UNIVERSITÉ DE STRASBOURG

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Thomas W. Ebbesen 教授講演会
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Light and Metal:
Surface Plasmon Devices and Circuitry

日時：　4月23日（木）　16:00～17:30
場所：　金属材料研究所2号館1階・講堂

Surface plasmons have generated considerable renewed interest in the past decade due to wide potential they offer in everything from sensors to opto-electronics. Using modern fabrication techniques, it is possible to structure metals surface on nanometer scale and thereby to tailor the properties of surface plasmons for a given purpose. Since surface plasmons are essentially electromagnetic waves trapped at the metal surface, much effort is being oriented towards creating novel photonic devices and miniature circuits. The fundamental aspects of surface plasmons, their involvement enhanced transmission and diffraction control in aperture structures together with examples of practical devices will be presented. The different possibilities and challenges to create complete surface plasmon circuits will also be discussed [1-3].

Ref.: 1. Barnes, Dereux and Ebbesen, ***Nature*** 424, 824 (2003);
2. Genet and Ebbesen, ***Nature*** 445, 39 (2007);
3. Ebbesen, Genet and Bozhevolnyi**,** ***Physics Today*** (May 2008).

TOHOKU

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