Proposed position for the project: Project manager

Socioprofessional group: Engineer

NBC staff – www.nbcsarl.com





- 1. Last name: BREHM
- 2. First name(s): Nicolas
- **3.** Date of birth: October 24<sup>th</sup> 1970
- 4. Passport(s): French (05PK53642) and Dominican (pending)
- 5. Address: Dominican Republic Parque Las Terrenas, Las Terrenas CP39
- 6. Education: Water and Environment Technologist Engineer

College(s) / University	Diploma(s)
University of TOURS – 1998	Engineering degree in Aquatic Environments and River Corridors ( <i>DUS-IMACOF</i> )
University of NANCY I – 1993	Technologist Engineer degree in Continental Aquaculture and Aquariology Honors ( <i>Mention Bien</i> ) and Valedictorian
University of ROUEN – 1991	Technological University Degree in Applied Biology, option Food and Biological Industries

7. Languages: Level from 1 to 5 with 1 being excellent and 5 basic

Language	Reading	Speaking	Writing	
French	Native			
Spanish	1	1	1	
English	1	2	1	
Portuguese	3	3	2	
Creole	4	4	4	

#### 8. Membership in Professional Associations

- Holder of 2 qualifications granted by the OPQIBI (Engineering qualification body) under the reference 14 06 27 26 for:
  - Sanitation studies and receiving environments protection (0803)
  - Water resources studies: management and purification (0807)
- <u>Scientific expert for the French Ministry of Research</u> (*Ministère de la Recherche Française*) under the Research Tax Credit (*Crédit Impôt Recherche*) since 2003, renewable every 3 years.
- <u>President of GRAINE Guyane</u> (*Groupement Régional Animation, Initiation Nature et Environnement*), Regional group of animation and introduction to nature and environment, it gathers associations like WWF, SEPANGUY, GEPOG, Kwata, *etc.* From 2004 to 2005.
- Vice-president of the AMAC music school from 2003 to 2005.
- Founding member and secretary of the Inquiry Commissioners of French Guyana Association (Compagnie des Commissaires Enquêteurs de la Guyane) since its inception.
- Member of the SACEM as a musical composer (n°00439213856).
- <u>Active member of the SEPANGUY Association</u> (Société d'Etude, de Protection & d'Aménagement en Guyane); Association for the Study, Protection and Development of French Guyana; since 1998.
  - Author of the "Album des poissons d'aquarium de Guyane Française"; *Album of the French Guyana Aquarium Fish.* Published by the SEPANGUY and sponsored by the European Union, the French Guyana Region, the French Ministry of Research, the DIREN and WWF.
- Holder of the patents INPI/OMPI n°06 08544; n°09 04827 and n°10 03821.

#### 9. Other skills/knowledge

#### Computer skills:

Routine use of several professional programs for measurements and hydro modeling: Winfluid; Watercad; Epanet; Flowmaster, *etc*.

Command of the software: Office pack; Canvas; Photoshop; AutoCAD, etc.

#### Metrology:

Routine use of the following analytical instruments belonging to NBC (<u>www.nbcsarl.com</u>):

- 2 flow meters Mainstream<sup>®</sup>;
- 1 electromagnetic flow meter HACH FH950;
- 5 pressure and temperature loggers;
- 5 Schlumberger DIVER sensors and atmospheric calibration probe;

- 2 multiparameter probes (HANNA; HACH; WTW...);
- 3 photometers (Palintest 7100; HACH, etc.);
- 1 UV spectrophotometer (ASSISTEMO);
- 2 turbidity meters (HANNA; HACH);
- 2 automatic samplers 24 bottles (ISCO, Manning);
- Digital microscope;
- Biogas measurements with the DRÄGER method;
- Etc.

### Licenses:

- Driving license (since 1988).
- Boat driving license (since 1998: seashore; river and barge).
- Flying license (License n° F-LPA00174629, valid since 2004).
- ULM (License UL-0111015793 valid since 1993) 3 axes and pendulum.
- Paragliding: Pilot License since 2003.

