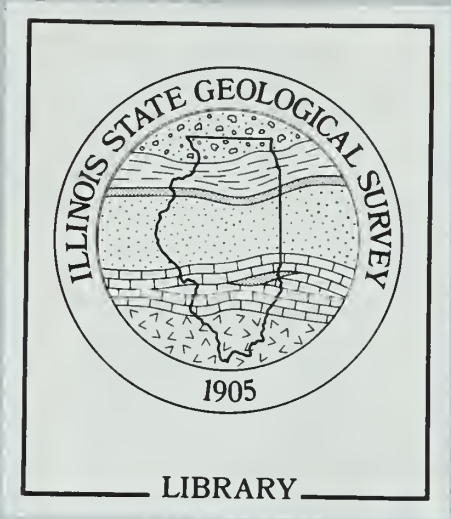


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BIBLIOGRAPHY AND INDEX OF ILLINOIS GEOLOGY

SERIALS LIST

- A. I. P. Conference Proceedings. New York, NY: American Institute of Physics.
- AAPG Bulletin. [Tulsa, OK: American Association of Petroleum Geologists].
- ANL/ES - Argonne National Laboratory. Argonne, IL: Argonne National Laboratory.
- Annual Meeting - Association of Engineering Geologists. [s.l.]: Association of Engineering Geologists.
- Annual Remote Sensing of Earth Resources Conference. [Tullahoma, TN: The University of Tennessee, Space Institute].
- Arch. Sci. (Soc. Phys. Hist. Nat. Geneve). Archives des Sciences (Societe de Physique et d'Histoire Naturelle de Geneve). Geneva.
- ASTM Special Technical Publication = American Society for Testing and Materials Special Technical Publication. Philadelphia, PA: American Society for Testing and Materials, 1911-.
- Bulletin of the Southern California Paleontological Society. Long Beach, CA: Southern California Paleontological Society.
- Circular - Illinois State Geological Survey. Urbana, IL: Illinois State Geological Survey, 1906-.
- Circular - Illinois State Water Survey. Urbana, IL: Illinois State Water Survey, 1928-.
- Coal Age. New York, NY: McGraw-Hill Book Co., 1911-.
- Congres International - Association International de Geologie de l'Ingenieur = International Congress - International Association of Engineering Geology. [s. l.: s. n.].
- Congress of the International Union for Quaternary Research. [s. l.: International Union for Quaternary Research].
- Cooperative Groundwater Report. Illinois, State Water Survey. Urbana, IL: Illinois State Water Survey, 1959-.
- Document - Illinois Institute of Natural Resources. Chicago, IL: Institute of Natural Resources.
- Earth Science. Colorado Springs, CO: Richard M. Pearl.
- Earthquake Information Bulletin. Reston, VA: U. S. Geological Survey, 1973-.
- Economic Geology and the Bulletin of the Society of Economic Geologists. Lancaster, PA: Economic Geology Publishing Company.
- Eng. Geol. Engineering Geology. Elsevier Sci. Publ. Co., Amsterdam.
- Environmental Geology Notes. Urbana, IL: Illinois State Geological Survey, 1965-.
- Fieldiana: Geology. Chicago, IL: Field Museum of Natural History, 1945-.
- Financial Times. London: Financial Times Ltd., 1888-.
- Geologica et Palaeontologica. Marburg: Elwert, 1967-.
- Geological Society of America Bulletin. Boulder, CO: Geological Society of America, 1890-.
- Geological Survey Circular. Reston, VA: U. S. Geological Survey, 1950-.
- Geological Survey Professional Paper. Washington, DC: U.S. Government Printing Office, 1902-.
- Geological Survey Professional Paper (Washington). Washington, DC: U.S. Government Printing Office, 1902-.
- Geophysical Monograph. Washington, DC: American Geophysical Union, 1956-.
- Geophysical Research Letters. Washington, DC: American Geophysical Union, 1974-.
- Geoscience and Man. Baton Rouge, LA: Louisiana State University, School of Geoscience.
- Ground Water. Urbana, IL: National Water Well Association, Ground-Water Technology Division.

- Guide Leaflet - Illinois State Geological Survey. Champaign, IL: Illinois, Department of Energy and Natural Resources, State Geological Survey Division.
- I. A. E. A., Proc. Ser. International Atomic Energy Agency, Proceedings Series. Vienna.
- IIHR Report. Iowa City, IA: Iowa Institute of Hydraulic Research.
- Illinois Mineral Note. Urbana, IL: Illinois State Geological Survey Division, Illinois Institute of Natural Resources, 1972-.
- Illinois Petroleum. Urbana, IL: Illinois State Geological Survey, 1926-.
- Int. Assoc. Eng. Geol., Bull. International Association of Engineering Geology, Bulletin--Association Internationale de Geologie de l'Ingenieur, Bulletin. Paris.
- Int. Geol. Congr. Abstr.--Congr. Geol. Int., Resumes. International Geological Congress, Abstracts--Congres Geologique Internationale, Resumes.
- Int. Peat Congr., Proc. International Peat Congress, Proceedings.
- Iowa Geology. [Iowa City]: Iowa Geological Survey, 1979-.
- ISWS Miscellaneous Publication. Champaign, IL: Illinois Department of Energy and Natural Resources.
- Journal of Environmental Quality. Madison, WI: Published cooperatively by the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America, 1972-.
- Journal of Paleontology. Tulsa, OK: Society of Economic Paleontologists and Mineralogists, 1927-.
- Journal of Sedimentary Petrology. Tulsa, OK: Society of Economic Paleontologists and Mineralogists, 1931-.
- Journal of Soil and Water Conservation. Ankeny, IA: Soil Conservation Society of America.
- Journal of the Geotechnical Engineering Division. New York, NY: American Society of Civil Engineers, Geotechnical Engineering Division, 1974-.
- Journal of the Hydraulics Division. New York, NY: American Society of Civil Engineers, Hydraulics Division, 1956-.
- Journal of the Institution of Engineers. India. Environmental Engineering Division. Calcutta: Institution of Engineers.
- Journal of the Water Resources Planning and Management Division. New York, NY: American Society of Civil Engineers, Water Resources Planning and Management Division, 1976-.
- Land Use Land Cover Maps, L-Ser. Land Use and Land Cover Maps, L-Series. U. S. Geological Survey, Reston, Virginia.
- Lapidary Journal. San Diego, CA: Lapidary Journal, Inc., 1947-.
- Marine Mining. New York, NY: Crane, Russak and Company, 1977-.
- Mining Engineering. Littleton, CO: Society of Mining Engineers of AIME, 1949-.
- Miscellaneous Series Publication - Botanical Society of America. [s. l.]: Botanical Society of America.
- Open-File Report (United States Geological Survey, 1978). Reston, VA: U. S. Geological Survey.
- Proceedings - Soil Science Society of America. Madison, WI: Soil Science Society of America, 1936-.
- Proceedings - Symposium on Rock Mechanics. New York, NY: American Institute of Mining, Metallurgical and Petroleum Engineers.
- Proceedings of the Annual Highway Geology Symposium. Atlanta, GA: Highway Geology Symposium.
- Proceedings of the Annual William T. Pecora Memorial Symposium on Remote Sensing. [s. l.: s. n.], 1975-.
- Proceedings of the Indiana Academy of Science. Indianapolis, IN: Indiana Academy of Science, 1891-.
- Quaternary Research (New York). New York, NY: Academic Press, 1970-.
- Radiocarbon. New Haven, CT: The American Journal of Science.
- Report - California Water Resources Center. Davis, CA: Office of the Director, California Water Resources Center, University of California, 1975-.
- Report of Investigation - Illinois State Water Survey. Urbana, IL: Illinois State Water Survey.
- Reports of Investigations - Illinois State Museum. Springfield, IL: Illinois State Museum, 1948-.
- Rock & Gem. Encino, CA: Behn-Miller Publishers, Inc., 1974-.

Rocks and Minerals. Washington, DC: Heldref Publications.

Soil Science: Baltimore, MD: The Williams & Wilkins Company, 1916-.

Soil Science Society of America Journal. Madison, WI: Soil Science Society of America, 1976-.

Special Publication - Kentucky Geological Survey. Lexington, KY: Kentucky Geological Survey, 1953-.

Special Report - Water Resources Center, University of Illinois at Urbana-Champaign. Urbana, IL: Water Resources Center, University of Illinois at Urbana-Champaign.

SPEJ. Society of Petroleum Engineers Journal. Dallas, TX: Society of Petroleum Engineers, 1961-.

Systematics Association Special Volume. London - New York: Academic Press for the Systematics Association, 1968-.

Tectonics. Washington, DC: American Geophysical Union, 1982-.

Trace Substances in Environmental Health. Columbia, MO: University of Missouri-Columbia, 1968-.

Transactions of the American Institute of Mining, Metallurgical, and Petroleum Engineers Incorporated. New York, NY: American Institute of Mining, Metallurgical, and Petroleum Engineers.

Transactions of the Illinois State Academy of Science. Springfield, IL: Illinois State Academy of Science.

Transactions of the Kansas Academy of Science. Lawrence, KS: Kansas Academy of Science, 1903-.

U. S. Geol. Surv., Misc. Field Stud. Map. U. S. Geological Survey, Miscellaneous Field Studies Map. Reston, Virginia.

University of Louisville Studies in Paleontology and Stratigraphy. Louisville, KY: University of Louisville.

Water-Resources Investigations. [Reston, VA]: U. S. Geological Survey, 1972-.

Water Resources Research. Washington, DC: American Geophysical Union, 1965-.

Water Science and Technology. Oxford-New York: Pergamon Press.

