

NAME

Haitjema, Hendrik Marten

EDUCATION

Master's Degree - (Ingenieurs) in Civil Engineering (specialty: Sanitary Engineering), 1976, Delft University of Technology, The Netherlands.

Ph.D. - Civil Engineering, 1982, University of Minnesota. Thesis Title: 'Modeling Three-dimensional Flow in Confined Aquifers using Distributed Singularities.'

ACADEMIC APPOINTMENTS

- 1997-present -Professor, School of Public and Environmental Affairs, Indiana University. Duties: Teaching in the field of Groundwater Flow, Geotechnical Engineering and Applied Mathematics. Research in the field of Groundwater Flow.
- 1997-present - Professor (part time), Department of Geology, Indiana University Purdue University, Indianapolis.
- 1997-present - Professor (part time), Department of Geology, Indiana University.
- 1984-1997 - Associate Professor, School of Public and Environmental Affairs, Indiana University. Duties: Teaching in the field of Groundwater Flow, Geotechnical Engineering and Applied Mathematics. Research in the field of Groundwater Flow.
- 1989-1997 - Associate Professor (part time), Department of Geology, Indiana University Purdue University, Indianapolis.
- 1988-1997 - Associate Professor (part time), Department of Geology, Indiana University.
- 1982-1984 - Assistant Professor, Department of Civil and Mineral Engineering, University of Minnesota. Duties: Teaching in the field of Soil Mechanics, research in the field of Groundwater Flow.
- 1978-1982 - Instructor, Department of Civil and Mineral Engineering, University of Minnesota. Duties: Teaching in the field of Soil Mechanics, research in the field of Groundwater Flow

OTHER APPOINTMENTS AND PROFESSIONAL CONSULTANTSHIPS

- **1978 (3 months)** - *Hydrologist at HARO B.V.* (Geotechnical and Hydrological Consulting Firm, The Netherlands). Duties: Stationed in Kenya to perform the final hydrological studies for three drinking water projects. The study included field surveys. (Leave of absence from both the University of Minnesota and the Delft University of Technology).
- **1977-1978** - *Junior Engineer at the University of Minnesota.* Duties: During a 4-month leave of absence from the Delft University of Technology I was employed by the U of M to participate in a research project at the Department of Civil and Mineral Engineering: the modeling of groundwater flow near the Tennessee-Tombigbee Waterway under contract with the U.S. Army Corps of Engineers.
- **1976-1978** - *Scientific Officer at the Delft University of Technology.* Duties: Research in soil mechanics and groundwater flow. Advising graduate students. Participation in the design of advanced triaxial test equipment and designing of computer programs for modeling fresh/salt water interface flow. Member of national committees: 'Artificial Recharge of Groundwater' and 'In Situ Testing of Bearing Capacity of Foundation Piles.'
- **1976 (2 months)** - *Project Engineer at IWACO* (International Water Engineer Consultants). Duties: Design and use of computer models to study the environmental impact of pumping salt water from underneath the dunes near The Hague (The Netherlands).
- **1974-1976** - *Research Engineer at the 'Provincial Drinking Water Company of Northern Holland.'* Duties: 1) Study drinking water injection in a saline aquifer in Northern Holland (Master's thesis research). 2) Hele Shaw model study at the Geotechnical Laboratory of the Delft University of Technology.

LICENSURE AND CERTIFICATION

Certified Hydrologist (groundwater) by the American Institute of Hydrology (AIH).

PROFESSIONAL SOCIETIES

American Society of Civil Engineers (ASCE)
Koninklijk Instituut van Ingenieurs (KIVI)
Netherlands Society for Soil Mechanics and Foundation Engineering
American Geophysical Union (AGU)
Indiana Water Resources Association (IWRA)
National Ground Water Association (NGWA)
Association of Environmental Studies and Sciences (AESS)

HONORS

Funded *Braun/Braun Intertec Visiting Professorship* at the Civil Engineering Department of the University of Minnesota (January – May 2005)
SPEA Graduate Teaching Award (2005)
SPEA Graduate Teaching Award (1998)
Teaching Excellence Recognition Award (TERA) (1998)
SPEA Undergraduate Teaching Award (1992)
SPEA Graduate Teaching Award (1992)
William G. Wilber – John S. Zogorski Leadership Award for exemplary service as President of IWRA 1990
Delft University of Technology Award of 350 guilders for special performance during the preparation of the Master's Thesis, 1976.

TEACHING ASSIGNMENTS

Indiana University School of Public and Environmental Affairs (1985-present)

Groundwater Flow Modeling (undergraduate)
Introduction to Groundwater Hydrology (undergraduate)
Mathematics for Environmental Sciences (graduate)
Mathematics for Environmental Sciences (undergraduate)
Environment and People (undergraduate)
Introduction to Environmental Sciences (undergraduate)
Soil Mechanics and Science (graduate)
Groundwater Flow Modeling (graduate)
Elements of Fluid Mechanics (undergraduate)
Environmental Policy (undergraduate)
Environmental Policy Analysis (graduate)

University of Minnesota Department of Civil and Mineral Engineering (1980-1984)

Elements of Soil Mechanics (undergraduate)
Soil Mechanics Laboratory (undergraduate)

SERVICES

University Service, Indiana University

SPEA Services

- 1 Ph.D. in Environmental Sciences program director 2009 - present
- 2 MSES program director 2008 - present
- 3 MSES program director 2004
- 4 ESAP faculty chair (1997 - 2004)

- 5 Ph.D. Program Director (1993 - 1997)
- 6 Resident Director SPEA - EUR/LUR Student Exchange Program for 16 students in
- 7 Rotterdam during Spring 1988.

SPEA Committees

- 1 Member search committee for Management Science position
- 2 Chair MSES Curriculum Advisory Committee (2006-present)
- 3 P&T – Personnel Committee (2006-present)
- 4 Chair MSES Curriculum Revision Committee (2005-2006)
- 5 P&T Committee (1997-1998)
- 6 Promotion & Tenure Policies (1997-1999)
- 7 Promotion & Tenure Policies Subcommittee on Teaching (1997-1999)
- 8 ESAP Screening Committee for Delft Exchange Program (chair) (1997-present)
- 9 Ph.D. Admissions Committee (1988- present) (chair: 1993- 1997)
- 10 Graduate Admissions Committee (1997- 1998).
- 11 Search Committee Candidate in Env. Planning & Management (IUPUI) (1997)
- 12 Undergraduate Policy Committee (1989 - 1993) (Chair since 1990) and (1997))
- 13 Chair of the SPEA Computing Committee (1995 - 1996)
- 14 Graduate Policy Committee (1993 - 1996)
- 15 Computer Committee (1993 - 1998)
- 16 Prof. Grad. Progr. & Fin. Aid Committee (1991 - 1993)
- 17 Search committee Env. Scientist/Engineer (1990- 1992)
- 18 Equipment Committee (1989- 1991, 1993- 1995)
- 19 International Programs Committee (1988 - 1994)
- 20 Teaching/experiential learning/professional development committee (1986 - 1990)
- 21 Computing and Quantitative Analysis Committee (1985 - 1989) (Chair Bloomington
i. Committee, since 1987)
- 22 Ad Hoc Undergraduate Microcomputer Use Committee (1984 - 1986)
- 23 Strategic Planning Task Force (1985 - 1986)
- 24 Search Committee for Waste Management Engineer (1984 - 1985)

Geological Sciences Committees

- 1 Member of the search committee for the Boyce Professorship (2000-present)
- 2 Search Committee for Geological Engineer, 1984.
- 3 Committee on program development for the proposed B.S. in Environmental and Geological Engineering, 1984.

