

1. **Last name:** CIOCAN
2. **First name:** Gabriel Dan
3. **Date and place of birth:** 23/08/1967, Bucharest
4. **Citizenship:** Romanian and French
5. **Education:**



Institution	Period	Degree or diplomas
Université de Lille 1, France	2014	Accreditation to supervise research - HDR
International Project Management Association, Switzerland	2017 2012 2007	Certification IPMA - level B – Project manager of complex projects
Institut Suisse pour la Formation des Chef d'Entreprises - Switzerland	2006-2007	Project Manager diploma, level II
Institut National Polytechnique de Grenoble, France	1994-1998	Phd Fluid Mechanics
Institut National Polytechnique de Grenoble, France	1993-1994	Diplôme d'Etudes Approfondies - DEA
Civil Engineering University of Bucharest, Romania	1986-1991	Engineer Diploma - Master

6. Actual position:

Project Director
 GE Renewable Energy
 82 Avenue Leon Blum, 38041 Grenoble Cedex 09
 France
gabriel.ciocan@ge.com

7. Professional experience:

Date	Project/Company	Position/Responsibilities
2015 - present	GE Renewable Energy, France Management of projects for building new turbines or rehabilitation of existing turbines (from signing the contract to operation), Francis, variable speed. pump-turbines, Pelton turbines, two stages pumps, from 35 to 400 MW, 4 ongoing projects (Israel, Malaysia, France, Haiti), 5 finalized (Pakistan, China, Europe, Malaysia, Vietnam) with values between 16 and 200 M€	Project Director / Project Manager
2007 – 2015	ALSTOM Hydro, France Management of projects for building new turbines or rehabilitation of existing turbines (from signing the contract to operation), Francis, variable speed pump-turbines, two stages pumps, from 35 to 400 MW, 6 projects finalized (Algeria, Italy, Zambia, Malaysia, Switzerland, Venezuela, Iran), with values between 16 and 200 M€	Project Manager / Project Director
2007 - 2019	Université Laval, Québec, Canada constituted from: Hydro Québec, EDELCA, ALSTOM, Andritz VATECH, Voith Siemens, Natural Resources Canada and Université Laval Canada. Co-director of 2 PhD Thesis at Université Laval	Coordinator of the Scientific Committee and member of Management Committee of "Consortium de

		recherche en machines hydrauliques"
2006-2007	Research contracts with industry and universities	Consulting engineer
2003-2006	Ecole Polytechnique Fédérale de Lausanne, Laboratoire de Machines Hydrauliques – Switzerland Two research projects in consortium with 4 turbine manufacturers: ALSTOM, General Electric, VATECH, Voith Siemens and the European leader of energy production, transport and commercialization, EDF 1. HYDRODYNA -"Harnessing the Dynamic Behavior of Hydro Turbines, Storage Pumps and Pump-Turbines", EUREKA n° 3246, 4,3 MCHF 2. FLINDT II, "Flow Investigation in Draft Tubes", EUREKA n° 1625, 3 MCHF Co-director of 2 PhD Thesis at EPFL	Coordinator and responsible of Research projects
1998 - 2002	Ecole Polytechnique Fédérale de Lausanne, Laboratoire de Machines Hydrauliques – Switzerland European project FLINDT I, "Flow Investigations in Draft Tubes I", EUREKA no. 1625	Responsible of the experimental part of research projects
1994 - 1998	INPG - Laboratoire des Ecoulements Géophysiques et Industriels de Grenoble, Equipe Turbomachines – France Project "Réseau interdisciplinaire sur les transports" la Région Rhône-Alpes, with the subject "Contribution à l'analyse des écoulements 3D complexes en turbomachines"	Researcher
1992 - 1993	Association pour le Développement de la Recherche - Centre de Recherche et d'Essais de Machines Hydrauliques de Grenoble – France The study of the flow inside hydraulic machines based on laser measurement	Research engineer
1992	Civil Engineering University of Bucharest Applied Hydraulics Faculty Research grants in the area of underground hydraulics and civil engineering	Researcher
1991-1992	Hydroconstructia - S. A. Bucharest The study of the ground water pollution Elaboration of 5 projects and internal and external offers	Tender engineer

8. Academic titles: PhD, HDR

9. Languages: Romanian, French, English, Italian

10. Publications:

- 4 International patents
 - 42 ISI publications <http://www.researcherid.com/rid/B-9280-2011>
 - 15 BDI publications
 - 35 Conference papers with peer review
 - 6 Books/Books Chapters
- Google Scholar H index 20**
Scopus H index 13
Web of Science H index 11

11. Member of professional associations:

- Soci t  Suisse de Management de Projet - *Member*
- La Houille Blanche, Associations des ing nieurs dipl m s de l'INPG – *Member*
- Asocia ia Inginerilor Hidrotehnicieni din Romania – *Member*

12. Specializations and qualifications:

- Certification IPMA – International Project Management Association, level B – Chief of complex projects – Switzerland
- Institut Suisse pour la Formation des Chef d'Entreprises - Switzerland