INTENTIONAL BLANK PAGE

BIBLIOGRAPHY AND INDEX OF ILLINOIS GEOLOGY

BIBLIOGRAPHY

- Alexander, John D. *see* Krishnan, P.
- Algermissen, S. T. *see* Stover, C. W.
- Anderson, Raymond R. Tri-State field conference: Iowa Geology, No. 4, p. 20-21, illus., January 1979.
- Anderson, T. C.; and Lukas, R. G. Preconsolidation pressure predicted using S/u -rho ratio: *in* Laboratory shear strength of soil (Yong, R. N., editor; *et al.*), ASTM Special Technical Publication = American Society for Testing and Materials Special Technical Publication, No. 740, p. 502-515, illus. (incl. 3 tables), 12 ref., 1981.
- Anonymous. Physiographic divisions of Illinois: Ill. State Geol. Surv., Urbana, IL, United States, 1 sheet, physiogr. map 1:2,534,400, 1970.
- Anonymous. Index of surface-water records to September 30, 1970; Part 5, Hudson Bay and upper Mississippi River basins: Geological Survey Circular, No. 655, 65 p., 1 table, sketch map, 1971.
- Anonymous. Index of surface-water records to September 30, 1970; Part 3, Ohio River basin: Geological Survey Circular, No. 653, 71 p., 1 table, sketch map, 1971.
- Anonymous. Urban geology of America; Peoria, Illinois: Earth Science, Vol. 28, No. 5, p. 240, October 1975.
- Anonymous. Illinois [abstr.]: *in* Geological Survey research 1981, Geological Survey Professional Paper, No. 1275, p. 94, 1981 [1982].
- Anonymous. Sediment transport and water quality during urban development in Illinois [abstr.]: Geological Survey Professional Paper, No. 1275, p. 175, 1981 [1982].
- Anonymous. Sohio in new U.S. Steel coal deal: Financial Times, No. 28443, p. 1, 1981.
- Arihood, L. D. *see* Lapham, W. W.
- Artiola, J.; and Fuller, W. H. Limestone liner for landfill leachates containing beryllium, cadmium, iron, nickel, and zinc: Soil Science, Vol. 129, No. 3, p. 167-179, illus. (incl. 5 tables), 33 ref., March 1980.
- Ault, Curtis H. *see* Sullivan, Dan M.
- Avila, John. Regional setting of the Cambro-Ordovician in the Illinois Basin: *in* Proceedings of the technical sessions, Kentucky Oil and Gas Association thirty-eighth annual meeting (Luther, Margaret K., editor), Special Publication - Kentucky Geological Survey, No. 3, p. 60-76, sects., sketch maps, 7 ref., 1981.
- Baker, Clyde N. Jr. *see* Bushell, Ted D.
- Barcelona, Michael J. Chemical characteristics of lake sediments: *in* Proceedings of a round table on reclaiming and managing lakes in Illinois (Keasler, Linda, editor), Special Report - Water Resources Center, University of Illinois at Urbana-Champaign, No. 12, p. 10-20, illus. (incl. 1 table, sect., sketch map), February 1981.
- Barcelona, Michael J. *see also* Naymik, Thomas G.
- Bardack, David; and Richardson, Eugene S., Jr. New agnathous fishes from the Pennsylvanian of Illinois: Fieldiana: Geology, Vol. 33, No. 26, p. 489-510, 1 table, 8 ref., June 23, 1977. *Pipiscius zangerli*, *Gilpichthys greeni*.
- Barrows, Mary H.; Cluff, Robert M.; and Harvey, Richard D. Petrology and maturation of dispersed organic matter in the New Albany Shale Group of the Illinois Basin [abstr.]: *in* Energy for the eighties; a joint DOE/EGSP-ES/AAPG symposium (Woodfork, Larry O., chairperson; *et al.*), U. S. Dep. Energy, Washington, DC, United States, Am. Assoc. Pet. Geol., Tulsa, OK, United States, p. 9, 218 anal., 1979.
- Batra, R. C. *see* Keith, H. D.
- Bauer, Robert A.; and DeMaris, Philip J. Geologic investigation of roof and floor strata; longwall demonstration, Old Ben Mine No. 24; final technical report; Part 1: 49 p., illus. (incl. 2 tables), 26 ref., April 1982. (Rep. No. FE/9007-1) available from: Ill. State Geol. Surv., Champaign, IL, United States.

- Bauer, Robert A. *see also* DuMontelle, Paul B.
- Baxter, James W.; and Bradbury, J. C. Bertrandite at Hicks Dome, Hardin County, Illinois: Transactions of the Illinois State Academy of Science, Vol. 73, No. 1, p. 1-13, illus. (incl. 5 anal., 5 tables, 1 plates, geol. sketch maps), 20 ref., 1980.
- Baxter, James W. *see also* Goodwin, Jonathan H.
- Beard, J. G. *see* Kepferle, R. C.
- Bengal, Lawrence E. *see* Jacobson, Russell J.
- Benson, Curtis R. *see* Sasman, Robert T.
- Berg, R. C. Use of stepwise discriminant analysis to assess soil genesis in a youthful sandy environment: Soil Science, Vol. 129, No. 6, p. 353-365, 8 tables, sketch maps, 20 ref., June 1980.
- Bhagwat, Subhash; and Collias, Theodore J. The future competitive position of coal from the Illinois Basin: Illinois Mineral Note, No. 81, 25 p., illus. (incl. 20 tables, sketch maps), 13 ref., July 1981.
- Bhowmik, Nani G. Hydraulics of flow in the Kaskaskia River, Illinois: Report of Investigation - Illinois State Water Survey, No. 91, 116 p., illus. (incl. 13 tables, sects., sketch maps), 38 ref., 1979.
- Bhowmik, Nani G.; and Bonini, Allen P. An historical review of the Kankakee River basin development: Transactions of the Illinois State Academy of Science, Vol. 74, No. 1-2, p. 203-216, sketch maps, 19 ref., 1981.
- Bhowmik, Nani G. *see also* Ivens, J. Loreena
- Blacic, J. D.; Halleck, P. H.; D'Onfro, P.; et al. Thermomechanical properties of Galesville Sandstone: in Mechanical behavior of crustal rocks; the Hardin volume (Carter, Neville L., editor; et al.), Geophysical Monograph, No. 24, p. 153-159, illus. (incl. 2 tables), 10 ref., 1981.
- Boast, Charles W. *see* Indorante, Sam J.
- Boes, R. *see* Weaver, L.
- Bogan, Arthur E. *see* Parmalee, Paul W.
- Boland, D. H. P. *see* Schaeffer, David J.
- Bonini, Allen P. *see* Bhowmik, Nani G.
- Brabets, T. P. (investigator). Surface-mine hydrology, Illinois [abstr.]: Geological Survey Professional Paper, No. 1275, p. 226, 1981.
- Bradbury, J. C. *see* Baxter, James W
- Bradford, Susan C. *see* DuMontelle, Paul B.
- Braile, L. W.; Keller, G. R.; Hinze, W. J.; et al. An ancient rift complex and its relation to contemporary seismicity in the New Madrid seismic zone: Tectonics, Vol. 1, No. 2, p. 225-237, illus. (incl. sketch maps), 45 ref., April 1982.
- Brigham, Allison R. *see* Ivens, J. Loreena
- Brill, E. Downey, Jr. *see* Hopkins, Lewis D.
- Bristol, Hubert M. *see* Nelson, W. John
- Brown, F. W. *see* Hatcher, P. G.
- Brugam, Richard B.; and Carlson, Mark A. Lead-210 analyses of sediment accumulation rates in five southern Illinois surface mine lakes: in Proceedings, 1981 symposium on surface mining hydrology, sedimentology, and reclamation (Graves, D. H., chairperson), p. 195-199, illus. (incl. 3 tables), 11 ref., December 1981. (Rep. No. UKY BU126) available from: Univ. Ky., Coll. Eng., Lexington, KY, United States.
- Bucek, Milena F. Sedimentation ponds and their impact on water quality: in Proceedings, 1981 symposium on surface mining hydrology, sedimentology, and reclamation (Graves, D. H., chairperson), p. 345-354, illus. (incl. 7 tables), December 1981. (Rep. No. UKY BU126) available from: Univ. Ky., Coll. Eng., Lexington, KY, United States.
- Burris, Charles B.; Morse, Walter J.; and Naymik, Thomas G. Assessment of a regional aquifer in central Illinois: Cooperative Groundwater Report. Illinois, State Water Survey, Vol. 6, 79 p., illus. (incl. 8 tables, sects., geol. sketch map), 32 ref., 1981.
- Buschbach, T. C. New Madrid seismotectonic study; activities during fiscal year 1979: 143 p., illus. (incl. tables, sketch maps), 11 ref., March 1980. (Rep. No. NUREG/CR-0977) available from: NTIS, Springfield, VA, United States. Individual papers are cited separately.
- Bushell, Ted D.; Baker, Clyde N. Jr.; Horvath, R. G.; et al. Caissons socketed in sound mica schist; discussions and closure: Journal of the Geotechnical Engineering Division, Vol. 108, No. GT7, p. 988-994, illus., 7 ref., July 1982. For reg. to orig. artic. by Koutsoftas, D. C., *see* J. Geotech. Eng. Div., Proc. Am. Soc. Civ. Eng., Vol. 107, No. GT6, June 1981.
- Butler, B. J. *see* Krishnan, P.
- Carlson, Mark A. *see* Brugam, Richard B.
- Carnaghi, Gary Louis. The Kankakee Flood and the origin of the Parkland Sand, northeastern Illinois: Master's, 1979, Univ. of Iowa, Iowa City, IA.
- Carozzi, A. V. *see* Rich, D. W.

- Carpenter, G. L. see Lindau, Robert D.
- see van den Berg, Jacob
- Carr, C. see Leith, C. J.
- Cartwright, Keros see Kempton, John P.
- Catt, Paul E. see Siefker, Joseph R.
- Chou, S. F. J. see Griffin, R. A.
- Chugh, Y. P.; Okunola, A.; and Hall, M.
Moisture absorption and swelling behavior of the Dykersburg Shale: Transactions of the American Institute of Mining, Metallurgical, and Petroleum Engineers Incorporated, Vol. 268, p. 1808-1812, illus. (incl. 2 tables), 11 ref., 1980 [1981]. AIME annual meeting, Las Vegas, Nev., Feb. 1980.
- Chugh, Yoginder P.; and Missavage, Roger A.
Effects of moisture on strata control in coal mines: Eng. Geol., Vol. 17, No. 4, p. 241-255, illus. (incl. 5 tables), 27 ref., November 1981.
- Clarke, Robert P. see Schaeffer, David J.
- Clemence, S. P.; and Pool, J. M. Model studies of induced slope failures for strip mine reclamation: Congres International - Association International de Geologie de l'Ingenieur = International Congress - International Association of Engineering Geology, No. 3, Special sessions, p. 43-53, illus. (incl. 5 tables), 12 ref., 1978.
- Clemence, S. P.; and Westphal, J. A. The response of the Middle Mississippi to human presence; 1821-1974: Congres International - Association International de Geologie de l'Ingenieur = International Congress - International Association of Engineering Geology, No. 3, Seccion 1, Volumen 2, p. 201-211, illus. (incl. 1 table, sketch maps), 7 ref., 1978.
- Cluff, R. M. see Stevenson, D. L.
- Cluff, Robert M.; and Dickerson, Donald R.
Natural gas potential of the New Albany Shale Group (Devonian-Mississippian) in southeastern Illinois: SPEJ. Society of Petroleum Engineers Journal, Vol. 22, No. 2, p. 291-300, illus. (incl. 1 table, sketch maps), 16 ref., April 1982.
- Cluff, Robert M. (organizer); Lineback, Jerry A. (organizer); Lloyd, R. Michael; et al. Middle Mississippian carbonates of the Illinois Basin: a seminar and core workshop: Apr. 23-24, 1981, Mount Vernon, IL, United States. Ill. Geol. Surv., Mount Vernon, IL, United States, 88 p., illus. (incl. sects., strat. cols., block diags., sketch maps), 31 ref., April 1981.
- Cluff, Robert M. see also Barrows, Mary H.
- see also Nuhfer, Edward B.
- Cobb, James C.; and Fraser, Gordon S.
Application of sedimentology to development of sand and gravel resources in McHenry and Kane counties, northeastern Illinois: Illinois Mineral Note, No. 82, 17 p., illus. (incl. sketch maps), 8 ref., December 1981.
- Cobb, James C. see also Fraser, Gordon S.
- Cobb, James Collins. Geology and geochemistry of sphalerite in coal: 220 p., Doctoral, 1981, Univ. of Illinois, Urbana, IL. available from: Univ. Microfilms.
- Coleman, Dennis D. Illinois State Geological Survey radiocarbon dates V: Radiocarbon, Vol. 16, No. 1, p. 105-117, 7 ref., 1974.
- Coleman, Dennis D.; and Liu, Chao Li. Illinois State Geological Survey radiocarbon dates VI: Radiocarbon, Vol. 17, No. 2, p. 160-173, 7 ref., 1975.
- Coleman, Dennis D. see also Liu, Chao Li
- Collias, Theodore J. see Bhagwat, Subhash
- Collinson, Charles. Devonian-Mississippian biostratigraphy of northeastern Missouri and western Illinois: Ill. State Geol. Surv., Ill., United States, Vol. 3, 23 p., illus. (incl. sects.), August 1969. Field trip No. 3 of the North Am. Paleontol. Conv. held on Sept. 3-4, 1969.
- Combs, S. M.; Dowdy, R. H.; Gupta, S. C.; et al. Chemical properties and mineralogical characteristics of selected dredged material: Journal of Environmental Quality, Vol. 11, No. 2, p. 255-261, illus., 41 ref., June 1982.
- Conkin, Barbara M. see Conkin, James E.
- Conkin, James E.; and Conkin, Barbara M. Early Mississippian (Kinderhookian) smaller foraminifera from the McCraney Limestone of Missouri and Illinois: University of Louisville Studies in Paleontology and Stratigraphy, No. 15, 39 p., illus. (incl. 33 tables, 3 plates, sketch map), 24 ref., 1981.
- Conroy, P. J. see Keith, H. D.
- Cook, James R. see Sargent, Kenneth A.
- Cronauer, D. C.; Ruberto, R. G.; and Young, D. C. Liquefaction of Kentucky and Illinois coals in a batch microreactor [abstr.]: in Chemistry and physics of coal utilization, 1980 (Copper, Bernard R., editor; et al.), A. I. P. Conference Proceedings, No. 70, p. 468, 1981. Topical conference of the American Physical Society.
- Dancer, W. S. see McSweeney, K.
- Daniels, J. J.; Scott, J. H.; and Olhoeft, G. R.
Geophysical well logs for drill hole UPH-3,

