



## ABOUT PROFESSOR JEAN PHILIBERT

### A BRIEF C.V. OF JEAN PHILIBERT

After physics and chemistry studies at the University of Paris, Jean Philibert joined the French Institute for Steel Research , where he studied martensitic transformation under the supervision of Prof.. Charles Crussard.

He was later entrusted with the management of the first “Elctron Probe Microanalyser” , a prototype built by Prof. Raimond Castaing. He developed many original applications in several fields of metallurgy and developed a basic formula for the quantitative analysis ( ZAF method). This instrument offered quite new ways to study diffusion in metals and ceramics. J. Philibert, mainly with Dr. Yves Adda , investigated interdiffusion processes in several metallic and non metallic systems. This close collaboration led to a published large book : *La Diffusion dans les Solides* (1966).

Jean Philibert was later appointed a professorship at the University Paris-sud, Orsay campus, to organize new degrees in Materials Science and Engineering education and simultaneously he launched with the CNRS a laboratory under the heading of Materials Physics. With his collaborators, he studied the relation between diffusion processes and high temperature mechanical properties in non metallic materials , especially oxides and molecular liquid crystals. Determination of oxygen diffusion was performed by means of oxygen isotopic exchange. Later ,especially with Dr. François d’Heurle , he studied the formation of compounds by interdiffusion in the solid state.

Prof.. Philibert is the author of more than two hundred papers . Besides the above quoted book, he also published “*Diffusion et Transport de Matière dans les Solides*” (185) , later translated in English by Dr Steve Rothman under the title “ *Atom Movements : diffusion and mass transport in Solids*”.

He is also the co-author of a text-book for undergraduate students “ *Métallurgie Générale* ”(1969) , and later “*Métallurgie, du minerai au matériau*”, that covers the whole field from extractive metallurgy to corrosion, including physical metallurgy, structural transformations, and mechanical metallurgy: This book received several editions.

Jean Philibert was awarded the *1999 Acta Metallurgica Gold Medal*.