### Institutional qualifications:

- Inquiry Commissioner for the French Guyana Prefectural Offices (since 1998).
- <u>Scientific expert for the French Ministry of Research</u> (Ministère Français de la Recherche) Research Tax Credit (Crédit Impôt Recherche) 2004-2015.

## 10. Current situation

Founder and Manager of the SARL NBC since 2003.
 Company established in French Guyana with a 44 000 Euros capital.
 Water and Environment Consulting Firm established in Cayenne.
 SIRET 480 876 598 000 24
 N°APE: 7112B
 www.nbcsarl.com

# - Founder and Manager of the SRL TECMALAB since 2005.

Company established in the Dominican Republic with a 100 kRD\$ capital. Wastewater and water treatment plant constructing firm. RNC 130456331 <u>www.tecmalab.com</u> www.tecma-constructores.com

- **Scientific partner of the GlobalEX Company** established in the Dominican Republic (Since 2014).

Founder of the GYMNOKIDI Company in 2009.
 Innovation Company with a capital of 965 000 Euros.
 www.nbcsarl.com/domaine.php

### **11.** Years of service with the employer

Entrepreneur since 2003 and salaried manager of the NBC SARL and TECMALAB SRL.

Prior to this: Director of the Centre International de l'Eau de Nancy, *International Centre for Water of Nancy,* French Guyana Office (from 1999 to 2003).

I've been working in the water sector since 1993 and I have 20 years of experience in the water and sanitation sector as well as in the tropical environment sector.

### Key competences:

- Professional training in the water sector (sanitation, drinking water) and environment: CNAM; CNFPT; Office de l'Eau; DEAL; Université des Antilles-Guyane; Education Nationale (CAP Water Quality Agent); CAESA (Water company of Macapa, Brazil), *etc*.
   Photos available on www.nbc.com/publications.php
- <u>Audit of treatment plants for drinking water</u>: resources; treatment units; disinfection units; storage units; pressure pumps; networks (sectoring meters; pressure and flow logger; ILP estimate, *etc.*)
   Clients: Local authorities; private companies (real estate companies; Lyonnaise des Eaux, *etc.*)
- <u>Audit of wastewater treatment plants</u> (activated sludge; naturally aerated lagoons/ponds; aerated lagoons/ponds) <u>and sanitary sewer</u> (pump station and networks: camera inspections, smoke tests, *etc.*).
   Cliente: Local authorities (municipalities: Chamber of Commerce: Office do l'Equ. etc.) and

Clients: Local authorities (municipalities; Chamber of Commerce; Office de l'Eau, etc.) and private companies (Unilever Group; Lyonnaise des Eaux, *etc*.).

- Author of about 15 Water and Sanitation Master plan (Schéma Directeur d'Assainissement et d'Eau Potable).
- <u>Wastewater Treatment Plant (WWTP) designer</u> (activated sludge): sizing; rehabilitation; equipment selection, *etc*.
- <u>Wastewater Treatment Plant (WWTP) constructor</u>: activated sludge plant (100 2000 EH) and lagoons/ponds (more than 10 000 inhabitants).

- Designer and constructor of drinking water and wastewater networks; + fire. Photos available on: <u>www.tecmalab.com</u> and <u>www.tecma-constructores.com</u>

### 12. Regional mapping of the professional experiences:

Country	Date		
Dominican Republic	Since 2005		
French Guyana	Since 1993		
Haiti	Since 2010		
Guadeloupe *	2008-2013		
Morocco	2010		
Brazil	1999		
Surinam *	1999		
Martinique *	1998		
Belgium	1992-1993		
West Africa (Mali and Ivory Coast)	1990-1991		

\*The experiences in these geographical areas, namely the development of environmental studies, are not detailed in this Curriculum.

