

## **Bernard DREVILLON**

Director of Thin Film Laboratory of Ecole Polytechnique (LPICM, CNRS – UMR 7647)

Professor at Ecole polytechnique (Palaiseau, France)

*Born at Saint Gildas de Rhuys (France) on 02/02/46; French citizen*

*Married, three children, eight gran-chidren*

### **. Education :**

PhD in High Energy Physics, University of Orsay (Paris 11), 1973

### **. Main professional activity :**

Head of LPICM (Thin Film Laboratory, Ecole Polytechnique, Palaiseau, France).

1999-2012

Staff : 120 persons (45 permanents) including about 25 PhD students. Four research groups :

- Silicon based nanomaterials and thin films - Photovoltaics applications (joint research team PVSIXT with TOTAL)
- Large area electronics applications (silicon and organics)
- Carbon nanotubes, graphene, silicon nanowires and applications (joint research teams with Thales R&T and IFSTTAR)
- Instrumentation in optics and applications (polarimetry, nanoRaman)

### **. Main professional position :**

Research Director (Exceptional Class) at French National Research Council (CNRS)

Permanent position at CNRS from 1972 (at Ecole Polytechnique Physics laboratories)

Retired in 2012

### **. Teaching (Ecole Polytechnique) :**

Professor (courses : applied electronics, semiconductor and photovoltaics, nanomaterials and electronic applications) - Vice-President of the Physics Department (till 2011)

Director of the international Master program REST (Renewable Energy Science and Technology) since 2011

Director of the international Master program STEEM (Energy & Environment : Science, Technology & Management) since 2016

### **. Consulting :**

Horiba-Jobin-Yvon (ellipsometry, polarimetry) and FX-Conseil

### **. Research interests :**

High Energy Physics (1969 - 78)

Instrumentation in optics :

Spectroellipsometry (UV-visible and infrared), Mueller polarimetry, NanoRaman

Plasma Deposition of thin films and nanomaterials - In situ optical studies  
Semiconductor thin films and interfaces (silicon based)  
Large area electronic applications (solar cells, flat panel displays)  
Optical characterizations (biomedical applications, metrology of semiconductor devices)

. **Publications** : Over 300 journal publications, over 7600 citations (H-factor : 44)

. **Patents - Licences** :

Over 20 patents pending (mostly in optical instrumentation) and 4 exclusive licences in ellipsometry and polarimetry (Horiba-Jobin-Yvon SA).  
More than 700 instruments sold by Horiba in the worldwide market (> 50 % in Asia)

. **Conferences** : Over 50 invited talks in international conferences and meetings

. **Edition**

Editor-in chief of the European Physical Journal - Applied Physics  
2003-14  
(about 600 submissions and 1600 published pages per year)

. **Awards**

Chevalier de la Légion d'Honneur, Officier dans l'Ordre National du Mérite et Officier des Palmes Académiques  
Prix Y. Rocard (French Physical Society, 1992)  
Silver Medal of CNRS (1995)  
Research Team of the Year in Material Science (France, 1996)  
SPIE Fellow (The International Society for Optical Engineering): from 2003  
Prix de l'innovation de l'Ecole polytechnique (2012)