

Sumitomo forms gallium refining JV in Shanghai

Sumitomo Chemical Co (Osaka, Japan) has formed a joint venture in Shanghai, China to expand high-purity gallium production. Ownership is:

- 70% Sumitomo Chemical;
- 15% Inabata & Co; and
- 15% Technical Sourcing International.

The plant will have the capacity to refine 40 tons per year (using Sumitomo's own process). Sumitomo Chemical already produces 40 tons per year in Japan and is to boost that to 60 tons within the year (so total capacity will be over 100 tons per year).

Airtron GaAs shut down

Since acquiring wafer manufacturer **Litton Airtron** (Morris Plains, NJ, USA) as part of its take-over of Litton Industries (announced last December), **Northrop Grumman Corp** (Los Angeles, CA, USA) had been trying to sell the business but, after not finding any takers, it has now closed the production facility.

Northrop Grumman is said to be not continuing to produce GaAs wafers. However, there is still a possibility that the SiC division may continue (Northrop Grumman already had SiC substrate- and device-making technology before its acquisition of Litton).

EMF continues growth

EMF Ltd (Cambridge, UK) says it has seen record chemical sales in Q2/2001 (and 200% growth over the last 12 months, mainly for DEOX TMA and EpiProof TBP), reflecting the large number of MOCVD tools sold over the last few years. Growth is mainly in the US and Taiwan. It forecasts continued growth in Q3-Q4.

The DEOX range of TMA, TMG and TMI can be used where low oxygen content is needed (particularly for VCSELs). The demand for group V precursors TBA and TBP has also risen sharply, preferred by many start-ups to arsine and phosphine. The shift is driven by safety and the authorities (especially in the US). However, there is an advantage in using MO's over hydrides in terms of purity (especially for silane). TBP also eliminates deposits in the exhaust line (a fire hazard for PH₃).

Also, for more complex structures with regrowth, TBA and TBP give better performance due to the lower V/III ratio and the lower-temperature cracking.

New materials including the nitrogen source EpiProof uDMHy and DTBSi (a metal-organic source replacement for silane) have seen double-digit growth.

EMF's doubling in capacity is on target. The Mochem group V facility at Marburg, Germany should also double over the next 12 months.

EMF is also pioneering a new technique for in-situ monitoring of chemicals during the vacuum filling process, replacing certification by ICP and NMR (which are no longer effective for measurements at the ultra-low levels of impurities now seen in the DEOX grade materials).

New gallium-bearing zones discovered

Following its acquisition in June of gallium mining rights on the Cordero property in Nevada, USA (see Issue 6, page 12), **Gold Canyon Resources Inc** (Vancouver, BC, Canada) has received final assay results from Inspectorate/Rocky Mountain Laboratories for the second group of samples from its Phase I sampling program.

These have identified three major new zones (North Ruja; Southwest Extension; and White Hills) with values up to 103.8 grams gallium per metric tonne, in addition to values up to 123.7 g/t in the Harper Pit and North East Bradley Pits areas of the existing "M" Fault Zone.

Gold Canyon is due to begin Phase I drilling in mid-October.

* Robert G Carrington - president of the Nevada-based subsidiary Gold Canyon Resources USA Inc formed in June - has been appointed CEO of Gold Canyon Resources Inc.

BOC Edwards launches methylsilane

After completing characterization in May, **BOC Edwards** (Crawley, UK) has begun production and customer sampling of monomethylsilane and monomethylsilane/hydrogen mixtures (used as a carbon precursor in the CVD of SiGeC).

Several customer studies are now underway to tailor specifications and mixtures to individual applications. Special monomethylsilane blends are available.

The electronic materials group is also developing other materials for low-k and SiGe applications.

Equipments & Materials Processing

ATI Inc (Fremont, CA, USA) has lowered its Q3/2001 sales forecast from US\$26-28m to US\$22-23m due to weaker than expected demand for both GaAs and InP substrates (as well as for opto products).

It also expects a further substantial drop in substrate-related revenue in Q4.

For **ATMI Inc** (Danbury, CT, USA) Q2/2001 sales were US\$55m (down 23% on a year ago and 29% on Q1). For first-half 2001 sales were US\$132m (down 1% on a year ago).

ATMI doesn't expect any improvement in Q3. "If anything, early indications suggest a continued slowing of economic activity throughout the semiconductor supply chain," says CEO Gene Banucci.

AIXTRON AG (Aachen, Germany) has reported sales of €58.9m for Q2/2001 (down just 1.5% on Q1) and €118.7m for first-half 2001 (up 79% on first-half 2000): 35% US, 42% Asia, 23% Europe (compared to Q1's 39%, 44% and 17%, respectively).

Orders were €50.1m in Q2 (down just 4%) and €102.4m in first-half 2001 (up 10%). Backlog rose 79% to €160.7m, supporting a forecast of 30% annual growth for the next few years.

AIXTRON has raised its sales target for 2001 from €235m to €239m (up 51% on 2000).

Unaxis Semiconductors (Zurich, Switzerland) has recruited Ralf Kuhlmann in September to the new position of International Sales & Market Manager. Kuhlmann will be based in Trüebach, Switzerland.