

PHILIPPE GOUDEAU

58 years, married, 4 children

Experience

2007, May-July: Scientific position at [ALS-LBNL](#) (USA), [Poitou-Charentes](#) (France) & [LBNL](#) financial supports

1986 - Present: Research director (DR1 since 2012) at [CNRS](#) (NCSR in English: national center for scientific research) working at [Pprime institute](#), Futuroscope, France

Education

1994, 29th of September: Habilitation à Diriger les Recherches from Poitiers university (France) in Material sciences - Title "Characterization of the microstructure, the morphology and the mechanical state of nanostructures by small angle x-ray scattering and x-ray diffraction »

1986, 7 of March: PhD degree from Poitiers university (France) in Material sciences - Title "Anomalous Small Angle X-Ray Scattering - ASAXS. Application to metallurgical alloys" mention Très Honorable

Training

1999 Thematic school on "internal gradient effects in semi-conductors", Campus of Luminy, Marseille, France.

1994 International school "Luminescence of porous silicon and silicon nanostructures", Centre de Physique, Les Houches, France.

1993 Training "Determination of residual stresses by X-ray diffraction", ENSAM, Aix en Provence, France.

1991 Summer School on "Materials under irradiation", Giens, France.

1990 Training "Image analysis and fractal measurements", CNRS Campus, Orléans, France.

1989 Summer School on "Metallic Multilayers", Centre Paul Langevin, Aussois, France.

1987 School on applied nonlinear problems "Fractal sets", INRIA, Rocquencourt, France.

1986 Summer School "Synchrotron Radiation" at the Centre Paul Langevin, Aussois, France.

Responsibilities

2010-2013: Deputy Director of a new laboratory call [Pprime institute](#) (340 permanents + 200 PhD and Post-docs) for two years and then director of the materials science department in this institute (100 permanents, 50 PhD and Post-docs).

2008-2012: Chairman of the "Condensed Matter: organization and dynamic" division (numbered 05) at the French national committee of the scientific research ([CoNRS](#))

2016-2017: Scientific Delegate of the High Council for Research and Higher Education - [HCERES](#) ST2 domain (Physic) in charge of condensed matter.

Member of scientific committees

French [AERES/HCERES](#) visiting committees: [IN](#) (Grenoble), [LEM Onera](#) (Paris), [DMN](#) (Saclay), [SIMaP](#) (Grenoble), [PPME](#) (Nouvelle-Calédonie)

Scientific advisory committee of the French agency for research [ANR](#) (SIMI4, CES30)

Scientific advisory committee of the French [EMC3 Labex](#) (Normandy, France) since 2013.

Sporadically expertise: [ETH Zurich Research Commission](#), [Austrian Science Fund FWF](#), [Royal Society of London](#), [Czech Science Foundation](#), [ESRF review panel](#), [CEA](#), [UTT](#), [Idex Toulouse](#), [CEFIPRA](#), [COFECUB](#), etc.

Member of scientific societies

[MRS](#), [TMS](#), [ECA](#) – [AFC](#), [SFP](#), [SF2M](#)

Research interests and activities:

Past: Application of anomalous small angle x-ray scattering for the study of heterogeneities in metallic alloys and porous silicon

Present: Size effects on thin film mechanical properties and thin film functional property modification under stress using specific X-ray diffraction tools developed at the laboratory and at synchrotron sources such as ALS Berkeley (USA), ESRF Grenoble (France) and SOLEIL Paris (France).

Co-author of more than 180 international peer review publications ([h=34 & citations=3946](#)), co-editor of 5 books “Rayons X et Matière” series (Lavoisier and ISTE) [2006](#), [2007](#), [2009 \(English version\)](#) and [2011](#) and of Nanosciences overview in North – West France ([International Journal of Nanotechnology](#)) and more than 50 invited talks.

Co-Chair of the scientific committee of the biannual French-speaking meeting "[Rayons X et Matière](#)" since 2006 (up to 250 participants) and member of several advisory boards of national and international scientific conferences ([ICEM](#), [CIMTEC](#) etc.).

Co-supervisor of about 10 PhD thesis and member of more than 50 PhD and HDR jury.

Synchrotron radiation facilities user:

One month per year on average since 1981 (beam-time allocation through review panels) for doing SAXS and XRD with some fluorescence scan experiments at [LURE](#) (France), [ALS](#) (USA), [SSRL](#) (USA), [SOLEIL](#) (France) and [ESRF](#) (France)

Contact

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