- Stephenson County, Illinois: Open-File Report (United States Geological Survey, 1978), No. 81-0237, 7 p., 1981. available from: U. S. Geol. Surv., Open-File Serv. Sect., West. Distrib. Branch, Denver, CO, United States.
- Davis, Anthony M. see Whittecar, G. Richard
- Debuchananne, G. D. see Stevens, P. R.
- DeMaris, Philip J. see Bauer, Robert A.
- Dickerson, Donald R. see Cluff, Robert M.
- Dimichele, William A.; and Phillips, Tom L. Stratigraphic-geographic patterns of change in Pennsylvanian coal-swamp vegetation [abstr.]: in Abstracts of papers to be presented at the meetings of the Botanical Society of America and affiliated groups at Indiana University (Heimsch, Charles, leader), Miscellaneous Series Publication - Botanical Society of America, No. 160, p. 44, 1981.
- DiMichele, William A. see also Phillips, Tom L.
- D'Onfro, P. see Blacic, J. D.
- Dowdy, R. H. see Combs, S. M.
- DuMontelle, Paul B.; Bradford, Susan C.; Bauer, Robert A.; et al. Mine subsidence in Illinois: facts for the homeowner considering insurance: Environmental Geology Notes, Vol. 99, 24 p., illus. (incl. sect., strat. col., sketch map), 7 ref., August 1981.
- Dyhouse, Gary R. Sediment analyses for urbanizing watersheds: Journal of the Hydraulics Division, Vol. 108, No. HY3, p. 399-418, illus. (incl. sketch map), 9 ref., March 1982.
- Edkins, John E. see Krothe, Noel C.
- Eisel, Leo M. The national ground water picture: in Proceedings of the Thirteenth biennial conference on ground water (Anonymous), Report - California Water Resources Center, No. 53, p. 33-38, November 1981.
- Elyn, Jaclyn Rendall see van den Berg, Jacob
- Erickson, J. R. see Dlimpio, J. C.
- Fay, William M. see Sargent, Kenneth A.
- Fehrenbacher, J. B. see Hassett, J. J.
- see Sharma, A. K.
- see Snarski, R. R.
- Fitzgerald, K. K. see Zuehlis, E. E.
- Flemal, Ronald C. see Springer, James Warren
- Foster, J. B. see Olimpio, J. C.
- Foster, James B. Sheffield, Illinois: in U. S. Geological Survey research in radioactive waste disposal; fiscal year 1979 (Schneider, Robert; et al.), Geological Survey Circular, No. 847, p. 60-61, 1982.
- Francis, Carl A. Fluorite and associated minerals from South Illinois; the Rex and Julie Bannister Collection: Rocks and Minerals, Vol. 57, No. 2, p. 63-71, illus. (incl. 4 plates, sketch maps), 12 ref., April 1982.
- Frank, Thomas D. A comprehensive inventory of Illinois stream characteristics: in Remote sensing; an input to geographic information systems in the 1980's (Richason, Benjamin F., Jr., editor), Proceedings of the Annual William T. Pecora Memorial Symposium on Remote Sensing, No. 6, p. 393-401, illus. (incl. 2 tables), 9 ref., 1981.
- Fraser, Gordon S.; and Cobb, James C. Late Wisconsinan proglacial sedimentation along the West Chicago Moraine in northeastern Illinois: Journal of Sedimentary Petrology, Vol. 52, No. 2, p. 473-491, illus. (incl. 1 table, sketch maps), 51 ref., June 1982.
- Fraser, Gordon S. see also Cobb, James C.
- Fraser, H. L.; Hsieh, K. C.; and Twigg, M. E. Analytical transmission electron microscopy in minerals processing: in Process mineralogy; extractive metallurgy, mineral exploration, energy resources (Hausen, Donald M., editor; et al.), Am. Inst. Min. and Metall., New York, NY, United States, p. 89-105, 1 table, 30 ref., 1981. 110th AIME annual meeting, TMS-AIME Process Mineralogy Committee.
- Fraunfelter, George H. Megafossil zonation of the Lingle and St. Laurent limestones (Middle Devonian) of southern Illinois and _____ southeastern Missouri: Transactions of the Illinois State Academy of Science, Vol. 73, No. 3, p. 74-83, illus. (incl. strat. col., sketch maps), 48 ref., 1980.
- Frest, T. J.; and Strimple, Harrell L. New Manicrinidae (Crinoidea, Inadunata, Dendrocrinina) from the Silurian of Illinois and Indiana: Journal of Paleontology, Vol. 56, No. 3, p. 720-728, 1 table, 1 plate, 22 ref., May 1982.
- Frost, R. R.; and Griffin, R. A. Effect of pH on adsorption of arsenic and selenium from landfill leachate by clay minerals: in Proceedings of the 41st annual meeting, Soil Science Society of America (Stewart, B. A., editor), Soil Science Society of America Journal, Vol. 41, No. 1, p. 53-57, illus. (incl. 1 table), 18 ref., February 1977.
- Frye, J. C. see Willman, H. B.
- Frye, John C. see Runge, E. C. A.

- Fuller, W. H. see Artiola, J.
- Galloway, D. L. (investigator). Ground-water flow effects from strip mining in Illinois [abstr.]: Geological Survey Professional Paper, No. 1275, p. 226, 1981.
- Garklavs, George see Graf, J. B.
- Gast, R. G. see Combs, S. M.
- Geodata International. Aerial radiometric and magnetic survey, Quincy National Topographic Map, Illinois/Missouri; New York-Illinois Project: variously paginated, 7 tables, geol. map 1:500,000, geophys. surv. maps 1:500,000, 1981. (Rep. No. GJBX-27-82) available from: U. S. Dep. Energy, Grand Junction Off., Grand Junction, CO, United States. National Uranium Resource Evaluation Program; includes microfiche.
- Geodata International. Aerial radiometric and magnetic survey, St. Louis National Topographic Map, Illinois/Missouri; New York-Illinois Project: variously paginated, illus. (incl. 7 tables; geol. map 1:500,000; geophys. surv. maps 1:500,000), 1981. (Rep. No. GJBX-26-82) available from: U. S. Dep. Energy, Grand Junction Off., Grand Junction, CO, United States. National Uranium Resource Evaluation Program; includes microfiche.
- Geodata International. Aerial radiometric and magnetic survey, Burlington National Topographic Map, Illinois/Iowa/Missouri; New York-Illinois Project: unpaginated, illus. (incl. tables, geol. sketch maps), 18 ref., 1981. (Rep. No. GJBX-2882) available from: Geodata Int., Dallas, TX, United States. Final report; prep. for U. S. Dep. Energy.
- Gibb, James P.; Schuller, Rudolph M.; and Griffin, Robert A. Procedures for the collection of representative water quality data from monitoring wells: Cooperative Groundwater Report, Illinois, State Water Survey, No. 7, 61 p., illus. (incl. 10 tables), 27 ref., 1981.
- Gibb, James P. see also Sasman, Robert T.
- Gilkeson, Robert H.; and Holtzman, Richard B. 226Ra and 228Ra in ground water of the Cambrian-Ordovician aquifer system in northern Illinois [abstr.]: in Proceedings of University of Missouri's 15th annual conference on trace substances in environmental health (Hemphill, Delbert D., editor), Trace Substances in Environmental Health, No. 15, p. 86, June 1981.
- Gilmore, A. R.; and Matis, D. S. Effects of past agricultural practices on the soil-phosphorus system and growth of planted pines: Soil Science, Vol. 131, No. 5, p. 313-319, 3 tables, 24 ref., May 1981.
- Goldman, Barbara Ellen. The extent of stream disequilibrium in northern Illinois: Master's, 1981, Northern Illinois Univ., De Kalb, IL.
- Goodwin; Jonathan H.; and Baxter, James W. High-calcium, high-reflectance limestone resources of Illinois: in Symposium on industrial minerals of the upper Midwest (Carr, Donald D., editor; et al.), Geological Society of America Bulletin, Vol. 92, No. 9, p. I 621-I 628, illus. (incl. 1 table, geol. sketch map), 21 ref., September 1981.
- Graf, J. B.; Garklavs, George; and Oberg, K. A. A technique for estimating time of concentration and storage coefficient values for Illinois streams: Water-Resources Investigations, WRI 82-22, 16 p., 1982. (Rep. No. PB-82 218 793) available from: NTIS, Springfield, VA, United States.
- Graf, J. B. (investigator). Longitudinal stream-dispersion measurements [abstr.]: Geological Survey Professional Paper, No. 1275, p. 193, 1981 [1982].
- Grandt, Alten F. Problems in reclaiming farmland in Illinois: Mining Engineering, Vol. 33, No. 9, p. 1347-1351, illus. (incl. 4 tables), 11 ref., September 1981.
- Grant, N. K. see Kessen, K. M.
- Grant, Ulyses Simpson, III. The effect of the National Environmental Education Act on secondary and elementary schools in two mid-western states: 204 p., Doctoral, 1981, Univ. of Michigan, Ann Arbor, MI. available from: Univ. Microfilms.
- Gregg, D. W. see Hassett, J. J.
- Griffin, R. A.; and Chou, S. F. J. Attenuation of polybrominated biphenyls and hexachlorobenzene by earth materials: Environmental Geology Notes, No. 87, 53 p., illus. (incl. 22 anal., 2 tables), 68 ref., July 1980.
- Griffin, R. A. see also Frost, R. R.
- Griffin, Robert A. see Gibb, James P.
- see Schuller, Rudolph M.
- Grimes, Walter W. Geotechnical investigation for the Des Plaines River system tunnels and shafts: in Proceedings, 28th annual highway geology symposium (Anonymous), Proceedings of the Annual Highway Geology Symposium, No. 28, p. 83-95, illus. (incl. sketch map, strat. col.), 12 ref., 1977.
- Gross, David L. Governmental responses to the problem of sedimentation [abstr.]: Int. Geol. Congr. Abstr.--Congr. Geol. Int., Resumes, No. 26, Vol. 3, p. 1287, 1980.
- Gross, David L. see also Ivens, J. Loreena

