

## CURRICULUM VITAE (April, 2017)



### PERSONAL DATA:

Name: **José Esteban CAPILLA ROMÁ** Birth date: December 26<sup>th</sup>, 1961  
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Current Occupation: Full Professor, Vice-rector for Research, Innovation and Transfer  
Technical University of Valencia (Universidad Politécnica de Valencia), SPAIN.  
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### EDUCATION:

1986: Civil Engineer; School of Civil Engineering, Technical University of Valencia.  
1989: Civil Engineer, Ph.D., Dept. of Hydraulic and Environmental Eng., Technical University of Valencia. Ph. D. thesis: "*Flow Equation Solution in Saturated Porous Media by means of Generalized Fourier Series in Bidimensional Domains*".

### MAIN AREA(S) OF SCIENTIFIC AND PROFESSIONAL SPECIALIZATION:

#### *Water and environmental engineering:*

- Hydrogeology and Mathematical models; geostatistics applied to subsurface flow and mass transport; technical assessment of remediation strategies for soils and groundwater pollution problems. Use and development of stochastic inverse modeling tools to assess uncertainty in model results.
- Water Resources Planning and Management with conjunctive use of surface and groundwater; development and application of optimization and simulation models.
- Application of models for performance assessment of deep geological waste (nuclear) repositories.
- Design, project and performance assessment of solid waste landfills.
- Long experience in the development and application of mathematical / computer models in the above fields of expertise.
- Development of Response strategies to climate change: Mitigation and Adaptation.

#### *Higher education management:*

- Recent and founded experience in higher education management and quality assurance as responsible at both regional government positions and University positions with participation in European EACEA projects.

### PROFESSIONAL EXPERIENCE:

- 1) 1984-86: As undergraduate student worked in international projects (funded by joint American-Spanish agreements) with the participation of US Geological Service, Stanford University, Spanish Geological Service and Technical University of Valencia in the field of groundwater and water conjunctive use.
- 2) Since 1986 teaching at graduate level at Technical University of Valencia: *Applied Physics, Tensor Analysis, Continuum Mechanics, Soils Pollution and Transport and Dispersion of Pollutants in the*

*Environment*. Coordinator of several initiatives for the innovation of teaching and evaluation methodologies.

3) Since 1990 teaching at post-graduate level at Technical University of Valencia: *Mathematical Models of Flow and Transport in Porous Media, Conjunctive Use of Surface water and Groundwater, Computer Aided Support Systems for Water Management and Planning, Numerical methods in Hydraulics, Transport and Fate of Pollutants in the Subsurface*.

4) 1990-2012 invited professor at Center of Studies and Experimentation in Public Works (Centro de Estudios y Experimentación de Obras Públicas, CEDEX), in Madrid (Spain), giving lectures on flow and mass transport in groundwater, and on water resources planning and management (Master degree currently organized by Universidad Politécnica de Madrid, Spain).

5) During the academic year 1999-2000 visiting professor at the Massachusetts Institute of Technology, MA, United States, at Ralph Parsons Lab, lecturing the graduate class CEE1.721: *Geostatistics and Inverse Methods in Hydrogeology*.

6) Visiting Scientist Jun/1995-Sep/1995: Department of Environmental and Earth Sciences, Stanford University, USA.

7) Visiting Scientist Jun/1998-Sep/1998: Department of Petroleum Engineering, Stanford University, USA.

8) Since 1986 to present has worked as Scientist and/or consulting Engineer in different projects funded by National and International agencies, private companies, river basin authorities and other institutions.

9) Invited professor / speaker in several courses/conferences held by different national and international institutions. Some relevant contributions:

- + Short-course (35 h) on Flow and Mass Transport Models in Groundwater ("Curso de modelos matemáticos de flujo subterráneo y transporte de masa"), Dpto. Ingeniería Hidráulica y Medio Ambiente. Technical University of Valencia. May 1989. Also co-Director

- + XVI General Assembly de la European Geophysical Society. April 1991. Wiesbaden, Germany: Andreu, Capilla and Sanchís, "A computer aided support system for complex water resources schemes management".

