

Classification of Titles:

Air Pollution

Agricultural Waste Management Instrumental Methods of Analysis

Industrial Waste Treatment

Land Treatment

Non Point Pollution

Rivers, Estuaries, and Lakes

Solid Wastes

Water and Wastewater Treatment

Water Management

You may also use other classifications if there are a sufficient number of titles.

Format: "Title of Paper", Name of Author (Ph.D. or M.S.), X pp., Month, Year, Name of University (Name of Faculty Advisor).

Comments: Since the availability of documents varies, persons interested in a specific publication will be asked to contact the Faculty Advisor directly.

Deadline: Submit by August 15, 1981

J.F. Judkins, Jr. and J.M. Morgan

Co-Editors

AEEP Newsletter

Department of Civil Engineering

Auburn University, AL 36849

Titles of theses completed during the 1979-80 academic year are presented below.

AIR POLLUTION

"Usage of Wetting Agents to Improve Collection Efficiency in a Wet Scrubber," Eduardo Gurria Trevino (MS), 38 pp., May, 1980, University of Kansas (Dennis D. Lane).

"Ambient Aliphatic Hydrocarbon Concentrations in the Troy, New York Area and a New Portable Sampling Device," William Langston (MS), 107 pp., August, 1979, Rensselaer Polytechnic Institute (E.R. Altwicker).

"Quality Assurance and Interlaboratory Comparisons for Specific Ambient Nonmethane Hydrocarbons," Stephen Piper (M. Eng.), 171 pp., August, 1979, Rensselaer Polytechnic Institute (E.R. Altwicker).

"Role of Fuel Nitrogen and Fuel Additives in Nitric Oxide Formation from a Spray Diffusion Flame," Michael Jasinski (M. Eng.), 124 pp., December, 1979 Rensselaer Polytechnic Institute (E.R. Altwicker).

"A Laboratory Investigation of Sulfur Dioxide Removal by Falling Water Drops," Elaine Chapman (M. Eng.), 144 pp., May, 1980, Rensselaer Polytechnic Institute (E.R. Altwicker).

"Workplace Exposure of Automobile Mechanics to Carbon Monoxide," A.A. Amendola (MS), 1979, Tufts University (N. Bruce Hanes).

"Ecological Responses of Lake Eola Water to Urban Runoff," Harvey H. Harper (MS), 163 pp., November, 1979, University of Central Florida (Yousef A. Yousef).

"Impact of Highway Bridge Runoff on Receiving Water Bodies," James E. Christopher (MS), 170 pp., University of Central Florida (Yousef A. Yousef).

"Continuous Simulation of Receiving Water Transients," Jennifer Buzun (MS) 80 pp., October 1979, Duke University (M.A. Medina, Jr.)

"Continuous Simulation of Receiving Water Quality Transients," Barbara Ann Buzun, 139 pp., April, 1980, Duke University (Dr. Miguel A. Medina, Jr.).

"The Water Pollution Potential from Demolition-Waste Disposal," David W. Ferguson (MS), 131 pp., August, 1980, University of Massachusetts/Amherst (James W. Male).

"Urban Stormwater Pollutant Loading," Thomas Keith Jewell (Ph.D.), 267 pp., February, 1980, University of Massachusetts/Amherst (Donald Dean Adrian).

"A Laboratory and Field Analysis of Factors Affecting Quality of Leachate from Coal Storage Piles," Edward Charles Davis (Ph.D.), 195 pp., May, 1980, Vanderbilt University (Frank L. Parker & Edward L. Thackston).

"Aquatic Mactroinvertebrate Response to Forestry Activities and Water Quality in the Okanogan National Forest, Washington", Andrew G. Hoffman, 89 pp., 1980, Washington State University (Donald L. Johnstone).

RIVERS, ESTUARIES AND LAKES

"Dissolved Oxygen Depletion due to Natural Organic Runoff in the Red Deer River System," S.E. Penttinen (M. Sc.), November, 1979, University of Alberta (S.E. Hrudey). "Influence of Dilution Water pH on Acute Lethality of Long."

"Influence of Dilution Water pH on Acute Lethality of Long Chain Unsaturated Fatty Acids to Rainbow Trout," S. Tookwinas (M. Sc.), April, 1980, University of Alberta (S.E. Hrudey).

"Water Quality Implications of Invertebrate Drift in North Saskatchewan River at Edmonton," R.G. Ruggles (M. Sc.), April, 1980, University of Alberta (S.E. Hrudey).

"Quantity and Quality of Goshen Bay Inflows (Utah Lake)," Wallis Ashcroft, 80 pp., July, 1980, Brigham Young University (L.B. Merritt).

