

# Dr. Bruno GERARD

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sept 2013-now

2002-May 2017

International Expert for Life Extension of civil & industrial Assets

#### Summary

• Entrepreneur • International Experts for Asset & Aging Mangement : life extension, reduce maintenance costs, leverage skills • Expert in innovative solutions

for surveillance, IoT, smart structures

## Core skills

- Leadership and vision
- Concrete Pathologies
- Aging Modelling
- Finite elements modelling
- Corrosion
- Expertises: diagnosis & pronogsis
- Risk audits
- Trainings and games
- Work in Multicultural environmentShare experience with others
- Share experience with others

## Education

•MBA entrepreneurship HEC-France •PhD & MSc. Civil Eng., Laval University-Canada •PhD & MSc. Civil Eng., Ecole Normale Superieure de Cachan •Graduated from Ecole Normale

Supérieure in France (**Agrégé** in Civil Eng.)

#### Other contribution

Author of more than 70 papers
Lecturer in several conferences & seminars worldwide (USA, Canada, Japan, China, Europe)
Since 2012 national I-Lab jury of french minister of research with BPI (we grant best innovative start-up projects with a US\$15 m/year fund)

•Since 2009, Foreign Trade French Council (CCEF) : charity international organization to support French SMEs to export worldwide

Since 2009, Lecturer at HEC France « talent & growth »
Society of Petroleum Eng.
Society of French Nuclear Energy
Co-founder of CJD Fontainebleau (a charity association to support personal development of entrepreneurs and SME executives
Investor as business angel in start-ups: Calexium, Soyooz, Ipsiis, PayTrip

# **Professional Experience**

# Founder & Director

#### BGSi

Independent Expertise on Asset Integrity and life extension of civil infrastructures and industrial assets in Nuclear, Oil and Gas and Transport. Based on the long experience of Dr. Bruno GERARD, BGSi is positionned on a niche related to aging of civil engineering structures. Bruno advises assets key decision makers on life extension strategy at best costs. He supports operational teams to develop their skills with dedicated unique training sessions and coaching to monitor efficiency of the consultancy. Dr. Gerard operates dominently worldwide (China, USA, Canada, Africa, South Americas).

#### CEO/Founder

#### OXAND www.oxand.com

Established a winning international business to support Major Firms and Governments to better manage their physical assets in energy, transport, defense, industry and real estate. Provide solutions to optimize long term costs with more performance and less risks related to aging. With a presence in 5 countries with 7 offices, OXAND was ranked in the top 100 of best French SMEs in 2014.

- Develop the leadership to align teams on same objectives
- Attract and maintain motivated talents to build international teams in a great environment of work
- Coach key leaders to Develop strategies for the life extension of assets
- Bring new technologies to support transformation in asset management and reduce costs
- · Teambuilding and Trainings, create Oxand Academy and innovative games
- Create trust and close relationships with clients
- Publish papers and provide lectures in international workshops in partnership with clients
- Endorse responsability of delivering strategic projects, in charge of specific expertises for strategic clients overseas

• Adapt the client's organization to support changes and transformation

#### Co-founder and investor

2014-2016

**IPSIIS** – design and development of innovative insulating porous materials for airspace and industry

Establishes for the founder all conditions to start-up the company. In charge of developping a dedicated business plan and finance the project. Promote the project and obtained one of the most important grant for innovation in France. Help the CEO to build a team.

Research Engineer & Project Director **EDF** R&D

sept 1991 - Dec 2001

# Established an integrated project for evaluating aging and residual life time of major civil structures (nuclear reactors, dams, ...). High involvement for financing the project with engineering and production divisions. Establish an international R&D network with best universities (MIT, Tokyo, Delft, Paris, Lausanne, Madrid, Québec...). Objectives achieved:

• develop new skills at EDF related to civil engineering and aging of assets (recruit,

- transfer the knowledge to Engineering and production units.
- · Create and develop new labs
- Develop new technologies to reduce maintenance costs and increase long term safety
- · Large autonomy, establishment of several international partnerships to grow fast EDF
- international reputation.

• Launch and supervize several PhD and Master students. Important production of papers in best international journals.

#### Academic Experience

#### Associate Professor Ecole Normale Superieur de Cachan

Head of Durability Mechanics group within the civil engineering Team of LMT Cachan. Coorodination of 5 researchers and 3 international full professors, define, plan strategy and research program. Set up partnership with industry.

Assistant Professor Paris Tech University, France

1996-1999

1999-2001

In charge of Construction Materials courses for under graduate students Assistant Professor Laval University, Canada

1993-1995

Established Durability Mechanics activities in the Civil engineering Department under Prof. Pigeon supervision. Coach new students in that field for modelling aging of concrete structures. Integration of monitoring data to re-engineered the predictive model of maintenance. Development of new lab technologies to reproduce 300 years of concrete aging in 3 years.