New Energy and Industrial Technology Development Organization (NEDO) entrusted TNSC with a part of the “Development of high performance and reliable PV modules to reduce levelized cost of energy”

Taiyo Nippon Sanso Corporation (President & CEO: Yujiro Ichikawa) hereby provide notice that TNSC and National Institute of Advanced Industrial Science and Technology (AIST) have begun pursuing joint R&D of Metal Organic Chemical Vapor Deposition (MOCVD) equipment and Halide Vapor Phase Epitaxy (HVPE) equipment. Those two equipment are installed at AIST (Tsukuba, Ibaraki Prefecture). The R&D is conducted as a part of NEDO’s “Development of high performance and reliable PV modules to reduce levelized cost of energy” project.

Background

NEDO entrusted a consortium led by Professor Okada of Research Center for Advanced Science and Technology, The University of Tokyo with “Research and Development of Ultra High-Efficiency/Low Cost III-V PV Modules” on July 2015.

TNSC has been entrusted on July 29, 2015 as a member of “Development of Low Cost Process Technology” team led by AIST. TNSC will contribute to cost reduction of renewable energy and popularization of clean energy.

1. Installed Equipment and Development Target

・MOCVD equipment

Model	HR3335
Capacity	2 inch wafer x 1
Feature	Flow channel shape to grow high speed
Development Target	Improve MOCVD equipment specification to achieve ultra high speed epi growth such as 40 um/hr with high quality. This R&D is conducted in collaboration with the University of Tokyo

・H-VPE equipment Co-Developed by Tokyo University of Agriculture and Technology

Model	H260
Capacity	2 inch wafer x 1
Feature	GaAs / InGaP continuous growth using twin nozzle
Development Target	Improve H-VPE equipment specification to achieve ultra high speed growth such as 100 um/hr. This R&D is conducted in collaboration with the AIST.

・Other facility (Gas Supply System)

Gas Purifier	Hydrogen Purifier / Nitrogen Purifier
Gas Cylinder Cabinet	Gas Cylinder Cabinet for AsH3/PH3/Si2H6
Gas Abatement System	Dry-Type Exhaust Gas Abatement Equipment

2. Project Term

From June 1. 2015 to March 20, 2018