### CURRICULUM VITAE – Nicolas BREHM Senior Expert (43 years old) Manager and Engineer of 2 companies in the water sector

## 13. Professional experiences:

# Audit of treatment plants, networks and other waterworks

Date	Country	Company & Reference (Name & Contact)	Position	Description
July 2014	French Guyana	City Hall of Saint Georges de l'Oyapock	Project Manager	Water and Sanitation Master Plan of Saint Georges de l'Oyapock
June 2014	French Guyana	CNES – French Guyana Space Centre	Project Manager	Sanitation Master Plan of the European Space Centre in French Guyana
February 2014	French Guyana	DEAL Guyane	Project Manager	Hydraulic study of flood maps in the watershed of the Maroni river
January – June 2014	Dominican Republic	VINCI – Construction Grands Projets Santo Domingo Mr. Thibault de Certaines	Project Manager	<ul> <li>-Conducted 3 Environmental Impact Assessments for the cities of Montecristi (MC), San Cristóbal (SC) and Villa Vásquez (VV) within the project of 3 Wastewater Treatment Plants (WWTP).</li> <li>-Completion of the detailed plans for the 3 WWTP of these cities (90 plans per WWTP).</li> <li>-Implementation of a wastewaster sludge management for the WWTP of San Cristóbal.</li> <li>-Completion of 3 flow meter campaigns for all the network's outflows of these 3 cities.</li> <li>-Soil survey (Proctor, CBR, permeability, <i>etc.</i>) for MC and VV prior to the construction of the WWTP.</li> </ul>
December 2013 – March 2014	French Guyana	Office de l'Eau and DEAL	Project Manager	Updated the French Guyana Water Development and Management Master Plan (SDAGE) and its measurement's program for 2016-2021.
May-August 2012	French Guyana	DEAL Guyane – Police des Eaux de la Guyane	Project Manager	Audit of all the French Guyana WWTP's (23 WWTP of which 50% are activated sludge plants) -Completion of a 24H sampling program subservient to flow inlet and outlet. -Analysis and reports.

Date	Country	Company & Reference (Name & Contact)	Position	Description
September and October 2011 and 2012	French Guyana	BRGM Guyane – DEAL Guyane	Project Manager	Sampling and diagnostic assessment of water resources of French Guyana -Water and Sediment sampling -Diagnostic assessment of water resources
October 2011	French Guyana	DEAL Guyane	Project Manager	Study on the monitoring of French Guyana ICPE control structures -Carried out hydraulics controls and structures' diagnostic (concrete, pumps, electro-mechanics, <i>etc.</i> ). -Studying of the authorization dossier and putting into perspective with the field realities. -Bibliographic study, development of 3D visuals, hydraulic modeling.
June 2011	French Guyana	City Hall of Saint Laurent du Maroni	Project Manager	Impact assessment for the new treatment plant of Saint Laurent du Maroni -Carried out the Impact assessment Water legislation -Sizing of the activated sludge plant
2010 and 2011	French Guyana	City Hall of Matoury	Assistant Project Manager (Subcontractor BRL)	Rainwater Master plan of the Matoury municipality -Coordination of the field study and hydraulic measurements -Audit of the water control structures
May 2010 and August 2008	French Guyana	City Hall of Saül and City Hall of Maripasoula	Project Manager	Declaration of Public Utility for the drinking water catchments of Saül and Maripasoula -Audit of the production and protection facilities for drinking water and raw water
2007-2011	French Guyana	Saint Maurice Rum Distillery (Saint Laurent du Maroni)	Project Manager	Preparation of the Annual Pollution Report -Audit of the industrial facilities -Sizing and pollution flow calculation -Writing of the Annual Report

