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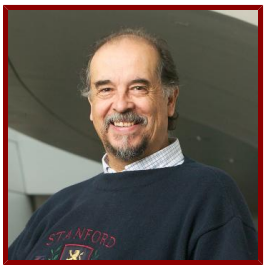

James Leckie

C.L. Peck, Class of 1906 Professor in the School of Engineering, Emeritus

Civil and Environmental Engineering

CONTACT INFORMATION

- **Administrator**

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Bio

BIO

Leckie investigates chemical pollutant behavior in natural aquatic systems and engineered processes, specifically the environmental aspects of surface and colloid chemistry and the geochemistry of trace elements. New research efforts are focused on the development of techniques and models for assessment of exposure of humans to toxic chemicals. Specific attention has been paid to the evaluation of exposure of young children to toxic chemicals. Other interests include technology transfer and the development of environmental science programs in developing nations.

ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Civil and Environmental Engineering

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Elected Member, National Academy of Engineering (2013 - present)
- Appointed Chair Professor in the Department of Environmental Science and Engineering, Tsinghua University, Beijing, China (2013 - present)

PROFESSIONAL EDUCATION

- PhD, Harvard University (1970)

LINKS

- https://web.stanford.edu/~jleckie: https://web.stanford.edu/~jleckie

Publications

PUBLICATIONS

- **Quantification and Analysis of Micro-Level Activities Data from Children Aged 1-12 Years Old for Use in the Assessments of Exposure to Recycled Tire on Turf and Playgrounds.** *International journal of environmental research and public health*

  Lopez-Galvez, N., Claude, J., Wong, P., Bradman, A., Hyland, C., Castorina, R., Canales, R. A., Billheimer, D., Torabzadeh, E., Leckie, J. O., Beamer, P. I.

  2022; 19 (4)

- **Stochastic Collision-Attachment-Based Monte Carlo Simulation of Colloidal Fouling: Transition from Foulant-Clean-Membrane Interaction to Foulant-Fouled-Membrane Interaction.** *Environmental science & technology*

Liu, J. n., Huang, T. n., Ji, R. n., Wang, Z. n., Tang, C. Y., Leckie, J. O.
2020

- **Soil ingestion among young children in rural Bangladesh.** *Journal of exposure science & environmental epidemiology*
  Kwong, L. H., Ercumen, A., Pickering, A. J., Unicomb, L., Davis, J., Leckie, J. O., Luby, S. P.
  2019
- **Modeling Dynamics of Colloidal Fouling of RO/NF Membranes with A Novel Collision-Attachment Approach** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Liu, J., Wang, Z., Tang, C. Y., Leckie, J. O.
  2018; 52 (3): 1471–78
- **3D visualization of the internal nanostructure of polyamide thin films in RO membranes** *JOURNAL OF MEMBRANE SCIENCE*
  Pacheco, F., Sougrat, R., Reinhard, M., Leckie, J. O., Pinnau, I.
  2016; 501: 33-44
- **Modeling and optimizing the performance of PVC/PVB ultrafiltration membranes using supervised learning approaches** *RSC ADVANCES*
  Chi, L., Wang, J., Chu, T., Qian, Y., Yu, Z., Wu, D., Zhang, Z., Jiang, Z., Leckie, J. O.
  2016; 6 (33): 28038-28046
- **Carbon-silica composite nanofiber membrane for high flux separation of water-in-oil emulsion - Performance study and fouling mechanism** *SEPARATION AND PURIFICATION TECHNOLOGY*
  Tai, M. H., Juay, J., Sun, D. D., Leckie, J. O.
  2015; 156: 952-960
- **A Self-Assembled Superhydrophobic Electrospun Carbon-Silica Nanofiber Sponge for Selective Removal and Recovery of Oils and Organic Solvents** *CHEMISTRY-A EUROPEAN JOURNAL*
  Tai, M. H., Tan, B. Y., Juay, J., Sun, D. D., Leckie, J. O.
  2015; 21 (14): 5395-5402
- **Effect of humic acid on the sorption of perfluorooctane sulfonate (PFOS) and perfluorobutane sulfonate (PFBS) on boehmite** *CHEMOSPHERE*
  Wang, F., Shih, K., Leckie, J. O.
  2015; 118: 213-218
- **Highly Efficient and Flexible Electrospun Carbon-Silica Nanofibrous Membrane for Ultrafast Gravity-Driven Oil-Water Separation** *ACS APPLIED MATERIALS & INTERFACES*
  Tai, M. H., Gao, P., Tan, B. Y., Sun, D. D., Leckie, J. O.
  2014; 6 (12): 9393-9401
- **Effects of inorganic anions on cadmium sorption behaviours on titanate nanotube surfaces** *ENVIRONMENTAL TECHNOLOGY*
  Zhang, L., Du, A. J., Sun, D. D., Leckie, J. O.
  2013; 34 (22): 3029-3033
- **Enterococcus spp on fomites and hands indicate increased risk of respiratory illness in child care centers** *AMERICAN JOURNAL OF INFECTION CONTROL*
  Julian, T. R., Pickering, A. J., Leckie, J. O., Boehm, A. B.
  2013; 41 (8): 728-733
- **Critical Review of Desalination Concentrate Management, Treatment and Beneficial Use** *ENVIRONMENTAL ENGINEERING SCIENCE*
  Xu, P., Cath, T. Y., Robertson, A. P., Reinhard, M., Leckie, J. O., Drewes, J. E.
  2013; 30 (8): 502-514
- **Methodology to Capture Children's Non-Dietary Ingestion Exposure Activities During Meal Events** *HUMAN AND ECOLOGICAL RISK ASSESSMENT*
  Ferguson, A., Canales, R., Vieira, V., Leckie, J.
  2013; 19 (4): 944-958
- **Effects of Chlorine Exposure Conditions on Physiochemical Properties and Performance of a Polyamide Membrane-Mechanisms and Implications** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Van Thanh Do, V. T., Tang, C. Y., Reinhard, M., Leckie, J. O.