- + Geostatistical Experts Group Meeting - Sandia National Laboratory (USA). March 1993, Albuquerque (New México, USA). Capilla, Gómez and Sahuquillo, "Conditional Simulation of Transmissivity Fields honouring Piezometric Data. Difficulties and perspectives as a tool for performance assessment."

- + Workshop on "Expert Systems for Water Resources Management and Flood Risk Control"; Università di Bologna, Italy, June 1993.

- + Lecture on "Use of Geographical Information Systems for Planning and Management of Water Resources Systems". Centro de Estudios y Experimentación de Obras Públicas (CEDEX, <http://www.cedex.es/ingles/home.html>), MOPTMA, Madrid, Spain. December, 1994.

- + Postgraduate course on Legal and Technical Issues in Civil Engineering ("Intensificación Tecnológica y Legal en Ingeniería Civil"), Technical University of Valencia in cooperation with European Community (Fondo Social Europeo, FEDER), December, 1994.

- + 8th Annual Meeting of the Stanford Centre for Reservoir Forecasting, May 1995, Stanford University, California, USA. Gómez, Capilla and Sahuquillo, "Generating permeability fields conditioned to pressure information."

- + Conference in "Groundwater in Ebro, Júcar and Catalanian basins. Role in Hydraulic Planning" ("Las Aguas Subterráneas en las cuencas del Ebro, Júcar e Internas de Cataluña y su papel en la planificación hidrológica"), February 1996, Lérida, España. International Association of Hydrogeologist - Spanish Chapter. Capilla, José E., "Los acuíferos costeros de la Comunidad Valenciana: Situación y perspectivas".

- + Course on "Conjunctive Use of Surface and Ground Water" ("Utilización conjunta de Aguas Superficiales y Subterráneas"), Universidad Politécnica de Valencia - Ministerio de Medio Ambiente; junio 97. Also Secretary.

- + Master en Planificación Territorial, Medioambiental y Urbana, Universidad Politécnica de Valencia – Departamento de Urbanismo (UPV). Editions 1998, 2000 and 2003.

- + "Catchment Management Planning". Faculty of Civil Engineering, Prague (Czech Republic). February, 1998.

- + 11th Annual Meeting of the Stanford Center for Reservoir Forecasting, May 1998, Stanford University, California, USA. Capilla, Rodrigo and Gómez, "Worth of secondary data compared to piezometric data for the probabilistic assessment of radionuclides migration".

