

Nano-Science and Nano-Communication Design in Graduate-Level Education and Research Training

Tadashi Itoh

Institute for NanoScience Design, Osaka University

1-3, Machikaneyama-cho, Toyonaka, Osaka 560-8531, Japan

itoh@insd.osaka-u.ac.jp

http://www.insd.osaka-u.ac.jp/index_e.html

Abstract

In addition to the subsidiary graduate-level, multi- and trans-disciplinary education and research training programs which were started 7 years ago and offered for graduate students and young refreshers working in nanotechnology-related industries, the Institute for NanoScience Design of Osaka University has added its new training programs for "Technology Roadmap Design" of future devices and materials, and also for "Public Engagement" including nano-communication, nanorisk for EHS (environment, health and safety), standardization of nanomaterials, etc in the fields of nanoscience and nanotechnology. The programs consist of lectures and equally weighted discussion and debate shared by graduate students and special auditors working in industries. The programs are transmitted through internet to connect five lecture rooms inside Japan with the aid of distance live-education video system. The presentation of the results of discussion is quite useful not only for polishing the presentation ability of the students but also for adding new concepts or elements to polish up the roadmap design. These activities become possible with the support of the "Osaka University Academia-Industry Liaison Consortium for Human Resource Development on Nano-Science and Engineering (Alice-one)".

The outline of the whole nano-programs offered by Osaka University will be presented.

References

- 1) T. Itoh, H. Akai, H. Ogawa, W.A.T. Dino, and S. Ichikawa: "Trans-disciplinary Graduate and Refresher Programs for Education, Research and Training in the Fields of Nanoscience and Nanotechnology", *J. Materials Education* 28, 15-20 (2006).