

## **Juan Carlos GIMENEZ SAL**

CITIZENSHIP: Argentinean.  
DATE OF BIRTH: July 30 1942.  
PLACE: Buenos Aires  
CIVIL STATUS: Married, 2 children.  
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### **EDUCATION**

- Civil engineer, hydraulics area, Universidad de Buenos Aires, Facultad de Ingeniería. 1965.
- Languages: Spanish, English, French, Italian.

### **GRADUATE DEGREE COURSES**

- " Master in Numerical Simulation and Control" . Universidad de Buenos Aires, Facultad de Ingeniería. Doctorate Department. 2003 to date
- " Operations Research" Approved the Second Course of the Degree (on a total of three).
- DIGID, Investigations Department of the National Army Corp. 1974.
- " Introduction to digital computers", in the Calculus Center of the Universidad de Buenos Aires, 1965. Later on, courses of Fortran, Basic, Turbo Basic, C.

### **REGISTRATION**

Professional Civil Engineer, Argentina . Matr. 7033

### **PROFESSIONAL INTERESTS**

Water Resources Management; Water Resources Systems; Flood Risk Assessment; Rainfall-Runoff Modeling, Mathematical Models of Natural Resources Systems

### **PROFESSIONAL EXPERIENCE**

- July 2005 – September 2006. Team Leader of the IADB Program " Development of Water Resources in the Norte Grande of Argentina. Provinces of Chaco, Catamarca and Santiago del Estero".

- March-April 2006- Expert in Water Resources for chapter "Understanding the potential impact of Climate Change and Variability in Latin America" contribution to the Stern Review of the Economics of Climate Change. HM Treasury. UK.

- 2004-2006- Lead Author for Chapter 13 Latin America of the Working Group II contribution to the AR4 of the IPCC.

- February 2002- april 2003. Team Leader of the Project " Mejora de la Infraestructura y la Gestión de Drenaje Urbano" . U\$S 993.000 Grant Fund Gobierno de Japón PHRD-TF 025819 - BIRF management. Urban drainage Diagnosis for Argentina. Environmental impact assessment , case study in 15 cities. Development of " Plan Maestro" (Master Plan) in 7 cities and writing of a "Manual of Best Practices for the development of Master Plans for

Urban Drainage Systems”. This Manual includes risk analyses assessment, for the study and selection of reference cases.

-February -June 2002. Consultant for the study “Impact of Climate Change and Extreme Events on the Hydrometeorological Conditions of the Pampas ´Region. Analysis of potential socio-economic effects”. With Dr. Osvaldo Canziani, Co-President del IPCC-Intergovernmental Panel on Climate Change –WMO- Geneve- Suiza. For EPA-Environmental Protection Agency de EEUU.

- Setiembre - Noviembre de 1999. World Bank. Served as an expert to produce the Terms of Reference for the Consulting Services for the “Plan de emergencias de inundaciones” for the Republica del Paraguay, BIRF 3774 – PAY 3775 – PA ” Desarrollo del sector privado y emergencia de El Niño”. Unidad Técnica Ejecutora de Proyectos (UTEP). Ministerio del Interior. República del Paraguay.

- July 1999 . World Bank. Member of a panel of experts to develop a report on the case study on risk assessment, disaster management and mitigation concerning the floods of the Greater Buenos Aires, Argentina, 1999.

- Junio – setiembre 1999. World Bank. Served as an expert in the Report “ Gestión de los Recursos Hídricos de Argentina. Elementos de Política para su Desarrollo Sustentable en el siglo XXI.” For the “Oficina Regional de América Latina y Caribe. Unidad Departamental de Argentina y los Grupos de Finanzas, Sector Privado y Infraestructura, y Medio Ambiente y Desarrollo Social Sustentable”.

- November 1997. World Bank, Washington DC,. Served as a member of the Argentine expert panel to produce the Technical report for the US\$ 42 million El Niño Emergency Project - 4273-IBRD-AR to control ENSO episodes in water resources in Argentina Northwestern region.

- October 1997. World Bank Mission, Lima, Peru Served as a member of an expert panel to develop the Technical Annex of the Loan and Project Summary. El Niño Emergency Project for Perú.