2012; 46 (24): 13184-13192

- **Effects of chlorine exposure conditions on physiochemical properties and performance of a polyamide membrane--mechanisms and implications.** *Environmental science & technology*
  Do, V. T., Tang, C. Y., Reinhard, M., Leckie, J. O.
  2012; 46 (24): 13184-13192
- **Effects of hypochlorous acid exposure on the rejection of salt, polyethylene glycols, boron and arsenic(V) by nanofiltration and reverse osmosis membranes** *WATER RESEARCH*
  Van Thanh Do, V. T., Tang, C. Y., Reinhard, M., Leckie, J. O.
  2012; 46 (16): 5217-5223
- **Effects of hypochlorous acid exposure on the rejection of salt, polyethylene glycols, boron and arsenic(V) by nanofiltration and reverse osmosis membranes.** *Water research*
  Do, V. T., Tang, C. Y., Reinhard, M., Leckie, J. O.
  2012; 46 (16): 5217-5223
- **Adsorption of perfluorinated compounds on thin-film composite polyamide membranes** *JOURNAL OF APPLIED POLYMER SCIENCE*
  Kwon, Y., Shih, K., Tang, C., Leckie, J. O.
  2012; 124 (2): 1042-1049
- **Degradation of Polyamide Nanofiltration and Reverse Osmosis Membranes by Hypochlorite** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Van Thanh Do, V. T., Tang, C. Y., Reinhard, M., Leckie, J. O.
  2012; 46 (2): 852-859
- **Quantified outdoor micro-activity data for children aged 7-12-years old** *JOURNAL OF EXPOSURE SCIENCE AND ENVIRONMENTAL EPIDEMIOLOGY*
  Beamer, P. I., Luik, C. E., Canales, R. A., Leckie, J. O.
  2012; 22 (1): 82-92
- **An Ontology-based Service Model For Smart Infrastructure Design** *International Conference on Cloud Computing and Service Computing (CSC)*
  Chu, T., Wang, J., Leckie, J. O.
  IEEE.2012: 17–24
- **Relative Pesticide and Exposure Route Contribution to Aggregate and Cumulative Dose in Young Farmworker Children** *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH*
  Beamer, P. I., Canales, R. A., Ferguson, A. C., Leckie, J. O., Bradman, A.
  2012; 9 (1): 73-96
- **Effect of bromide on the chlorination of a polyamide membrane** *DESALINATION*
  Kwon, Y., Joksimovic, R., Kim, I., Leckie, J. O.
  2011; 280 (1-3): 80-86
- **Comparison of Surface Sampling Methods for Virus Recovery from Fomites** *APPLIED AND ENVIRONMENTAL MICROBIOLOGY*
  Julian, T. R., Tamayo, F. J., Leckie, J. O., Boehm, A. B.
  2011; 77 (19): 6918-6925
- **Sequestration of cadmium ions using titanate nanotube** *JOURNAL OF HAZARDOUS MATERIALS*
  Du, A. J., Sun, D. D., Leckie, J. O.
  2011; 187 (1-3): 401-406
- **Selective sorption of divalent cations using a high capacity sorbent** *JOURNAL OF HAZARDOUS MATERIALS*
  Du, A. J., Sun, D. D., Leckie, J. O.
  2011; 187 (1-3): 96-100
- **Systematic study on calcium-alginate interaction in a hybrid coagulation-nanofiltration system** *JOURNAL OF MEMBRANE SCIENCE*
  Listiarini, K., Tan, L., Sun, D. D., Leckie, J. O.
  2011; 370 (1-2): 109-115
- **A decision-support system for smarter city planning and management** *IBM JOURNAL OF RESEARCH AND DEVELOPMENT*

Juan, Y., Wang, L., Wang, J., Leckie, J. O., Li, K.
2011; 55 (1-2)

- **Virus transfer between fingerpads and fomites** *JOURNAL OF APPLIED MICROBIOLOGY*
  JULIAN, T. R., Leckie, J. O., Boehm, A. B.
  2010; 109 (6): 1868-1874
- **Hybrid coagulation-nanofiltration membrane for removal of bromate and humic acid in water** *JOURNAL OF MEMBRANE SCIENCE*
  Listiarini, K., Tor, J. T., Sun, D. D., Leckie, J. O.
  2010; 365 (1-2): 154-159
- **Formation of copper aluminate spinel and cuprous aluminate delafossite to thermally stabilize simulated copper-laden sludge** *JOURNAL OF HAZARDOUS MATERIALS*
  Hu, C., Shih, K., Leckie, J. O.
  2010; 181 (1-3): 399-404
- **Characterization of isolated polyamide thin films of RO and NF membranes using novel TEM techniques** *JOURNAL OF MEMBRANE SCIENCE*
  Pacheco, F. A., Pinnau, I., Reinhard, M., Leckie, J. O.
  2010; 358 (1-2): 51-59
- **Effect of solution chemistry on the adsorption of perfluorooctane sulfonate onto mineral surfaces** *WATER RESEARCH*
  Tang, C. Y., Fu, Q. S., Gao, D., Criddle, C. S., Leckie, J. O.
  2010; 44 (8): 2654-2662
- **Effect of solution chemistry on the adsorption of perfluorooctane sulfonate onto mineral surfaces.** *Water research*
  Tang, C. Y., Shiang Fu, Q., Gao, D., Criddle, C. S., Leckie, J. O.
  2010; 44 (8): 2654-2662
- **Effect of solution chemistry on the adsorption of perfluorooctanesulfonate onto mineral surfaces** *Water Research*
  Tang, C., Y., Shiang, Q., Fu, Gao, D., Criddle, C., S., Leckie, J., O.
  2010; 8 (44): 2654 – 2662
- **Fouling mechanism and resistance analyses of systems containing sodium alginate, calcium, alum and their combination in dead-end fouling of nanofiltration membranes** *JOURNAL OF MEMBRANE SCIENCE*
  Listiarini, K., Chun, W., Sun, D. D., Leckie, J. O.
  2009; 344 (1-2): 244-251
- **Farmworker children's residential non-dietary exposure estimates from micro-level activity time series** *ENVIRONMENT INTERNATIONAL*
  Beamer, P. I., Canales, R. A., Bradman, A., Leckie, J. O.
  2009; 35 (8): 1202-1209
- **Influence of a prolonged solid retention time environment on nitrification/denitrification and sludge production in a submerged membrane bioreactor** *DESALINATION*
  Teck, H. C., Loong, K. S., Sun, D. D., Leckie, J. O.
  2009; 245 (1-3): 28-43
- **Effect of membrane chemistry and coating layer on physiochemical properties of thin film composite polyamide RO and NF membranes II. Membrane physiochemical properties and their dependence on polyamide and coating layers** *DESALINATION*
  Tang, C. Y., Kwon, Y., Leckie, J. O.
  2009; 242 (1-3): 168-182
- **Effect of membrane chemistry and coating layer on physiochemical properties of thin film composite polyamide RO and NF membranes I. FTIR and XPS characterization of polyamide and coating layer chemistry** *DESALINATION*
  Tang, C. Y., Kwon, Y., Leckie, J. O.
  2009; 242 (1-3): 149-167
- **Fabrication and photocatalytic activity of porous TiO2 nanowire microspheres by surfactant-mediated spray drying process** *MATERIALS RESEARCH BULLETIN*
  Zhang, X., Pan, J. H., Du, A. J., Ng, J., Sun, D. D., Leckie, J. O.
  2009; 44 (5): 1070-1076

