Joseph Borel

J B R&D Consulting
(Retired from Executive Vice President Central R/D
ST Microelectronics)

Joseph (jo) P. A. Borel is native from Dévoluy in France (born 08 02 1938) and began his carrier at LETI/ Grenoble in 1961 in devices physics (Doctor ès Sciences Physiques in 1967) and then in CMOS technologies and became head of the Applied Microelectronics Lab in 1977. He had in this position a major contribution to the development of industrial MOS and SOS processes and design automation for ASIC applications in FRANCE and then moved to EFCIS, a start up production facility, in 1979 as R/D Director.

From 1981 to 1987 he was appointed Technical Director of Thomson Semiconductor (merge of EFCIS and SESCOSEM) , a large French company in the design and production of CMOS dedicated products for industry.
After the merge of Thomson Semiconductors and SGS (an italian company) in 1987, he became Executive Vice President central R/D of ***STM in charge of corporate design automation of very complex integrated circuits (SoC's***) until 1998 when he retired. ***He developed a corporate unified CAD strategy for STM (called UNICAD) that is still in place.***

Since then he is continuing technical activities as a consultant in JB-R&D (individual consulting company) and contributed to several domains:
-with the MEDEA+ European Program he took ***the initiative to launch the European MEDEA+ EDA Roadmap (first release in 1999),*** an annual reference program proposal for the EDA developments in Europe.
His recent contribution in EDA consulting for the ongoing CATRENE European EDA 5 years program is accessible in a 348 pages document (Referenced below and available on the net).
http://www.catrene.org/web/communication/publ_eda.php
This document has been proposed as a template for an international EDA Roadmap to Andrew Cahng.

The global vision from devices to process, design and design automation is central in the semiconductor industry to make the pertinent strategic decisions leading to highly competing products early available on the market. Under the responsibility of Jo Borel the Physical devices simulation and Design Automation results in System on Chip at STMicroelectronics were leading the industry and recognized in his presentations as
-an ***early speaker on computer simulation at IEEE ISSCC 73 in Philadelphia on "Connection between technology and models using computer analysis";***
- the ***keynote speaker of the ISSCC conference in 1997 in San Francisco on « Technologies for multimedia Systems on a Chip » (3500 participants).***

-in 2000 he received, at the ISSCC conference in San Francisco, the « IEEE Millennium Medal »; were also promoted internationally recognized research and industry leaders such as Gordon E. Moore , James D. Meindl, Minoru Nagata…

As a recognition of his leading technical expertise Mr Borel was invited to participate during his life at various activities, committees or boards among which :

-***Associate Editor of Solid State Electronics, USA (review of device physics and technology research advances worldwide).***
-Expert at national or international levels for governments research programs .
-25 years (72 to 97) initiation and participation to/or chairman of Steering Committee in European Conferences ***(ESSDERC and ESSCIRC)*** and awarded in ***1997 the first fellowship for outstanding contribution to these conferences.***
-Two times expert for reviewing the National R/D program in SWEDEN (96 and 98).
-Expert for JESSI and MEDEA European programs. He has been the initiator of the ***MEDEA+ EDA Roadmap for Europe*** and published 5 releases of it from 1999 to 2005 with the contribution of nearly 100 top level European experts in the domain (coming both from universities, laboratories and industry in Europe).