- + Seminar "Stochastic Simulation of K fields honoring pressure data: the conditional probabilities method and its extension to 3D". Dept. of Geological and Environmental Sciences, Stanford University, California, USA. August, 1998.
- + Seventh International Conference on Hydraulic Engineering Software - HYDROSOFT 98. 16-18 September 1998, Como, Italy. Wessex Institute of Technology, Southampton, United Kingdom. Capilla, Andreu, Solera and Sánchez, "Risk based water Resources Management".
- + "Conjunctive Use of Surface and groundwater: modelling tools and management systems. International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM), <http://www.ciheam.org>, November 1999.
- + "Inverse stochastic modelling of non-Gaussian parameters in hydrogeology". Seminar lectured at Ralph Parsons Laboratory - Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, USA. June 2000.
- + Invited paper "Stochastic Inverse Problems in Groundwater Modelling", José E. Capilla, J. Gómez, A. Sahuquillo, A. y H.J.W.M. Hendricks; Eighth International Conference on Hydraulic Engineering Software - HYDROSOFT 2000. 12-14 June 2000, Lisbon, Portugal. Wessex Institute of Technology, Southampton, United Kingdom, and University of Coimbra (Portugal).
- + "Uncertainty Analysis", Course on "Underground Disposal of Nuclear Waste; the role of geological barrier", International University Menendez Pelayo (UIMP), <http://www.uimp.org>, Valencia (Pineda Palace), 6-10 November 2000.
- + Invited conference "Geostatistical Modeling", J. Gómez, J. Capilla, A. Sahuquillo, E. Cassiraga y H.J.W.M. Hendricks. IV Jornadas de Investigación y Desarrollo Tecnológico en Gestión de Residuos Radioactivos, TERRA INNOVA 2000, 20-25 November 2000, Universidad de Barcelona. Spanish Nuclear Waste Management Company, ENRESA, <http://www.enresa.es>.
- + Director of Postgraduate Course on "Soils and Groundwater Pollution" (30 h), Valencian Agency for the Environment, Spanish Geological Service and Technical University of Valencia. 24-28 September 2001.
- + "Modelling fracture heterogeneity in flow and mass transport problems", Capilla, J.E. et al., in Ninth International Conference on Hydraulic Engineering Software, Wessex Institute of Technology, Southampton, United Kingdom, and University of Coimbra (Portugal). Montreal (Canada), 28-31 May 2002.
- + Director of Postgraduate Course "Soils and Groundwater Remediation", International University Menendez Pelayo (UIMP), <http://www.uimp.org>, Spain. October 2003.
- + Short Course on "Groundwater Pollution", held by the Centre of Environmental Studies of the Mediterranean Savings Bank, Murcia, February 2002 and March 2003.
- + Director of Postgraduate Course on "Mathematical modelling of Flow and Mass Transport in Groundwater" (30 h), Technical University of Catalonia, Technical University of Valencia and Spanish Chapter of the International Association of Hydrogeology. Valencia, September 2004.
- + Invited Speaker, Course "Evaluación e innovación en el sistema educativo" ("*Evaluation and Innovation in the Educational System*"). Curso de verano en El Escorial (*Summer courses El Escorial*). Universidad Complutense de Madrid, Spain. 11-15, July, 2005.
- + Invited Speaker in "Jornadas de redes de investigación en Docencia Universitaria" ("*Meeting of University Teaching research networks*"). Universidad de Alicante, Spain. Ediciones de junio 2005 y junio 2006.
- + Director of Seminar organized by Universidad Internacional Menendez Pelayo (Comunidad Valenciana, Spain), "La Estrategia Valenciana para el Cambio Climático" ("*The valencian Strategy for climate Change*"), december, 2008.
- + Invited Professor Course "Hidrogeología II". Programa de Formación Iberoamericano de Aguas del PNUMA (Programa de Naciones Unidas para el Medio Ambiente) y CODIA (Conferencia de Directores Iberoamericanos del Agua). 26-31, October, 2009. Ciudad de Panamá, Panamá.
- + Organizer and professor of "Seminario-taller nacional sobre modelación del flujo y el transporte de contaminantes en las aguas subterráneas" ("*Workshop on Flow and Mass Transport in groundwater*"). Organizers involved: UPV, ISPJAE, Instituto Nacional de Recursos Hidráulicos (INRH), Sociedad de Hidráulica de la Unión Nacional de Arquitectos e Ingenieros de la Construcción de Cuba y Comité Nacional Cubano del Programa Hidrológico Internacional. 22-26, March, 2010, La Habana, Cuba.
- + Invited Speaker, Course "Estrategia Valenciana ante el Cambio Climático" del Centro de Tecnologías Limpias (CTL) e Instituto Valenciano de la Administración Pública (IVAP). Valencia, 18-28, April, 2010.
- + Invited speaker in other international seminars and meetings: China (Oct 2010), Colombia (Oct 2011),

Stanford University (Dec 2012), Brussels – European Committee of the Regions (2014), Colombia (Sep 2014), etc.