- **A Model of Exposure to Rotavirus from Nondietary Ingestion Iterated by Simulated Intermittent Contacts** *RISK ANALYSIS*
  Julian, T. R., Canales, R. A., Leckie, J. O., Boehm, A. B.
  2009; 29 (5): 617-632
- **Organic fouling of nanofiltration membranes: Evaluating the effects of humic acid, calcium, alum coagulant and their combinations on the specific cake resistance** *JOURNAL OF MEMBRANE SCIENCE*
  Listiarini, K., Sun, D. D., Leckie, J. O.
  2009; 332 (1-2): 56-62
- **Developing probability distributions for transfer efficiencies for dermal exposure** *JOURNAL OF EXPOSURE SCIENCE AND ENVIRONMENTAL EPIDEMIOLOGY*
  Beamer, P., Canales, R. A., Leckie, J. O.
  2009; 19 (3): 274-283
- **Combination of one-dimensional TiO2 nanowire photocatalytic oxidation with microfiltration for water treatment** *WATER RESEARCH*
  Zhang, X., Pan, J. H., Du, A. J., Fu, W., Sun, D. D., Leckie, J. O.
  2009; 43 (5): 1179-1186
- **The role of foulant-foulant electrostatic interaction on limiting flux for RO and NF membranes during humic acid fouling-Theoretical basis, experimental evidence, and AFM interaction force measurement** *JOURNAL OF MEMBRANE SCIENCE*
  Tang, C. Y., Kwon, Y., Leckie, J. O.
  2009; 326 (2): 526-532
- **A Model of Exposure to Rotavirus from Non-Dietary Ingestion Iterated by Simulated Intermittent Contacts** *Risk Analysis*
  Julian, T., Canales, R., Leckie, R., A., Boehm, J., O.
  2009; 5 (29): 617-632
- **Effect of membrane chemistry and coating layer on physiochemical properties of thin film composite polyamide RO and NF membranes. I. FTIR and XPS characterization of polyamide and coating layer chemistry** *Desalination*
  Tang, C., Y., Kwon, Y., N., Leckie, J., O.
  2009; 1-3 (242): 149 – 167
- **Combination of one-dimensional TiO nanowire photocatalytic oxidation with microfiltration for water treatment** *Water Research*
  Zhang, X., Pan, J., H., Du, A., J., Fu, W., Sun, D., D., Leckie, J., O.
  2009; 5 (43): 1179 – 1186
- **Effect of membrane chemistry and coating layer on physiochemical properties of thin film composite polyamide RO and NF membranes. I. FTIR and XPS characterization of polyamide and coating layer chemistry** *Desalination*
  Tang, C., Y., Kwon, Y., N., Leckie, J., O.
  2009; 1-3 (242): 149 – 167
- **Combination of one-dimensional TiO nanowire photocatalytic oxidation with microfiltration for water treatment** *Water Research*
  Zhang, X., Pan, J., H., Du, A., J., Fu, W., Sun, D., D., Leckie, J., O.
  2009; 5 (43): 1179 – 1186
- **The fraction of total hand surface area involved in young children's outdoor hand-to-object contacts** *ENVIRONMENTAL RESEARCH*
  Auyeung, W., Canales, R. A., Leckie, J. O.
  2008; 108 (3): 294-299
- **Grafted multifunctional titanium dioxide nanotube membrane: Separation and photodegradation of aquatic pollutant** *APPLIED CATALYSIS B-ENVIRONMENTAL*
  Zhang, X., Du, A. J., Lee, P., Sun, D. D., Leckie, J. O.
  2008; 84 (1-2): 262-267
- **Quantified activity pattern data from 6 to 27-month-old farmworker children for use in exposure assessment** *ENVIRONMENTAL RESEARCH*
  Beamer, P., Key, M. E., Ferguson, A. C., Canales, R. A., Auyeung, W., Leckie, J. O.
  2008; 108 (2): 239-246
- **Self-etching reconstruction of hierarchically mesoporous F-TiO2 hollow microspherical photocatalyst for concurrent membrane water Purifications** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
  Pan, J. H., Zhang, X., Du, A. J., Sun, D. D., Leckie, J. O.

2008; 130 (34): 11256-?

- **Synthesis of bimodal porous structured TiO2 microsphere with high photocatalytic activity for water treatment** *COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS*
  Lee, P. F., Zhang, X., Sun, D. D., Du, J., Leckie, J. O.
  2008; 324 (1-3): 202-207
- **Change of chemical composition and hydrogen bonding behavior due to chlorination of crosslinked polyamide membranes** *JOURNAL OF APPLIED POLYMER SCIENCE*
  Kwon, Y., Tang, C. Y., Leckie, J. O.
  2008; 108 (4): 2061-2066
- **Palladium-indium catalyzed reduction of N-nitrosodimethylamine: Indium as a promoter metal** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Davie, M. G., Shih, K., Pacheco, F. A., Leckie, J. O., Reinhard, M.
  2008; 42 (8): 3040-3046
- **TiO2 nanowire membrane for concurrent filtration and photocatalytic oxidation of humic acid in water** *JOURNAL OF MEMBRANE SCIENCE*
  Zhang, X., Du, A. J., Lee, P., Sun, D. D., Leckie, J. O.
  2008; 313 (1-2): 44-51
- **TiO nanowire membrane for concurrent filtration and photocatalytic oxidation of humic acid in water** *Journal of Membrane Science*
  Zhang, X., Du, A., J., Lee, P., Sun, D., D., Leckie, J., O.
  2008; 1-2 (313): 44 – 51
- **Aggregating TiO (B) nanowires to porous basketry-like microspheres and their photocatalytic properties** *Chemistry Letters*
  Zhang, X., Pan, J., H., Du, A., J., Lee, P., F., Sun, D., D., Leckie, J., O.
  2008; 4 (37): 424 – 425
- **Synthesis of bimodal porous structured TiO microsphere with high photocatalytic activity for water treatment** *Colloids and Surfaces A: Physicochemical and Engineering Aspects*
  Lee, P., F., Zhang, X., Sun, D., D., Du, J., Leckie, J., O.
  2008; 1-3 (324): 202 - 207
- **Self-etching reconstruction of hierarchically mesoporous F-TiO hollow microsphericalphotocatalyst for concurrent membrane water purifications** *Journal of the American Chemical Society*
  Pan, J., H., Zhang, X., Du, A., J., Sun, D., D., Leckie, J., O.
  2008; 34 (130): 11256 – 11257
- **Biofouling development and rejection enhancement in long SRT MF membrane bioreactor** *PROCESS BIOCHEMISTRY*
  Khor, S. L., Sun, D. D., Liu, Y., Leckie, J. O.
  2007; 42 (12): 1641-1648
- **Application of a stochastic model to estimate children's short-term residential exposure to lead** *STOCHASTIC ENVIRONMENTAL RESEARCH AND RISK ASSESSMENT*
  Canales, R. A., Leckie, J. O.
  2007; 21 (6): 737-745
- **The influence of cobalt doping on photocatalytic nano-titania: Crystal chemistry and amorphicity** *JOURNAL OF SOLID STATE CHEMISTRY*
  Lim, S. H., Ferraris, C., Schreyer, M., Shih, K., Leckie, J. O., White, T. J.
  2007; 180 (10): 2905-2915
- **Photocatalytic oxidation of pharmaceutical compounds: Kinetics and pathways for ibuprofen, clofibric acid, diclofenac and naproxen** *JOURNAL OF ADVANCED OXIDATION TECHNOLOGIES*
  Thanasawasdi, H., Leckie, J., Mill, T.
  2007; 10 (2): 342-348
- **Membrane independent limiting flux for RO and NF membranes fouled by humic acid** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Tang, C. Y., Leckie, J. O.
  2007; 41 (13): 4767-4773