- Grundl, Timothy J. A stable-isotopic view of the Cambro-Ordovician aquifer system in northern Illinois: Master's, 1980, Northern Illinois Univ., De Kalb, IL.
- Gruner, Dennis B.; and Hood, William C. Geochemistry of drainage from a coal refuse pile, Pyramid Mine, Perry County, Illinois: in *Proceedings, 1981 symposium on surface mining hydrology, sedimentology, and reclamation* (Graves, D. H., chairperson), p. 355-357, 3 tables, 4 ref., December 1981. (Rep. No. UKY BU126) available from: Univ. Ky., Coll. Eng., Lexington, KY, United States.
- Gum, Cecil see Cluff, Robert M.
- Gupta, S. C. see Combs, S. M.
- Habermann, Gail M.; and Hole, Francis D. Soilscape analysis in terms of pedogeomorphic fabric; an explanatory study: in *Proceedings of the 44th annual meeting, Soil Science Society of America* (Larson, W. E., president), *Soil Science Society of America Journal*, Vol. 44, No. 2, p. 336-340, illus. (incl. 2 tables, sketch map), 23 ref., April 1980. *Dep. Geogr., Univ. Wis.; Contrib.*
- Hagerty, D. J.; Spoor, M. F.; and Ullrich, C. R. Bank failure and erosion of the Ohio River: *Eng. Geol.*, Vol. 17, No. 3, p. 141-158, illus. (incl. 3 tables), 6 ref., October 1981.
- Hall, M. see Chugh, Y. P.
- Halleck, P. H. see Blacic, J. O.
- Hamilton, Robert M.; and Russ, David P. Seismotectonics of the New Madrid region: in *Proceedings of Conference XIII; Evaluation of regional seismic hazards and risk* (Hays, Walter W., editor), *Open-File Report* (United States Geological Survey, 1978), No. 81-0437, p. 55-73, illus. (incl. sketch maps), 24 ref., 1981. available from: U. S. Geol. Surv., Open-File Serv. Sect., West. Distrib. Branch, Denver, CO, United States.
- Hansel, Ardith K. see Reinertsen, David L.
- Harrison, Wyman; and Van Luik, Abraham. Suitability of dredged material for reclamation of surface-mined land; the Ottawa, Illinois, Demonstration Project: ANL/ES - Argonne National Laboratory, No. 73, 126 p., illus. (incl. tables), 48 ref., December 1979. available from: NTIS, Springfield, VA, United States. Final report.
- Harvey, Richard D. see Barrows, Mary H.
- Hassett, J. J.; Gregg, D. W.; and Fehrenbacher, J. B. Formation of calcium carbonate concretions in natric horizons of Illinois soils: *Soil Science*, Vol. 122, No. 4, p. 202-205, illus. (incl. 2 tables), 9 ref., October 1976.
- Hatcher, P. G.; Lyons, P. C.; Brown, F. W. (investigators); et al. Coalification of tissues in a coal ball from the Illinois basin [abstr.]: *Geological Survey Professional Paper* (Washington), No. 1275, p. 31, 1981 [1982].
- Healy, R. W. see Olimpio, J. C.
- Heigold, Paul C. see Kempton, John P.
- Hempen, G. L.; Kloisterman, M. J.; Moore, B. H.; et al. Zonation of central U.S. earthquake sources: in *International conference on recent advances in geotechnical earthquake engineering and soil dynamics; Vol. 1* (Prakash, Shamsheer, editor), Univ. Mo. at Rolla, Rolla, MO, United States, p. 541-544, sketch map, 5 ref., 1981.
- Hempen, Gregory L.; and Navin, Michael J. Explorations for the pile founded Lock & Dam No. 26 replacement [abstr.]: in *AEG 25th annual meeting* (Crepeau, P. M., chairperson; et al.), *Annual Meeting - Association of Engineering Geologists*, No. 25, p. 45, 1982.
- Herrmann, Robert B. Preliminary results of microearthquake studies in the central Mississippi Valley: in *Proceedings of Conference XIII; Evaluation of regional seismic hazards and risk* (Hays, Walter W., editor), *Open-File Report* (United States Geological Survey, 1978), No. 81-0437, p. 30-54, illus. (incl. sketch maps), 2 ref., 1981. available from: U. S. Geol. Surv., Open-File Serv. Sect., West. Distrib. Branch, Denver, CO, United States.
- High Life Helicopters; and QEB. Airborne gamma-ray spectrometer and magnetometer survey; Peoria, Decatur, Belleville quadrangles (IL.); final report: variously paginated, illus., 1981. (Rep. No. GJBX-241-81) available from: U. S. Dep. Energy, Grand Junction Off., Grand Junction, CO, United States. National Uranium Resource Evaluation Program; includes microfiche; in several volumes.
- Hill, James J.; and Tuchman, Robert J. The mineral industry of Illinois: U. S. Bur. Mines, United States, 12 p., illus., 198?. Preprint from *Minerals yearbook, 1980*, U. S. Bur. Mines.
- Hinze, W. J. see Braile, L. W.
- Hole, Francis D. see Habermann, Gail M.
- Holtzman, Richard B. see Gilkeson, Robert H.
- Hood, William C. see Gruner, Dennis B.
- Hopkins, Lewis D.; Brill, E. Downey, Jr.; Kurtz, Kenneth B.; et al. Analyzing floodplain policies using an interdependent land use allocation model: *Water Resources Research*, Vol. 17, No. 3, p. 469-477, 2 tables, sketch maps, 22 ref., June 1981.

- Horvath, R. G. see Bushnell, Ted D.
- Hsieh, K. C. see Fraser, H. L.
- Huang, Scott Lin. Swelling behavior of Illinois coal shales: 209 p., Doctoral, 1981, Univ. of Missouri, Rolla, MO. available from: Univ. Microfilms.
- Hummel, John W. see Krishnan, P.
- Illinois Institute of Natural Resources, Environmental Management Division. Illinois Institute of Natural Resources project list, January 1, 1981: Document - Illinois Institute of Natural Resources, No. 81/O1, 91 p., 91 ref., January 1981. Project abstracts for fiscal years 1978, 1979 and 1980.
- Indiana University, School of Public and Environmental Affairs. Permit requirements for energy and other natural resources for the State of Illinois: Open-File Report (United States Geological Survey, 1978), No. 81-1257, 72 p., 1981. available from: U. S. Geol. Surv., Open-File Serv. Sect., West. Distrib. Branch, Denver, CO, United States.
- Indorante, S. J.; and Jansen, I. J. Soil variability on surface-mined and undisturbed land in southern Illinois: in Proceedings of the 45th annual meeting, Soil Science Society of America (Stewart, B. A., president), Soil Science Society of America Journal, Vol. 45, No. 3, p. 564-568, 4 tables, 9 ref., 1981. Univ. Ill., Dep. Agron.; Contrib.
- Indorante, Sam J.; Jansen, Ivan J.; and Boast, Charles W. Surface mining and reclamation; initial changes in soil character: Journal of Soil and Water Conservation, Vol. 36, No. 6, p. 347-350, 1 anal., 1 table, 12 ref., December 1981.
- Ivens, J. Loreena; Bhowmik, Nani G.; Brigham, Allison R.; et al. The Kankakee River yesterday and today: ISWS Miscellaneous Publication, Vol. 60, 24 p., illus. (incl. geol. sketch map), 1981.
- Jacobson, Russell J.; and Bengal, Lawrence E. Strippable coal resources of Illinois; Part 7, Vermilion and Edgar counties: Circular - Illinois State Geological Survey, Vol. 521, 24 p., 7 tables, strat. cols., sketch maps, econ. geol. maps 1:133,333, 1981.
- Jansen, I. J. see Indorante, S. J.
- see McSweeney, K.
- see Snarski, R. R.
- Jansen, Ivan J. see Indorante, Sam J.
- Johnson, Ralph G. see Thompson, Ida
- Johnston, Arch C. On the use of the frequency-magnitude relation in earthquake risk assessment: in Proceedings of Earthquakes and earthquake engineering; the eastern United States; two volumes (Beavers, James E., chairperson; et al.), Ann Arbor Sci. Publ., Ann Arbor, MI, United States, p. 161-181, illus. (incl. 1 table, sketch maps), 44 ref., 1981. Assessing the hazard; evaluating the risk.
- Jollie, Malcolm see Kolata, Dennis R.
- Jones, B. A., Jr. see Sharma, A. K.
- Jones, Bob. Aragonite; for a common mineral, it's amazingly scarce: Rock & Gem, Vol. 11, No. 10, p. 40-41, 44-46, 77-79, illus., October 1981.
- Jones, Robert L. see Omueti, J. A. I.
- Kahle, R.; and Rowlands, J. Evaluation of trench subsidence and stabilization at Sheffield low-level radioactive waste disposal facility, Sheffield, Illinois; final report; October 15, 1980 - March 30, 1981: 177 p., illus. (incl. 14 tables, sketch maps), May 1981. (Rep. No. NUREG/CR-2101) available from: NTIS, Springfield, VA, United States. Includes 6 sheets charting subsidence.
- Kean, William F. Paleomagnetism of the Late Ordovician Neda iron ore from Wisconsin, Iowa and Illinois: Geophysical Research Letters, Vol. 8, No. 8, p. 880-882, illus. (incl. 1 table, sketch map), 8 ref., August 1981.
- Kearney, Michael S. Photometric detection of soil moisture using color and color infrared films: in Remote sensing of earth resources (Shahrokh, F., editor), Annual Remote Sensing of Earth Resources Conference, No. 5, Vol. 5, p. 435-451, illus., 12 ref., 1977.
- Keifer, Clint J. The Chicago region's valuable water resources; closure: Journal of the Water Resources Planning and Management Division, Vol. 108, No. WR1, p. 161-162, March 1982. For reference to original article by Keifer, C. J. see J. Water Resour. Plann. Manage. Div., Proc. Am. Soc. Civ. Eng., Vol. 107, July 1980.
- Keith, H. D.; Batra, R. C.; and Conroy, P. J. Finite element analysis of a longwall mine: in The state of the art in rock mechanics (Summers, David A., chairperson), Proceedings - Symposium on Rock Mechanics, No. 21, p. 9-15, illus. (incl. 1 table), 3 ref., September 1980.
- Keller, G. R. see Braile, L. W.
- Kempton, John P. Three-dimensional geologic mapping for environmental studies in Illinois: Environmental Geology Notes, No. 100, 43 p., illus. (incl. geol. sketch maps), 50 ref., October 1981.
- Kempton, John P.; Ringler, Robert W.; Heigold, Paul C.; et al. Ground-water resources of northern Vermilion County, Illinois:

Kempton/Larson

- Environmental Geology Notes, No. 101, 36 p., illus. (incl. 3 tables, sects., chart, strat. col., geol. sketch map), 16 ref., October 1981.
- Kenney, T. C. see Bushell, Ted D.
- Kepferle, R. C.; and Beard, J. G. (investigators). Distribution of Devonian algae, *Foerstia*, in the Appalachian and Illinois basins [abstr.]: Geological Survey Professional Paper, No. 1275, p. 59, 1981 [1982].
- Kessen, K. M.; Woodruff, M. S.; and Grant, N. K. Gangue mineral /87_Sr//86_Sr ratios and the origin of mississippi valley-type mineralization: Economic Geology and the Bulletin of the Society of Economic Geologists, Vol. 76, No. 4, p. 913-920, illus. (incl. 90 anal., 1 table, sketch map), 31 ref., July 1981.
- Kettles, Inez M. Till stratigraphy of the Vandalia-Effingham-Marshall region, East-central Illinois: Master's, 1980, Univ. of Illinois, Urbana, IL.
- Killey, Myrna M. Ancient dust storms in Illinois: Bulletin of the Southern California Paleontological Society, Vol. 14, No. 3-4, p. 31-32, sketch map, April 1982.
- Killey, Myrna M. The Dwight mineralogical zone of the Yorkville Till Member, northeastern Illinois: Circular - Illinois State Geological Survey, No. 526, 25 p., illus. (incl. 2 tables, sketch maps), 13 ref., 1982.
- Killey, Myrna M. see also DuMontelle, Paul B.
- Kim, K. W. see Visocky, A. P.
- Klasner, J. S. Geologic map of the Lusk Creek Roadless Area, Pope County, Illinois: U. S. Geol. Surv., Misc. Field Stud. Map, No. MF-1405-A, 1 sheet, geol. map, 1982.
- Kloisterman, M. J. see Hempen, G. L.
- Kolata, Dennis R. Structural framework of the Mississippi Embayment of southern Illinois; annual progress report; fiscal year 1979: in New Madrid seismotectonic study; activities during fiscal year 1979 (Buschbach, T. C.), p. 91-98, illus. (incl. sketch maps), 6 ref., March 1980. (Rep. No. NUREG/CR-0977) available from: NTIS, Springfield, VA, United States.
- Kolata, Dennis R.; and Jollie, Malcolm. Anomalocystitid mitrates (Stylophora-Echinodermata) from the Champlainian (Middle Ordovician) Guttenberg Formation of the Upper Mississippi Valley region: Journal of Paleontology, Vol. 56, No. 3, p. 631-653, illus. (incl. 1 table, 2 plates, sketch maps), 43 ref., May 1982.
- Kolata, Dennis R.; Treworgy, Janis D.; and Masters, John M. Structural framework of the Mississippi Embayment of southern Illinois: Circular - Illinois State Geological Survey, No. 516, 38 p., illus. (incl. 1 table, sect., chart, strat. cols., geol. sketch map), 56 ref., 1981.
- Korbus, Janet M.; and Sipiera, Paul P. A record of life in rock: Earth Science, Vol. 29, No. 3, p. 117-120, illus. (incl. sketch map), 4 ref., June 1976.
- Koutsoftas, Demetrious C. see Bushell, Ted D.
- Kovar, J. A.; and Riecken, F. F. Relation of nonexchangeable potassium and magnesium to development in some midwestern soils: in Proceedings of the 40th annual meeting, Soil Science Society of America (Stewart, B. A., editor), Soil Science Society of America Journal, Vol. 40, No. 4, p. 547-553, illus. (incl. 2 tables, sketch map), 23 ref., August 1976. Iowa Agric. and Home Econ. Exp. Stn., Ames, IA, Proj. No. 1992.
- Krapac, Ivan G. see Schuller, Rudolph M.
- Krausse, H. F. see Nelson, W. John
- Krishnan, P.; Alexander, John D.; Butler, B. J.; et al. Reflectance technique for predicting soil organic matter: in Proceedings of the 44th annual meeting, Soil Science of America (Larson, W. E., president), Soil Science Society of America Journal, Vol. 44, No. 6, p. 1282-1285, illus. (incl. 4 tables), 9 ref., December 1980. Univ. Ill., Agric. Eng. Dep.: Contrib.
- Krothe, Noel C.; Edkins, John E.; and Schubert, Jeffrey P. Leaching of metals and trace elements from sulfide-bearing coal waste in southwestern Illinois: in Proceedings, 1980 Symposium on surface mining hydrology, sedimentology, and reclamation (Graves, Donald H., editor; et al.), p. 455-463, illus. (incl. 7 tables, sketch maps), 14 ref., December 1980. (Rep. No. UKY BU123).
- Kurtz, Kenneth B. see Hopkins, Lewis D.
- Lane, H. Richard. The Burlington Shelf (Mississippian, North-central United States): Geologica et Palaeontologica, No. 12, p. 165-176 (incl. German sum.), illus. (incl. sketch map), 60 ref., 1978.
- Lapham, W. W.; and Arihood, L. D. (investigators). Large yields from glacial drift and bedrock formations [abstr.]: in Geological Survey research 1981, Geological Survey Professional Paper, No. 1275, p. 94, 1981 [1982].
- Larson, Curtis L. Effects of wetland drainage on surface runoff: in Selected proceedings of the Midwest conference on wetland values and management (Richardson, Brandt, editor), Minn. Water Plann. Board, St. Paul, MN, United States, p. 117-120, 2 ref., 1981.

- Larson, W. E. see Combs, S. M.
- Lazaro, T. R. (investigator). Seasonal relations between streamflow and suspended-sediment discharge [abstr.]: Geological Survey Professional Paper, No. 1275, p. 175, 1981 [1982].
- Leary, Richard L. Early Pennsylvanian geology and paleobotany of the Rock Island County, Illinois, area; Part 1, Geology: Reports of Investigations - Illinois State Museum, No. 37, 88 p., illus. (incl. 3 tables, 7 plates, sects., strat. cols., geol. sketch maps), 178 ref., 1981. This paper is based on a Doctoral thesis submitted to the University of Illinois (no date given); one of the appendices contains a computer program for plotting data points.
- Leary, Richard L. see also Sipiiera, Paul P.
- Leisman, G. A. The fossil lycopod cone, *Aclamydocarpon varius*, from Carboniferous coal balls of the Illinois Basin [abstr.]: in Kansas Academy of Science, 109th annual meeting; abstracts of contributed papers (Anonymous), Transactions of the Kansas Academy of Science, Vol. 81, p. 159, 1978.
- Leith, C. J.; Schneider, K. A.; and Carr, C. Geophysical investigation of archeological sites: in Section 13; The contribution of geology towards management of the environment (Jacobson, G., convener), Int. Assoc. Eng. Geol., Bull., No. 14, p. 123-128 (incl. French, English sum.), illus. (incl. sketch maps), 10 ref., December 1976. 25th international geological congress.
- Lidiak, E. G. see Braile, L. W.
- Lindau, Robert D.; Van Den Berg, Jacob; Carpenter, G. L.; et al. East-Central states: in World energy developments, 1980 (Anonymous), AAPG Bulletin, Vol. 65, No. 10, p. 1814-1827, 10 tables, sketch maps, October 1981.
- Lindorff, David E. Hydrogeology of surface coal mines in Illinois: in Proceedings, 1980 Symposium on surface mining hydrology, sedimentology, and reclamation (Graves, Donald H., editor; et al.), p. 33-40, illus. (incl. 21 anal., 3 tables, sketch maps), 13 ref., December 1980. (Rep. No. UKY BU123).
- Lineback, Jerry A. The eastern margin of the Burlington-Keokuk (Valmeyeran) carbonate bank in Illinois: Circular - Illinois State Geological Survey, No. 520, 24 p., illus. (incl. strat. cols., sketch maps), 7 ref., 1981.
- Lineback, Jerry A. see also Cluff, Robert M.
- Liu, Chao Li; and Coleman, Dennis D. Illinois State Geological Survey radiocarbon dates VII: Radiocarbon, Vol. 23, No. 3, p. 352-383, 25 ref., 1981.
- Liu, Chao Li see also Coleman, Dennis D.
- Lloyd, R. Michael see Cluff, Robert M.
- Ludwigs, R. Scott see Sasman, Robert T.
- Lukas, R. G. see Anderson, T. C.
- Lyons, P. C. see Hatcher, P. G.
- Mades, D. M. Stage-discharge relations at dams on the Illinois and Des Plaines rivers in Illinois: Open-File Report (United States Geological Survey, 1978), No. 81-1009, 62 p., illus. (incl. 23 tables, sketch maps; index map), 11 ref., 1981. available from: U. S. Geol. Surv., Open-File Serv. Sect., West. Distrib. Branch, Denver, CO, United States.
- Masters, John M. see Kolata, Dennis R.
- Matis, D. S. see Gilmore, A. R.
- McSweeney, K.; Jansen, I. J.; and Dancer, W. S. Subsurface horizon blending; an alternative strategy to B horizon replacement for the construction of post-mined soils: in Proceedings of the 45th annual meeting, Soil Science Society of America (Stewart, B. A., president), Soil Science Society of America Journal, Vol. 45, No. 1-6, p. 794-799, illus. (incl. 5 tables), 13 ref., 1981. Univ. Ill., Dep. Agron.; Contrib.
- Meents, Wayne F. Analyses of natural gas in Illinois: Illinois Petroleum, No. 122, 64 p., 1 table, strat. col., sketch maps, 16 ref., 1981.
- Meyer, Michael. Major problems of lake water quality in Illinois: in Proceedings of a round table on reclaiming and managing lakes in Illinois (Keasler, Linda, editor), Special Report - Water Resources Center, University of Illinois at Urbana-Champaign, No. 12, p. 4-9, 1 anal., 2 tables, 2 ref., February 1981.
- Meyer, Robert P. see Welkie, Carol J.
- Mickle, James E.; and Rothwell, Gar W. Permineralized Alethopteris from the Upper Pennsylvanian of Ohio and Illinois: Journal of Paleontology, Vol. 56, No. 2, Part 1, p. 392-402, 1 table, 2 plates, 33 ref., March 1982.
- Milhous, H. C. see van den Berg, Jacob
- Missavage, Roger A. see Chugh, Yoginder P.
- Mont, H. R. Soil survey of Champaign County, Illinois: U. S. Dep. Agric., Soil Conserv. Serv., Washington, DC, United States, 178 p., illus. (incl. 18 tables; soils maps 1:15,840; colored soils map 1:253,440), 13 ref., March 1982. (Publ. in coop. with Ill. Agric. Exp. Stn.).
- Moore, B. H. see Hempen, G. L.

