

## UMF Equipment – Plasma-Enhanced Chemical Vapor Deposition (PECVD) for Carbon Nanostructure

### Aixtron BM Pro 4

Plasma-enhanced chemical vapor deposition (PECVD) is a chemical vapor deposition process used to deposit thin films from a gas state (vapor) to a solid state on a substrate. Chemical reactions are involved in the process, which occur after creation of a plasma of the reacting gases. Our systems offer a turnkey solution for carbon nanotube and graphene production. The system can operate in both thermal CVD and plasma-enhanced CVD modes, which is extremely important for controlling the structure of carbon nanomaterials as it enables virtually all variations and morphologies of carbon nanotubes and graphene to be produced.

- Features:
- Substrate size: Up to 4" wafer
  - Fast response heater, up to 300°C/ minute ramp rates
  - Excellent reproducibility for carbon nanotubes and graphene
  - Closed loop infrared wafer temperature control
  - Automatic process control
  - Fast growth and processing

Please refer to supplier information page: <https://www.aixtron.com/> for further details of the system.  
For any inquiry, please contact Dr. Terence Wong (Tel: 3400 2075; Email: [tai-lun.wong@polyu.edu.hk](mailto:tai-lun.wong@polyu.edu.hk)).



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