- **Impact of prolonged sludge retention time on the performance of a submerged membrane bioreactor** *DESALINATION*
  Sun, D. D., Khor, S. L., Hay, C. T., Leckie, J. O.
  2007; 208 (1-3): 101-112
- **An efficient bicomponent TiO2/SnO2 nanofiber photocatalyst fabricated by electrospinning with a side-by-side dual spinneret method** *NANO LETTERS*
  Liu, Z., Sun, D. D., Guo, P., Leckie, J. O.
  2007; 7 (4): 1081-1085
- **Effect of flux (transmembrane pressure) and membrane properties on fouling and rejection of reverse osmosis and nanofiltration membranes treating perfluorooctane sulfonate containing wastewater** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Tang, C. Y., Fu, Q. S., Criddle, C. S., Leckie, J. O.
  2007; 41 (6): 2008-2014
- **Fouling of reverse osmosis and nanofiltration membranes by humic acid - Effects of solution composition and hydrodynamic conditions** *JOURNAL OF MEMBRANE SCIENCE*
  Tang, C. Y., Kwon, Y., Leckie, J. O.
  2007; 290 (1-2): 86-94
- **Characterization of humic acid fouled reverse osmosis and nanofiltration membranes by transmission electron microscopy and streaming potential measurements** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Tang, C. Y., Kwon, Y., Leckie, J. O.
  2007; 41 (3): 942-949
- **Adsorption and photodegradation of humic acids by nano-structured TiO2 for water treatment** *10th International Conference on Photocatalysis/11th International Conference on Advanced Oxidation Technologies for Treatment of Water, Air and Soil*
  Lee, P. F., Sun, D. D., Leckie, J. O.
  SCIENCE & TECHNOLOGY NETWORK INC.2007: 72–78
- **Probing the nano- and micro-scales of reverse osmosis membranes - A comprehensive characterization of physiochemical properties of uncoated and coated membranes by XPS, TEM, ATR-FTIR, and streaming potential measurements** *JOURNAL OF MEMBRANE SCIENCE*
  Tang, C. Y., Kwon, Y., Leckie, J. O.
  2007; 287 (1): 146-156
- **One-step fabrication and high photocatalytic activity of porous TiO2 hollow aggregates by using a low-temperature hydrothermal method without templates** *CHEMISTRY-A EUROPEAN JOURNAL*
  Liu, Z., Sun, D. D., Guo, P., Leckie, J. O.
  2007; 13 (6): 1851-1855
- **An efficient bicomponentTiO/SnOnanofiberphotocatalyst fabricated by electrospinning with a side-by-side dual spinneret method** *Nano Letters*
  Liu, Z., Sun, D., D., Guo, P., Leckie, J., O.
  2007; 4 (7): 1081 – 1085
- **Fouling of reverse osmosis and nanofiltration membranes by humic acid-Effects of solution composition and hydrodynamic conditions** *Journal of Membrane Science*
  Tang, C., Y., Kwon, Y., N., Leckie, J., O.
  2007; 1-2 (290): 86 – 94
- **Probing the nano- and micro-scales of reverse osmosis membranes-A comprehensive characterization of physiochemical properties of uncoated and coated membranes by XPS, TEM, ATR-FTIR, and streaming potential measurements** *Journal of Membrane Science*
  Tang, C., Y., Kwon, Y., N., Leckie, J., O.
  2007; 1 (287): 146 – 156
- **Effect of flux (transmembrane pressure) and membrane properties on fouling and rejection of reverse osmosis and nanofiltration membranes treating perfluorooctanesulfonate containing wastewater** *Environmental Science & Technology*
  Tang, C., Y., Fu, Q., S., Criddle, C., S., Leckie, J., O.
  2007; 6 (41): 2008 - 2014
- **The Influence of Cobalt-doping on PhotocatalyticNano-titania: Crystal Chemistry and Amorphicity** *Journal of Solid State Chemistry*
  Lim, S., H., Ferraris, C., Schreyer, M., Shih, K., Leckie, J., O., White, T., J.