IU. Committees

- 1 Member of the IUB Tenure Advisory Committee (2008)
- 2 Chair of the IUB Tenure Advisory Committee (2007)
- 3 Member of the IUB Tenure Advisory Committee (2006)
- 4 Member of the IU Teaching and Research Preserve committee (2001)
- 5 Member of GIS Task Force (IUPUI) (2000-2002).
- 6 Member of the Promotion Advisory Committee IUB (1998-2002)
- 7 Member of the BSES SPEA/COAS committee (1996)
- 8 Academic Computing Policy Committee (ACPC) (1990 - present) (Chair of the Standards and Technology subcommittee).
- 9 Staff Merit Award Committee (Chair Subc.) (1991)
- 10 Research Computing Planning Committee (RCPC) appointed by Dean of Academic Computing 1986-1987.

Student Service, Indiana University

- 1 Ph.D. advisor: Daniel Abrams (2008-present), Maksym Gusyev (2004-present), Victor A. Kelson (1993-1998), Kenneth Luther (1993-1997), Jack Wittman (1990- 2000), Sherry Mitchell-Broker (1987 - 1993), Abdel M. Ebraheem (1987- 1989), Steve Kraemer (1985- 1990).

- 2 Member Ph.D. committee: Hye Yun Park (2006-2007), Deborah Opokauh (Geology 2003-present), Nora Czar (2002-present), Won-Tea Chung (2001-present), Sally Letsinger (Geological Sc.) (1996 - 2000), Sujoy Ghose (Geological Sc.) (1993-1997), Jerry Johnston (SPEA)(1996-200-), Charles Crawford (1986 - 1996), Glen Bear (Geological Sc.) (1992-1997), Mark Krieger (Chemistry) (1989- 1994), Robert Shannon (1990- 1995).
- 3 Advisor for the Water Resources Concentration (1985 - present).
- 4 Advisor for Masters thesis research Mary Willett (1990), Admir Ceric (1999-2000).
- 5 Advisor for BSES thesis research Tamara Ratcliff (2000-2002), Sharon Fahler (2006-present).
- 6 Freshman advisor.

University Service, University of Minnesota

- 1 Design and installation of a new undergraduate soil mechanics laboratory (1980).
- 2 Design and installation of soil mechanics laboratory in new CE building (1979 - 1984). Undergraduate student advisor (1984).
- 3 Co-advisor of several masters students.

Public Service

- 1 Expert witness services to the U.S. Justice Department regarding U.S. vs Rapanos (wetland litigation) (2006-present).
- 2 *Expert professional services (incl. affidavit) related to the permit application for CCW disposal in an abandoned coal mine in Indiana (related to earlier testimony regarding this case in 1995 and 1996, see below) (March 28, 2005).
- 3 *Expert witness services (incl. affidavit) opposing Senate Bill 392, which provides an exception for Washington County on IDEM rule 329 IAC 10-16-8 prohibiting the location of landfills in karst terrain. On behalf of Lawrence Vanore of Sommer Barnard Ackerson in Indianapolis, IN during 2003.
- 4 Expert professional services to the U.S. Justice Department regarding the case “False Cape Enterprises, Inc. East Virginia” contact Mr. Robert Foster (2001 – 2002).
- 5 Expert professional services to the U.S. Justice Department regarding the case US v. False Cape Enterprises, Inc. contact Mr. Robert Foster (2001 – 2002).
- 6 Expert professional services to the U.S. Justice Department regarding the case “Sea Base Development, Inc. East Virginia (Bosher Site)” contact Mr. Robert Foster (2001 – 2002).
- 7 Expert professional services to the U.S. Justice Department regarding the case US v. Transamerica Services contact Mr. Robert Foster (July, 2001 – 2002).
- 8 Member of the Bloomington PCB Task Force, July 2000 – present.
- 9 Expert testimony for the US government regarding the case US vs Rapanos (with Dan Willard) (July, 1998 - 2000).
- 10 Expert professional services for Kendall law office (Indianapolis) regarding land-applied paper mill sludge from Kiefert Paper Mill in Brownstown, IN (June 2005).
- 11 *Expert professional services to Lewis and Associates Law Office (Orland, IN) regarding the sediment pollution of the Fawn River near Orland, IN (1998 – present).
- 12 Presentation for public hearing for IDEM regarding the proposed Hickory Hill Landfill, Lowel, IN, February 18, 1998.
- 13 Moderator for SPEA State House Colloquium “Source Water Assessment Planning in Indiana”, Indianapolis, February 24, 1998.
- 14 Capture zone delineations for three communities in Indiana, for IDEM with students in E554 (May 1998).
- 15 Expert testimony for the City of New Haven at a hearing of the Indiana Hazardous Waste Site Approval Authority in opposition of an expansion of the Adams Center Facility near Fort Wayne. Hearing date: March 20, 1996.
- 16 Expert testimony for Hoosier Environmental Council at a hearing of the Natural Resources Study Committee in opposition of the proposed disposal of coal combustion waste in the Little Sandy #10 mine in Daviess County. Hearing date: August 30, 1996.
- 17 Expert testimony for Hoosier Environmental Council at a hearing of the Natural Resources Commission in opposition of the proposed disposal of coal combustion waste in the Little Sandy #10 mine in Daviess County. Hearing date: July 27, 1995.

- 18 Environmental Impact of the Gumwood Road Well Field near Mishawaka, Indiana, study performed for IDEM (1992)
- 19 Groundwater evaluations for the County Line Landfill, Indiana (1990).
- 20 Groundwater flow modeling for Cohen, Milstein, Hausfeld & Toll and Robert D. Gary, Jori Bloom Naegele & Thomas R. Theads regarding the Uniontown Landfill site (1990).
- 21 Invited participant of the workshop organized by the St. Joseph River Basin Commission, Nov. 30, 1990.
- 22 Invited participant of the workshop "Indiana Water: Issues for the '90s and Beyond" (September 25 - 26, 1990) organized by the Indiana Water Resources Research Center, Purdue University.
- 23 Study of subsidence due to depressurization of old mines, for Mr. J. Jarrett (1990 - present).
- 24 Groundwater evaluations regarding Shelbyville, Indiana (for IDEM) (1989 - present).
- 25 Presentation at I.U. Mini University: "Groundwater Contamination: How It Affects Everybody," (June 20, 1989).
- 26 Groundwater flow study for citizens in Clay Township regarding the projected Gumwood Road Well Field of the City of Mishawaka, (1989).
- 27 Member of the Indiana Groundwater Task Force, an inter-agency task force which oversees the implementation of Indiana's Groundwater Strategy, (1988-1989).
- 28 Groundwater study near the Tippecanoe Landfill (Indiana) for IDEM (1988-1989).
- 29 Review of groundwater study for TRW in Lafayette, IN. Review performed for IDEM (July 1987).
- 30 Review of groundwater study for the Shelbyville municipal well field. Review performed for IDEM (August 1987).
- 31 Groundwater contamination study for the Fountain School Corporation, Veedersburg, Fountain County, Indiana (1986).
- 32 Groundwater study/testimony for the 'Citizens against Landfills, Inc.,' Plymouth, Indiana (1985-1991).
- 33 Wrote a side bar on groundwater modeling in the leading article of Indiana Business Magazine (Jan. 1986) (on invitation).
- 34 Member of a national Dutch committee on testing pile foundations (1977).
- 35 Member of a national Dutch committee on artificial recharge during dewatering activities (1977).