9) Professional and academic responsibilities:

- + August 2007 to present: Professor at Technical University of Valencia, Spain.
- + June 2013 to present: Vice-Rector for Research, Innovation and Transfer, Technical University of Valencia, Spain.
- + July 2009 to May 2013: Director of the Research Institute of Water and Environmental Engineering at Technical University of Valencia, Spain.
- + September 2008 to July 2009: Director of International Programs in Canada, Colombia and Cuba; Technical University of Valencia, Spain.
- + October 2007 to August 2008: Director of the Strategic Plan following-up Office; Technical University of Valencia, Spain.
- + 2004-2007: General Director of Universities and Higher Education of the region of Valencia (Spain); President of the Valencian Commission for Accreditation and Quality Assurance.
- + 2003-2004: Vice-Rector for European Higher Education Affairs. Technical University of Valencia, Spain.
- + Since 2003, main researcher of the “Group of Mathematical Modeling of Groundwater Flow and Transport Processes”, Research Institute of Water and Environmental Engineering, Technical University of Valencia, Spain.
- + 2001-2003: Vicedean for Academic Affairs. School of Civil Engr., Technical U. of Valencia, Spain.
- + 1998-99: Vicedean for International Affairs. School of Civil Engr., Technical U. of Valencia, Spain.
- + 1994-98: Academic Secretary of the School of Civil Engr., Technical University of Valencia, Spain.
- + 1993-94: Vicedean for research at the Applied Physics Dept. Technical University of Valencia, Spain.

10) Other merits:

- + Award "*Waste management Research and Technology in the Valencian region*", SPAIN (Premio Investigación y Tecnología sobre Residuos en la Comunidad Valenciana), 1999.
- + Reviewer of Journals: Hydrological Sciences Journal, Transport in Porous Media, Stochastic Hydrology and Hydraulics, Advances in Water Resources, Revista Internacional de Métodos Numéricos para cálculo y diseño en ingeniería, Revista de Ingeniería del Agua, Water Resources Research, Journal of Hydrology, Mathematical Geology and some others.
- + Member of the editorial board of the Journal “Mathematical Problems in Engineering”, Hindawi Publishing Corporation.
- + Member of Scientific Committees: National Conference “La contaminación de las aguas subterráneas: un problema pendiente” (1998, Valencia, Spain); “Seventh International Conference on Hydraulic Engineering Software - HYDROSOFT 98” (Como, Italy); “Second International Conference on Geostatistics for Environmental Applications” (1998, Spain); “Eighth International Conference on Hydraulic Engineering Software” (2000, Estoril, Portugal); “International Conference on River Basin Management” (2001, Cardiff, United Kingdom); “Ninth International Conference on Hydraulic Engineering Software” (2002, Montreal, Canada); Convener of Session "Advances in calibration and uncertainty analysis of groundwater flow and mass transport models" at

the Meeting of the European Geosciences Union (EGU), Nice (Francia), 25-30 March of 2004; "Fifth European Conference on Geostatistics for Environmental Applications", 13-15 October of 2004, University of Neuchatel, Neuchatel (Switzerland); Member of the International Scientific Advisory Committee de la "International Conference on River Basin Management", Bolonia (Italia), 6 - 8 September 2005; International Conference geoENV 2008, United Kingdom, September 2008; member of the Organizing Committee of the International Groundwater Symposium de la IAHR to be held in Valencia, in september 2010, International Conference geoENV 2012, September 2012, Geostat 2016, etc.

+ ANEP (Spanish National Agency of Evaluation) evaluator since 1995; Spanish Geological Survey (IGME); Expert for evaluation and monitoring of research projects under the 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> Framework Programmes of the European Community; EVAL-INCO evaluator (Federal Ministry of Education and Research at the Project Management Agency c/o German Aerospace Center, 2010->); also for the evaluation of INTAS (International Association formed by the European Community, European Union's Member States and like-minded countries acting to preserve and promote the valuable scientific potential of the NIS partner countries through East-West Scientific co-operation, <http://www.intas.be>); Evaluator for Ministry of education and science of the Russian Federation, since 2010; Swedish International Agency for Cooperation, Spanish Agency of Cooperation (AECID), TEMPUS-EACEA experts database, etc.