"Utah Lake Tributaries Water Quality Study," L. Steven Miller, 64 pp., April, 1980, Brigham Young University (L.B. Merritt).

"Thermal Profile Modeling of Selected Central Utah Lakes," Mark T. Bowers, 80 pp., August, 1980, (A. Wood Miller).

"Hydrologic Study of Utah Lake, Utah, June, 1977 through September, 1978," William E. Schlotthauer, 50 pp., July, 1979 (Dean K. Fuhriman).

"Utah Lake Tributaries Surface Inflows 1930-1978," Clyde K. Thompson, 70 pp., June, 1979 (D.K. Fuhriman).

"Kinetic Studies of Phytoplankton Decomposition," Paul W. Rodgers (Ph.D.), 242 pp., December, 1979, Clarkson College of Technology (Joseph V. DePinto).

"A Laboratory Study of the Kinetics of Aerobic Decomposition of Phytoplankton," James S. Bonner (MS), 93 pp., January, 1980, Clarkson College of Technology (Joseph V. DePinto).

"Fate of Heavy Metals in Onondaga Lake," Edward S. Seger (MS), 160 pp., February, 1980, Clarkson College of Technology (Thomas C. Young and Joseph V. DePinto).

"Phosphorus Dynamics of Lake Eola Sediments," Frank E. Marshall III (MS), 120 pp., March, 1980, University of Central Florida (Yousef A. Yousef).

"Comparison of Macroinvertebrate Communities and Select Fish Species in a Stressed and Unstressed Kansas Stream," Bruce S. Anderson (MS), 98 pp., July, 1979, University of Kansas (Carl E. Burkhead).

"The Development of Water Quality Criteria for Ammonia and Total Residual Chlorine for the Protection of Aquatic Life in Two Johnson County, Kansas Streams," Ralph Hazel (Ph.D.), 189 pp., September, 1979, University of Kansas (Carl E. Burkhead).

"Effects of Temperature Cycles on Osmoregulation in Bluefill Lempomis Macrochirus Rafinesque," Colette B. Burton (MS), 73 pp., July, 1979, University of Kansas (Harvey B. Lillywhite and Carl E. Burkhead).

"A Synoptic Survey of Bacteriological Indicators of Pollution in Lake Washington," Robert Germann (MS), 111 pp., August, 1979, Florida Institute of Technology (T.V. Belanger).

"Macroinvertebrates of Lake Washington," Ruth Buzzi, 62 pp., August, 1979, Florida Institute of Technology (T.V. Belanger).

"Analysis of Lake Washington's Water and **Nutrient** Budgets Including the Critical Loading of Phosphorus," Brian Shannon, 122 pp., December, 1979, Florida Institute of Technology (T.V. Belanger).

"An Approach for Hydrodynamic Modeling of Maine's Estuaries," Robert Bruce Fidler (MS), 74 pp., August, 1979, University of Maine (Professor Franklin E. Woodard).

"Cadium, Copper and Lead in Estuarine Salt Marsh Microlayers: Accumulation, Speciation, and Transport," Leonard W. Lion, 370 pp., June, 1980, Stanford University, Department of Civil Engineering (Dr. James O. Leckie).

"The Effects of Velocity and Dissolved Oxygen on Sediment Oxygen Demand," Mary Jane Sara O'Donnell (MS), 1979, Tufts University (Linfield C. Brown).

"The Modification of Open Channel Vertical Velocity Profiles by Density Stratification," Steven Clinton McCutchon (Ph.D.), 181 pp., December, 1979, Vanderbilt University (Richard H. French).

"Waste Assimilative Capacity of the Conasanga River Near Dalton, Georgia," Michael Corn (MS), 111 pp., December, 1979, Vanderbilt University (Frank L. Parker).

"Direct Measurement of the Velocity Gradient in Open Channel Flow," Eduardo Anibal Fiqueroa (MS), 48 pp., May, 1980, Vanderbilt University (John Williamson and Robert S. Rowe).

"An Investigation of the Zooplankton Community of Liberty Lake, WA with Special Regard to Seasonal Succession," Maribeth V. Gibbons (MS), 31 pp., 1980, Washington State University (William H. Funk).

SOLID WASTES

"A Descriptive Model of Air Classification," Richard Hendrikson (MS), 80 pp., August, 1979, Duke University (P.A. Vesilind).

"Conception, Planning- and Operation of Four Resource Recovery Facilities," Brenda Harrison (MS), 116 pp., August, 1979, Duke University (P.A. Vesilind).

