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## CURRICULUM VITAE

### MENELLE Alain

Director Assistant  
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<http://www-llb.cea.fr>

French, born on Novembre 12<sup>nd</sup> 1958 at Longeville-les-Metz, France

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### Skills

After having started the LLB liquid diffractometer and used the first neutrons of ISIS, I upgraded the high flux powder diffractometer G61. Then I moved to neutron reflectivity learned at Argonne and NIST. In Saclay, I built the Eros reflectometer, and then organized our instrumental upgrade programs Orphée+, ALTOR and Cap2015. Beside organizing safety and communication of the LLB, I am now heavily involved in our participation in ESS.

Since 2013	Deputy of the French representative at the IKC of the ESS.
Since 2009	International Expert of the CEA for neutron instrumentation and Areva-TA advisor.
Since 2003	In the team of direction at the Laboratoire Léon Brillouin, in charge of instrumentation, user office, safety, communication and budget spending.
2004 – 2008	Nominated at the section 05 of the « Comité National de la Recherche Scientifique »
2002	Yves Rocard price of the SFP for the work on neutron supermirrors.
2001 – 2002	CEA observer at the ESS R&D Council
1999 – 2000	Technicadome advisor on research reactors
1994 – 2003	Head of « Materials and Interfaces » group at the LLB, in charge of the time of flight reflectometer

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### Education :

- 1983-1987 : thesis of the Université Paris VI on the structure of amorphous silicon
- 1978-1982 : Ecole Supérieure de Physique et Chimie Industrielle in Paris (ESPCI)

**Publications :** H=23, 138 publications, 2 chapters of book

### Current duties :

- Director advisor at the LLB
- Responsible of instrumental activities and of our instrumental upgrade program Cap2015
- In charge of the safety, communication and user office of the LLB
- Controls and organise the good realisation of the budget

## Main publications :

Kugler S., Molnar G., Petš G., Zsoldos E., Rosta L., Menelle A., Bellissent R.  
Neutron-diffraction study of the structure of evaporated pure amorphous silicon  
Physical Review B 40 (1989) 8030-8032

Menelle A., Russell T.P., Anastasiadis S.H., Satija S.K., Majkrzak C.F.  
Ordering of thin diblock copolymer films.  
Phys. Rev. Letters, 68, (1992), 67-70

Ballot B., Menelle A., Al Usta K., Farnoux B. Samuel F.  
Supermirrors study by neutron multireflexions.  
Journal de Physique IV-C8, 3, (1993), 471-474

Maaza M., Menelle A., Chauvineau J.P., Pardo B., Raynal A., Bridou F., Sella C., Megademini T.  
Monochromation and apodization with Ti-B4C multilayers in neutron optics  
Physica B, 198, (1994), 231-234

Al Usta K., Gaehler R., Boeni P., Hank P., Kahn R., Koppe M., Menelle A., Petry W.  
A new polarizing guide at LLB.  
Physica B, **241-243**, (1997), 77-78

Fermon C., Ott F., Menelle A.  
Neutron Reflectometry. In "X-Ray and neutron reflectivity: Principles and Applications", Chapter V, 163-194  
Daillant J. and Gibaud A. (Eds.), Lecture Notes in Physics, Springer 1999

Marzolin C., Auroy P., Deruelle M., Folkers J.P., Léger L. and Menelle A.  
Neutron reflectometry study of the segment –density profiles in the end-grafted and irreversibly adsorbed layers of polymers in good solvents.  
Macromolecules, **34**, (2001), 8694-8700

N'Guy-Maréchal K., Menelle A., Gergaud P.  
NiC/Ti supermirrors and stress evolution under neutron irradiation.  
Journal of Neutron Research, **9**, (2001), 71-78

Bertagna, V.; Erre, R.; Saboungi, M.-L.; Petididier, S.; Levy, D.; Menelle, A.  
Neutron reflectivity study of ultrathin SiO<sub>2</sub> on Si  
Applied Physics Letters, (2004), vol. **84**, no. 19, pp. 3816-3818

Menelle A., Ott F.,  
TiToF: A high-intensity space-time reflectometer.  
Physica B: Condensed Matter (Amsterdam, Netherlands) (2006), **385-386**(Pt. 2), 985-988.

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REFocus : A new concept for very high flux neutron reflectometer.  
Nuclear Instruments & Methods in Physics Research, Section A ; (2008), **586**(1), 23-30

O. Roigl, V. Méot, B. Rossé, G. Bélier, J.-M. Daugas, A. Letourneau, A. Menelle, and P. Morell  
Direct evidence for inelastic neutron acceleration by <sup>177</sup>Lu  
Physical Review C; (2011), **83**, 6 (DOI: 10.1103/PhysRevC.83.064617)

D. L. Anastassopoulos, N. Spiliopoulos, A. A. Vradis, C. Toprakcioglu, A. Menelle and F. Cousin  
Neutron Reflectivity Study of End-Adsorbed Bimodal Polymer Systems under Static Conditions and Shear Flow  
Macromolecules (2013), **46**, pp. 6972-80.