13. Experience (including managerial experience) in national/international program/projects:

Date / Organization	Projects	Position
2021-ongoing GE Hydro	Peligre Project - 3 Francis turbines 18MW, Haiti Customer: Electricit� d'Haiti Subject: 3 Francis turbines, 18 MW Description of the subject of delivery: new turbines, Generators, governing, BOP, Control System, hydromechanical.	Project Director
2021-ongoing GE Hydro	AVR Refurbishment and spares delivery BAKUN hydraulic power-plant - 4 vertical Francis turbines 330 MW, Malaysia Customer: Sarawak Energy Subject: 12 Francis turbines, 155 MW Description of the subject of delivery: AVR and governing system refurbishment, governing and CS spares.	Project Director
2021-ongoing GE Hydro	Gavet Project - 2 Francis turbines 50MW, France Customer: Electricit� de France Subject: 2 Francis turbines, 50 MW Description of the subject of delivery: new turbines, governing, hydromechanical.	Project Director
2017-ongoing GE Hydro	Gilboa Project - 2 pump-turbines 150MW, Israel Customer: Electra Solel Bone – Pumped Storage Gilboa Subject: 2 pump turbines, 150 MW Description of the subject of delivery: new pump-turbines, governing, hydromechanical, SCADA, BOP.	Project Director
2016-2019 GE Hydro	Refurbishment Mangla Project - 6 vertical Francis turbines 155 MW, Pakistan Customer: The Pakistan Water and Power Development Authority Subject: 6 Francis turbines, 155 MW Description of the subject of delivery: refurbishment of turbines and governing,	Project Manager
2015-2020 GE Hydro	Anti-corrosive Protection BAKUN hydraulic power-plant - 4 vertical Francis turbines 330 MW, Malaysia Customer: Sarawak Energy Subject: Anti corrosive Protection BAKUN hydraulic power-plant - 4 vertical Francis turbines 330 MW Description of the subject of delivery: Design, manufacturing,	Project Director

	transport, commissioning and warranty for turbine components, governing components and upgrade of the control system	
2016- 2020 GE Hydro	Da Nhim Extension power plant, 1 Pelton turbine 80 MW, Vietnam Customer: Da Nhim Ham Thuan Da Mi Hydro Power Joint Stock Company Subject: 1 Pelton turbine, 80 MW Description of the subject of delivery: supply of turbine, generator and governing equipment	Project Manager
2015-2017 GE Hydro	Construction Hei Mi Feng Hydraulik power plant 2 pump-turbines, 300 MW, China Customer: DFEM / GE Hydro China Subject: 2 pump-turbines, 300 MW Description of the subject of delivery: Warranty for turbine, governing and hydromechanical equipment	Project Manager
2015-2017 GE Hydro	Rescue – manufacturing of distributors, runners, spiral case & MIV – 42 components, 8 projects, Spain, Italy Customer: GE Management Subject: Follow-up of manufacturing of distributors, runners, spiral case & MIV in Spain and Italy Description of the subject of delivery: – 42 components (distributors, spherical valves, spiral case) for 8 projects,	Project Director
2008-2015 Alstom Hydro	Construction of LINTHAL LIMMERN hydraulic power plant – 4 pump turbines, 250 MW, variable speed, Switzerland Customer: AXPO Subject: 4 pump turbines, 250 MW, variable speed Description of the subject of delivery: Design, manufacturing, transport, installation and commissioning for turbine, governing and hydromechanical equipment	Project Manager
2007-2015 Alstom Hydro	Construction of SEYMAREH hydraulic power plant, 3 vertical Francis Turbines 165 MW, Iran Customer: FARAB Subject: 3 vertical Francis Turbines 165 MW, Description of the subject of delivery: Design, manufacturing, installation, transport, commissioning, warranty for turbine and governing	Project Manager
2011-2015 Alstom Hydro	Construction of BAKUN hydraulic power plant, 4 vertical Francis turbines 330 MW, Malaysia Customer: SARAWAK Hidro Subject: 4 vertical Francis turbines 330 MW Description of the subject of delivery: Design, manufacturing, transport, installation, commissioning and warranty for control command, generator, turbine, governing and hydromechanical equipment	Project Director
2008-2010 Alstom Hydro	Refurbishment of KARIBA NORTH hydraulic power plant, 4 vertical Francis turbines 156 MW, Zambia Customer: ZESCO Subject: 4 vertical Francis Turbines 155 MW, Description of the subject of delivery: Refurbishment of turbines & governor	Project Manager
2008-2009	Refurbishment of SALTO hydraulic power plant – 2 horizontal Francis Turbines 34 MW, Italy	Project Director

Alstom Hydro	Customer: ENDESA Subject: 2 horizontal Francis Turbines 35 MW, Description of the subject of delivery: refurbishment of turbines, generator, governing, control command and BOP	
2007-2008 Alstom Hydro	Construction of pumping station BENI HAROUN, 2 stages pumps 90 MW, Algeria Customer: Agence Nationale des Barrages Subject: 2 bi-stage pumps 90 MW Description of the subject of delivery: Design, manufacturing, installation, transport, commissioning, warranty for pump and control command	Project Manager
2007-2016 Laval University	Consortium of research in Hydraulic Machines, Canada	Coordinator of the Scientific Committee Member of Management Committee
2012-2016 Laval University	Project RDC, BulbT, Canada	Coordinator of the Scientific Committee Member of Management Committee
2007-2011 Laval University	Project RDC, AxialT, Canada	Coordinator of the Scientific Committee Member of Management Committee
2005-2006 EUREKA n° 3246, EPFL	<i>HYDRODYNA</i> -"Harnessing the Dynamic Behavior of Hydro Turbines, Storage Pumps and Pump-Turbines", Switzerland	Coordinator of the Scientific Committee Member of Management Committee
2003-2004 EUREKA n° 1625, EPFL	<i>FLINDT II</i> , "Flow Investigation in Draft Tubes", Switzerland	Coordinator of the Scientific Committee Member of Management Committee

I hereby state on my own responsibility that the data presented is accurate.

January 4th, 2023

Gabriel Dan CIOCAN