"The Effect of Aluminum Content on the Calorific Analysis of Refuse Derived Fuels," (MS), 46 pp., December, 1979, Duke University (P.A. Vesilind).

"The Solid Waste Disposal Problem of Bogota D.E." Rafael Maria Acevedo (MS), 77 pp., May, 1980, Vanderbilt University (Robert S. Rowe).

"Studies of Methanogenesis in Samples From Landfills," (Ph.D.), 223 pp., August, 1980, University of Wisconsin, Madison (R.K. Ham).

"Composting of Sewage Sludge: An Alternative Treatment Technique," Barbara Bowerman (MS), 69 pp., May, 1980, University of Kansas (Ross E. McKinney).

"Characteristics and Trends Analysis of City - Operated Residential Refuse Collection in Kansas City, Missouri," Peter J. Culver (Ph.D.), 146 pp., May, 1980, University of Kansas (Ross E. McKinney.)

WATER AND WASTEWATER TREATMENT

"Greywater Characterization and Treatment for Isolated Northern Communities," S. Raniga (M. SC.), April, 1980, University of Alberta (S.E. Hrudey).

"Nominal Molecular Weight Distributions of Color, TOC, UHM Precursors and Acid Strength in a Highly Organic Potable Water Source," Jalil Fouroozi (MS), 108 pp., March, 1980, University of Central Florida (Dr. J.S. Taylor).

"The Effect of Ozone on Trihalomethane Precursors in Raw and Magnesium Treated Lake Washington Water," James Kent Kimes (MS), 100 pp., December, 1979, University of Central Florida (Dr. J.S. Taylor).

"Treatment Process Variations to Reduce TTHM Residuals in a Finished Water," Edward L. Hatcher (MS), 95 pp., June, 1979, University of Central Florida (Dr. J.S. Taylor).

"Direct Filtration Studies on the Removal of Color and Chloroform Precursors Using Synthetic Humic Waters and the Raquette River," Lise E. Scheuch (MS), 129 pp., September, 1979, Clarkson College of Technology (James K. Edzwald).

"Removal of Humic Acid on Activated Carbon," Seyed Nekouinaini, 56 pp., March, 1980, Florida Institute of Technology (P.A. Jennings).

"The Application of Low Pressure Revere Osmosis for Advanced Wastewater Treatment," Richard Schmitz, 71 pp., July, 1980, Florida Institute of Technology (P.A. Jennings).

"Treatment of Mililani STP Effluent for Application in Drip Irrigation," Edward K.F. Liu (MS), 131 pp., August, 1979, University of Hawaii at Manoa (R.H.F. Young).

"The Treatability of Domestic Wastewater Using Designed, Hawaiian Soil Complexes," Gary Tasato (MS), 180 pp., August, 1979, University of Hawaii at Mona (G.L. Dugan).

"The Effect of Aeration on Disinfection Efficiency in Chlorine Contact Chambers," Stanford Iwamoto (MS), 70 pp., May, 1980, University of Hawaii at Manoa (R.H.F. Young).

"Kinetic Design Constants for the Activated Sludge Process," Patrick R. Vasicek (MS), 66 pp., May, 1980, University of Hawaii at Manoa (R.H.F. Young).

"Thermal Regeneration of Powdered Activated Carbon (PAC) and PAC-Activated Sludge Mixtures Using a Lab-Scale Microfurnace," Philip Shiu-Lun Chu (MS), 90 pp., May, 1979, University of Houston (Dr. Dennis Clifford).

"The Use of PAC and PAC-GAC Filters for TOC Removal in Drinking Water Treatment," James R. Wolfe (MS), 67 pp., December, 1979, University of Houston (Dr. Dennis Clifford).

"Studies on the Effect of Regeneration on Powdered Activated Carbon (PAC) and PAC-Biological Treatment (PACT) Process Sludge." Yiu-Lam Albert Lau (MS), 98 pp., May, 1980, University of Houston (Dr. Dennis Clifford).

"Equilibrium Fluoride Adsorption Capacity of Activated Alumina as Influenced by pH and Competing Ions," Gurinderjit Singh (MS), 77 pp., May, 1980, University of Houston (Dr. Dennis Clifford).

"Project Report - Planning and Design Development Kaw Point Wastewater Treatment Plant, Kansas City, Kansas," Joseph C. Roth (Ph.D.), 218 pp., May, 1980, University of Kansas (Ross E. McKinney).

"Characteristics of an Aerated Lagoon for Municipal Wastewater Treatment," Miryoussef Norouzian (Ph.D.), 229, pp., May, 1980, University of Kansas (Ross E. McKinney).