PROFESSIONAL ACTIVITIES

1. Convener Analytic Element Workshop, October 31 – November 1, 2008, Bloomington, IN
2. Technical Committee MODFLOW and More 2008: Ground Water and Public Policy, May 19-21, 2008 Golden, CO.
3. Technical Committee 5th International Conference on the Analytic Element method in Manhattan, KA, May 14-17, 2006.
4. Technical committee 4th International Conference on the Analytic Element Method in Saint-Etienne, France, 1-5 April, 2003.
5. Review panel for Fulbright Senior Specialists program (2001-2002).
6. Invited Workshop for the National Rural Water Association in Spokane, WA on June 12, 2001.
7. Convener (with de Lange) of a special session on Analytic Elements at the XIV International Conference on Computational Methods in Water Resources, Delft, The Netherlands, June 23-28, 2002.
8. Invited panel member for the Groundwater Fluxes Across Interfaces section of a workshop sponsored by the National Research Council, Door County, Wisconsin, May 12-14, 2002.
9. Convener (with Jankovic) of a special session on analytic elements for the AGU spring meeting in Washington, DC, May 28-31, 2002.
10. Convener (with Hunt) of a special session on analytic elements on the GSA meeting in Denver, CO, October 27 – 30, 2002.
11. Review panel member for South Florida Water management District on Minimum Aquifer levels for the Lower West Coast aquifers, September 27-28, 2000.
12. Panel member and moderator at the "Third International Conference on Analytic Element Modeling of Groundwater Flow", Brainerd, MN, April 16 – 19, 2000.
13. Invited for the workshop "Modeling and Management of Emerging Environmental Issues. Expert Workshop 2000. Sponsored by E.I. du Pont de Nemours and Company. Held at Penn State Great Valley Campus on July 25-27, 2000.
14. Invited short course on groundwater flow modeling for the Ohio EPA, Columbus, OH, March 27-28, 2000.

15. Invited panel member on Research Needs at the International Riverbank Infiltration Conference in Louisville, KY November 3-6, 1999.
16. Invited presentation for geologists of Brunei Shell Petroleum in Seria, Brunei January 27, 1999.
17. Member of the Technical Committee of the Third International Conference on the Analytic Element Method (April 2000, Minnesota).
- 18.** Invited short course on the use of the analytic element model GFLOW for source water assessment, for the Wisconsin DNR and USGS, Madison Wisconsin, December 8-10, 1999 (with Vic Kelson).
- 19.** Instructor of short course "Groundwater Modeling with the Analytic Element Method", July 6 – 10, 1998, for the South Florida Water Management District (SFWMD), West Palm Beach, Florida.
- 20.** Instructor of short course "Analytic Element Modeling of Groundwater Water Flow" (with V.A. Kelson), for the USEPA at Kerr Lab, Ada, OK, February 24 – 26, 1997.
- 21.** Moderator at the international conference "Analytic Based Modeling of Groundwater Flow" April 7 - 10, 1997, Nunspeet, The Netherlands.
- 22.** Moderator at the international conference "Water: A trigger for conflict/A reason for cooperation" March 7-10, 1996 at Indiana University, Bloomington.
- 23.** Instructor of short course "Analytic Element Modeling of Groundwater Flow" (with Victor Kelson), organized by E3 (Environmental Education Enterprises, Inc.), April 19-21, 1995, San Francisco, Febr. 7- 9, 1996, Orlando, June 19 - 21, 1996, Scottsdale.
- 24.** Member of the technical committee for the international conference "Analytic Based Modeling of Groundwater Flow", scheduled for 1997 in the Netherlands.
- 25.** Chairman of the organizing committee and host of the international conference "Analytic Element Modeling of Groundwater Flow", Indianapolis, April 19-21, 1994.
- 26.** Member of the organizing committee of the "First Indiana Water Forum", Fall 1993.
- 27.** Member of the organizing committee of the Midwest Groundwater Conference in Indianapolis, November 1991.
- 28.** Member of organizing committee of American Water Resources Association (AWRA) Conference on Water Quality, Toledo, Ohio, April 1991.
- 29.** President of the Indiana Water Resources Association (IWRA), the Indiana chapter of the American Water Resources Association (AWRA) (1990).
- 30.** Organized and hosted the 11th Annual Water Resources Symposium "Conjunctive Surface Water and Groundwater Studies," sponsored by IWRA at Nashville, Indiana, June, 1990.
- 31.** Member of the technical committee of the NWWA/IGWMC international conference "Solving Groundwater Problems with Models" in Indianapolis, February 1989.
- 32.** Reviewer of the Journal of Irrigation and Drainage Engineering of ASCE (1989-Present).
- 33.** Editor of " Hydrological Science and Technology," a refereed journal of the American Institute of Hydrology (1988-Present).
- 34.** Reviewer for Journal of Hydrology (1988-Present).
- 35.** Reviewer for Water Resources Research (1986-Present).
- 36.** Reviewer for National Science Foundation (1986-Present).
- 37.** Groundwater impact study for a projected Oil Shale pilot plant in Southern Indiana, P.I. Dan Willard, funded by Cliffs Engineering, Inc. (1986).
- 38.** Modeling thermal energy injection in unconfined aquifers for Battelle Memorial Institute, funded by the Department of Energy (1986).
- 39.** Invited participation in a workshop on the hydrology of crystalline rocks, at the University of Arizona in Tucson (1979).
- 40.** Participation in a study for the Department of the Environment (England), 'Numerical Modeling of Water in Rock Masses,' which was conducted by Dr. P.A. Cundall (1982).
- 41.** Participation in groundwater flow study performed by Dr. O.D.L. Strack for the Battelle Pacific Northwest Laboratory. Subject: Flow in Fissured Porous Media (1981 - 1982).
- 42.** Preliminary feasibility study about the injection and recovery of hot water near the projected St. Paul Energy Park. Study was funded by the Minnesota Geological Survey (1981).

Consulting

- 1 Development of a coupled GFLOW – MODFLOW model for enhanced surface water groundwater interactions on a large regional scale. This project is funded by the USGS Milwaukee Wisconsin office (2005-present).