Date	Country	Company & Reference (Name & Contact)	Position	Description
September 2010 to April 2011	French Guyana	City Hall of Awala Yalimapo	Project Manager	Sanitation Master plan of the Awala Yalimapo municipality -Audit of the water treatment facilities (naturally aerated lagoons/ponds and activated sludge plant) -Audit of the wastewater networks (fluorescein test, camera inspections, <i>etc</i> .) -Development of scenarios -Writing of the Sanitation Master plan
2005	French Guyana	City Hall of Saint Laurent du Maroni	Project Manager	Drinking water Master plan of the Saint Laurent du Maroni municipality -Audit of the water treatment facilities (coagulation, flocculation, decantation, filtration and chlorination) -Audit of the drinking water networks (pressure measurements, flow rate, water level in the tanks, ILP calculation, <i>etc.</i> ) -Production of an EPANET modeling -Development of scenarios -Writing of the Sanitation Master plan
September 2008	French Guyana	Communauté des Communes de l'Ouest Guyanais	Project Manager	Achievement of quarterly analytical tasks for leachate and biogas for the Saint Laurent du Maroni landfill -Audit of the waste repository and proofing leachate facilities -Realization of sampling and analysis -Writing of the final report

Date	Country	Company & Reference (Name & Contact)	Position	Description
June 2008	French Guyana	Cayenne City Hall	Project Manager	Hydraulic feasibility study for the implementation of a control structure on the Leblond channel in Cayenne -Audit of the established structures (valves, pumps, <i>etc</i> .) and hydraulic measurements -Realization of projections and sizing based on modeling -Writing of the final report -Realization of 3D landscaped visuals -Integration into the project of the dynamics of mud banks and vegetation (mangroves, <i>etc</i> .)
March 2008	French Guyana	French Army	Project Manager	Technical audit of the GSMA pool (Saint Laurent du Maroni)
January to March 2007	French Guyana	Maripasoula City Hall - DAAF	Project Manager Assistant	Sanitation Master plan for the Maripasoula municipality (the biggest of France!!) -Audit of the water treatment facilities (naturally aerated lagoons/ponds and activated sludge plant) -Audit of the wastewater networks (fluorescein test, camera inspections, <i>etc.</i> ) -Development of scenarios -Writing of the Sanitation Master plan
January to June 2006	French Guyana	Apatou City Hall	Project Manager Assistant	Sanitation Master plan for the Apatou municipality -Technical audit of the natural environment -Measurement campaign: flow rate, quality (DCO, conductivity, <i>etc</i> .) -Support to the elaboration of scenarios -Technical survey on on-site sanitation -Presentation of results and participation in the final restitution

Date	Country	Company & Reference (Name & Contact)	Position	Description
January to June 2006	French Guyana	CAMIG Private company Mr. Ojeda	Project Manager Assistant	SPIOM study on on-site sanitation -Technical audit -Bibliographical study -Presentation of results and participation in the final restitution
June 2005	French Guyana	Communauté des Communes du Centre Littoral (CCCL) known nowadays as CACL (Communauté d'Agglomération du Centre Littoral) Mr. R. Alexandre (President)	Project Manager	Contract specifications for a diagnostic study of sanitation networks -Establishment of the consultation (realization of the tender) -Establishment of the contract specifications
June 2005	French Guyana	Etablissement Public d'Aménagement de la Guyane (EPAG)	Project Manager	Impact assessment (Water Act) for the establishment of a treatment plant
Since March 2001	French Guyana	GESTIMMO then GUY HOQUET	Project Manager	Management of an activated sludge plant (70 Eq. Hab.) Demonstrative tool in professional training
Since October 2004	French Guyana	GESTIMMO	Project Manager	Management of a biological treatment plant (70 Eq. Hab.)
October 2003	French Guyana	SIGES (SODEXHO)	Project Manager	Audit of all treatment plants of the Guiana Space Centre (Kourou) -Technical audit of the purifying capacities of the plants -Writing of a maintenance form for the SIGES maintenance technicians -Training of the maintenance crew -Technical review for each plant -Analysis and summary of the results – Statistical report and classification -Presentation of results and participation in the final restitution

