

You are cordially invited to attend this seminar to be held on

Wednesday, November 30th, 16:00
Room 206, Wolfson Mechanical Engineering Building

Crystal growth mechanism investigated by STMBE method

Prof. Shiro Tsukamoto

National Institute of Technology, Anan College
265 Aoki, Minoubayashi-cho, Anan, Tokushima 774-0017, JAPAN
e-mail: tsukamot@anan-nct.ac.jp

Abstract

Only, it is possible to perform true dynamic atomistic-level imaging by using a system in which a Scanning Tunneling Microscope (STM) is placed inside a Molecular Beam Epitaxy (MBE) growth chamber, the so-called "STMBE system", and perform true in-situ STM imaging. We have already exhibited the use of this system for Ga on GaAs, InAs on GaAs, Mn on GaAs, Pd-catalyst on S-terminated GaAs and GaN, etc. In this seminar, I will present the details of our STMBE system and explain the connections between these basic researches and industries.

Biosketch



1987 B.S. Electrical Engineering, Tokyo University of Science
1989 M.S. Electrical Engineering, University of Michigan
1993 Ph.D. Electronics Engineering, University of Tokyo
1993 Researcher, National Research Institute for Metals
1998 Senior Researcher, National Research Institute for Metals
2001 Senior Researcher, National Institute for Materials Science
2003 Specially Appointed Associate Professor, University of Tokyo
2007 (~present) Special Research Professor (Nichia Corporation Endowed Chair), National Institute of Technology, Anan College
2011 (~2012) Guest Professor, The Institute for Solid State Physics, University of Tokyo
2013 (~2014) Guest Professor, The Institute of Scientific and Industrial Research, Osaka University