- 2 Maintenance of WhAEM for the USEPA (2006)
- 3 Expert professional services in the case *LeClerq v. Lockformer Co* for the law offices of Goldberg Kohn representing Met-Coil Systems Corporation. (September, 2004 – October, 2004).
- 4 Expert professional services in the case *LeClerq v. Lockformer Co* for the law offices of Greenberg, Traurig, LLP representing Mestek, Inc. (October, 2004 – January 2005).
- 5 Development of WhAEM version 3 funded by the USEPA. WhAEM is a public domain groundwater flow modeling program, published by the USEPA, for its wellhead protection program. (2002-2003).
- 6 Enhancement of the AEM solver GFLOW1 for coupling with the USGS MMS software. This project is funded by the USGS in Madison Wisconsin. (2002-2003).
- 7 Expert witness support for Spence, Moriarity & Shockey regarding the Homestake mining pollution case in New Mexico (2003-2004).
- 8 *Consulting services to Mifflin and Associates, including testimony at a hearing for the State Engineer of the state of Nevada (2000 - 2003).
- 9 Expert professional services to Young Riley Dudley & DeBrotta (Indianapolis) regarding the case *William Gordon vs. Guide Corporation and General Motors Corporation* (2001).
- 10 Expert professional services for Sommer & Barnard (Indianapolis) regarding the proposed Lake County landfill in Lake County, Indiana (2001).
- 11 Expert witness services for Bayliff, Harrigan, Cord & Maugan regarding TCE contamination due to Conrail in Elkhart County, IN (1999-2001).
- 12 Expert professional services (affidavit) for Steward and Erwin (Indianapolis) regarding the case *Ramsey Development Corporation vs. Tuchman Cleaners Inc. et al.* (1999).
- 13 Expert witness services to Cohen, Millstein, Hausfeld & Toll regarding the case *Yslava vs. Hughes Aircraft* (1997).
- 14 Groundwater hydrology assessment for the S.R.O.D. related to the Hickory Hills Landfill in northwestern Indiana (1997-1998).
- 15 Expert witness services to Barron & Budd regarding the Pfohl Brothers Landfill case (1998).
- 16 Expert witness services to Allen, Lippes & Shon regarding the Four County Landfill case in Indiana (1997)
- 17 Wellhead protection study for the city of Columbus, Indiana, with SIECO, Inc., (1995- 1997).
- 18 Technical support to August Mack Environmental, Inc., Indianapolis (1993-present).
- 19 Expert professional services for Vandenberg regarding Cotter Uranium Mill (1998).
- 20 Groundwater flow modeling study related to the Cotter Uranium Mill contaminant releases in Cannon City, CO. For Kevin Hannon and Ass. Denver, CO. (1993-1995).
- 21 Groundwater flow study related to TCE releases at Johnson Controls, Inc. for the law firm of Yoder, Ainsly, Ulmer and Buckingham, Goshen, Indiana (1993).
- 22 Groundwater flow modeling related to TCE releases from Organic Chemical in Columbia and Cassatt, SC. For Allen, Lippes & Shon, Buffalo, New York (1993-1995).
- 23 Groundwater review regarding contaminant releases by Boeing. For McLaren/Hart Env. Eng. Corp., Lester, PA. (1993).
- 24 Groundwater modeling of the dilution of radionuclides in domestic wells near a nuclear waste repository, with Golder Geosyst. Assoc., Inc., Sweden, (1991).
- 25 Groundwater modeling for Sieco, Inc. regarding wellhead protection of the Columbus (Indiana) Cities Utilities' well field (1990 - 1997).
- 26 *Groundwater flow study regarding groundwater contamination at the Texas Eastern Terminal near Seymour, Indiana. For Pardieck, Gill & Vargo, P.C. Seymour, Indiana. (1990-2004).
- 27 Groundwater study for Delta Environmental Consultants, Inc. regarding a gasoline spill in Fort Collins, CO (1989- 1990).
- 28 Groundwater flow instruction to staff of Hoosier Environmental Services, Inc. (1990).
- 29 Groundwater flow study with Hoosier Environmental Services, Inc. for Allison Gear Division in Indianapolis, (1989).
- 30 Groundwater study near the Four County Landfill (Indiana) for the law firm Allen, Lippes, and Shonn (1988-1989).
- 31 Groundwater contamination study for the law firm, 'Szaferman, Lakind, Blumstein, Walter and Blader' in New Jersey; aquifer contamination in Warren Township, N.J. (1987-1989).
- 32 Groundwater contamination study for the law firm, 'Allen, Lippes and Shonn'; contaminant migration in Battle Creek, Michigan (1986-1989).
- 33 Groundwater contamination study for Philadelphia law firm 'Cohen, Shapiro, Polisher, Shiekmann and Cohen';

- contaminant migration in Bradley Gardens, Bridgewater, NJ. (1986-1989). Groundwater modeling advise to ATEC Associates, Inc., Indianapolis (1985-1988).
- 34 Modeling of contaminant migration from a road salt pile toward production wells. Funded by Heileman Brewery at La Crosse, Wisconsin and carried out as a consultant for Layne Western Co., Inc. (1984).
- 35 Dewatering study for a tunnel near Zwolle (The Netherlands). Study was funded by HARO, B.V. (1983).
- 36 Participation in a study performed by Strack of the possibly contamination of the Chippewa Spring Water, for Kraus and Anderson, Inc. (1979).

GRANTS, FELLOWSHIPS AND AWARDS

1. "Modeling Support for Ground Water Resources on the Sheyenne Grasslands in North Dakota", funded by the US Forest Service, \$30,000 (2008-2010)
2. "Developing a guidance document for application of source water capture zones", funded by the Indiana Department of Environmental Management (IDEM) (1999 - 2000). Project Manager: Mary Hoover.
3. "Investigation of Hydrologic Modeling Needs for the Multimedia Integrated Modeling System", subcontract with Georgia Institute of Technology, PI. Christa Peter-Lidard, for USEPA, 1999-2001.
4. "Modeling Three-Dimensional Flow in Regional Unconfined Aquifers", funded by EPA, \$250,000 (1994-1997).
5. "Groundwater Modeling Studies for the Office of Environmental Response of the Indiana Department of Environmental Management (IDEM)" (with Dr. Backhus) \$22,000 (1995-1997).
6. "Wellhead protection modeling in Marion County", as part of the Center for Urban Policy and the Environment, SPEA at IUPUI, \$80,000 (1994-1995).
7. "Hoosier Heartland Groundwater Study", for Hoosier Heartland Resource Conservation and Development Council, \$25,000 (1994).
8. Groundwater contamination research for Crane Naval Weapons Center. Project manager (six P.I.s) \$600,000 (Groundwater lab: \$140,000) (1993-1994).
9. "Groundwater Modeling Studies for the Office of Environmental Response of the Indiana Department of Environmental Management (IDEM)" \$19,000 (1993-1994).
10. "Groundwater flow modeling in the Walnut Creek Watershed (Iowa)" funded by the Soil's Tilt Laboratory, Ames, Iowa, \$50,000 (1994-1996).
11. "Groundwater flow modeling in the Walnut Creek Watershed (Iowa)" as part of the MASTER project funded by USEPA, USGS, and USDA. \$20,000.- (1992-1993).
12. "Statewide groundwater modeling" as part of the Center for Urban Policy and the Environment, SPEA at IUPUI, \$60,000 (1992-1994).
13. "Groundwater modeling studies" for the Office of Environmental Response of the Indiana Department of Environmental Management (IDEM) \$18,500 (1992-1993).
14. "Supra-Regional Modeling of Groundwater Response to Climate Change" funded by the National Institute for Global Environmental Change (NIGEC), U.S. Department of Energy (DOE), \$68,000 (1992).
15. "Demonstration of the Analytic Element Method for Wellhead Protection", funded by Kerr Laboratories (EPA) \$70,000 (1991-1993).
16. "Supra-Regional Modeling of Groundwater Response to Climatic Change" funded by the National Institute for Global Environmental Change (NIGEC), U.S. Department of Energy (DOE), \$117,000 (1991).
17. "Supra-Regional Modeling of Groundwater Response to Climatic Change" funded by the National Institute for Global Environmental Change (NIGEC), U.S. Department of Energy (DOE), \$103,747 (1990).
18. "Groundwater Modeling Studies" for the Office of Environmental Response of the Indiana Department of Environmental Management (IDEM) \$14,100 (1991-1992).
19. "Groundwater Modeling Studies" for the Office of Environmental Response of the Indiana Department of Environmental Management (IDEM) \$14,100 (1990-1991).
20. Groundwater modeling studies for the Office of Environmental Response of the Indiana Department of Environmental Management (IDEM), \$12,500 (1988-1989).
21. SPEA 1988 Summer Faculty Fellowship for a groundwater flow study regarding multiple fluid flow \$4 500 1988.
22. Groundwater modeling subcontract for "Proposed Deep Well Injection Study for the Great Lakes Region" with Indiana Geological Survey, \$6,200 Jan. 1987 - Jul. 1987.
23. "Development of computer simulations of geotechnical laboratory and field tests" Small Grants Program, University of Minnesota, with Dr. A. Drescher, \$1,900 1984.