- Moore, David Warren. Stratigraphy of till and lake beds of late Wisconsinan age in Inoquois and neighboring counties, Illinois: 211 p., Doctoral, 1981, Univ. of Illinois, Urbana, IL. available from: Univ. Microfilms.
- Moore, G. see Weaver, L.
- Moore, Herbert. Chicago region's valuable water resources; discussion: Journal of the Water Resources Planning and Management Division, Vol. 107, No. WR2, p. 587-588, October 1981. For reference to original article by Keifer, C. J., see J. Water Resour. Plann. Manage. Div., Am. Soc. Civ. Eng. Proc., Vol. 106, July 1980.
- Moore, J. S. Illinois groundwater problems and needs: in Proceedings and recommendations of the Workshop on groundwater problems in the Ohio River basin (Ramachandra, Rao A., chairperson; et al.), Purdue Univ. Water Resour. Res. Cent., West Lafayette, OH, United States, p. 13-14, 1981.
- Morse, Walter J. see Burris, Charles B.
- Mortimer, Clifford H. The Lake Michigan pollution case; a review and commentary on the limnological and other issues: Univ. Wis., Cent. Great Lakes Stud., Milwaukee, WI, United States, 156 p., illus. (incl. tables, sketch maps), 57 ref., 1981.
- Murray, H. H. Clay resources of the Midwest states: Mining Engineering, Vol. 34, No. 1, p. 68-71, 5 anal., 2 tables, sketch map, 23 ref., January 1982. SME preprint 80-346, SME-AIME fall meeting, Minneapolis, Minn., Oct. 1980.
- Nakato, Tatsuaki. Sediment-budget study for the upper Mississippi River, GREAT-II reach: IIHR Report, No. 227, 111 p., illus. (incl. 6 tables, sketch maps), 13 ref., April 1981.
- Nance, Roger B.; and Treworgy, Colin G. Strippable coal resources of Illinois; Part 8, Central and southeastern counties: Circular - Illinois State Geological Survey, No. 515, 32 p., illus. (incl. 1 anal., 11 tables, strat. cols., chart, sketch maps; econ. geol. map 1:126,720), 1981. new names.
- Navin, Michael J. see Hempen, Gregory L.
- Naymik, Thomas G.; and Barcelona, Michael J. Characterization of a contaminant plume in ground water, Meredosia, Illinois: Ground Water, Vol. 19, No. 5, p. 517-526, illus. (incl. 2 tables, sketch maps), 14 ref., October 1981.
- Naymik, Thomas G. see also Burris, Charles B.
- Neitzel, Robert S. A suggested technique for measuring landscape changes through archaeology: in Traces of prehistory; papers in honor of William G. Haag (West, Frederick Hadleigh, editor; et al.), Geoscience and Man, Vol. 22, p. 57-70, illus. (incl. sketch maps), 26 ref., 1981.
- Nelson, W. John. Faults and their effect on coal mining in Illinois: Circular - Illinois State Geological Survey, Vol. 523, 38 p., illus. (incl. 1 table, sects., strat. col., block diags., sketch maps), 26 ref., 1981.
- Nelson, W. John; Krausse, H. F.; and Bristol, Hubert M. The Cottage Grove fault system in southern Illinois: Circular - Illinois State Geological Survey, No. 522, 65 p., illus. (incl. sects., strat. cols., sketch maps; struc. contour. map 1:99,400), 1981.
- Niccum, Dwight A. Prevention of shoreline erosion by physical and structural methods: in Proceedings of a round table on reclaiming and managing lakes in Illinois (Keasler, Linda, editor), Special Report - Water Resources Center, University of Illinois at Urbana-Champaign, No. 12, p. 106-109, illus. (incl. sect.), February 1981.
- Norby, Rodney D. see Reinertsen, David L.
- Norman, R. J.; and Stucki, J. W. The determination of nitrate and nitrite in soil extracts by ultraviolet spectrophotometry: in Proceedings of the 45th annual meeting, Soil Science Society of America (Stewart, B. A., president), Soil Science Society of America Journal, Vol. 45, No. 1-6, p. 347-353, illus. (incl. 8 tables), 20 ref., 1981.
- Noscow, Edmund see van den Berg, Jacob
- Nosow, Edmund see Lindau, Robert D.
- Nuhfer, Edward B.; and Cluff, Robert M. Mudrock fabrics and their significance; discussion and reply: Journal of Sedimentary Petrology, Vol. 51, No. 3, p. 1027-1031, illus. (incl. sketch map), 41 ref., 1981. Discussion of two papers; for reference to Cluff, Robert M., see J. Sediment. Petrol., Vol. 50, p. 767, 1980; for reference to Lundegard, Paul D., and Samuels, Neil D., see Vol. 50, p. 781.
- Oberg, K. A. see Graf, J. B.
- O'Hearn, Michael see Sasman, Robert T.
- Ohio River Valley Sanitation Commission. Registry of wells for use in underground injection of wastewater, 1972-1975; a summary of operational characteristics of injection wells in the Ohio Valley region: Ohio River Valley Sanit. Comm., Columbus, OH, United States, 57 p., tables, 8 ref., July 1976.
- Okunola, A. see Chugh, Y. P.
- Olthoef, G. R. see Daniels, J. J.
- Olimpio, J. C. Argonne National Laboratory site, Illinois: in U. S. Geological Survey research in radioactive waste disposal; fiscal year 1979 (Schneider, Robert; et al.),

- Geological Survey Circular, No. 847, p. 65-66, 3 ref., 1982.
- Olimpio, J. C.; Foster, J. B.; Erickson, J. R. (investigators); *et al.* Radioactive waste-burial sites in Illinois [abstr.]: Geological Survey Professional Paper, No. 1275, p. 236-237, 1981.
- Omuetti, J. A. I.; and Jones, Robert L. Regional distribution of fluorine in Illinois soils: *in* Proceedings of the 41st annual meeting, Soil Science Society of America (Stewart, B. A., editor), Soil Science Society of America Journal, Vol. 41, No. 4, p. 771-774, illus. (incl. 1 table, sketch maps), 22 ref., August 1977.
- Omuetti, J. A. I.; and Jones, Robert L. Fluorine distribution with depth in relation to profile development in Illinois: *in* Proceedings of the 44th annual meeting, Soil Science Society of America (Larson, W. E., president), Soil Science Society of America Journal, Vol. 44, No. 2, p. 247-249, illus. (incl. 2 tables, sketch map), 16 ref., April 1980. Dep. Agron., Univ. Ill.; Contrib.
- Parmalee, Paul W.; and Bogan, Arthur E. Vertebrate remains from early European and historic Indian occupations at the Waterman site, Randolph County, Illinois: Transactions of the Illinois State Academy of Science, Vol. 73, No. 3, p. 49-51, 2 ref., 1980.
- Parmalee, Paul W.; and Speth, Janet M. A prehistoric archaeological record of the Pomarine Jaeger, *Stercorarius Pomarinus* (Temminck), from central Illinois: Transactions of the Illinois State Academy of Science, Vol. 74, No. 1-2, p. 29-32, illus., 13 ref., 1981.
- Patterson, G. L. (investigator). Sludge-storage basins recharge ground water in Illinois [abstr.]: Geological Survey Professional Paper, No. 1275, p. 226, 1981.
- Peart, D. B. *see* Zuenls, E. E.
- Perkins, H. F. *see* Reddy, M. R.
- Person, Waverly J. Earthquakes, May-June 1981: Earthquake Information Bulletin, Vol. 13, No. 6, p. 225-227, 2 tables, December 1981.
- Phillips, Tom L.; and DiMichele, William A. Paleoecology of Middle Pennsylvanian age coal swamps in southern Illinois: Herrin Coal Member at Sahara Mine No. 6: *in* Paleobotany, paleoecology, and evolution; Volume 1 (Niklas, Karl J., editor), Praeger Publ., New York, NY, United States, p. 231-284, illus. (incl. 8 tables, geol. sketch maps), 102 ref., 1981. Symposium in honor of Dr. Harlan P. Banks.
- Phillips, Tom L. *see also* Dimichele, William A.
- Pool, J. M. *see* Clemence, S. P.
- Poole, Vickie L. *see* Kempton, John P.
- QEB *see* High Life Helicopters
- Rabchevsky, George A. Detecting buried river channels by satellite: Earth Science, Vol. 28, No. 4, p. 184-186, August 1975.
- Reagor, B. G. *see* Stover, C. W.
- Reddy, M. R.; and Perkins, H. F. Fixation of zinc by clay minerals: Proceedings - Soil Science Society of America, Vol. 38, No. 2, p. 229-231, 3 tables, 15 ref., April 1974.
- Reinertsen, David L. A guide to the geology of the Waterloo-Valmeyer area: Guide Leaflet - Illinois State Geological Survey, No. 1981D, 33 p., illus. (incl. geol. sketch maps), 29 ref., October 1981.
- Reinertsen, David L. A guide to the geology of the Danville area: Guide Leaflet - Illinois State Geological Survey, No. 1981B, 44 p., illus. (incl. strat. cols., geol. sketch maps), 14 ref., May 16, 1981.
- Reinertsen, David L.; Hansel, Ardith K.; and Norby, Rodney D. A guide to the geology of the Zion-Lake Bluff area: Guide Leaflet - Illinois State Geological Survey, No. 1981C, 42 p., illus. (incl. geol. sketch maps), 18 ref., October 3, 1981.
- Rich, D. W.; and Carozzi, A. V. Experimental development of porosity in carbonate rocks under simulated deep burial conditions; I. Oomoldic porosity in Mississippian oolitic limestone: Arch. Sci. (Soc. Phys. Hist. Nat. Geneve), Vol. 34, No. 1, p. 5-28 (incl. French sum.), illus. (incl. plate), 11 ref., 1981.
- Richardson, Eugene S., Jr. *see* Bardack, David
- Riecken, F. F. *see* Kovar, J. A.
- Riecker, R. E. *see* Blacic, J. D.
- Ringler, Robert W. *see* Kempton, John P.
- Robertson, John B. Shallow land burial of low-level radioactive wastes in the USA: *in* Underground disposal of radioactive wastes; Vol. 2 (Barbreau, A., chairperson; *et al.*), I. A. E. A., Proc. Ser., No. ST1/PUB/S28, p. 253-269, illus. (incl. 3 tables, sketch map), 18 ref., 1980.
- Rockaway, J. D. *see* Hempen, G. L.
- Rockaway, John D. *see* Stephenson, Richard W.
- Rolfe, W. D. Ian. Early invertebrate terrestrial faunas: *in* The terrestrial environment and the origin of land vertebrates (Panchen, A. L., editor), Systematics Association Special Volume, No. 15, p. 117-157, illus. (incl. 2 plates), 118 ref., 1980.