2007; 10 (180): 2905-2915

- **Nickel aluminate spinel formation during sintering of simulated Ni-laden sludge and kaolinite** *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*
  Shih, K., Leckie, J. O.
  2007; 27 (1): 91-99
- **Change of membrane performance due to chlorination of crosslinked polyamide membranes** *JOURNAL OF APPLIED POLYMER SCIENCE*
  Kwon, Y., Tang, C. Y., Leckie, J. O.
  2006; 102 (6): 5895-5902
- **Use of reverse osmosis membranes to remove perfluorooctane sulfonate (PFOS) from semiconductor wastewater** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Tang, C. Y., Fu, Q. S., Robertson, A. P., Criddle, C. S., Leckie, J. O.
  2006; 40 (23): 7343-7349
- **Hypochlorite degradation of crosslinked polyamide membranes I. Changes in chemical/morphological properties** *JOURNAL OF MEMBRANE SCIENCE*
  Kwon, Y., Leckie, J. O.
  2006; 283 (1-2): 21-26
- **Hypochlorite degradation of crosslinked polyamide membranes - II. Changes in hydrogen bonding behavior and performance** *JOURNAL OF MEMBRANE SCIENCE*
  Kwon, Y., Leckie, J. O.
  2006; 282 (1-2): 456-464
- **Nickel stabilization efficiency of aluminate and ferrite spinels and their leaching behavior** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Shih, K., White, T., Leckie, J. O.
  2006; 40 (17): 5520-5526
- **Young children's hand contact activities: An observational study via videotaping in primarily outdoor residential settings** *JOURNAL OF EXPOSURE SCIENCE AND ENVIRONMENTAL EPIDEMIOLOGY*
  Auyeung, W., Canales, R. A., Beamer, P., Ferguson, A. C., Leckie, J. O.
  2006; 16 (5): 434-446
- **Spinel formation for stabilizing simulated nickel-laden sludge with aluminum-rich ceramic precursors** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Shih, K., White, T., Leckie, J. O.
  2006; 40 (16): 5077-5083
- **Video methods in the quantification of children's exposures** *JOURNAL OF EXPOSURE SCIENCE AND ENVIRONMENTAL EPIDEMIOLOGY*
  Ferguson, A. C., Canales, R. A., Beamer, P., Auyeung, W., Key, M., Munninghoff, A., Lee, K. T., Robertson, A., Leckie, J. O.
  2006; 16 (3): 287-298
- **Photocatalytic oxidation of emerging contaminants: Kinetics and pathways for photocatalytic oxidation of pharmaceutical compounds** *2nd European Conference on Oxidation and Reduction Technologies for Ex-Situ and In-Situ Treatment of Water, Air and Soil*
  Tungudomwongsa, H., Leckie, J., Mill, T.
  SCIENCE & TECHNOLOGY NETWORK INC.2006: 59–64
- **Effect of 200 days' sludge retention time on performance of a pilot scale submerged membrane bioreactor for high strength industrial wastewater treatment** *IWA International Conference on Sustainable Development of Chemical Industries with the Environment*
  Hay, C. T., Sun, D. D., Khor, S. L., Leckie, J. O.
  IWA PUBLISHING.2006: 269–76
- **Hypochlorite Degradation of CrosslinkedPolyamide Membranes: I. Changes in Chemical/Morphological Properties** *Journal of Membrane Science*
  Kwon, Y., N., Leckie, J., O.
  2006; 282: 21-26
- **An Efficient Bicomponent TiO2/SnO2NanofiberPhotocatalyst Fabricated by Electrospinning with a Side-by-Side Dual Spinneret Method** *Nano Letters*
  Liu, Z., Y., Sun, D., D., Guo, P., Leckie, J., O.

2006; 4 (7): 1081-1085

- **Hypochlorite Degradation of CrosslinkedPolyamide Membranes: II. Changes in Hydrogen Bonding Behavior and Performance** *Journal of Membrane Science*
  Kwon, Y., N., Leckie, J., O.
  2006; 282: 456-464
- **Managing E-Government IT infrastructure: An approach combining autonomic computing and awareness based collaboration** *4th International Conference on Computer and Information Technology*
  Wang, J., Cao, J., Leckie, J. O., Zhang, S. S.
  IEEE COMPUTER SOC.2004: 998–1003
- **Variability in goethite surface site density: evidence from proton and carbonate sorption** *JOURNAL OF COLLOID AND INTERFACE SCIENCE*
  Villalobos, M., Trotz, M. A., Leckie, J. O.
  2003; 268 (2): 273-287
- **Association of uranyl with the cell wall of Pseudomonas fluorescens inhibits metabolism** *GEOCHIMICA ET COSMOCHIMICA ACTA*
  Bencheikh-Latmani, R., Leckie, J. O.
  2003; 67 (21): 4057-4066
- **Fate of uranyl in a quaternary system composed of uranyl, citrate, goethite, and Pseudomonas fluorescens** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Bencheikh-Latmani, R., Leckie, J. O., Bargar, J. R.
  2003; 37 (16): 3555-3559
- **Surface complexation modeling of carbonate effects on the adsorption of Cr(VI), Pb(II), and U(VI) on goethite** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Villalobos, M., Trotz, M. A., Leckie, J. O.
  2001; 35 (19): 3849-3856
- **Surface Complexation Modeling and FTIR Study of Carbonate Adsorption to Goethite.** *Journal of colloid and interface science*
  Villalobos, M., Leckie, J. O.
  2001; 235 (1): 15-32
- **Surface complexation modeling and FTIR study of carbonate adsorption to goethite** *JOURNAL OF COLLOID AND INTERFACE SCIENCE*
  Villalobos, M., Leckie, J. O.
  2001; 235 (1): 15-32
- **Carbonate adsorption on goethite under closed and open CO2 conditions** *GEOCHIMICA ET COSMOCHIMICA ACTA*
  Villalobos, M., Leckie, J. O.
  2000; 64 (22): 3787-3802
- **Modeling particle transport and aggregation in a quiescent aqueous environment using the residence-time scheme** *WATER RESOURCES RESEARCH*
  Perigault, J. G., Leckie, J. O., Kitanidis, P. K.
  2000; 36 (8): 2249-2261
- **Development of a simulation system for a continuous flow, quiescent, aqueous environment** *WATER RESEARCH*
  Ela, W. P., Leckie, J. O.
  2000; 34 (5): 1734-1750
- **Comparative assessment of settlement models for municipal solid waste landfill applications** *WASTE MANAGEMENT & RESEARCH*
  El-Fadel, M., Shazbak, S., Saliby, E., Leckie, J.
  1999; 17 (5): 347-368
- **Acid/base, copper binding, and Cu2+/H+ exchange properties of a soil humic acid, an experimental and modeling study** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Robertson, A. P., Leckie, J. O.
  1999; 33 (5): 786-795

- **Neptunium(V) sorption on hematite (alpha-Fe2O3) in aqueous suspension: The effect of CO2** *RADIOCHIMICA ACTA*
  Kohler, M., Honeyman, B. D., Leckie, J. O.
  1999; 85 (1-2): 33-48

- **Quantified mouthing activity data from a four-child pilot field study** *JOURNAL OF EXPOSURE ANALYSIS AND ENVIRONMENTAL EPIDEMIOLOGY*
  Zartarian, V. G., Ferguson, A. C., Leckie, J. O.
  1998; 8 (4): 543-553

- **Acid/base, copper binding, and Cu2+/H+ exchange properties of goethite, an experimental and modeling study** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Robertson, A. P., Leckie, J. O.
  1998; 32 (17): 2519-2530

- **Quantified dermal activity data from a four-child pilot field study (Reprinted from the Journal of Exposure and Environmental Epidemiology, vol 7, pg 543-552, 1997)** *JOURNAL OF CLEAN TECHNOLOGY ENVIRONMENTAL TOXICOLOGY AND OCCUPATIONAL MEDICINE*
  Zartarian, V. G., Ferguson, A. C., Leckie, J. O.
  1998; 7 (3): 259-268

- **Quantifying videotaped activity patterns: Video translation software and training methodologies (Reprinted from the Journal of Exposure Analysis and Environmental Epidemiology, vol 7, pg 535-542, 1997)** *JOURNAL OF CLEAN TECHNOLOGY ENVIRONMENTAL TOXICOLOGY AND OCCUPATIONAL MEDICINE*
  Zartarian, V. G., Ferguson, A. C., Ong, C. G., Leckie, J. O.
  1998; 7 (3): 251-258