24. "An Initial Study of Thermal Energy Storage in Unconfined Aquifers," Pacific Northwest Battelle Laboratory, \$35,000 Nov. 1982 - Jan. 1984.

PUBLICATIONS

Books and book chapters

- 1 *Analytic Element Modeling of Groundwater Flow*, H.M. Haitjema, Academic Press, Inc., San Diego, 400 pages, 1995.
- 2 Chapter 8.2 "Groundwater Flow Modeling" H.M. Haitjema. In "Standard Handbook of Environmental Health, Science, & Technology (ed. Jay Lehr) McGraw-Hill, New York, 2000.

Articles (refereed)

1. "Surface-Groundwater modeling in the Sheyenne National Grassland, North Dakota" 2010, Maksym Gusyev and Henk Haitjema, in preparation.
2. "Modeling flow in wetlands and underlying aquifers" 2010, Maksym Gusyev and Henk Haitjema, *Journal of Hydrology*, under review.
3. "An exact solution for a line-sink in the presence of leakage or transient flow," 2010, Maksym Gusyev and Henk Haitjema, *Journal of Engineering Mathematics*, under revision.
4. "Truncating cross-sectional groundwater models under wetlands" 2010, Henk Haitjema, Maksym Gusyev, and Mark Wilsnack, *Journal of Hydrological Engineering*, in press.
5. "A hybrid finite difference and analytic element groundwater model" 2010 Henk Haitjema, Daniel Feinstein, Randy Hunt, and Maksym Gusyev, *Ground Water*, in press.
6. "Modeling Flow into Horizontal Wells in a Dupuit-Forchheimer model" 2010, Henk Haitjema, Sergey Kuzin, Vic Kelson, and Daniel Abrams, *Ground Water*, in press.
7. "The role of hand calculations in groundwater flow modeling" 2006, Henk Haitjema, *GROUND WATER*, Vol 44, No. 6, pages 786-791, November – December.
8. "Foreword: Ground Water Flow Modeling with the Analytic Element Method" 2006, Hendrik M. Haitjema, Randall J. Hunt, Igor Jankovic, and Wim J. de Lange, *GROUND WATER* 44, no. 1: 1-2.
9. "A Fast Direct Solution Method Nonlinear Equations in an Analytic Element Model" 2006, Henk Haitjema, *GROUND WATER* 44, no. 1: 102-105
10. "Are Water Tables a Subdued Replica of the Topography?" 2005, Henk M. Haitjema and Sherry Mitchell-Bruker, *GROUND WATER* 43, no. 6: 781-786.
11. "On using simple time-of-travel capture zone delineation methods", Admir Ceric and Henk Haitjema, *GROUND WATER*, Vol.43, No.3, May-June, 2005
12. "Simulating ground water-lake interactions: approaches, analyses, and insights", Hunt, Randy, Henk Haitjema, James Krohelski and Daniel Feinstein, *GROUND WATER*, Vol. 41, No. 2, March – April, pages 227-237, 2003.
13. "Improving a regional model using reduced complexity and parameter estimation", Vic Kelson, Randy Hunt and Henk Haitjema, *GROUND WATER*, volume 40 number 2, March-April, pages 132-143, 2002
14. "Selecting MODFLOW cell sizes for accurate flow fields", H. M. Haitjema, V. A. Kelson and W. de Lange, Vol 39, No. 6, *GROUND WATER*, Nov.-Dec., pages 931-938, 2001.
15. "Approximate analytic solutions to 3D unconfined groundwater flow within regional 2D models", K.H. Luther and H.M. Haitjema, *J. of Hydrology*, 229, pp 101-117, 2000.
16. An Analytic Element Solution to Unconfined Flow near Partially Penetrating Wells, K.H. Luther and H.M. Haitjema, *J. of Hydrology*, 226, pp 197-203, 1999.
17. Numerical Experiments on the Residence Time Distributions of Heterogeneous Groundwatersheds, K.H. Luther and H.M. Haitjema, *J. of Hydrology*, Volume 207, nos. 1-2, pp 1 – 17, 1998.
18. Recycling Input Data During Analytic Element Modeling in Marion County, Indiana., J.F. Wittman, H.M. Haitjema and L. Studebaker, *Water Resources Bulletin*, V33:1, pp 47-54, 1996.
19. Using the Stream Function for Flow Governed by Poisson's Equation, H.M. Haitjema and V.A. Kelson, *J. of Hydrology*, 187, pp 367-386, 1996.
20. Modeling Steady State Conjunctive Groundwater and Surface Water Flow with Analytic Elements, S.

- Mitchell-Bruker and H.M. Haitjema, *Water Resource. Res.*, Vol. 32, No. 9, pp 2725 - 2732, September 1996.
21. On the Residence Time Distribution in Idealized Groundwatersheds, H.M. Haitjema, *J. of Hydrology*, 172, pp 127-146, 1995.
 22. GAEP: A Geographic Preprocessor for Groundwater Flow Modeling, V.A. Kelson and H.M. Haitjema, *Hydrological Science and Technology*, Vol. 8, pp 74-84, 1993.
 23. Modeling Regional Groundwater Flow in Fulton County Indiana, H.M. Haitjema, *Ground Water*, Vol. 30, No.5, pp. 660-666, 1992.
 24. Groundwater Hydraulics Considerations Regarding Landfills, H.M. Haitjema, *Water Resources Bulletin*, Vol. 27, No.5, pp. 791-796, 1991.
 25. An Analytic Element Model for Transient Axi-Symmetric Interface Flow, H.M. Haitjema, *J. of Hydrology*, 129, pp. 215-245, 1991.
 26. Modeling the Effect of Density Flow on Waste Spreading During and After Deep Well Injection, M.R. Willett, H.M. Haitjema, and J.A. Rupp, *Hydrological Science and Technology*, Vol. 6, No.1-4, 1990.
 27. A new Analytic Function for Modeling Partially Penetrating Wells, H.M. Haitjema and S.R. Kraemer, *Water Resources Res.*, Vol. 24, No. 5, pp. 683-690, May 1988.
 28. Evaluating Solid Angles Using Contour Integrals, H.M. Haitjema, *Appl. Math. Model.*, Vol. 11, Feb. 1987.
 29. Comparing a Three-Dimensional and a Dupuit-Forchheimer Solution to a Circular Recharge Area in a Confined Aquifer, H.M. Haitjema, *J. of Hydrology*, Vol. 91, pp. 83-101, 1987.
 30. Modeling three-dimensional flow in confined aquifers by superposition of both two- and three-dimensional analytic functions, H.M. Haitjema, *Water Resources Research*, Vol. 21, No. 10, Oct. 1985.
 31. Modeling double aquifer flow using a comprehensive potential and distributed singularities, II: Solution for inhomogeneous permeabilities, O.D.L. Strack and H.M. Haitjema, *Water Resources Research*, Vol. 17, No. 5, Oct. 1981.
 32. Modeling double aquifer flow using a comprehensive potential and distributed singularities, I: Solution for homogeneous permeability, O.D.L. Strack and H.M. Haitjema, *Water Resources Research*, Vol. 17, No. 5 Oct. 1981.
 33. The use of vortex rings for modeling saltwater upconing, H.M. Haitjema, *L.G.M. Mededelingen*, Part XXI No. 2, June 1980. (Tribute to Prof. G. De Josselin De Jong) (invited).
 34. Numerical application of vortices to multiple fluid flow in porous media, H.M. Haitjema, *Delft Progress Report*, 2, 1977.
 35. Linear residence time distribution definitely optimal for damping of pulse type, stochastic and periodical quality fluctuations, in response to ir. K. Maas' criticism on my paper "Optimum residence time distribution of a recharge and recovery system for damping of quality fluctuations." *H20* (10), No. 14 (Dutch) (invited), 1977.
 36. Optimum residence time distribution of a recharge and recovery system for damping of quality fluctuations, H.M. Haitjema, *H20* (10), No. 6 (Dutch), 1977.

