RESUME

Born on January 22, 1948 in Paris. To Italian emigrants. Italian citizen by blood. French citizen by soil. 3 children: Julien Giol born 1975, Charles Giol born 1979, Louise Balotte-Giol born 1998.

INITIAL EDUCATION AND ADVANCED TRAINING

- 1965: Baccalaureate series C Elementary Mathematics, Lycée d'Etat of 17-Royan. Languages studied: English and German
- 1966-1968: Preparatory classes for entrance examinations for the Grandes Ecoles, Advanced and Specialized Mathematics, Lycées Henri IV and Camille Guérin of 86-Poitiers
- 1969-1971: Engineering School, Grande Ecole: ESTP, 57 Bd St-Germain, Paris
- 1971: Graduate in "Civil Engineering", academic degree, year of 71 (pdf)
- 1972-1973: Annual cycle of Sciences and Techniques for Building and Construction Regulations, at the Centre Scientifique et Technique du Bâtiment (CSTB), Av. du Recteur Poincaré, Paris
- 1979-1980: "Heat and mass transfers" certificate, University of Bordeaux 1
- 1986-1988: Evening classes in English and Italian, Maison de l'Europe, Bordeaux
- 1988-1989: "Management Techniques" annual cycle, Institut Français de Gestion, Bordeaux
- 1989-1990: Masters of "Computer-Assisted Design/Computer-Assisted Manufacturing" (CAD/CAM, Catia) , Ecole Nationale Supérieure des Arts et Métiers (ENSAM), Bordeaux
- 1972-1999: Continuing Professional Education: Physical measurements, Data analysis, Heat exchanges, Acoustics, Energy savings, Thermal solar energy, Photovoltaic solar energy, Computerized structures calculation, Finite elements calculation, Various computer languages, Expert-systems, Micro-processing, Electronic data interchange (EDI), Telemetering and Teleprocessing, Smart houses and Domotics, Smart buildings and Building automation, Mainte nance of Electric Vehicles

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SALARIED EMPLOYMENT

1972-1990: IN CHARGE OF THE CONSTRUCTION-BUILDING DEPARTMENT of the South-West Centre d'Etudes Techniques de l'Equipement (C.E.T.E.) in Bordeaux:

Creation and Management of the Department (intervention area: 20 departments of Greater Southwest France)

Types of activity:

- measuring performances of buildings, inspections, audits
- experimentation of technical innovations / technical-economic assessments
- studies and research
- technical assistance and consulting
- coordination, training and information

Intervention scope: sciences and techniques of building, energy control, information technology and specialized software, physical measurements

Personal responsibilities:

- directing and managing the department, leading the team, technical management, customer relations, internal training and professional evolution, administrative and accounting monitoring direction
- experimentation of technical innovations, assessments, external information and activities, training, papers for professional and scientific conferences

1991-2000: IN CHARGE OF THE CONSTRUCTION TECHNICAL POLICY AND THE CONSTRUCTION REGIONAL INNOVATION PILOT SECTOR FOR AQUITAINE REGION, Aquitaine Regional Engineering Management in Bordeaux

- Definition of the **regional technical policy of technical and organizational innovation** concerning housing-building
 - Mounting and following experimental and demonstration operations of the Regional

Innovation Pilot Sector (SPIR)

- Technical research activities management of the regional professional Construction milieu : Project owners, Prime contractors, Companies etc.
- Launching **progress procedures for the regional Public Works sector**: Quality Management, Protection of the Environment , Computerized data exchanges (EDI-BTP), etc.
 - Inter-professional exchanges, information and communication, training

OTHER PROFESSIONAL ACTIVITIES 1975-1985: THERMAL AND PHOTOVOLTAIC SOLAR ENERGY

- Founding Vice-President of the Aquitaine Solar Association, Bordeaux (**Goal pursued: Innovation, High Technology**)
 - Promotion of solar energy applications in housing and services sectors
- Technological watch, information for the public, training professionals, newsletter, exhibits, seminars, experimentation, communications

Personal achievement in 1985: 20-apartment building with solar heating and solar hot water in Bordeaux-Blanquefort (best measured French yield in the field) (pdf)

1986-1989: SMART HOUSES, DOMOTICS BUILDING AUTOMATION

- Founding Vice-President of the Aquitaine Houses of the Future Association (**Goal pursued: Innovation, High Technology**)