- **Time-dependent adsorption in near coastal marine sediments: a two-step model** *ADVANCES IN WATER RESOURCES*
  Hansen, A. M., Leckie, J. O.
  1998; 21 (6): 523-531

- **Dermal exposure: The missing link** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Zartarian, V. G., Leckie, J. O.
  1998; 32 (5): 134A-137A

- **Quantifying videotaped activity patterns: Video translation software and training methodologies** *JOURNAL OF EXPOSURE ANALYSIS AND ENVIRONMENTAL EPIDEMIOLOGY*
  Zartarian, V. G., Ferguson, A. C., Ong, C. G., Leckie, J. O.
  1997; 7 (4): 535-542

- **Quantified dermal activity data from a four-child pilot field study** *JOURNAL OF EXPOSURE ANALYSIS AND ENVIRONMENTAL EPIDEMIOLOGY*
  Zartarian, V. G., Ferguson, A. C., Leckie, J. O.
  1997; 7 (4): 543-552

- **Modeling leachate generation and transport in solid waste landfills** *ENVIRONMENTAL TECHNOLOGY*
  Elfadel, M., Findikakis, A. N., Leckie, J. O.
  1997; 18 (7): 669-686

- **Environmental impacts of solid waste landfilling** *JOURNAL OF ENVIRONMENTAL MANAGEMENT*
  Elfadel, M., Findikakis, A. N., Leckie, J. O.
  1997; 50 (1): 1-25

- **Cation binding predictions of surface complexation models: Effects of pH, ionic strength, cation loading, surface complex, and model fit** *JOURNAL OF COLLOID AND INTERFACE SCIENCE*
  Robertson, A. P., Leckie, J. O.
  1997; 188 (2): 444-472

- **Numerical modelling of generation and transport of gas and heat in sanitary landfills .3. Sensitivity analysis** *WASTE MANAGEMENT & RESEARCH*
  Elfadel, M., Findikakis, A. N., Leckie, J. O.
  1997; 15 (1): 87-102

- **Gas simulation models for solid waste landfills** *CRITICAL REVIEWS IN ENVIRONMENTAL SCIENCE AND TECHNOLOGY*
  Elfadel, M., Findikakis, A. N., Leckie, J. O.
  1997; 27 (3): 237-283
- **Numerical modelling of generation and transport of gas and heat in sanitary landfills .2. Model application** *WASTE MANAGEMENT & RESEARCH*
  Elfadel, M., Findikakis, A. N., Leckie, J. O.
  1996; 14 (6): 537-551
- **Numerical modelling of generation and transport of gas and heat in landfills .1. Model formulation** *WASTE MANAGEMENT & RESEARCH*
  Elfadel, M., Findikakis, A. N., Leckie, J. O.
  1996; 14 (5): 483-504
- **Estimating and enhancing methane yield from municipal solid waste** *HAZARDOUS WASTE & HAZARDOUS MATERIALS*
  Elfadel, M., Findikakis, A. N., Leckie, J. O.
  1996; 13 (3): 309-331
- **Temperature effects in modeling solid waste biodegradation** *ENVIRONMENTAL TECHNOLOGY*
  Elfadel, M., Findikakis, A. N., Leckie, J. O.
  1996; 17 (9): 915-935
- **Anion-exchange preparation of a U-232 radiotracer for alpha-particle liquid scintillation counting** *TALANTA*
  Ong, C. G., Leckie, J. O.
  1996; 43 (4): 601-605
- **EFFECT OF PH, NACL, AND COCKTAIL SELECTION ON U-232 LIQUID SCINTILLATION SPECTRA** *ANALYTICAL CHEMISTRY*
  Ong, C. G., Prasad, A., Leckie, J. O.
  1995; 67 (21): 3893-3896
- **Migration and atmospheric emission of landfill gas** *HAZARDOUS WASTE & HAZARDOUS MATERIALS*
  Elfadel, M., Findikakis, A. N., Leckie, J. O.
  1995; 12 (4): 309-327
- **X-RAY-ABSORPTION SPECTROSCOPIC STUDIES OF CADMIUM AND SELENITE ADSORPTION ON ALUMINUM-OXIDES** *LANGMUIR*
  Papelis, C., Brown, G. E., Parks, G. A., Leckie, J. O.
  1995; 11 (6): 2041-2048
- **MODELING THE RATE OF CADMIUM AND SELENITE ADSORPTION ON MICROPOROUS AND MESOPOROUS TRANSITION ALUMINAS** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Papelis, C., Roberts, P. V., Leckie, J. O.
  1995; 29 (4): 1099-1108
- **KINETICS OF OXIDATION OF SELENITE TO SELENATE IN THE PRESENCE OF OXYGEN, TITANIA, AND LIGHT** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  GRUEBEL, K. A., Davis, J. A., Leckie, J. O.
  1995; 29 (3): 586-594
- **A PILOT-STUDY TO COLLECT MICRO-ACTIVITY DATA OF 2-YEAR-OLD TO 4-YEAR-OLD FARM-LABOR CHILDREN IN SALINAS VALLEY, CALIFORNIA** *JOURNAL OF EXPOSURE ANALYSIS AND ENVIRONMENTAL EPIDEMIOLOGY*
  Zartarian, V. G., STREICKER, J., Rivera, A., CORNEJO, C. S., Molina, S., VALADEZ, O. F., Leckie, J. O.
  1995; 5 (1): 21-34
- **Ternary complex formation at mineral solution interfaces** *NEA Workshop on Binding Models Concerning Natural Organic Substances in Performance Assessment*
  Leckie, J. O.
  ORGANIZATION ECONOMIC COOPERATION & DEVELOPMENT.1995: 181–212
- **INTERACTION BETWEEN AQUEOUS URANIUM(VI) AND SULFIDE MINERALS - SPECTROSCOPIC EVIDENCE FOR SORPTION AND REDUCTION** *GEOCHIMICA ET COSMOCHIMICA ACTA*
  Wersin, P., Hochella, M. F., Persson, P., Redden, G., Leckie, J. O., Harris, D. W.