+ Expert for the Evaluation of proposals for the Iberoamerican Program of Science and Technology for Development (Programa Iberoamericano de Ciencia y Tecnología para el Desarrollo, CYTED), <http://www.cyted.org>, since 2004.

+ Invited Editor *Journal of Hydrology*, special Issue "Stochastic Inversion in Hydrogeology", Vol. 281 (4).

## PUBLICATIONS AND PARTICIPATION IN SCIENTIF CONGRESS:

Author/co-author of more than fifty peer reviewed publications and around two hundred participations and communications in National/International Technical and Scientific Meetings (courses and seminars not included). Some representative contributions are:

- Meyer, B., Lundy, L., Watt, J., Abdullaev, I., Capilla Roma, J.E. (2016). Risk management as a basis for integrated water cycle management in Kazakhstan. *Journal of Environmental Geography* 9 (3–4), 33–42. DOI: 10.1515/jengeo-2016-0010

- Chirivella, V., Capilla, José E. and Perez, M. A. (2016). Dynamical versus statistical downscaling for the generation of regional climate change scenarios at a Western Mediterranean basin: The Jucar river district. *Journal of Water and Climate Change*, 7 (2) 379-392; DOI: 10.2166/wcc.2015.207.

- Sanz, I and Capilla, José E. (2015). Assessment of Saltwater Intrusion and Discharges to a Wetland with a 3D Transient Variable Density Flow Model: The Coastal Plane Oropesa-Torreblanca Aquifer, Spain. *Journal of Water Resource and Protection*, Vol.7 No.9. DOI: 10.4236/jwarp.2015.79062.

- Chirivella, V., Capilla, José E. and Perez, M. A. (2015). Modelling Regional Impacts of Climate Change on Water Resources: the Jucar Basin, Spain. *Hydrological Sciences Journal – Journal des Sciences Hydrologiques*, 60:1, 30-49, <http://dx.doi.org/10.1080/02626667.2013.866711>.

- Heredia, J., Pardo-Igúzquiza, E., J. Rodríguez-Arévalo, J., Castaño, S., Díaz-Teijeiro, M.F., Capilla, J.E., Prado, A. and Bardasano, L. (2013). Identification of spatial models of the seasonal variability of  $\delta^{18}\text{O}$  in rainfall over Spain using genetic algorithms. Accepted for presentation at 15<sup>th</sup> Annual conference of the International Association for Mathematical Geosciences, *Frontiers of Mathematical Geosciences: New approaches to understand the natural World*. Madrid (Spain) 2-6 September 2013.