Date	Country	Company & Reference (Name & Contact)	Position	Description
October 2003	French Guyana	City Hall of Saint Laurent du Maroni	Project Manager Assistant	Drinking water Master plan of Saint Laurent du Maroni (60 000 inh.) -Technical audit of the plant -Measurement campaign: flow rate, pressure, temperature -Network modeling (PORTEAU software) -Study of the salt water wedge of the Maroni river -Development of scenarios -Administrative documentation for water intake authorization -Presentation of results and participation in the final restitution
December 2002	French Guyana	Apatou City Hall	Project Manager	Declarative file for a sanitation lagoon <2000 Eq. Hab.
November 2002	French Guyana	City Hall of Saint Laurent du Maroni	Project Manager	Declarative file on the extension of the Saint Laurent du Maroni sanitation lagoon
August 2001	French Guyana	Conservatoire de l'Espace Littoral (CEL)	Project Manager	Feasibility study for the establishment of a threshold on the Yiyi swamp belonging to the CEL -Hydrological study -Hydrological modeling with FLOWMASTER -Plan proposals -Study writing and restitution
June 2001	French Guyana	Saint Maurice Rum Distillery	Project Manager	Flow sheet – Balance sheet of the Saint Maurice Distillery water flow + ICPE filing dossier -Technical audit of the plant -Measurement campaign: flow rate, temperature -Flow sheet -Administrative documentation for the ICPE dossier -Presentation of results and participation in the final restitution

Date	Country	Company & Reference (Name & Contact)	Position	Description
July 1991	Mali	BRAMALI firm	Project Manager assistant	Audit of the wastewater treatment systems at the brewery outlet -Technical audit of the plant -Flow sheet -Sizing of a treatment system consisting in an aerated lagoon/pond according to the local energy constraints

## CURRICULUM VITAE – Nicolas BREHM Senior Expert (43 years old) Manager and Engineer of 2 companies in the water sector

### Design, sizing and construction of production and treatment plants

Date	Country	Company & Reference (Name & Contact)	Position	Description
1992	Belgium (Huy)	GABRIEL SA	Technician	Project manager for the design and construction of a wastewater treatment unit for intensive pisciculture (2 ha.) Biological filtration on fixed cultures
June 2011	French Guyana	City Hall of Saint Laurent du Maroni	Project Manager	Impact assessment for the new treatment plant of Saint Laurent du Maroni (60 000 EH) -Carried out the Impact assessment Water legislation -Sizing of the activated sludge plant
May 2012	French Guyana	French Guyana Region – Grand Santi City Hall	Project Manager	Design and construction of a drinking water plant (slow retro- filtration) for a 100 inhabitants town + disinfection with DOSATRON <sup>®</sup> -Sizing study -Construction and monitoring of the work -1-year follow-up on the purifying capacities Photos and project details available on: www.nbcsarl.com/devdurable.php
June 2012	French Guyana	Iracoubo City Hall – DAAF	Project Manager	Design and construction of a drinking water plant (slow retro- filtration) for a 100 inhabitants town + disinfection with DOSATRON® + associated R&D program -Sizing study -Construction and monitoring of the work -1-year follow-up on the purifying capacities Photos and project details available on: <u>www.nbcsarl.com/devdurable.php</u>