Conference Proceedings

1. "A new formulation for conjunctive flow in wetlands and underlying aquifer" M. Gusyev and H. M. Haitjema, in proceedings of and oral presentation at 5th International Conference on the Analytic Element Method, Kansas State University, Manhattan, KA, May 14 – 17, 2006.
2. "The Role of Hand-Calculations in Groundwater Flow Modeling," Henk Haitjema, in proceedings of MODFLOW and More 2003, September 16-19, 2003.
3. "Some Cell-Size Selection Criteria for MODFLOW", Henk Haitjema, Vic Kelson, Wim de Lange, proceedings of MODFLOW 2001 and other modeling odysseys, IGWMC, Golden, Colorado, September 11- 14, 2001.
4. The Development and Maintenance of the Groundwater Resource in the USA, H.M. Haitjema, "International Conference on Finding Solutions for Water Management Problems," Seoul, Korea, September 13, 1996.
5. Hierarchical Approach to Modeling Surface-Groundwater Interactions: The Walnut Creek (Iowa) Watershed in Regional Perspective, H.M. Haitjema, S. Mitchell-Broker, and S.R. Kraemer, Conference: "Agriculture Research to Protect Water Quality," SWCS, Minneapolis, MN, February 21-24, 1993.
6. Very large scale regional aquifer modeling including local detail, H.M. Haitjema, Abdel-Aziz M. Ebraheem and S. Mitchell-Broker, poster and paper at International Conference: "Solving Groundwater

- Problems with Models," Indianapolis, Indiana, February 7-9, 1989.
7. A modeling approach to regional fracture flow systems, S.R. Kraemer and H.M. Haitjema, International Conference: "Solving Groundwater Problems with Models," Indianapolis, Indiana, February 7-9, 1989.
 8. An analytic element approach to modeling multiple fluid flow, H.M. Haitjema, International Conference: "Solving Groundwater Problems with Models," Indianapolis, Indiana, February 7-9, 1989.
 9. Regional modeling of fractured rock aquifers, S.R. Kraemer and H.M. Haitjema, International Conference on "Groundwater contamination: use of models in decision-making," Amsterdam, The Netherlands, October 26-29, 1987.
 10. Developments and applications of three-dimensional analytic element models for transport modeling. H.M. Haitjema, International Conference on "Groundwater contamination: use of models in decision-making," Amsterdam, The Netherlands, October 26-29, 1987.
 11. "Modeling three-dimensional flow near a partially penetrating well in a stratified aquifer," H.M. Haitjema, proceedings of "Solving Groundwater Problems with Models," Denver Feb. 10-12, pages 532-540, 1987.
 12. "A practical approach to regional three-dimensional flow modeling," H.M. Haitjema, National Water Well Association (NWWA) conference 'Practical applications of groundwater models, in Columbus, Ohio August 19-20, 1985.
 13. "Artificial recharge during dewatering activities," H.M. Haitjema, submitted and presented on invitation for the American Institute of Hydrology (AIH) at the workshop: 'A national survey: Selected problems and solutions in applied Hydrology and Hydrogeology,' in Minneapolis, Minnesota May 16-17, 1985.
 14. "Development of a predictive tool for unconfined aquifer TES," H.M. Haitjema, Proceedings DOE Physical and Chemical Energy Storage Contractor's Review Meeting, Arlington, Virginia.
 15. "Inter-active modeling of the aquifers near the Tennessee-Tombigbee Waterway," O.D.L. Strack, H.M. Haitjema and J.J. Melnyk, Proceedings IFAC, Cleveland, Ohio 1980.
 16. "Dynamic storage of fresh water in a saline aquifer", H.M. Haitjema, Proceedings SWIM, England 1977.

Selected Technical Reports

- 1 "Replacing upper MODFLOW layers by a GFLOW model" report to the USGS in Wisconsin, 2005 – present.
- 2 "Time of Travel Capture Zone Delineation for Wellhead Protection", H.M. Haitjema for Indiana Department of Environmental Management (IDEM), December, 2000.
- 3 "Assessing the Suitability of MODFLOW for Modeling Advective Transport", Henk Haitjema and Vic Kelson, for RIZA (National Institute for Integrated Water Management), The Netherlands, (84 pages), November 15, 1998.
- 4 A Regional Analytic Element Model to Investigate the Extent of Drawdowns on the Groundwater Flow Regime due to the Dewatering of the Proposed Crandon Mine", H.M. Haitjema and V.A. Kelson, report to Wisconsin Department of Natural Resources (WDNR), (42) January, 1998.
- 5 Modeling Three-Dimensional Groundwater Flow on a Regional Scale Using the Analytic Element Method, H.M. Haitjema, V. Kelson, and K. Luther, final report for the USEPA, contract CR 823637-01-1, 1997.
- 6 IU-SPEA 1995-1996 Groundwater Technical Support Activities for the Indiana Department of Environmental Management, H.M. Haitjema, K. Luther, J. Wittman, final report to IDEM, 1997.
- 7 "Capture Zone Delineation for the Municipal Well Fields Columbus, Indiana", H.M. Haitjema, Vic Kelson, Jack Wittman, for Sieco, Inc., Columbus IN, October 21, 1996 (55 pages).
- 8 "Delineation of Wellhead Protection Areas in Marion County," J.F. Wittman and H.M. Haitjema, publication # 95-E14 Center for Urban Policy and the Environment, SPEA at IUPUI, June 1995 (pp. 49).
- 9 "Report of Groundwater Flow and Contaminant Migration Modeling at the Ammunition Burning Ground, Crane NSWC, Indiana, H.M. Haitjema and V.A. Kelson, submitted to the U.S. Army Corps of Engineers, December 19, 1994.
- 10 "WhAEM User's Guide", H.M. Haitjema and O.D.L. Strack, prepared for USEPA under contract with Robert S. Kerr Environmental Research Laboratory, Ada, Oklahoma, October 1994.
- 11 "Wellhead protection study of the Fall Creek pumping station", for Indiana Water Company (IWC), 1993.
- 12 "Well Head Protection of the Southern Well Fields near Columbus, Indiana", H.M. Haitjema and J.F.