- Capilla, José E. and Sanchez-Fuster (2012). Modeling the local effective dispersivity to deal with the limitations of the Advection-Dispersion Equation. Groundwater Modeling and Management under Uncertainty: Proceedings of the Sixth IAHR International Groundwater Symposium (ISBN 9781138000124), Kuwait, 19 - 21 November, 2012. Khaled Hadi and Nadim Copty (Eds).
- Capilla, José E., Rodriguez Arevalo, J., Castaño, S., Castaño, Díaz Teijeiro, M.F., Sanchez, Rut and Heredia, J. (2012). Mapping Oxygen-18 in Meteoric Precipitation over Peninsular Spain using Geostatistical Tools. Proceedings of geoEnv2012 conference: IX Conference on Geostatistics for Environmental Applications, Valencia, Sep 2012.
- Chirivella, V., Capilla, José E. and Perez, M. A. (2012). Regional Impacts of Climate Change on Water Resources: the Jucar Basin, Spain. International Environmental Modelling and Software Society (iEMSS), 2012 International Congress on Environmental Modelling and Software, Managing Resources of a Limited Planet, Sixth Biennial Meeting, Leipzig, Germany, R. Seppelt, A.A. Voinov, S. Lange, D. Bankamp (Eds.); <http://www.iemss.org/society/index.php/iemss-2012-proceedings>.
- Chirivella, V. and Capilla, José E. (2010). Recapitulación de la metodología y resultados de los escenarios climáticos futuros y su impacto en los recursos hídricos: el caso de la Comunidad Valenciana (España). Ingeniería del Agua, Vol. 17, No 4, Diciembre 2010.
- Llopis-Albert, C., Capilla, J. E. (2010). Stochastic simulation of non-Gaussian conductivity fields with multiple statistical populations in a 3D fractured rock medium. American Society of Civil Engineers (ASCE). Journal of Hydrologic Engineering (ISSN: 1084-0699). Vo. 15, No. 7, DOI: 10.1061/(ASCE)HE.1943-5584.0000214
- Llopis-Albert, C., Capilla, J. E. (2010). Stochastic inverse modelling of hydraulic conductivity fields taking into account independent stochastic structures: A 3D case study. Journal of Hydrology 391 (2010) 277–288. doi:10.1016/j.jhydrol.2010.07.028
- Capilla, J. E. and Llopis-Albert (2009). Gradual Conditioning of Non-Gaussian Transmissivity Fields to Flow and Mass Transport Data. 1 Theory. Journal of Hydrology, 371 (2009), pp. 66-74; DOI: 10.1016/j.jhydrol.2009.03.015
- Llopis-Albert and Capilla (2009). Gradual Conditioning of Non-Gaussian Transmissivity Fields to Flow and Mass Transport Data. 2 Demonstration on a Synthetic Aquifer. Journal of Hydrology, 371 (2009), pp. 66-74; DOI: 10.1016/j.jhydrol.2009.03.015
- Llopis-Albert and Capilla (2009). Gradual Conditioning of Non-Gaussian Transmissivity Fields to Flow and Mass Transport Data. 3 Application to the Macrodispersion Experiment (MADE-2) site, on Columbus Air Force Base in Mississippi (USA). Journal of Hydrology 371 (2009), pp. 75-84; DOI: 10.1016/j.jhydrol.2009.03.016
- Capilla, J. E., Pulido, D., Sahuquillo, A. and Andreu, J. (2009). Solving the steady state groundwater flow equation for finite linear aquifers using a Generalized Fourier Series approach in two-dimensional domains. International Journal for Numerical Methods in Engineering, DOI: 10.1002/nme.2552.
- Sánchez, I., López Chacón, L. Capilla, Jose E. (2008). Investigación del flujo y transporte mediante experimentación a escala intermedia. Ingeniería del Agua, Vol. 15, No. 3, pp 147-162.
- Llopis-Albert and Capilla (2008). A New Approach for the Stochastic Inversion of Flow and Transport data: Application to the Macrodispersion Experiment (MADE-2) site. International Conference ModelCARE, Calibration and Reliability in Groundwater Modelling: Credibility of Modelling. IAHS Publ. 320.
- Capilla, J., Martinez Cortina, L., Sahuquillo, A. y Sanchez-Vila, X. (Eds), (2005). Intensive Use of Groundwater: Challenges and Opportunities. Selected papers in Hydrogeology. International Association of Hydrogeologist – IAH.
- Capilla, Jose E. y Gómez-Hernández, J.J. (Eds.) (2003). Special Issue "Stochastic Inversion in Hydrogeology" Journal of Hydrology, Vol. 281 (4).
- Capilla, José E., Gómez, J.J. (2003). *Preface*, Special Issue on Stochastic Inversion in Hydrogeology, Journal of Hydrology, Vol. 281 (4), pp. 249-250.
- Capilla, J., Rodrigo, J. y Gomez-Hernandez, J. (2003). Transporte de masa en medio fracturado: impacto del modelo estocástico de conductividad en las fracturas (Mass Transport in Fractured Media: Impact of the Stochastic Model of Hydraulic Conductivity). Bulletin of the Spanish Geological Survey (Boletín geológico y Minero, Vol 114, Nr 3, pp 279 – 286).
- Capilla et al. (2002). *Water resources management of an overexploited aquifer. The Adra – Campo de Dalías system, Almería, Spain. Symposium on Intensive Use of Groundwater: Challenges and opportunities (SINEX)*.
- Capilla, J.E. (2002). *A Mixed Lagrangian-Eulerian Approach for the Coupled Inversion of the Flow and Mass Transport Equations in Fractured Media*. Annual Conference of the International Association for Mathematical Geology. International Association for Mathematical Geology - Freie Universität Berlin - Deutsche Geologische Gesellschaft, Berlin (Germany), September 2002.
- Capilla, J.E. et al. (2001). *Stochastic Inverse Modeling of non-Gaussian hydraulic conductivity fields*. AGU 2001 Spring

