

## Benoît Malard

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Unmarried, 32 years.

## EDUCATION

1998: **D.E.S.S. Instrumentation /Analytical methods in chemistry, spectroscopy, electronics and the nuclear sciences.**

*Université Louis Pasteur, Strasbourg*

1992 / 1997: **Masters in Materials science**

**and two years study B.Sc. Chemistry-Physics (DEUG diploma).**

*Université Henri Poincaré, Nancy*

- Mastery of Word, Excel, Access, MS Project, MapInfo, Matlab, Photoshop, PowerPoint.
- Good knowledge of written and spoken English.

2000 / 1999: **B.Sc. and M.Sc. in Health Engineering as applied to physical and occupational activities.**

(in parallel with military service)

*Université Henri Poincaré, Nancy*

## PROFESSIONAL EXPERIENCE

2003 / 2007: **PhD Student** at Institut laue langevin and European Synchrotron Radiation Facility, Grenoble, France.

**Subject:** Multi-scale analysis of the mechanically-induced martensite phase transformation by synchrotron and neutron diffraction

2001 / 2003: **Materials Engineer.** FaME38 / Institut Laue Langevin / E.S.R.F , Grenoble, France.

- **Mission:** The management of residual stresses on neutron and synchrotron radiation beam lines.
- **Method:** Communications with users and definition of their needs.
- **Results:** Multiplication of contacts and user satisfaction.

2000 / 2001: **Qualifications / Start-up Engineer.** Air Liquide Electronics Systems, Pont de Claix, France

- **Mission:** Qualify and commission chemical systems for the semi-conductor industry (Singapore).
- **Method:** Detailed technical study, ingenuity, and interconnection of the services concerned.
- **Results:** Qualification and commissioning of the distribution systems, to deadline.

1998: **Coordinator at the centre for sediment diagnostics of the North-East canals.**

*Service navigation du Nord-Est, Cellule qualité de l'eau énergie hydraulique, Nancy.*

- **Mission:** establishment of a methodology for sampling, analysing and storing sediments.
- **Method:** Bibliographical survey, creation of a questionnaire, methodology and cartography.
- **Results:** Implementation of the methodology to pilot the dredging of the navigable waterways in the North-East.

1997: **Master's work placement.** Institut de recherche Agronomique (INRA), Champenoux.

Comparison of analytical methods on a plasma atomic-absorption spectrometer.

## PUBLICATIONS

- **B.Malard, T.Pirling, K.Inal, E.Patoor, S.Berveiller.** Stress determination during the mechanically-induced martensite phase transformation in the superelastic alloy CuAlBe by neutron diffraction. *Mat. Sci. Forum.* Vols. 524, p 905, 2006.
- **N.Ratel, D.J Hughes, A.King, B.Malard, Z.Chen, P.Busby, P.J.Webster.** Direct sample positioning and alignment methodology for strain measurement by diffraction. *Review of scientific instrument* 76,1 (2005)
- **G.Bruno, C.Fanara, F.Guglielmetti, B.Malard.** Characterization and residual stress analysis of wear resistant Mo thermal spray-coated steel gear wheels. *Surface & Coatings Technology* (2005)
- **P.J.Webster, M.N.James, S-P.Ting, Z.Chen, D.Hughes, A.Steuwer, B.Malard, N.Ratel.** Engineering Applications of Synchrotron X-Rays and Neutrons and the FaME38 project. ASME 2004 , USA, (2004)
- **D.J.Hughes, P.J.Webster, B.Malard, N.Ratel, H.Sitepu and A.Dale.** MECA-SENS2, Manchester, Sept. 2003. FaME38: A New Approach to Materials Science at the ILL-ESRF.
- **G.Bruno, B.Malard, N.Ratel, D.J.Hughes and T.Pirling.** November 2003 (Abstract for ICRS7) Application of advanced engineering tools for optimization of a residual stress beamline.
- **B.Malard, D.J.Hughes.** G.F.A.C 2002 de l'ENSAM Metz et Le colloque RX et Matière 2003 de l'INSA Strasbourg. FaME38, Laboratoire dédié à l'ingénierie des matériaux.

## FURTHER EXPERIENCE

Summer 1993: **Preparation and implementation of a voluntary aid project in Burkina-Faso.**

*Association des Amis de Sabou-Poa. Vandoeuvre-lès-Nancy*

- Fascinated by encounters with different cultures: Burkina-Faso, Canada, Germany, the UK and USA.
- Secretary, trainer of the *Association Rhône-Alpes des Petits Débrouillards*, Grenoble.
- Climbing, trekking and snowboard ridding.