

Prof. Digbijoy N. Nath

Assistant Professor Room no. TF-05, Centre for Nanoscience and Engineering, Indian Institute of Science, Bangalore – 560012.

Website: <u>http://www.cense.iisc.ernet.in/people/faculty/digbijoy.html</u> E-mail: <u>digbijoy@cense.iisc.ernet.in</u>

TUTORIAL TOPIC:

Epitaxy of III-nitride heterostructures: Growth & Fabrication

TUTORIAL:

In this tutorial, epitaxial growth of III-nitrides would be explained with particular focus on the two primary growth techniques commonly used – metal organic chemical vapor deposition (MOCVD) and molecular beam epitaxy (MBE).

Growth diagrams for MBE growth of both Ga-polar and N-polar GaN and InN would be explained along with details of growth of InGaN and InAlN based heterostructures.

MOCVD growth of III-nitrides on sapphire, SiC as well as on silicon would be covered in comprehensive details in this tutorial too.

PROFILE:

EDUCATION:

- PhD, Electrical Engineering, 2013, The Ohio State University, Columbus, USA.
- B. E. (Hons), Electrical & Electronics Engineering, 2008, Birla Institute of Technology and Science (BITS), Pilani.

EXPERIENCE:

- Postdoctoral researcher, The Ohio State University, Columbus, USA, October 2013 July 2014
- Assistant Professor, IISc, Bangalore, August 2014 present.