- Wittman, prepared for Sico Inc. under contract with the Columbus City Utilities, May 21, 1992.
- 13 "Environmental Impact of the Gumwood Road Well Field near Mishawaka, Indiana", H.M. Haitjema, prepared for IDEM, May 11, 1992.
 - 14 "Preliminary Findings Regarding the Effect of Pumping the Old Works Underneath the Minnehaha Mine on Subsidence", H.M. Haitjema, prepared for Jack Jarrett, September 11, 1989.
 - 15 "Computer modeling of the effects of density differences on waste spreading in the Mt. Simon sandstone in Northwest Indiana," H.M. Haitjema and Mary Willet, prepared for the Indiana Geological Survey for Underground Injection Practices Council. Study is part of the Deep Well Injection study for the Great Lakes Region. Report is part of a comprehensive report submitted by the Indiana Geological Survey, 1987.
 - 16 "Preliminary ATEs Simulations for the Student Recreation Building of the University of Alabama", H.M. Haitjema, prepared for Pacific Northwest Laboratory under contract B-P1228A-N (1986)
 - 17 "An Initial Study on Thermal Energy Storage in Unconfined Aquifers", H.M. Haitjema and O.D.L. Strack, final report to Battelle Northwest Laboratory, PNL-5815, April 1, pages 107 (1986).
 - 18 "Recommendations and Comments regarding the pressure relief system and the environmental modeling of the divide-cut section of the Tennessee Tombigbee Waterway." Report to U.S. Army Corps of Engineers, Nashville district, O.D.L. Strack and H.M. Haitjema (1982).
 - 19 "Report on the feasibility of injection and recovery of hot water near the projected St. Paul Energy Park: recharge and recovery wells in the upper glacial drift," H.M. Haitjema (1981).
 - 20 "Final report of computer inter-active modeling of the dewatering for the Tennessee- Tombigbee Waterway", O.D.L. Strack, H.M. Haitjema, and G. Heizman, Report to the U.S. Army Corps of Engineers, Nashville District (1978).
 - 21 "Preliminary predictions of final drawdowns near the Tennessee-Tombigbee Waterway," O .D.L. Strack and H.M. Haitjema, Report to the U.S. Army Corps of Engineers, Nashville District (1977) .
 - 22 "Hele Shaw model test" (in Dutch), H.M. Haitjema, IWACO report (1976).
 - 23 "Sensitivity analysis for discontinuities in a resistance layer" (in Dutch), H.M. Haitjema, IWACO report (1976).

Monographs

- 1 "Accounting for resistance to 3D flow near horizontal wells or galleries in a Dupuit-Forchheimer model," September 24, 2002.
- 2 "Dealing with resistance to flow into surface waters," September 29, 2002.
- 3 "Fresh and salt water interface flow in GFLOW 2000," October 24, 2002.
- 4 "Modeling lake-groundwater interactions in GFLOW 2000," March 4, 2002.
- 5 "Solution strategies in GFLOW1," October 20, 2002.
- 6 "Theory of modeling inhomogeneity domains in GFLOW1," January 24, 2001.
- 7 Calculated Fixed Radius Issues, H.M. Haitjema for the Microbial Contamination Workshop of the USEPA, Irvine, CA, July 11, 1996.
- 8 Applied Mathematics for Environmental Sciences, H.M. Haitjema, class notes, (1985, revised 1992, revised 1998).
- 9 Elements of Fluid Mechanics, H.M. Haitjema, class notes, (1986)
- 10 The use of line doublets to model discontinuous material properties in two-dimensional linear elasticity, H.M. Haitjema, University of Minnesota (1981).
- 11 Introduction of inhomogeneous fluid and aquifer properties in non-steady three-dimensional groundwater flow by application of vortex distributions, H.M. Haitjema, Technical University of Delft (1978).
- 12 Calculation examples for artificial recharge to limit the effect of a dewatering system (in Dutch), Technical University of Delft (1977).

Other

1. "Source Water Protection in the USA: Ensuring Clean Drinking Water" Henk Haitjema and Maksym Gusyev, edited by Roy Shin and published by the Seoul Development Institute, Korea, July 2006.
2. On line manual and help system for the computer program WhAEM for Windows95/NT produced under contract with Dynamac Corporation for the USEPA, 1997
3. "Demonstration of the Analytic Element Method for Wellhead Protection", H. M. Haitjema, O. D. L. Strack, and S. R. Kraemer, EPA Project Summary, EPA/600/SR94/210, produced by USEPA's Robert S.

Kerr Environmental Research Laboratory, Ada, OK, March 1995.

4. "Computers Helping Protect Groundwater Environment", H.M. Haitjema, editorial in the Indiana Manufacturer, the Ohio Manufacturer, and the Kentucky Manufacturer, December 1994.
5. 'Wanted: Soil detectives,' side bar in article on groundwater pollution in Indiana, published in the January 1986 issue of INDIANA BUSINESS Magazine.

Invited Presentations

1. "Replacing upper MODFLOW layers with an Analytic Element Model: An alternative to grid refinement" MODFLOW and more 2008, May 18 – 21, 2008, Golden, CO.
2. "A coupled Analytic Element – Finite Difference Approach to Groundwater Flow Modeling" (with Feinstein and Hunt) at the 5th international conference on the analytic element method in Manhattan, KA, May 14 – 18, 2006.
3. "Analytic Element Screening Models" at the Braun Intertec headquarters in Minneapolis, Minnesota, April 21, 2005.
4. "Analytic Element Screening Models" at the Civil Engineering Department of the University of Minnesota, February 27, 2005.
5. "Groundwater Modeling: Decision making models for watershed management" at the joint Indiana University - Magdenburg University workshop on "Hochwasserschutz durch nachhaltige Einzugsgebietsbewirtschaftung – Strategien und Beispiele" in Magdenburg, Germany June 29, 2004.
6. "A fast direct solution method for non-linear equations in an analytic element model" at the 4th international conference on the analytic element method in Saint Etienne, France, November 20-21, 2003.
7. "Analytic element modeling of groundwater flow," invited by the Illinois Groundwater Association at their annual meeting in Urbana, November 13, 2002.
8. Presentation at the Valpariso University on April 3, 2001.
9. Presentation at the University of Buffalo on October 4, 2001.
10. Presentation at the University of Western Australia in Perth on October 24, 2001.
11. Presentation at Flinders University in Adelaide on October 30, 2001.
12. Guest lecture in advanced groundwater flow modeling course at the Geology Department of the University of Wisconsin, Madison, March 23, 2001.
13. "Water War in the Desert", H. M. Haitjema, Department of Mathematics and Computer Science, Valparaiso University, April 3, 2001.
14. Training session (1 afternoon) on groundwater flow modeling for the National Rural Water Association In-Service Training in Spokane, Washington, June 12, 2001.
15. "Estimating the non-point source groundwater contribution to surface water pollution: A lumped parameter approach", H. M. Haitjema, Monitoring and Modeling Nonpoint Source Pollution in Agricultural Landscapes, Indianapolis, August 28, 2001.
16. "The Role of the analytic element method in groundwater flow modeling", H. M. Haitjema, University of New York at Buffalo, October 4, 2001.
17. "The Role of the analytic element method in groundwater flow modeling", H. M. Haitjema, University of Western Australia, Perth, October 24, 2001.
18. "The Role of the analytic element method in groundwater flow modeling", H. M. Haitjema, Flinders University, Adelaide, October 30, 2001
19. "Analytic Solutions to Three-Dimensional Flow: The Past and the Future", H.M. Haitjema, Fall Meeting AGU, San Francisco, December 14 –19, 2000.
20. "It's over.... Some Closing Remarks", Third International Conference on Analytic Element Modeling of Groundwater Flow", Brainerd, MN, April 16 – 19, 2000.
21. "Step-Wise Groundwater Flow Modeling: Keep it Simple", H.M. Haitjema, Spring Meeting AGU, Boston, May 26 – 29, 1998.
22. "The Meaning of Capture Zone Delineation", H.M. Haitjema, at the annual meeting of the American Rural Water Association in Indianapolis, October, 1997.
23. "All Models are not Created Equal", H.M. Haitjema, key note address at the international conference "Analytic Based Modeling of Groundwater Flow", Nunspeet, The Netherlands, April 7-10, 1997.
24. "Groundwater Residence Time Distributions in Watersheds", H.M. Haitjema, International Conference on Advances in Groundwater Hydrology--A Decade of Progress--, Tampa, FL, November 16-20, 1997.
25. "Application of the analytic element method to the Four County Landfill", H.M. Haitjema, Civil