- 1997-1998. Secretaría de Recursos Naturales y Desarrollo Sostenible. Served as Expert consultant in Basin Management for the “Componente Manejo de Cuencas Hidrográficas”. In charge of the application of the ELECTRE II Multicriteria Methodology to the San Roque Lake Basin of Córdoba province and the Upper Tunuyán Basin in Mendoza province

- Julio-December 1995. COREBE. Comisión del Río Bermejo. Served as Expert in charge of the mathematical models for selection and evaluation of hydroelectric works (MIT-TAMS type) and of the simulation model HEC-5, in the “Estudio de factibilidad para el aprovechamiento de los recursos hídricos de la Alta Cuenca del río Bermejo y del río Grande de Tarija. Fase I”

- 1992-2001. Sub-Unidad Central de Coordinación para la Emergencia (SUCCE), Ministerio del Interior, Argentina, Served as Expert Team Leader in the planning, evaluation and construction of flood control works ( diversions, levees, stormwater systems, etc) for a total amount of 270 million US\$ in the Paraná, Paraguay and Uruguay basins as part of a World Bank loan to Argentina. Coordinator for the development of the terms of reference and technical specifications for a project to upgrade the hydrologic forecasting system for the Paraná, Paraguay and Uruguay basins.

- 1989 – 1992. AGOSBA- Public Water and wastewater Utility of the Pcia. of Buenos Aires Served as Technical Consultant. In charge of : Feasibility and availability analysis of the 2<sup>nd</sup> Aqueduct for La Plata City - Reliability analysis of the Paso de las Piedras Dam. Bahía Blanca
- 1986 – 1989. HIDROSUD Argentina Consulting Engineers. Director. Specialized in Sanitary and Hydraulic Engineering. Among others, the firm was in charge of the design of the Southwestern Buenos Aires Wastewater treatment Plant and the Big Aqueducts System.
- 1985 – 1989. HIDRENED-HIDROSERVICE Consultants Garabí Hydroelectric Project.. Head of Hydraulic and Hydrological Area.
- 1984-1986. Director of the Program “Buenos Aires Urban Basins Pilot Study”. Facultad de Ingeniería and Obras Sanitarias de la Nación Agreement. Application to two Subbasins of the Arroyo Maldonado of the URBIS urban drainage model.
- 1983-1986. Secretaría de Recursos Hídricos. Responsible for Plan of Handling of Floods. Coordinator of the recently created COAH - Operative Centers of Alert Hydrological. Agreement Nation-Pcia. of Córdoba for Complex White Stones-Anisacate.
- 1983. Served as Coordinator of the Working Group for the Multipurpose Assessment of the Paraná Medio Project, for the Water and Electric power Agency “Agua y Energía”.
- 1975 – 83. Entidad Binacional Yacyretá. Team leader of the Hydraulic Departement - Dirección Técnica : In charge of supervisory responsibilities : hydraulic designs, hydraulic models of the spillway and navigation locks and Principal Civil Works. Peer reviewer of the “Estudio de Atenuación de los efectos depredadores de las inundaciones producidas por las crecidas extraordinarias del río Paraná “.
- 1973 –1974 . Secretaría de Energía  
Served as Coordinator of the Electric equipment Model 1975-1990.  
Member of the Argentinean delegation in the First Meeting of the Argentinean-Soviet Economic Commission, participating in the hydroelectrical issues (Paraná Medio Project) and scientific exchange.  
Coordinator of the Seminar “The application of the optimal control to the electrical systems planning” in charge of Dr. Alain Breton, EDF, France, Service d'Etudes Economiques Générales.
- 1970 - 1974. Secretaría de Recursos Hídricos, Argentina.  
Counterpart Member of a working group for the water resources planning of the Colorado River Basin. The models and results of the MIT-Argentina Project were used in developing a Master Plan for the allocation of Colorado River water.  
A Master Plan was also formulated for the water resources planning of the Negro Basin with a major responsibility focusing on the hydrologic analysis of both systems through simulation models.  
Personal development of a mathematical model of hydroelectric equipment selection (similar to the Investissements ´85 of EdF).
- 1966-1970. Servicios Eléctricos del Gran Buenos Aires. Engineer of the Sección Estudios Económico-Comerciales..

1968-69.- Electricité of France, Six months stage in the Service d'Études Economiques Générales. Developing technical and economic planning models issues with Ings. Bessiere, Albouy and Lacoste.

- 1965 – 66. Obras Sanitarias de la Nación . Project Engineer. Design of water distribution networks of Orán (Salta), Villa María (Córdoba), structural calculation Villa María pumping station (Córdoba) and the Tarragona-Rufino ( Santa Fe) aqueduct.

## **EDUCATIONAL ACTIVITIES**

-2003 to date - Professor of “Analysis of Water Resources Systems”. CETA- Centro de Estudios Transdisciplinarios del Agua. Master en Gestión del Agua. Facultad de Veterinaria. UBA.

- 2002 to date - Professor of Applied Hydraulics and Water Resources Planning. Facultad de Ingeniería, UBA.

- 1983 to 2000 - Associate Professor of Applied Hydraulics in charge of Water Resources Planning . Facultad de Ingeniería, UBA.

- 1974 to 1990 - Academic Secretary of the Graduate School of Hydraulic Engineering. Facultad de Ingeniería, UBA.

