



SEMINAIRE ISMO

**Attention !
Date et lieu inhabituels**

Thomas R. NEU

Helmholtz Centre for Environmental Research – UFZ, Magdeburg, Germany

Imaging of environmental samples – present options and future prospects

Laser scanning microscopy represents a standard technique for analysis of microbiological samples from natural, technical and medical habitats. Employing a structured approach, the main features of unknown samples can be established. Specific fluorochromes allow visualisation and quantification of cellular and polymeric constituents.

Right now, imaging techniques are extended towards high resolution and chemical analysis. So-called nanoscopy techniques achieve a resolution of 120, 80 and even 30 nm in aqueous samples. In addition, chemical imaging becomes an important tool for linking biochemical with elemental composition.

As a result, correlative microscopy techniques are developed in order to study the structure, function and dynamics of microbiological communities.

Ref: Advanced imaging techniques for assessment of structure, composition and function in biofilm systems, *Neu TR, Manz B, Volke F, Dynes JJ, Hitchcock AP, Lawrence JR* FEMS Microbiology Ecology 72: 1-21 (2010).

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Jeudi 8 mars 2012 à 11 h 00

Bât. 349 - Amphi Magat

Université Paris-Sud, 91405 ORSAY Cedex