

# Innovation Through Global Technology Alliance

## The Dream-Team Culture

With the explosive growth of the internet and wireless communications to the surging demand for innovative new consumer electronic products, today hottest trends are driving the semiconductor industry. With semiconductors in use now in virtually every kind electronics product, demand is higher than ever and rising fast.

This current environment of rapid technological innovation forces us to focus on the current technological roadmaps by dedicating the right amount of human resources in terms of manpower and budget. Staying ahead of the technology curve demands extraordinary peripheral vision in terms of understanding the emerging technologies and their relevance for future R&D effort.

To solve the dual constraints time and customer satisfaction, the overall semiconductor divisions members of the Horiba group, which include-Atago-COS-Jobin Yvon and STEC, decided to have a **Global Technology Alliance Program**, based on the **Dream-Team Culture** where engineers never let their hearts rule their heads. We believe that this global expertise in engineering, research, development and marketing enables the Group to rapidly develop new technologies and advanced products in response to emerging industry trends.

Another key component of the Company's strategy is to involve selected high research institution, over the world, through close technical relationships at the operating and management level.

A typical example is the strong collaboration existing between JY-Horiba, with Ecole Polytechnique, the most prestigious research institution in France. This collaboration led to many technological transfer, like Spectroscopic Ellipsometry from UV to IR.

The internship program, started with both Jobin Yvon Thin Film division based in France, the Kyoto Horiba semiconductor division and Atago Bussan .

A successful example of this cooperation including is the UT-300, a metrology measurement system based on Spectroscopic Ellipsometry capable of measuring Ultra Thin Film properties across a 300 mm wafer with a high degree of precision and repeatability. To bring this system to the market in a record time, a network of team worked closely together to meet the dead line, as a Dream Team .

An other good example of this Dream-Team Culture program, is in the Wet-Etch field, where a solution combining the expertise in chemical concentration monitor of the Horiba's semiconductor division with Jobin Yvon endpoint detection system, is offered to our customers.

This two examples, are the first steps of a large program including the development of a common Device-Net communication system, and software platform.

This growing use of the Global HORIBA's group pioneering technologies, in optics & spectroscopy, gas analysis and chemicals, combined with strong relationships with semiconductor industry leaders and prestigious research institutions will lead in a very near future to a novel generation of advanced instrumentation for inspection, measurement metrology, and in-situ process monitoring .

The challenge of managing large development projects and for example improving a particular system component has led to the development of an internal global network, HORNET, which makes exchanging and sharing informations more efficient. This degree of cooperation do not



Ramdane BENFERHAT, Dr.

Managing Director

Thin Film Group

Jobin Yvon S.A. / HORIBA Group

compromises the technical competency of each partner, but let them acting as specialist, which is essential to making the right decision. Outstanding services and solid innovation are a necessity, we recognize that our future prosperity and growth is a direct results of our customers success and satisfaction.

Besides this Global Technology Alliance Program, the HORIBA Group has an extensive global network of sales, service and applications offices to support their aggressive plans for becoming as a Dream Team, the Champion of the competitive semiconductor industry league.

## グローバル技術提携によるイノベーション

### — ドリームチーム構想 —

インターネットなど情報産業の爆発的な成長の中、半導体産業も急拡大している。技術革新が日々誕生する環境下で求められるのは、人的資源への十分な投資と、新しい技術や周辺技術を理解するための広範な視野だ。

ホリバグループの半導体関連各社(愛宕物産(株))(株)コス、Jobin Yvon S.A.(株) エステック(株)堀場製作所))は、ドリームチーム構想に基づいてグローバル技術提携戦略を展開している。研究開発からマーケティングまですべての分野で協力を図り、新しいトレンドに対応できる成長力を養うことが目的だ。

この戦略の要となるのは高いレベルの研究所・企業との連携である。堀場本社、JY ホリバ、フランスのEcole Polytechnique 三者間の密接な関係から 300mm ウエハ対応の超薄膜を高精度で計測する分光エリプソメータ UT-300 が誕生した。また湿式洗浄分野では、堀場の薬液モニタとJYの終点検知システムとの技術提携によって新たな可能性が開けている。

これらの例は、デバイスネット通信システムやソフトウェアプラットフォームなど壮大な開発計画の第一歩にすぎない。今後、ホリバの誇る光学・分析技術は半導体先進企業や研究所との連繫をいっそう強め、検査、in-situ プロセスモニタリングの分野で優れた計装技術を生み出してゆくに違いない。

グループ内イントラネット(HORNET)により、グループ間で情報を交換・共有できる環境が整った。徹底したサービスや真の革新、つまり顧客満足こそが成功の鍵となるが、その意味で情報の共有が基盤となる。

ホリバ半導体グループのグローバルネットワークは、この他にも販売、サービス、さらにはアプリケーションの分野で構築されている。これらを活用して、競争が激化する半導体業界に対して、強力にバックアップしていきたい。

(抄訳 編集部)