

## Biobone Symposium

13-15 October 2015 - Santiago de Compostela, Spain

---



### Prof. Ann Wennerberg

Professor and Chair of the Department of Prosthodontics  
Faculty of Odontology, Malmö University, Sweden

---

### Nanohydroxyapatite coatings on titanium and PEEK implants

**Abstract:** Nanometer particles, ion implantation, surface wettability and biofilm coating are some examples on new surface modifications that have been added to the previous version of surface treatments. One of the hypothesis for adding nanometer particles is that these small particles may act as a retention site for the proteins and thus be relevant for further events during the healing process. In addition, calcium and magnesium ions have been reported to provide with a bioactive surface, i.e. a surface which will have a certain ability to attract necessary proteins and cells for implant integration in living tissue. Thus, chemical and topographical modifications on the nanometer level of resolution influence the bone healing. Experimental results and potential drawbacks will be discussed. Although increased bone integration as well as increased soft tissue adhesion has been reported in experimental studies, the clinical advantage of nano- and so called bioactive implant surfaces is still unknown.

**Bio:** Professor Ann Wennerberg received her dental degree at Gothenburg University in 1979. She became Doctor of Medicine in 1996 in the Department of Handicap Research and Specialist in Oral Prosthodontic in 1997 at Gothenburg University. In 2002 she became Professor and in 2003 was appointed Chair of the Prosthetic Department in Gothenburg. Currently, Professor Wennerberg is Professor and Chair of the Department of Prosthodontics at Malmö University.