Meeting. American Geophysical Union. Supplement to Eos, Transactions, American Geophysical Union, Vol. 82, No. 20, May 15, 2001. Boston, Massachusetts, United States.

- Capilla, José E. et al. (2000). *Stochastic Inverse Problems in Groundwater Modeling*, Eighth International Conference on Hydraulic Engineering Software, in "Hydraulic Engineering Software VIII", W.R. Blain y C.A. Brebbia (Eds.), WIT Press, p 295-304.

- Capilla, José E., Rodrigo, J. and Gómez J.J. (1999). Simulation of non-gaussian transmissivity fields honoring piezometric data and integrating soft and secondary information. *Mathematical Geology*, vol.31, No. 7, p. 907-927.

- Samper, J., Sahuquillo, A., Capilla, José E. y Gómez-Hernández, J.J. (Eds) (1999). *La Contaminación de las Aguas Subterráneas: Un problema pendiente (Groundwater pollution: a pending issue)*. International Association of Hydrogeologist – Spanish Geological Survey (Instituto Tecnológico y Geominero de España).

- Capilla, José E., J. J. Gómez-Hernández and Andrés Sahuquillo (1999). *Stochastic analysis of radionuclides travel times in the Culebra formation at the Waste Isolation Pilot Plant (WIPP), in New Mexico (U.S.A.)*. Empresa Nacional de Residuos Radioactivos (ENRESA), 1999.

- Hendricks Franssen, H.J.W.M., Gómez-Hernández, Capilla, J.E. and Sahuquillo, A. (1999). Joint Simulation of Transmissivity and Storativity Fields Conditional to Hydraulic Head Data. *Advances in Water Resources*, , 23 (1) 1999, p. 1-13.

- Wen, Xian-Huan, Capilla, J. E., Deutsch, C., Gómez, J.J. and Cullick, A.S. (1999). SSC: A FORTRAN Program to Create Permeability Fields that Honor Single-Phase Flow Rate and Pressure Data. *Computers and Geosciences*, v. 25 (1999), no. 3, pp. 217-230.

- Capilla, J. E., Rodrigo, J. and Gómez, J.(1998). Worth of Secondary Data Compared to Piezometric Data for the Probabilistic Assessment of Radionuclide Migration. *Stoch. Hydro. and Hy.*, 12(3), pp. 171-190.

- Capilla, José E., Gómez-Hernández, J. J. and Sahuquillo, A. (1998). Stochastic Simulation of Transmissivity Fields Conditional to Both Transmissivity and Piezometric data, 3. Application to the Culebra formation at the Waste Isolation Pilot Plant (WIPP), in New Mexico (U.S.A.). *Journal of Hydrology*, 207 (3-4) pp. 254-269.

- Gómez-Hernández, J. J. and Sahuquillo, A. and Capilla, José E. (1997). Stochastic Simulation of Transmissivity Fields Conditional to Both Transmissivity and Piezometric data, 1. Theory. *Journal of Hydrology*, 203, pp 162-174.