- Engineering Department, Purdue University (Prof. J. Delleur), January 26, 1995.
26. "Introduction and Development of the Analytic Element Method of Groundwater Flow Modeling", H.M. Haitjema, Northeast Region meeting of U.S. Geological Survey Ground-Water Specialists, Indianapolis, May 17-20, 1994.
 27. "Why Model Three-Dimensional Flow if You Can Go Dupuit-Forchheimer?," H.M. Haitjema, International Conference on Analytic Element Modeling of Groundwater Flow, Indianapolis, April 19-21, 1994.
 28. "Capture Zone Delineation Modeling with EPA's New Wellhead Protection Program WhAEM", H.M. Haitjema (presenter) and O.D.L. Strack, Short course at the International Ground Water Modeling Center, Colorado School of Mines, Golden, Colorado, November 17-19, 1993.
 29. "Conjunctive Surface Water and Groundwater Modeling with the Analytic Element Method," H.M. Haitjema (presenter) and S. Mitchell-Broker, presented at the Silver Anniversary Meeting of the International Society for Mathematical Geology, Prague, Czech Republic, October 11-15, 1993.
 30. "Use of the Analytic Element Method for Regionalization of Local Groundwater Studies", H.M. Haitjema (presenter) and S. Mitchell-Broker, at USDA Soil Tilth Laboratory, Ames, Iowa, September 10-11, 1992.
 31. "Demonstration of the Analytic Element Method for Well Head Protection", H.M. Haitjema, EPA contractors conference, Dallas, Texas, June 24-25, 1992.
 32. Invited presentation at the Geology Department of IUPUI, Indianapolis, October 1, 1992.
 33. "Uses of Models in Hydrogeology," national conference on Hazardous Materials Management organized by Indianapolis Center for Advanced Research, Inc., Indianapolis, July 25, 1989.
 34. Panel member on Groundwater Issues at the 35th Annual Indiana Farmers Union State Convention, January 26-27, 1989.
 35. Invited presentation at the Technical University of Delft, The Netherlands, March 4, 1988.
 36. Invited presentation at TNO Delft, The Netherlands, February 15, 1988.
 37. Invited presentation at the College of Engineering of the University of Cincinnati, December 3, 1987.
 38. Invited presentation at the Council of State Government's Groundwater Seminar in Indianapolis on November 19, 1986.
 39. Computer modeling of two ATEs systems in Tuscaloosa, Alabama. Invited presentation on Experts Meeting organized by Pacific Northwest Laboratories for DOE in St. Paul October 16-17, 1986.
 40. Invited presentation at the conference 'Indiana Groundwater: Regulations, Risk Assessment and Remedies,' at Indianapolis (Oct. 1985).
 41. Invited presentation on groundwater flow modeling at the International Groundwater Modeling Center, Holcomb Research Institute, Indianapolis (Feb. 1985).
 42. Invited presentation for a national Dutch committee on artificial recharge of aquifers (1975).

Selected Presentations

1. "Truncating cross-sectional groundwater flow models under wetlands" (with Wilsnack) at the international conference MODFLOW and More 2006 in Golden, CO, May 21-25, 2006.
2. "The Role of hand calculations in groundwater flow modeling" at the international conference MODFLOW and More 2003, September 16-19, 2003.
3. "Modeling Lake-Aquifer interactions with analytic elements" Haitjema H.M. and R.J. Hunt, presented at Annual Geological Society of America (GSA) meeting in Denver, CO, October 27 – 30, 2002
4. Presentation at the National Nonpoint Source Monitoring Workshop in Indianapolis on August 28.
5. Paper accepted at MODFLOW 2001 conference in Golden, CO, but attendance prevented by September 11 events.
6. "Only a matter of resolution", H.M. Haitjema, "Third International Conference on Analytic Element Modeling of Groundwater Flow", Brainerd, MN, April 16 – 19, 2000.
7. "Capture zone delineation: Are simple methods adequate?," H.M. Haitjema, Indiana Water Resources Association, Spring meeting, Mitchell Indiana, June 14-16, 2000.
8. Stepwise capture zone delineation: From circle to cell", H.M. Haitjema, Midwest Groundwater Flow Conference, Columbus, OH, October 17-19,2000.
9. "An Analytic Element Screening Model of Regional Flow Surrounding a Proposed Mine near Crandon, Wisconsin", H.M. Haitjema and V.A. Kelson, at the AWRA conference "Water Resources Management: Changes as We Approach the 21 Century", March 5 – 6, 1998, Green Lake, WI

10. "Comprehensive Well Field Modeling for Marion County, Indiana", J. Wittman, H.M. Haitjema, G. Lindsey, at the international conference "Analytic Based Modeling of Groundwater Flow", Nunspeet, The Netherlands, April 7-10, 1997.
11. "An Analytic Element Solution to Unconfined Groundwater Flow near Partially Penetrating Wells", K.H.Luther and H.M. Haitjema, at the international conference "Analytic Based Modeling of Groundwater Flow", Nunspeet, The Netherlands, April 7-10, 1997.
12. "A Massively-Parallel Analytic Element Code", V.A. Kelson and H.M. Haitjema at the international conference "Analytic Based Modeling of Groundwater Flow", Nunspeet, The Netherlands, April 7-10, 1997.
13. "An Analytic Element Solutions to Unconfined Flow near a Partially Penetrating Well," K.H. Luther and H.M. Haitjema poster at 1996 AGE Spring Meeting, Baltimore, Maryland, May 20-24, 1996.
14. "Analytic Element Screening Technique for Numerical Groundwater Models", V.A. Kelson and H.M. Haitjema, poster at the Midwest Groundwater Conference, Columbia, Missouri, October 16-18, 1995.
15. "Capture Zone Modeling Using the WhAEM (Wellhead Analytic Element Model), S.R. Kraemer (presenter), H.M. Haitjema and O.D.L. Strack, International Conference on Analytic Element Modeling of Groundwater Flow, Indianapolis, April 19-21, 1994.
16. "Effects of Climate Change on Groundwater in Dual Aquifer Settings", H.M. Haitjema (presenter) and J.F. Wittman, NIGEC conference at Oak Ridge, March 1994.
17. "Effective Continuum Representations of Discrete Fracture Networks for Regional Scale GroundWater Modeling", S.R. Kraemer (presenter) and H.M. Haitjema, AGE Chapman conference, Burlington, Vermont, September 12, 1994.
18. "Wellhead Protection Zone Delineation Using Analytic Element Models", Victor Kelson (presenter) and H.M. Haitjema, Midwest Ground Water Conference, Champaign Illinois, October 6-8, 1993.
19. "The Effects of Climate Change on Recharge to Regional Bedrock Aquifers in Glacial Settings," Jack Wittman (presenter) and H.M. Haitjema, Midwest Groundwater Conference, Bismark, South Dakota, October 4-6, 1992.
20. "Modeling Groundwater and Surface Water Interactions with Analytic Elements", S. Mitchell-Broker (presenter) and H.M. Haitjema, AGE Fall Meeting, San Francisco, December 9-13, 1991.
21. "Including Three-Dimensional Flow in a Regional Analytic Element Model", H.M. Haitjema, at the National Water Well Association (NWWA) sponsored international Groundwater Conference in Moscow, July 1-5, 1989.