

**Post-Doc Position
for
Epitaxial Growth of Si and Ge by CVD**

Institute of Bio- and Nanosystems 1, Section Ion Technology
Research Centre Juelich

The Institute of Bio- and Nanosystems, Section Ion Technology (IBN1 – IT), at the Research Centre Jülich offers a post-doc position for the research of epitaxial growth of silicon and germanium using chemical vapour deposition (CVD). The two novel CVD reactors are designed for 200 and 300 mm wafers. Aim of this work is to establish epitaxial layer growth of Si and Ge, develop selective growth methods and in-situ doping. In addition, novel precursor should be investigated for low temperature growth. Particular emphasis will be placed on selective growth methods because of their high relevance for the fabrication of novel devices. Conformal growth on nanowires and the development of novel heterostructures are envisaged. A state of the art wafer cleaning tool is available. The work will be performed in close collaboration with the high-k and device groups.

The institute is equipped with various layer deposition tools, ion implanters, simulation software, cleanroom facilities offering photo and electron beam lithography capabilities down to the few-nanometer range and excellent characterization facilities. This guarantees for an ideal working environment. Good knowledge of solid state physics and specifically on epitaxial layer growth is very welcome.

Initially, a fixed-term contract for two years will be offered.

Please submit applications
and requests for further information to:

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