- 1989 to 1993 - Professor of Hydrology and Hydraulic Works. Facultad de Ingeniería – Universidad Tecnológica Nacional. Regional Avellaneda.

- 1987 to 1989 - Professor of Applied Hydraulics- Facultad de Ingeniería – Universidad Tecnológica Nacional. Regional Buenos Aires

- 1973 to 1985 - Associate Professor of Applied Hydraulics. Universidad Católica Argentina

- 1976 to 1982 - Assistant Professor of Applied Hydraulics, Facultad de Ingeniería.UBA.

- 1974 –75.-.- Assistant Professor of Applied Hydraulics “ Hydroelectrical Power Plants” and “Hydraulic Projects Assessment”, Facultad de Ingeniería, UBA.

- 1970 –75.- Assistant Professor of Fluid Mechanics. Facultad de Ingeniería, UBA.

- 1962 –70.- Assistant of Physics I. Facultad de Ingeniería, UBA.

## **OTHER EDUCATIONAL ACTIVITIES. SHORT COURSES**

- “Análisis multicriterio en el planeamiento de los recursos hídricos” in the Departamento de Hidráulica of the Facultad de Ingeniería, UBA. 1998 to date.
- “ Teoría de la Decisión multicriterio en el planeamiento de cuencas hídricas y en la Gestión de problemas ambientales” en AIDIS. Asociación Argentina de Ingeniería Sanitaria y Ciencias del Ambiente. June 2000.
- “Proyecto de obras de manejo y control de las inundaciones urbanas” Departamento de Hidráulica de la Facultad de Ingeniería, UBA. 1996 to date.

- "Optimización de aprovechamientos Hidráulicos", Escuela de Ingeniería Hidráulica, 1982 to 1991.
- "El uso de modelos en el diseño hidráulico", Escuela de Ingeniería Hidráulica, 1977
- "Modelos aplicados al Proyecto Hidráulico", Escuela de Ingeniería Hidráulica, 1978.
- "Evaluación de aprovechamientos Hidráulicos", Escuela de Ingeniería Hidráulica, 1982 to 1990.

## **PUBLICATIONS**

- October 2003 - "El análisis multicriterio como método para la gestión sustentable de los recursos hídricos". With Ing. Bruno Ferrari Bono- XI Congreso Mundial del Agua IWRA. - Madrid Spain
- October 2003 - "Planeamiento y gestión del drenaje urbano – Medidas estructurales y no estructurales". With Ing. Ventura Bengoechea- XI Congreso Mundial del Agua. Madrid - Spain
- April 2003 - "Manual para el Diseño de Planes Maestros para la Mejora de la Infraestructura y la Gestión del Drenaje Urbano" . Coordinating Lead Author. Grant Fund Gobierno de Japón PHRD-TF 025819 - BIRF
- March 2002 – Impact of Climate Change and Extreme Events on the Hydrometeorological conditions of the Pampas´region. Analysis of socio-economic effects- With Dr Osvaldo F. Canziani
- 1999 - " Modelos borrosos y modelos neuronales. Su aplicación en el planeamiento de cuencas hídricas". Apuntes para la materia Planificación de los Recursos Hidráulicos. Facultad de Ingeniería, UBA.
- May 1999 – " Medidas Estructurales y No Estructurales para Mitigación y Control de las Inundaciones en el Area Metropolitana de Buenos Aires" . With Ings. Juan B. Valdés de Arizona (EEUU) y Gustavo Devoto. Seminario Inundaciones en el Gran Buenos Aires- BIRF-Facultad de Arquitectura
- October 1981 - "Minicentrales hidráulicas". With Ing. Hugo Schmidt - VIII Seminario de Grandes Obras Hidroeléctricas - Chaco - Argentina .
- 1978- "Teoría de modelos matemáticos para aprovechamiento de una cuenca hídrica". Apunte para curso "Modelos aplicados al Proyecto Hidráulico", 1978. With Ing. A.Vegh Villegas
- September 1976 - "Estudio del equipamiento argentino al año 2.000". With Ing. Jorge Serebrisky. Instituto de Economía y Legislación del Agua, - INCYTH-
- October 1975- "La aplicación de la teoría del control óptimo a la planificación de los grandes sistemas eléctricos". IV Seminario de Grandes Obras Hidroeléctricas - Misiones – Argentina

## **PROFESSIONAL SOCIETY MEMBERSHIPS**

**Centro Argentino de Ingenieros**, Member, 1965 - present  
Comisión de Recursos Hídricos, President, present

**AIDIS- Asociación Argentina de Ingeniería Sanitaria y Ciencias del Ambiente**, Member  
1989-present, División Hidrología y Drenaje Urbano, Director, present

**American Society of Civil Engineers**, Member, 1981-present  
Member, Technical Committee on Water Resources Systems, 1989-present