Rowlands/Singleton

- Rothwell, Gar W. *see* Mickle, James E.
- Rowlands, J. *see* Kahle, R.
- Ruberto, R. G. *see* Cronauer, D. C.
- Runge, E. C. A.; and Frye, John C. Comparison of glacial events in Canterbury, New Zealand, and Illinois, U.S.A., during the last 75,000 years: *in* Ninth congress of the International Union for Quaternary Research; abstracts (Anonymous), Congress of the International Union for Quaternary Research, No. 9, p. 307-308, illus., 1973.
- Rupert, G. B. *see* Hempen, G. L.
- Russ, David P. *see* Hamilton, Robert M.
- Ryan, G. L. *see* Zuehls, E. E.
- Sale, Michael John. Optimization techniques for instream flow allocations: 175 p., Doctoral, 1981, Univ. of Illinois, Urbana, IL. *available from*: Univ. Microfilms.
- Sargent, Kenneth A.; Cook, James R.; and Fay, William M. Data report; Illinois, Indiana, Kentucky, Tennessee, and Ohio; hydrogeochemical and stream sediment reconnaissance: 41 p., 15 tables, sketch maps, 4 ref., February 1982. (Rep. No. GJBX-105-82) (Rep. No. DPST-81-146-25) *available from*: U. S. Dep. Energy, Grand Junction Off., Grand Junction, CO, United States. National Uranium Resource Evaluation Program; includes microfiche.
- Sasman, Robert T.; Schicht, Richard J.; Gibb, James P.; *et al.* Verification of the potential yield and chemical quality of the shallow dolomite aquifer in DuPage County, Illinois: Circular - Illinois State Water Survey, No. 149, 46 p., illus. (incl. 1 table, sketch maps), 10 ref., 1981.
- Schaeffer, David J.; Clarke, Robert P.; Sefton, Donna F.; *et al.* Assessment and classification of selected Illinois lakes through the application of space technology: *in* Satellite hydrology (Deutch, Morris, editor; *et al.*), Proceedings of the Annual William T. Pecora Memorial Symposium on Remote Sensing, No. 5, p. 641-648, illus. (incl. 5 tables), 8 ref., 1981. (Tech. Publ. No. TPS81-1 of Am. Water Resour. Assoc.).
- Schicht, Richard J. *see* Sasman, Robert T.
- Schneider, K. A. *see* Leith, C. J.
- Schubert, Jeffrey P. *see* Krothe, Noel C.
- Schuller, Rudolph M.; Krapac, Ivan G.; and Griffin, Robert A. Evaluation of laboratory-produced leachates used for environmental assessment of coal refuse: *in* Proceedings, 1981 symposium on surface mining hydrology, sedimentology, and reclamation (Graves, D. H., chairperson), p. 123-128, 2 tables, 6 ref., December 1981. (Rep. No. UKY BU126) *available from*: Univ. Ky., Coll. Eng., Lexington, KY, United States.
- Schuller, Rudolph M. *see also* Gibb, James P.
- Schultze, Hans-Peter. Megapleuron zangerli, a new dipnoan from the Pennsylvanian, Illinois: *Fieldiana: Geology*, Vol. 33, No. 21, p. 375-396, illus. (incl. 1 table), 29 ref., January 28, 1977. *Megapleuron zangerli*.
- Schwalb, H. R. Paleozoic geology of the New Madrid area; annual progress report; fiscal year 1979: *in* New Madrid seismotectonic study; activities during fiscal year 1979 (Buschbach, T. C.), p. 77-79, illus. (incl. sketch map), March 1980. (Rep. No. NUREG/CR-0977) *available from*: NTIS, Springfield, VA, United States.
- Scott, J. H. *see* Daniels, J. J.
- Sefton, Donna F. *see* Schaeffer, David J.
- Shabica, Charles W. Sedimentary structures from the Carbondale Formation (Middle Pennsylvanian) of northern Illinois: *Fieldiana: Geology*, Vol. 33, No. 29, 27 p., illus., 25 ref., February 27, 1978.
- Sharma, A. K.; Fehrenbacher, J. B.; and Jones, B. A., Jr. Effect of gypsum, soil disturbance and tile spacing on the amelioration of Huey silt loam, a natric soil in Illinois: *Proceedings - Soil Science Society of America*, Vol. 38, No. 4, p. 628-632, illus. (incl. 5 tables), 10 ref., August 1974.
- Sherrill, M. G. (investigator). Deep test well [abstr.]: *in* Geological Survey research 1981, Geological Survey Professional Paper, No. 1275, p. 94, 1981 [1982].
- Siefker, Joseph R.; and Catt, Paul E. Gas chromatographic determination of organic compounds in river water: *in* Proceedings of the Indiana Academy of Science (Moulton, B., editor), Proceedings of the Indiana Academy of Science, Vol. 89, p. 133-135, 9 anal., 1 table, 12 ref., 1979 [1980].
- Siegal, Sherman M. Subsurface geology of the upper Tradewater and lower Carbondale groups in South-central Saline County, Illinois: Master's, 1979, Wright State Univ., Dayton, OH.
- Singh, V. P. Comparing urban runoff models: *Journal of the Institution of Engineers, India. Environmental Engineering Division*, Vol. 61, No. 2, p. 53-59, illus. (incl. 6 tables), 32 ref., 1981.
- Singleton, R. H. Peat in the United States: *in* Proceedings of the 6th international peat congress; The role of peatlands in a world of limited resources; energy, food, fiber and natural areas (Grubich, Donald M., chairperson), *Int. Peat Congr., Proc.*, No. 6,

- p. 96-102, illus. (incl. 8 tables, sketch map), 1980.
- Sipiera, Paul P.; and Leary, Richard L. Illinois meteorites: Earth Science, Vol. 29, No. 5, p. 253-260, illus. (incl. sketch map), 6 ref., October 1976.
- Sipiera, Paul P. *see also* Korbus, Janet M.
- Snarski, R. R.; Fehrenbacher, J. B.; and Jansen, I. J. Physical and chemical characteristics of pre-mine soils and post-mine soil mixtures in Illinois: *in* Proceedings of the 45th annual meeting, Soil Science Society of America (Stewart, B. A., president), Soil Science Society of America Journal, Vol. 45, No. 1-6, p. 806-812, 5 tables, 16 ref., 1981. Univ. Ill., Dep. Agron.; Contrib.
- Speck, R. C. The influence of certain geologic and geotechnical factors on coal mine floor stability; a case study: *in* Proceedings of the 1st conference on ground control in mining (Peng, S. S., editor), W. Va. Univ., Morgantown, WV, United States, p. 44-49, illus. (incl. 1 table), 6 ref., July 1981.
- Speth, Janet M. *see* Parmalee, Paul W.
- Spoor, M. F. *see* Hagerty, D. J.
- Springer, James Warren; and Flemal, Ronald C. Paleontological and geological results from two fossil proboscidean finds in northern Illinois: Transactions of the Illinois State Academy of Science, Vol. 74, No. 3-4, p. 87-99, illus. (incl. sketch maps), 74 ref., 1981.
- Stall, John B. Estimating reservoir sedimentation rates in the Midwest: *in* Proceedings of the Symposium on surface water impoundments (Stefan, H. G., editor), Am. Soc. Civ. Eng., New York, NY, United States, p. 1290-1297, illus. (incl. 2 tables, sketch maps), 7 ref., 1981.
- Stephenson, Richard W.; and Rockaway, John D. Seismic response mapping of Saint Louis County: Univ. Mo., Rolla, MO, United States, 127 p., illus. (incl. 1 table), 92 ref., November 1980.
- Stevens, P. R.; and Debuchananne, G. D. Problems in shallow land disposal of solid low-level radioactive waste in the United States: *in* Section 13; The contribution of geology towards management of the environment (Jacobson, G., convener), Int. Assoc. Eng. Geol., Bull., No. 14, p. 161-171 (incl. French, English sum.), illus. (incl. 2 tables, sect., geol. sketch maps), 11 ref., December 1976. 25th international geological congress.
- Stevenson, D. L.; Whiting, L. L.; and Cluff, R. M. Geologic structure of the base of the New Albany Shale Group in Illinois: Illinois Petroleum, No. 121, 2 p., struc. contour map, 14 ref., 1981. Reprinted from ISGS Circ. No. 518, the New Albany Shale Group of Illinois, 83 p., 1981.
- Stover, C. W.; Reagor, B. G.; and Algermissen, S. T. Seismicity map of the State of Illinois: U. S. Geol. Surv., Misc. Field Stud. Map, No. MF-1143, 1 sheet, seism. map 1:1,000,000, 1979. Reprint.
- Striegl, R. G. (investigator). Quality of urban storm runoff in Illinois [abstr.]: *in* Geological Survey research 1981, Geological Survey Professional Paper, No. 1275, p. 115, 1981 [1982].
- Strimple, Harrell L. *see* Frest, T. J.
- Strunk, Kevin L. Relationships between the Roger and Porter cave systems and Glacial Lake Quincy, Indiana, USA [abstr.]: *in* Proceedings of the Indiana Academy of Science (Moulton, B., editor), Proceedings of the Indiana Academy of Science, Vol. 89, p. 273, 1979 [1980].
- Stucki, J. W. *see* Norman, R. J.
- Sullivan, Dan M.; and Ault, Curtis H. A study of Indiana fault locations, displacements, attitudes and ages within a 200-mile radius of New Madrid, Missouri; annual progress; fiscal year 1979: *in* New Madrid seismotectonic study; activities during fiscal year 1979 (Buschbach, T. C.), p. 81-86, illus. (incl. sect., sketch maps), 1 ref., March 1980. (Rep. No. NUREG/CR-0977) available from: NTIS, Springfield, VA, United States.
- Sundmacker, Harvey. Controlling sediment by watershed management techniques: *in* Proceedings of a round table on reclaiming and managing lakes in Illinois (Keasler, Linda, editor), Special Report - Water Resources Center, University of Illinois at Urbana-Champaign, No. 12, p. 77-80, February 1981.
- Swann, D. H. *see* van den Berg, Jacob
- Swingen, Regina Anne. Evaluation of the St. Peter Sandstone and Joachim Dolomite for compressed air energy storage, with emphasis on thermal properties: 154 p., illus. (incl. 30 tables), Master's, 1981, Univ. of Wisconsin, Milwaukee, WI.
- Thompson, C. L. *see* Hatcher, P. G.
- Thompson, Ida; and Johnson, Ralph G. New fossil polychaete from Essex, Illinois: Fieldiana: Geology, Vol. 33, No. 25, 18 p., 1977.
- Treworgy, Colin G. Only minable coal is salable coal: Coal Age, Vol. 87, No. 4, p. 74-75, 77, illus., 1 ref., April 1982.
- Treworgy, Colin G. *see also* Nance, Roger B.
- Treworgy, Janis D. Structural features in Illinois; a compendium: Circular - Illinois