- Promotion of domotic systems for smart houses and smart buildings (electronics applied to buildings for comfort, safety, communications, savings at use, teleprocessing, networks, etc.)
- Technological watch, information for the public, training professionals, newsletter, exhibits, seminars, experimentation, communications

Personal achievement in 1989: 27 single-family homes grouped in Bordeaux-Bruges equipped with upgradeable modular domotics with pre-wiring (a European First)

1986-1991: VARIOUS INVENTIONS (PROTOTYPES, PATENTS, MODELS, SOFTWARE)

- Compact solar water heater with thermosiphon and concentration (prototype and patent)
- Sunwater and Rentcalc, software for technical and economical solar hot water calculations
- Light display device with integrated photovoltaic generator (patent)
- Two-mode instantaneous liquid cooling device (patent)
- Spa in a swimming-pool (patent pending)
- Systematically timed data processing (patent pending)

1990-1991: SPATARU & ASSOCIATES – ADEPT GROUP, LOS ANGELES, CALIFORNIA(sabbatical year, personally financed)

- Various studies in the fields of Solar Energy and Electric Vehicles

1990-2016: ACTIVITIES CONCERNING ELECTRIC VEHICLES 1990-1991: United States

- **Study of American activities concerning Electric Vehicles,** notably in California and Arizona : regulations, demonstrations, meetings, competitions, amateur cars, incentives,

documentation

- Detailed technical study of university Sunracers (electric racing vehicles with solar cells) and the "General Motors' SunRaycer" from

1987, visits to universities, sunracers' races

1992-1993: France

- Papers and Conferences on Sunracers in various French Engineering Schools and Universities
 - Reporting on the American university "GM SunRayce" in June 1993
 - Reporting on the Australian "World Solar Challenge" in October 1993
 - Study of French activities concerning Electric Vehicles
- Participation in EDF Electric Company **training periods "Driving Electric Vehicles" and "Maintenance of EV"**, **La Rochelle**
- Elaboration of a "Regional Centre For Demonstration and Diffusion of Electric Vehicles" project, for the Regional Agency Aquitainergie
 - Papers and Conferences on Electric Vehicles for the Agency Aquitainergie

1993-1996: PERSONAL ACHIEVEMENT : SUNRACER " HELIOTROPE " (France and Australia)

Goal pursued: Innovation, High Technology

- Design and construction of the "Heliotrope Sunracer", for a first French participation in the World Solar Challenge Darwin-Adelaide, 3000 Km race, in October 1996:
 - 3rd place in the category "Lead-acid batteries" (out of 27 competitors)
 - 21st place all-round (47 starters)

2005 : Participation in EVS 21, an annual World Electric Vehicle Convention in Monaco, April 2-6 2005 : sunracer Heliotrope displayed on the SMEG Gold Sponsor's booth

2006-2009: PERSONAL ACHIEVEMENT: SUNRACER "Formula SolarE"

- Design and Construction of the Sunracer "Formula SolarE, especially dedicated to fast races on circuits and road-rallies (such as FIA Alternative Energies Cup' events)
 - 2009 Solar Event / Solar Challenge / winner

2012-2016: "Formula Giol" - "2- Seater Sport Leisure EV"

- Design and Construction of a Special Electric Vehicle's Prototype
- 2016 : Formula Giol Concept is displayed at the PARIS AUTO SHOW

2001-2016: PRIVATE SALES AND REAL ESTATE ACTIVITIES

- Collaboration in Château Fonrazade, AOC Saint-Emilion Grand Cru (Family property), sales activities
 - 2005: Creation of the WEB-site: www.chateau-fonrazade.com
- Reconstruction and layout of family real estate properties (acting as : project owner + general contractor + superintendent)

PERSONAL CENTERS OF INTEREST AUTOMOBILE: Technical, Racing, Antique cars

1975 - 1976: racing - "Formule Bleue" single-seaters

1993 – 1996: designing and building the electric Heliotrope Sunracer

2001 - 2004: restoring antique cars

(Fulvia Rallye 1.6HF 1970; Citroën 5HP Trèfle 1925; Citroën C4 Torpédo 1930) "collection" of sports cars: Fulvia Rallye 1970, Porsche 911 SC 1983, Lancia Delta Intégrale Evo II 1994

2006 - 2009: designing and building the electric Formula SolarE Sunracer

2012 - 2018 : designing and building the \ll Formula Giol \gg small series recreational EV's prototype

LITERATURE: Autobiographical, biographical and historic works ART: Mosaics and Hard Stones