Post-Doc Position in Nanoplasmonics for biosensing available at the Interdisciplinary Nanoscience Center (iNANO), University of Aarhus, Denmark

A **post-doctoral research position** in **Nanoplasmonics for biosensing** is available at the Nanobiointerfaces group (www.inano.dk/sw16190.asp) at the iNANO center, Univ. Aarhus Denmark starting immediately. The position is for 1 year with the possibility for extension for up to a further 2 years **(1+2 years)**.

The project is focussed on studies of plasmon hybridisation in lithographically produced nanoparticles. The coupling of nanoparticles will be controlled in metal and metal dielectric by nanoscale fabrication [1-3] and used to understand and utilise plasmon hybridisation for the design of nanooptical biosensors. Nanodevices aimed at both refractive index sensing [4-7] and surface enhanced spectroscopic detection [8] will be explored by combining nanoplasmonic devices and macromolecular nanopatterns [9].

The successful applicant will have a **Ph.D in Nanoscience, Physics, Surface chemistry or related disciplines**, with a successful and documented scientific record. Previous experience of plasmonics, nanofabrication, surface modification and/or nanoscale characterisation being an advantage.

The interdisciplinary research center (iNANO) (www.inano.dk) is a major research and education centre based at the University of Aarhus, hosting 60 senior scientists, ~100 post-docs and ~120 Ph.D students. The center combines expertise and faculty from physics, chemistry, molecular biology and medicine to carry out world class interdisciplinary research. The center gives access to a broad range of infrastructure, tools and expertise including a newly inaugurated clean-room. With a 5 year undergraduate nanotechnology programme and nanoscience graduate school (www.inanoschool.dk) the center provides a full educational environment. In addition to the large base of basic research, the center has a large number of ongoing industrial projects and partnerships.

For further information contact **Associate Professor Duncan Sutherland** (duncan@inano.dk, tel +45 89 42 55 47). Potential candidates should submit their CV's and full publication list to duncan@inano.dk

1. A. Dmitriev, C. Hägglund, S. Chen, H. Fredriksson, T. Pakizeh, M. Käll and D.S.Sutherland *Nano Letters* 8 (11) 3893-3898 (2008)
2. A. Dmitriev, T. Pakizeh, T. Rindzevicius, M. Käll, and D. S. Sutherland *Small* 3 2 294-299 (2007)
3. H. Fredriksson, Y. Alaverdyan, A. Dmitriev, C. Langhammer, D.S.Sutherland, M. Zäch and B. Kasemo *Advanced Materials* 19:23 4297- 4302 (2007)
4. E.M. Larsson, J. Alegret, M. Käll and D.S.Sutherland *Nano Letters* 7 (5) 1256-1263 (2007)
5. A. Dahlin, M. Zach, T Rindzevicius, B.Kasemo, M. Käll, D.S. Sutherland and F. Höök *Journal of the American Chemical Society* 127 (14): 5043-5048 (2005)
6. R.Toftegaard, J. Arnbjerg, P.R.Ogilby, A. Dmitriev, D.S.Sutherland, L. Poulsen *Angew. Chem. Int. Ed.* 47:32 6025-6027 (2008)
7. H. Agheli, J. Malmstrom, E.M. Larsson, M. Textor and D.S. Sutherland *Nano Letters* 6 (6): 1165-1171 (2006)