- State Geological Survey, No. 519, 22 p., struc. contour map 1:750,000, 275 ref., 1981.
- Treworgy, Janis D. *see also* Kolata, Dennis R.
- Tripp, Angela M. Lower Mississippian Fort Payne Formation of southern Illinois: Master's, 1981, Northern Illinois Univ., De Kalb, IL.
- Tuchman, Robert J. *see* Hill, James J.
- Twigg, M. E. *see* Fraser, H. L.
- U. S. Army Corps of Engineers, Assistant Secretary of the Army (Civil Works). Locks and dam No. 26, Mississippi River, Alton, Ill.: U. S. Gov. Print. Off., Washington, DC, United States, 723 p., illus. (incl. geol. sketch maps), 1976. Ninety-fourth congress, second session; House document No. 94-584.
- U. S. Geological Survey. Land use and land cover and associated maps for Vincennes, Indiana, Illinois, Kentucky: Open-File Report (United States Geological Survey, 1978), No. 81-0009, 4 sheets, land use maps 1:250,000, 1981. *available from*: U. S. Geol. Surv., East. Mapp. Cent., Reston, VA, United States.
- U. S. Geological Survey. Aeromagnetic map of northwestern Illinois: Open-File Report (United States Geological Survey, 1978), No. 82-0190, 1 sheet, aeromagn. map 1:250,000, 1982. *available from*: U. S. Geol. Surv., Open-File Serv. Sect., West. Distrib. Branch, Denver, CO, United States.
- U. S. Geological Survey. Land use and land cover, 1972-76, St. Louis, Missouri; Illinois: Land Use Land Cover Maps, L-Ser., No. L-0101, 1 sheet, colored land use map 1:250,000, 1982.
- Ullrich, C. R. *see* Hagerty, D. J.
- van den Berg, Jacob; and Elyn, Jaclyn Rendall. Petroleum industry in Illinois, 1980; Part 1, Oil and gas developments; Part 2, Waterflood operations: Illinois Petroleum, No. 123, 134 p., illus. (incl. 14 tables), 1982.
- van den Berg, Jacob; Swann, D. H.; Carpenter, G. L.; *et al.* Developments in East central states in 1967: AAPG Bulletin, Vol. 52, No. 6, p. 965-975, illus. (incl. 8 tables), 1 ref., June 1968.
- Van Den Berg, Jacob *see also* Lindau, Robert D.
- Van Luik, Abraham *see* Harrison, Wyman
- Visocky, A. P.; Wehrmann, H. A.; and Kim, K. W. Assessment of public groundwater supplies in Illinois: Circular - Illinois State Water Survey, No. 144, 74 p., 2 tables, sketch maps, 2 ref., 1980.
- Walker, Robert D. A major water quality problem in Illinois: soil movement from the watershed and channel: *in* Proceedings of a round table on reclaiming and managing lakes in Illinois (Keasler, Linda, editor), Special Report - Water Resources Center, University of Illinois at Urbana-Champaign, No. 12, p. 1-3, February 1981.
- Wallace, Debbie L. Regionalizing water quality: the Province model: Master's, 1980, Northern Illinois Univ., De Kalb, IL.
- Watts, Alice Marie. Glacial legacy: Lapidary Journal, Vol. 35, No. 10, p. 2056-2063, illus., January 1982.
- Weaver, L.; Boes, R.; and Moore, G. An organics detection system for the Ohio River: *in* New developments in river basin management: proceedings of specialised conference (Jenkins, S. H.), Water Science and Technology, Vol. 13, No. 3, p. 227-236, illus. (incl. 2 tables, sketch map), 1981.
- Wehrmann, H. A. *see* Visocky, A. P.
- Welkie, Carol J.; and Meyer, Robert P. Exploration and assessment of offshore sand and gravel, western Lake Michigan: Marine Mining, Vol. 3, No. 3-4, p. 315-378, illus. (incl. 4 tables, sketch maps), 89 ref., 1982.
- Wenzel, Harry G., Jr. *see* Hopkins, Lewis D.
- Wescott, William A. Depositional setting and history of the Tar Springs Sandstone (Upper Mississippian), southern Illinois: Journal of Sedimentary Petrology, Vol. 52, No. 2, p. 353-366, illus. (incl. 1 table, strat. col., sketch maps), 45 ref., June 1982.
- Westphal, J. A. *see* Clemence, S. P.
- Whiting, L. L. *see* Stevenson, D. L.
- Whittecarr, G. Richard; and Davis, Anthony M. Sedimentology and palynology of middle Wisconsinan deposits in the Pecatonica River valley, Wisconsin and Illinois: Quaternary Research (New York), Vol. 17, No. 2, p. 228-240, illus. (incl. 1 table, sketch map), 46 ref., March 1982.
- Wildanger, Edward George. Sinkhole-type subsidence over abandoned coal mines in St. David, Illinois: Master's, 1980, Univ. of Illinois, Urbana, IL.
- Willman, H. B.; and Frye, J. C. Glacial map of Illinois: Ill. State Geol. Surv., Urbana, IL, United States, 1 sheet, geomorphol. map 1:2,534,400, 1970.
- Willman, H. B.; and Frye, J. C. Loess thickness in Illinois: Ill. State Geol. Surv., Urbana, IL, United States, 1 sheet, geomorphol. map 1:2,534,400, 1970.
- Winkle, Candace J. The paleoenvironment of the Cedar Valley Limestone (Middle Devonian) in northwestern Illinois: 61 p., Master's, 1980, Univ. of Wisconsin, Milwaukee, WI.

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Woodruff, Michael S. Strontium isotope compositions of mississippi valley-type deposits enclosed in Cambrian, Ordovician and Mississippian host carbonates: 69 p., Master's, 1980, Miami Univ., Oxford, OH.

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Zuehls, E. E.; Ryan, G. L.; Peart, D. B.; *et al.* Hydrology of area 35, Eastern region, Interior coal province, Illinois and Kentucky: Open-File Report (United States Geological Survey, 1978), No. 81-0403, 82 p., 1981. available from: U. S. Geol. Surv., Water Resour. Div., Urbana, IL, United States. Water-resources investigations.

Zuehls, E. E.; and Ryan, G. L. (investigators). Water quality in the coal areas of Illinois [abstr.]: Geological Survey Professional Paper, No. 1275, p. 226, 1981.

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Geodata International. Aerial radiometric and magnetic survey, Burlington National Topographic Map, Illinois/Iowa/Missouri; New York-Illinois Project
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Geodata International. Aerial radiometric and magnetic survey, Burlington National Topographic Map,
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ILLINOIS GEOLOGICAL
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- Lake County**
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Daniels, J. J. Geophysical well logs for drill hole UPH-3, Stephenson County, Illinois

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McCraney Limestone

Conkin, James E. Early
Mississippian
(*Kinderhookian*) smaller
foraminifera from the
McCraney Limestone of
Missouri and Illinois

McLeansboro Group

Jacobson, Russell J.
Strippable coal resources of
Illinois; Part 7, Vermilion
and Edgar counties
Mickle, James E.
Permineralized *Alethopteris*
from the Upper Pennsylvanian

of Ohio and Illinois

Meppen Limestone

Lane, H. Richard. The Burlington Shelf (Mississippian, North-central United States)

Modesto Formation

Nance, Roger B. Strippable coal resources of Illinois; Part 8, Central and southeastern counties
Reinertsen, David L. A guide to the geology of the Danville area

Neda Iron Formation

Kean, William F. Paleomagnetism of the Late Ordovician Neda iron ore from Wisconsin, Iowa and Illinois

New Albany Shale Group

Barrows, Mary H. Petrology and maturation of dispersed organic matter in the New Albany Shale Group of the Illinois Basin
Cluff, Robert M. Natural gas potential of the New Albany Shale Group (Devonian-Mississippian) in southeastern Illinois
Nunfer, Edward B. Mudrock fabrics and their significance
Stevenson, D. L. Geologic structure of the base of the New Albany Shale Group in Illinois

Northview Shale

Lane, H. Richard. The Burlington Shelf (Mississippian, North-central United States)

Oconee Coal

Nance, Roger B. Strippable coal resources of Illinois; Part 8, Central and southeastern counties

Ogallala Formation

Eisel, Leo M. The national ground water picture

Parkland Sand

Carnaghi, Gary Louis. The Kankakee Flood and the origin of the Parkland Sand, northeastern Illinois

Peoria Loess

Kearney, Michael S. Photometric detection of soil moisture using color and color infrared films

Neitzel, Robert S. A suggested technique for measuring landscape changes through archaeology

Petersburg Formation

Sullivan, Dan M. A study of Indiana fault locations, displacements, attitudes and ages within a 200-mile radius of New Madrid, Missouri; annual progress; fiscal year 1979

Pierson Limestone

Lane, H. Richard. The Burlington Shelf (Mississippian, North-central United States)

Racine Dolomite

Frest, T. J. New Manicrinidae (Crinoidea, Inadunata, Dendrocrinina) from the Silurian of Illinois and Indiana

Reeds Spring Limestone

Lane, H. Richard. The Burlington Shelf (Mississippian, North-central United States)

Saint Clair Limestone

Goodwin, Jonathan H. High-calcium, high-reflectance limestone resources of Illinois

Saint Joe Formation

Lane, H. Richard. The Burlington Shelf (Mississippian, North-central United States)

Saint Laurent Formation

Fraunfelder, George H. Megafossil zonation of the Lingle and St. Laurent limestones (Middle Devonian) of southern Illinois and southeastern Missouri

Saint Louis Limestone

Cluff, Robert M. Middle Mississippian carbonates of the Illinois Basin; a seminar and core workshop
Goodwin, Jonathan H. High-calcium, high-reflectance limestone resources of Illinois

Saint Peter Sandstone

Lindorff, David E. Hydrogeology of surface coal mines in Illinois
Swingen, Regina Anne. Evaluation of the St. Peter Sandstone and Joachim

Dolomite for compressed air energy storage, with emphasis on thermal properties

Sainte Genevieve Limestone

Cluff, Robert M. Middle Mississippian carbonates of the Illinois Basin; a seminar and core workshop
Goodwin, Jonathan H. High-calcium, high-reflectance limestone resources of Illinois

Salem Limestone

Goodwin, Jonathan H. High-calcium, high-reflectance limestone resources of Illinois

Snider Till Member

Moore, David Warren. Stratigraphy of till and lake beds of late Wisconsin age in Iroquois and neighboring counties, Illinois

Spar Mountain Sandstone

Cluff, Robert M. Middle Mississippian carbonates of the Illinois Basin; a seminar and core workshop

Spoon Formation

Siegel, Sherman M. Subsurface geology of the upper Tradewater and lower Carbondale groups in South-central Saline County, Illinois

Springfield Coal Member

Sullivan, Dan M. A study of Indiana fault locations, displacements, attitudes and ages within a 200-mile radius of New Madrid, Missouri; annual progress; fiscal year 1979

Tar Springs Sandstone

Wescott, William A. Depositional setting and history of the Tar Springs Sandstone (Upper Mississippian), southern Illinois

Tradewater Group

Siegel, Sherman M. Subsurface geology of the upper Tradewater and lower Carbondale groups in South-central Saline County, Illinois

Ullin Limestone/Yorkville Till Member

Ullin Limestone

Goodwin, Jonathan H.
High-calcium,
high-reflectance limestone
resources of Illinois

Waldron Shale

Frest, T. J. New Manicrinidae
(Crinoidea, Inadunata,
Dendrocrinina) from the
Silurian of Illinois and
Indiana

Wapsipinicon Limestone

Goodwin, Jonathan H.
High-calcium,
high-reflectance limestone
resources of Illinois

Wedron Formation

Burns, Charles B. Assessment
of a regional aquifer in
central Illinois
Moore, David Warren.
Stratigraphy of till and
lake beds of late
Wisconsinan age in Iroquois
and neighboring counties,
Illinois

Yorkville Till Member

Killey, Myrna M. The Dwight
mineralogical zone of the
Yorkville Till Member,
northeastern Illinois
Moore, David Warren.
Stratigraphy of till and
lake beds of late
Wisconsinan age in Iroquois
and neighboring counties,
Illinois