1994; 58 (13): 2829-2843

- **COMPLEXATION OF CARBONATE SPECIES AT THE GOETHITE SURFACE - IMPLICATIONS FOR ADSORPTION OF METAL-IONS IN NATURAL-WATERS** *GEOCHIMICA ET COSMOCHIMICA ACTA*
  VANGEEN, A., Robertson, A. P., Leckie, J. O.
  1994; 58 (9): 2073-2086

- **HUMIC ACID GOETHITE INTERACTIONS AND THEIR EFFECT ON COPPER BINDING** *6th International Meeting of the International-Humic-Substances-Society - Humic Substances in the Global Environment and Implication on Human Health*
  Robertson, A. P., Leckie, J. O.
  ELSEVIER SCIENCE BV.1994: 487–492

- **SOLUBILITY-PRODUCT CONSTANT AND THERMODYNAMIC PROPERTIES FOR SYNTHETIC OTAVITE, CDCO3(S), AND AQUEOUS ASSOCIATION CONSTANTS FOR THE CD(II)-CO2-H2O SYSTEM** *GEOCHIMICA ET COSMOCHIMICA ACTA*
  Stipp, S. L., Parks, G. A., Nordstrom, D. K., Leckie, J. O.
  1993; 57 (12): 2699-2713

- **KINETIC-STUDIES OF ADSORPTION-DESORPTION OF CD AND ZN ONTO AL2O3/SOLUTION INTERFACES** *WATER SCIENCE AND TECHNOLOGY*
  LO, K. S., Leckie, J. O.
  1993; 28 (7): 39-45

- **CD2+ UPTAKE BY CALCITE, SOLID-STATE DIFFUSION, AND THE FORMATION OF SOLID-SOLUTION - INTERFACE PROCESSES OBSERVED WITH NEAR-SURFACE SENSITIVE TECHNIQUES (XPS, LEED, AND AES)** *GEOCHIMICA ET COSMOCHIMICA ACTA*
  STIPP, S. L., Hochella, M. F., Parks, G. A., Leckie, J. O.
  1992; 56 (5): 1941-1954

- **COBALT(II) INTERACTIONS WITH NEAR-COASTAL MARINE-SEDIMENTS** *ENVIRONMENTAL GEOLOGY AND WATER SCIENCES*
  Hansen, A. M., Leckie, J. O., Mee, L. D.
  1992; 19 (2): 97-111

- **SURFACE COMPLEXATION MODELS - AN EVALUATION OF MODEL PARAMETER-ESTIMATION USING FITEQL AND OXIDE MINERAL TITRATION DATA** *JOURNAL OF COLLOID AND INTERFACE SCIENCE*
  Hayes, K. F., Redden, G., ELA, W., Leckie, J. O.
  1991; 142 (2): 448-469

- **INSITU X-RAY ABSORPTION STUDY OF LEAD-ION SURFACE COMPLEXES AT THE GOETHITE WATER INTERFACE** *LANGMUIR*
  Roe, A. L., Hayes, K. F., CHISHOLMBRAUSE, C., Brown, G. E., Parks, G. A., Hodgson, K. O., Leckie, J. O.
  1991; 7 (2): 367-373

- **SPECTROSCOPIC INVESTIGATION OF PB(II) COMPLEXES AT THE GAMMA-AL2O3 WATER INTERFACE** *GEOCHIMICA ET COSMOCHIMICA ACTA*
  CHISHOLMBRAUSE, C. J., Hayes, K. F., Roe, A. L., Brown, G. E., Parks, G. A., Leckie, J. O.
  1990; 54 (7): 1897-1909

- **STUDY OF COPPER(II) ASSOCIATION WITH DISSOLVED ORGANIC-MATTER IN SURFACE WATERS OF 3 MEXICAN COASTAL LAGOONS** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Hansen, A. M., Leckie, J. O., MANDELLI, E. F., Altmann, R. S.
  1990; 24 (5): 683-688

- **XANES AND EXAFS STUDY OF AQUEOUS PB(II) ADSORBED ON OXIDE SURFACES** *PHYSICA B-CONDENSED MATTER*
  CHISHOLMBRAUSE, C. J., Roe, A. L., Hayes, K. F., Brown, G. E., Parks, G. A., Leckie, J. O.
  1989; 158 (1-3): 674-675

- **A NUMERICAL-MODEL FOR METHANE PRODUCTION IN MANAGED SANITARY LANDFILLS** *WASTE MANAGEMENT & RESEARCH*
  Elfadel, M., Findikakis, A. N., Leckie, J. O.
  1989; 7 (1): 31-42

- **MODELING IONIC-STRENGTH EFFECTS ON ANION ADSORPTION AT HYDROUS OXIDE SOLUTION INTERFACES** *JOURNAL OF COLLOID AND INTERFACE SCIENCE*
  Hayes, K. F., Papelis, C., Leckie, J. O.

1988; 125 (2): 717-726

- **MODELING GAS-PRODUCTION IN MANAGED SANITARY LANDFILLS** *WASTE MANAGEMENT & RESEARCH*
  Findikakis, A. N., Papelis, C., Halvadakis, C. P., Leckie, J. O.
  1988; 6 (2): 115-123

- **THE MOUNTAIN-VIEW-CONTROLLED-LANDFILL-PROJECT FIELD EXPERIMENT** *WASTE MANAGEMENT & RESEARCH*
  Halvadakis, C. P., Findikakis, A. N., Papelis, C., Leckie, J. O.
  1988; 6 (2): 103-114

- **THE FEASIBILITY OF USING SEQUENTIAL EXTRACTION TECHNIQUES FOR ARSENIC AND SELENIUM IN SOILS AND SEDIMENTS** *SOIL SCIENCE SOCIETY OF AMERICA JOURNAL*
  GRUEBEL, K. A., Davis, J. A., Leckie, J. O.
  1988; 52 (2): 390-397

- **INSITU X-RAY ABSORPTION STUDY OF SURFACE COMPLEXES - SELENIUM OXYANIONS ON ALPHA-FEOOH** *SCIENCE*
  Hayes, K. F., Roe, A. L., Brown, G. E., Hodgson, K. O., Leckie, J. O., Parks, G. A.
  1987; 238 (4828): 783-786

- **MACROSCOPIC PARTITIONING COEFFICIENTS FOR METAL-ION ADSORPTION - PROTON STOICHIOMETRY AT VARIABLE PH AND ADSORPTION DENSITY** *ACS SYMPOSIUM SERIES*
  Honeyman, B. D., Leckie, J. O.
  1986; 323: 162-190

- **MECHANISM OF LEAD-ION ADSORPTION AT THE GOETHITE-WATER INTERFACE** *ACS SYMPOSIUM SERIES*
  Hayes, K. F., Leckie, J. O.
  1986; 323: 114-141

- **PROTON STOICHIOMETRY FOR THE ADSORPTION OF CATIONS ON OXIDE SURFACES** *JOURNAL OF COLLOID AND INTERFACE SCIENCE*
  Perona, M. J., Leckie, J. O.
  1985; 106 (1): 64-69

- **SORPTION OF LEAD ONTO 2 GRAM-NEGATIVE MARINE-BACTERIA IN SEAWATER** *MARINE CHEMISTRY*
  Harvey, R. W., Leckie, J. O.
  1985; 15 (4): 333-344