- Capilla, José E., Gómez-Hernández, J. J. and Sahuquillo, A. (1997). Stochastic Simulation of Transmissivity Fields Conditional to Both Transmissivity and Piezometric data, 2. Demonstration on a Synthetic Aquifer. *Journal of Hydrology*, 203, pp 175-188.

- Wen, Xian-Huan, J. J. Gómez-Hernández, José E. Capilla and A. Sahuquillo (1996). Significance of Conditioning to Piezometric Head Data for Predictions of Mass Transport in Groundwater Modelling. *Mathematical Geology*, 28(7), pp 951-968.

- Andreu, J., José E. Capilla and E. Sanchis (1996). Generalized decision support system for water resources planning and management including conjunctive use. *Journal of Hydrology*, 177, pp. 269-291.

- Andreu, J., José E. Capilla y F. Cabezas (1994). Los sistemas soporte de decisión en la planificación y gestión racionales de los recursos hídricos. *Ingeniería del agua*, vol. 1, nº 2.

- Capilla, José E., Paredes, J., Andreu, J. and Sahuquillo, A. (1998). Improvement of performance indicators due to conjunctive use of surface and groundwater in complex water resources systems. *XXIII General Assembly of the European Geophysical Society*. Nice, April, 1998.

- Capilla, José E. , J. Andreu , A. Solera y S. Sánchez (1998). Risk based water Resources Management. *Seventh International Conference on Hydraulic Engineering Software - HYDROSOFT 98*. September 1998, Como, Italy. Wessex Institute of Technology, Southampton, U. K.

- Cassiraga, E. F., H. W. M. Hendricks, J.J. Gómez-Hernández, A. Sahuquillo y J.E. Capilla (1998). Inverse Modeling of transient groundwater flow in a 3D fractured Medium. *II European Conference on Geostatistics for Environmental Applications, geoENV'98*. Universidad Politécnica de Valencia. November 1998.

- Capilla, José E., J.J. Gómez-Hernández and A. Sahuquillo (1998). Simulation of Nongaussian Transmissivity Fields Conditional to Both Transmissivity and Piezometric Data. *International Conference on "Modelling Permeable Rocks: Advances in the quantification for petroleum and groundwater applications"*. Institute of Mathematics and its Applications, Essex, United Kingdom. 23-25 March 1998, Churchill College, Cambridge, UK.

- Capilla, José E. and J. Rodrigo (1997). Geostatistical Structure of Simulated Transmissivity Fields that Honor Piezometric Data. *Annual Conference of the International Association for Mathematical Geology (IAMG)*, 18-20 September, Barcelona, Spain.

- Hendricks Franssen, H.J., J.J. Gómez-Hernández, A. Sahuquillo and José E. Capilla (1997). Stochastic inverse

modeling of transient groundwater flow. *Annual Conference of the International Association for Mathematical Geology (IAMG)*, 18-20 September, Barcelona, Spain. International Association for Mathematical Geology (IAMG).

- Capilla, José E., J. Rodrigo, and J.J. Gómez-Hernández (1997). Contribution of Secondary Data and Piezometric Measurements to the Probabilistic Assessment of Radionuclides Migration. In *XXVIIIth Congress of the International Association for Hydraulic Research (IAHR)*, 10-15 August, San Francisco, U.S.A.
- Gomez-Hernández, J.J., José E. Capilla and Andrés Sahuquillo (1996). Inverse conditional simulation. *Fifth International Geostatistics Congress*, 22-27 Sept., Wollongong. University of Wollongong, Australia.
- Capilla, José E. and J. Andreu (1996). AQUIVAL: A GUI for groundwater modelling incorporated into the simulation of complex water resources systems. *Sixth International Conference on Hydraulic Engineering Software*, 10-12 September, Penang, Malaysia. Wessex Institute of Technology, Southampton, U.K.
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I declare that the information contained in this Curriculum Vita is truthful.

Signature

José E. Capilla Romá (April/2017)