Date	Country	Company & Reference (Name & Contact)	Position	Description
Since 2003	French Guyana	City Hall of Apatou; Grand Santi; Maripasoula; Awala Yalimapo; Camopi French Guyana Region Office de l'Eau de la Guyane Rotary ; Soroptimiste ; ARS ; Parc Amazonien de la Guyane	Project Manager	<ul> <li>Provided equipment (tanks) for rainwater collection in remote locations of the Apatou, Trois Sauts, Camopi and Grand Santi municipalities</li> <li>-Design of the project and field action</li> <li>-Sizing of the needs</li> <li>-Carried out the project in the field – More than 3000 people supplied with drinking water</li> <li>-Establishment of changes in the water and sanitation legislation regarding rainwater for remote locations lacking a nearby water network</li> <li>Photos and project details available on: www.nbcsarl.com/devdurable.php</li> </ul>
2003	French Guyana	Conservatoire de l'Espace Littoral	Project Manager	Design and construction of a drinking water plant (slow retro- filtration) for a 30 inhabitants town + disinfection with DOSATRON <sup>®</sup> -Sizing study -Construction and monitoring of the work -1-year follow-up on the purifying capacities
May 2011	Haiti	NGO AREED – Dominican- European Association	Project Manager	Design and construction of a drinking water plant (slow retro- filtration) for an orphanage (15m <sup>3</sup> /day) + disinfection with DOSATRON <sup>®</sup> -Sizing study -Construction and monitoring of the work -1-year follow-up on the purifying capacities Photos and project details available on: <u>www.nbcsarl.com/devdurable.php</u>

Date	Country	Company & Reference (Name & Contact)	Position	Description
June 2011	Haiti	NGO AREED – Dominican- European Association	Project Manager	Hydro-geological and hydrological expertise -Metrology mission -Water network sizing study -Writing of the final report Photos and project details available on: www.nbcsarl.com/devdurable.php
October 2012	Haiti	NGO Terre des Hommes	Project Manager	Design and construction of a wastewater treatment plant -Sizing study + drainage -Construction and monitoring of the works Photos and project details available on: <u>www.nbcsarl.com/devdurable.php</u>
May 2010	Morocco	GYMNOKIDI	Project Manager	Technical diagnosis of an electronic production unit in Kénitra for the industrial production of the GYMNO'COM patent
December 2005	Dominican Republic	Hotel Lomita Maravilla – Las Terrenas – Samana	Project Manager and designer	Design and construction of an activated sludge wastewater treatment plant (100 EH) -Sizing study + treated water drainage -Construction and monitoring of the works -Maintenance provided since commissioning Photos available on: www.tecma-constructores.com/fr/assainissement.html

Date	Country	Company & Reference (Name & Contact)	Position	Description
December 2007	Dominican Republic	Bonita Village Residence – Las Terrenas – Samana	Project Manager and designer	Design and construction of an activated sludge wastewater treatment plant (400 EH) -Sizing study + treated water drainage -Construction and monitoring of the works -Maintenance provided since commissioning Photos available on: <u>www.tecma-constructores.com/fr/assainissement.html</u>
June 2008 to February 2010	Dominican Republic	Green Water Caraïbes Residence – Las Terrenas – Samana	Project Manager and designer	Design and construction of wastewater, drinking water, rainwater, fire networks for a luxury residence of 23 villas (average price for each villa: 3 millions USD) / construction of an activated sludge wastewater treatment plant (300 EH) -Sizing study (EPANET modeling, sizing rules for the WWTP, etc.) + treated water drainage -Construction and monitoring of the works -Maintenance provided since commissioning Photos available on: www.tecmalab.com/fr/traitement_eau.html
November 2011	Dominican Republic	Villa Simba – Las Terrenas – Samana	Project Manager and designer	Design and construction of a private pool (22 x11 m) -Sizing study (reinforcement plans, pumps, lighting, overflow, <i>etc.</i> ) + land development (earthworks) -Construction and monitoring of the works -Maintenance provided since commissioning

Date	Country	Company & Reference (Name & Contact)	Position	Description
Since 2005	Dominican Republic	Private villas owners on the Samana peninsula in the Dominican Republic	Project Manager and designer	Design and construction of more than 70 drinking water plants (slow retro-filtration principle : see method on <u>www.aquatrium.com</u> ) -Sizing study (treatment and disinfection) -Construction and monitoring of the works -Maintenance provided since commissioning Photos available on: <u>www.tecma-constructores.com/fr/eaupotable.html</u>
Since 2005	Dominican Republic	Private villas owners on the Samana peninsula in the Dominican Republic	Project Manager and designer	Design and construction of more than 30 on-site sanitation systems (septic tanks and French drains) -Sizing study (treatment and disinfection) -Construction and monitoring of the works -Maintenance provided since commissioning Photos available on: www.tecma-constructores.com/fr/assainissement.html
July 1991	Mali	BRAMALI firm	Project Manager assistant	Audit of the wastewater treatment systems at the brewery outlet -Technical audit of the plant -Flow sheet -Sizing of a treatment system consisting in an aerated lagoon/pond according to the local energy constraints