- **A GROUNDWATER MASS-TRANSPORT AND EQUILIBRIUM CHEMISTRY MODEL FOR MULTICOMPONENT SYSTEMS** *WATER RESOURCES RESEARCH*
  CEDERBERG, G. A., Street, R. L., Leckie, J. O.
  1985; 21 (8): 1095-1104

- **PARTICULATE MATTER AT THE ESTUARINE SALT-MARSH SURFACE MICROLAYER - PARTICLE-SIZE DISTRIBUTIONS AND COMPARISON TO BULK SUSPENSION** *ESTUARINE COASTAL AND SHELF SCIENCE*
  Lion, L. W., Leckie, J. O.
  1983; 16 (6): 689-698

- **ENRICHMENT AND ASSOCIATION OF LEAD AND BACTERIA AT PARTICULATE SURFACES IN A SALT-MARSH SURFACE-LAYER** *JOURNAL OF MARINE RESEARCH*
  Harvey, R. W., Lion, L. W., Young, L. Y., Leckie, J. O.
  1982; 40 (4): 1201-1211

- **REMOVAL OF TOXIC METALS FROM POWER-GENERATION WASTE STREAMS BY ADSORPTION AND COPRECIPITATION** *JOURNAL WATER POLLUTION CONTROL FEDERATION*
  Benjamin, M. M., Hayes, K. F., Leckie, J. O.
  1982; 54 (11): 1472-1481

- **TRACE-METAL ADSORPTION CHARACTERISTICS OF ESTUARINE PARTICULATE MATTER - EVALUATION OF CONTRIBUTIONS OF FE/MN OXIDE AND ORGANIC-SURFACE COATINGS** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Lion, L. W., Altmann, R. S., Leckie, J. O.
  1982; 16 (10): 660-666

- **MECHANISMS FOR TRACE-METAL ENRICHMENT AT THE SURFACE MICROLAYER IN AN ESTUARINE SALT-MARSH** *MARINE CHEMISTRY*
  Lion, L. W., Harvey, R. W., Leckie, J. O.
  1982; 11 (3): 235-244
- **ACCUMULATION AND TRANSPORT OF CD, CU, AND PB IN AN ESTUARINE SALT-MARSH SURFACE MICROLAYER** *LIMNOLOGY AND OCEANOGRAPHY*
  Lion, L. W., Leckie, J. O.
  1982; 27 (1): 111-125
- **CONCEPTUAL-MODEL FOR METAL-LIGAND-SURFACE INTERACTIONS DURING ADSORPTION** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Benjamin, M. M., Leckie, J. O.
  1981; 15 (9): 1050-1057
- **CHEMICAL SPECIATION OF TRACE-METALS AT THE AIR-SEA INTERFACE - THE APPLICATION OF AN EQUILIBRIUM-MODEL** *ENVIRONMENTAL GEOLOGY*
  Lion, L. W., Leckie, J. O.
  1981; 3 (5): 293-314
- **COMPETITIVE ADSORPTION OF CD, CU, ZN, AND PB ON AMORPHOUS IRON OXYHYDROXIDE** *JOURNAL OF COLLOID AND INTERFACE SCIENCE*
  Benjamin, M. M., Leckie, J. O.
  1981; 83 (2): 410-419
- **THE BIOGEOCHEMISTRY OF THE AIR-SEA INTERFACE** *ANNUAL REVIEW OF EARTH AND PLANETARY SCIENCES*
  Lion, L. W., Leckie, J. O.
  1981; 9: 449-486
- **MULTIPLE-SITE ADSORPTION OF CD, CU, ZN, AND PB ON AMORPHOUS IRON OXYHYDROXIDE** *JOURNAL OF COLLOID AND INTERFACE SCIENCE*
  Benjamin, M. M., Leckie, J. O.
  1981; 79 (1): 209-221
- **SURFACE-IONIZATION AND COMPLEXATION AT THE OXIDE-WATER INTERFACE .3. ADSORPTION OF ANIONS** *JOURNAL OF COLLOID AND INTERFACE SCIENCE*
  Davis, J. A., Leckie, J. O.
  1980; 74 (1): 32-43
- **LANDFILL MANAGEMENT WITH MOISTURE CONTROL** *JOURNAL OF THE ENVIRONMENTAL ENGINEERING DIVISION-ASCE*
  Leckie, J. O., PACEY, J. G., Halvadakis, C.
  1979; 105 (2): 337-355
- **NUMERICAL-SIMULATION OF GAS-FLOW IN SANITARY LANDFILLS** *JOURNAL OF THE ENVIRONMENTAL ENGINEERING DIVISION-ASCE*
  Findikakis, A. N., Leckie, J. O.
  1979; 105 (5): 927-945
- **PARTICULATE MATTER - ITS ASSOCIATION WITH MICROORGANISMS AND TRACE-METALS IN AN ESTUARINE SALT-MARSH MICROLAYER** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Lion, L. W., Harvey, R. W., Young, L. Y., Leckie, J. O.
  1979; 13 (12): 1522-1525
- **INVESTIGATION OF SOLUBLE ORGANIC NITROGEN-COMPOUNDS IN MUNICIPAL SECONDARY EFFLUENT** *JOURNAL WATER POLLUTION CONTROL FEDERATION*
  Keller, J. V., Leckie, J. O., McCarty, P. L.
  1978; 50 (11): 2522-2529
- **COMPUTER-SIMULATION OF CONDUCTOMETRIC AND POTENTIOMETRIC TITRATIONS OF SURFACE GROUPS ON IONIZABLE LATEXES** *JOURNAL OF COLLOID AND INTERFACE SCIENCE*
  James, R. O., Davis, J. A., Leckie, J. O.
  1978; 65 (2): 331-344

- **SURFACE IONIZATION AND COMPLEXATION AT OXIDE-WATER INTERFACE .2. SURFACE PROPERTIES OF AMORPHOUS IRON OXYHYDROXIDE AND ADSORPTION OF METAL-IONS** *JOURNAL OF COLLOID AND INTERFACE SCIENCE*
  Davis, J. A., Leckie, J. O.
  1978; 67 (1): 90-107
- **EFFECT OF ADSORBED COMPLEXING LIGANDS ON TRACE-METAL UPTAKE BY HYDROUS OXIDES** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Davis, J. A., Leckie, J. O.
  1978; 12 (12): 1309-1315
- **SURFACE IONIZATION AND COMPLEXATION AT OXIDE-WATER INTERFACE .1. COMPUTATION OF ELECTRICAL DOUBLE-LAYER PROPERTIES IN SIMPLE ELECTROLYTES** *JOURNAL OF COLLOID AND INTERFACE SCIENCE*
  Davis, J. A., James, R. O., Leckie, J. O.
  1978; 63 (3): 480-499