

RESEARCH SCIENTIST/ENGINEER

◇ PH.D./ENGINEER ◇ BIOLOGIST & GEOLOGIST ◇ GIA GRADUATE GEMOLOGIST
 ◇ ANALYTICAL TECHNIQUES SPECIALIST ◇ SCIENCE COMMUNICATOR

WORK EXPERIENCES

- 05/2024: **Research engineer in microscopy and histology**
 10/2022 Cellular and tissular imagery on the quality certified MicroPiCell platform (University of Nantes)
- Fluorescence confocal microscopy (Nikon A1 and AX, LIPSI).
 - Lightsheet microscopy (ZEISS LS7).
 - Clearing of thick samples (organic solvents, hyper-hydration, X-Clarity).
 - Histology: paraffin processing (Logos) and embedding, microtomy (Leica RM 2255 and cryostat Leica CM1950), routine staining (Leica ST5020/CV5030) and special staining, slides scanning (Hamamatsu HT 2.0 and S360).
 - Instructor on histology and smart microscopy with NIS software.
- 07/2020: **Communication Lead/Specialist for NASA InSight main instrument (SEIS)**
 09/2015 Institut de Physique du Globe (Paris), Planetology and Space Sciences team (5 years)
- Design and creation of NASA InSight's seismometer official website: writing of the whole editorial content, artistic direction for about 40 reference illustrations.
 - Workshop organization, medias (press, radio, television) and space agencies relations, photography reports in sensitive operational environments.
 - Two months and a half stay at NASA/JPL center (California) for surface operations.
- 03/2015: **Laboratory and field Gemology**
 10/2014 Institute of Materials Jean Rouxel / Laboratory of Planetology and Geodynamics (Nantes)
- Research subject: characterization of Sri-Lanka geuda sapphire before heating.
 - X-ray fluorescence spectrometry, luminescence emission spectrometry, UV-Vis absorption spectrometry, FTIR absorption spectrometry, Raman micro-spectrometry, LA-ICP-MS, SEM.
 - Mines, markets and laboratories visits in Thailand, Cambodia and North Vietnam.
 - One month stay in Thailand to experiment geudas sapphire heat treatment (04/2016).
- 12/2006: **Ph.D. in Geology / Precambrian Micropaleontology**
 10/2003 French National Center for Scientific Research (Orléans, 3 years and 3 months)
- Research subject: atomic force microscopy of Precambrian microfossils.
 - Lead operator of a newly arrived Atomic Force Microscopy instrument.
 - Advanced micro-imaging techniques: scanning/transmission electron microscopy, focused ion beam, Raman micro-spectrometry, ESRF synchrotron XANES.
 - Field trip in South Africa (Barberton greenstone belt).
- 2003: **Master's degree internship** (study of the zonation of spinifex pyroxenes in komatiites)
 Laboratory of Geodynamics of the Alpine Chains (Grenoble, 4 months)
- Observation of petrographic thin sections, determination of major and trace elements, analysis by electronic microprobe.

WORK EXPERIENCES (Network infrastructure engineering)

- 03/2022 : **Network consulting**, Pro BTP (Cagnes-sur-Mer, 4 months)
 12/2021 Network engineering/support, writing of a WIFI proposal, lead specialist for a NAC solution.
- 12/2014: **Network Consulting**, SMA, Orléans (4 months)
 09/2014 WAN audit: Quality of Service, WAN acceleration and applications performance issues.
- 10/2013: **Lead Network Architect**, AIRBUS/EADS, Elancourt (1 year and 5 months)
 06/2012 Design and implementation of a military communication infrastructure.
- 05/2012: **Lead datacenter specialist**, IBM Global Services, Lille/Seclin (1 year and 4 months)
 02/2011 Design of a primary datacenter for the French National Railway Company (SNCF).
- 12/2010: **Network Architect/Engineer**, AG2R/La Mondiale Group, Chartres (4 years)
 01/2007 Design of advanced datacenter, campus network and security infrastructures/solutions.
- 08/2002: **Network engineer**, Hewlett-Packard, Grenoble (1 year and 3 months)
 06/2001 2nd level network support in operational and international environment.
- 05/2001: **Webmaster**, Geoman, Quimper (1 year and 2 months)
 04/2000 Content creation for an outreach Internet website dedicated to astronomy.
- 03/2000: **Systems engineer**, BNP Paribas (Paris, 3 years and 1 month).
 03/1997 Systems administration, validation and deployment of software packages, documentation.
- 12/1996: **Military Officer**, Nancy-Ochey Airbase, (1 year and 2 months)
 11/1995 Computer specialist for a fighting squadron, systems and network administration.

EDUCATION

- 2019: Laboratory Gemology University Diploma (Nantes University).
 2014: Graduate Gemologist (Gemological Institute of America, London).
 2006: Ph.D. in Precambrian Micropaleontology (CNRS Orléans).
 2003: Master's degree (I) in Geology (University of Joseph Fourier, Grenoble).
 1995: Master's degree (II) in Computer Science (C.N.A.M. University of Montpellier II).
 1994: Master's degree (II) in Microbiology (University of Montpellier II).
 Engineer in Agronomy (genetics and physiology of microorganisms, ENSA.M).

AWARDS

- 2021: Ananoff award from the French Astronomical Society (SAF).
 2006: Stanley L. Miller Award (International Society for the Study of the Origin of Life).
 1999: Marcel Moye award from the French Astronomical Society (SAF).
 1989: Winner of the National Chemistry Olympiad, and of the National Biochemistry Competition.

INTERESTS AND ACTIVITIES

- Languages: English, French (native).
 Planetology: Creation of a web encyclopedia related to Mars (Nirgal.net). Started in 1997, this website is still the acknowledged online reference about the Red Planet on French-speaking Internet.
 Hobbies: Animal and vegetal microscopy/histology (professional level, permanent slides making and creation of a photographic atlas), creative writing, photography, trekking.
 Travels: Atacama (Chile/Bolivia), Patagonia (Chile/Argentina), Tanzania (Kilimanjaro), Indonesia, Thailand, Sri Lanka, Vietnam, Iceland, Reunion Island, Sahara, Oman, Jordan, South Africa, United Arab Emirates, Guyana, United States.