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# **Professional training**

Date	Country	Company & Reference (Name & Contact)	Position	Description
December 2010	French Guyana	Office de l'Eau and CNFPT Audience: Water technicians of the French Guyana municipalities Length: 2x2 weeks	Project Manager and instructor	Training of the water technicians -Preparation of training and educational materials -Training -Technical field visits to a sanitation lagoon and drinking water plant
November 2010	French Guyana	Office de l'Eau and CNFPT Audience: Water technicians of the French Guyana municipalities Length: 2x2 weeks	Project Manager and instructor	SPANC training (Public on-site sanitation service) -Preparation of training and educational materials -Training -Conducted a practical exercise on soil testing
Years 2009 and 2010	French Guyana	Education Nationale Française (French National Education) Audience : CAP students Length : 1 academic year	Project Manager and instructor	Training for the CAP "Water technician" students of Rémire -Instructor and in charge of conducting technical courses -Put into service teaching pilots for wastewater and drinking water treatment
Years 2000 to 2005	French Guyana	Conservatoire National des Arts et Métiers Audience : Adults retraining Length : 5 academic years	Project Manager and instructor	Training in a 2-year degree for "Biodiversity technician" (Bac+2) -Engineering training -Preparation of training and educational materials -Training -Follow-up of a number of students up to the professional degree in Environment from the University Antilles Guyane

Date	Country	Company & Reference (Name & Contact)	Position	Description
Years 2002 to 2005	French Guyana	University Antilles Guyane – Institut Supérieur de la Guyane Professional degree in Environment (Licence pro Environnement) Audience : Students Bac+3 Length : 3 academic years	Instructor	Training in the professional degree in Environment (Bac+3) -Preparation of training and educational materials -Instructor and in charge of conducting technical courses in the field of sanitation, sizing of sludge activated wastewater treatment plant and lagoons/ponds, etc. -Instructor of technical courses as well – WWTP audits -Follow-up of tutored projects and other internships
2003	French Guyana	SIGES – SODEXHO Group Audience : Maintenance technicians and executives Length: 2 weeks	Project Manager and instructor	<ul> <li>Professional training of the maintenance technicians from the firm SIGES on maintaining the Guyanese Space Center's treatment plants</li> <li>Preparation of training and educational materials</li> <li>Training</li> <li>Technical field visits to a sludge activated wastewater treatment plant + experiments</li> </ul>
Years 2001 and 2002	French Guyana	DIREN (Direction de l'Environnement) Audience: Adults Length: 2x1 week	Project Manager and instructor	Professional training for the French Guyana's Inquiry Commissioners -Instructor and in charge of conducting technical courses
2001	Brazil	Office de l'Eau and CNFPT Audience: CAESA's engineers Length: 2 weeks	Project Manager and instructor	Professional training of the CAESA's maintenance technicians (Macapa's Water Company – Brazil) -Instructor and in charge of conducting technical courses -Preparation of educational materials (toolbox)

## 14. Other relevant information

#### Awards:

- Prizewinner of the 2004 ANVAR national contest (French Ministry of Research (*Ministère Français de la Recherche*)).
- Prizewinner of the 2005 TOYP contest (Ten Outstanding Young People).
- Prizewinner of the 2005 contest for an innovative and sustainable development company (*Entreprise innovante et du développement durable*).
- Prizewinner of the 2006 youth exchange program between France and China in the category "Young Entrepreneurs", organized by the French Foreign Affairs Ministry.
   www.egide.asso.fr
- Prizewinner of the 2007 TOP 100 of the 100 most outstanding actions in sustainable development of the year. French Ministry of Ecology and Sustainable Development.
- Nominated for the 2008 national contest of the French Ministry of Research (*Ministère Français de la Recherche*).