"Design and Construction of an Underwater Interceptor Sewer - The Blue Springs Lake Interceptor Project," Robert Berry (MS) 85 pp., January, 1980, University of Kansas (Ross E. McKinney).

"Intrinsic Kinetics of Simultaneous Diffusion and Reaction in a Suspended Growth Activated Sludge System," Eileen E. Conley (MS), 88 pp., May, 1980, University of Massachusetts/Amherst (Enrique J. La Motta).

"The Effect of Polyelectrolytes on the Attached Growth of Bacteria," John F. Buydos (MS), 131 pp., September 1980, University of Massachusetts/Amherst (Enrique J. La Motta).

"Efficiency Analysis of a Pilot Scale Combined Single-Stage Nitrification-Denitrification Reactor," Nicole L. Letendre (MS), 91 pp., February, 1980, University of Massachusetts/Amherst (Enrique J. La Motta).

"The Role of Lipids in the Performance of the Activated Sludge Process," S.E. Hrudey (Ph.D.), November, 1979, University of London (R. Perry).

"The Interaction of Physiological Adaptation and Transient Response for Psuedomonas Putida and its Implications for Dynamic Modeling of Microbial Growth," Glen Diagger (Ph.D.), 330 pp., August, 1979, Purdue University, Department of Environmental Engineering (Dr. C.P.L. Grady, Jr.)

"Characterization of the Clarification Performance of Activated Sludge Final Settlers," Munsin Tuntoolavest (Ph.D.) 284 pp., December, 1979, Purdue University, Department of Environmental Engineering (Dr. C. P. L. Grady, Jr.)

"Clorination of Secondary Effluent: Use of Chlorine-36 to Evaluate Formation of Chloro-organics," Bonnie Marie Faith (MSE), 124 pp., December, 1979, Purdue University, Department of Environmental Engineering (Dr. Edwin J. Kirsch).

"Semi-batch Operation of Aerobic Digestion of Waste Activated Sludge," Heinrich Ewald Erbes (Ph.D.), 158 pp., May, 1980, Rutgers University (Marvin L. Granstrom).

"Oxygen Uptake Rate as a Control of Activated Sludge Process," Pierre A. Sajous (M. Eng.), 82 pp., November, 1979, Rensselaer Polytechnic Institute (C.N. Haas).

"Development and Description of Altered Sensitivity to Chlorine in Escherichia coli," Elizabeth C. Morrison (M. Eng.), November, 1979, Rensselaer Polytechnic Institute (C.N. Haas).

"Laboratory Investigation of the Activated Sludge Treatment Process with Alum Addition for the Removal of Trace Metals," Paul A. Hughes (MS), 250 pp., May, 1980, Rensselaer Polytechnic Institute (C.N. Haas).

"Ultraviolet Reactor Design Utilizing Hydraulic Parameters," Charles A. Weitz, Jr. (MS), June, 1980, Rensselaer Polytechnic Institute (C.N. Haas).

"Evaporation Rate of Toxic Materials," Dineschand D. Sharma (M. Eng.), 68 pp., December, 1979, Rensselaer Polytechnic Institute (William W. Shuster).

"Water Treatment to Conform with the Safe Drinking Water Act Impact on the City of Newark Water Supply," Andrew Pappachen (MS), 68 pp., May, 1980, Stevens Institute of Technology, Hoboken, New Jersey (Lubomyr Kurylko and Lawrence K. Wang).

"Thermochemical Pretreatment of Nitrogenous Organics to Increase Methane Yield," David C. Stuckey, 223 pp., May, 1980, Stanford University, Department of Civil Engineering (Dr. Perry L. McCarty).

"A Dynamic Model of the Flow-Through Biological Reactor," Jeffrey St. Charles Bryant (MS), 1979, Tufts University (Linfield C. Brown).

"Hydraulic Smoothing of Sewage Treatment Plant Influent," F.C. Sapienza (MS), 1979 Tufts University (Linfield C. Brown).

"A Study of the Methodologies and Filtration Characteristics Associated with the Suspended Solids Test," Daniel Thomas Donahue (MS), 1979, Tufts University (Linfield C. Brown).

"Optimization Methodologies in Environmental Engineering," A.A. Umaru (M. Eng.), 351 pp., 1979, University of Toronto (Dr. B.J. Adams).

"Hydrologic Evaluation of Mine Tailing Disposal Sites," P.A. Gonzalez (MA Sc.), 190 pp., 1979, University of Toronto (Dr. B.J. Adams).

"Performance Evaluation of Oxygenation Devices," D.D. Stolch (M. Eng.), 108 pp., 1979, University of Toronto (Dr. J.J. Ganczarczyk).

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