### **Publications:** (Non-exhaustive list)

Some publications can be downloaded on: <u>www.nbcsarl.com/publications.php</u>

- Activated carbon from vetiver roots and sugar cane bagasse: pilot-scale production and cost estimation Scientific publication from S. ALTENOR (a);
   M.C NCIBI (a); N. BREHM (b); E. EMMANUEL (c) and S. GASPARD (a). December 2012. SPRINGER Editions
  - a. Laboratory COVACHIMM, EA 3592 University Antilles Guyane, BP 250, 97157
     Pointe à Pitre Cedex, Guadeloupe
     b. SARL NBC, Cayenne, French Guyana
    - c. LAQUE, University Quisqueya of Haiti, Port au Prince, Haiti







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- Article Eau potable en sites isolés ("Drinking water in remote locations"), 4 pages. De la Recherche en Guyane, La Science par l'exemple, Parc Naturel Régional de Guyane Editions. December 2011. IBIS ROUGE Editions.
- Etude sur la récolte d'eau de pluie pour l'usage alimentaire dans les sites isolés de la Guyane ("Study on rainwater collection for food use in remote locations of French Guyana"). Implementation and writing: Direction de la Santé et du développement social de la Guyane.
- La faune de Guyane ("French Guyana's fauna"). T. MONTFORD; H. GERAUX; N. BREHM. Plume Verte Editions, 2002.
- TOPONOWINI sur les traces des premiers naturalistes ("TOPONOWINI on the trail of early naturalists"). D. SAINT JEAN; N. BREHM. TV Magazine Guyane, June 2003.
- Les Robinsons de l'Oyapock ("The Robinson Crusoe's of the Oyapock"). Paris Match. February 2002.
- A la recherche de l'Eldorado, une expédition découvre un lac en Guyane ("In search of Eldorado, an expedition discovers a lake in French Guyana"). L. MAROT, Le Monde, March 2002.
- Validation d'un indicateur écologique basé sur la lecture des microstructures déposées sur les otolithes d'atipa (Hoplosternum littorale) ("Validation of an ecological indicator based on the reading of microstructures deposited on atipa otoliths (Hoplosternum littorale)). Joint publication with the IRD, ex. ORSTOM. September 1999.
- Mission d'inventaire ichtyologique ECOBIOS CNRS ("Ichtyological inventory mission ECOBIOS – CNRS"). OPTIM'AQUA nº13, pages 69-76, June 1999.
- Atipa. OPTIM'AQUA nº6, pages 35-38, June 1998.
- Aquaculture guyanaise, vers une prise de conscience? ("Towards awareness in Guyanese Aquaculture?"), OPTIM'AQUA nº2, pages 73-75, June 1998.
- Découverte des poissons d'Amazonie française: mission CRITT GUYANE / ORSTOM Juillet 1996 - Fleuve Sinnamary. ("Discovering the French Amazon's fishes: CRITT - GUYANE / ORSTOM mission – July 1996 - Sinnamary River"). AQUARAMA nº153. January 1997.
- Un réseau de collecteur de poisson d'ornement en Guyane française ("A collection network for ornamental fish in French Guyana"). ANIMALERIE nº87, December 1996.









- La Guyane tente l'aquaculture de poissons d'ornement ("French Guyana attempts aquaculture for ornamental fish"). AQUA REVUE nº66, November 1996.
- Comment ouvrir un établissement piscicole? Le point réglementaire. ("How to open a fish farm? Regulations."). Guyane Verte, le magazine de la Chambre d'Agriculture de la Guyane.
   №31, November December 1996.

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