

CURRICULUM VITAE

Petra S. Dittrich, Prof. Dr.

PERSONAL INFORMATION

Date of Birth: 1974
Place of Birth: Lingen (Ems), Germany
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EDUCATION

2000-2003 PhD thesis, performed at the Max Planck-Institute for Biophysical Chemistry, Göttingen (Germany), supervised by Prof. P. Schwille, defense: April 2003 at the University of Bielefeld, Germany
Thesis title: *Confocal fluorescence spectroscopy in microstructures: detection, analysis and sorting of cells and particles*

1993-1999 Studies of chemistry at the University of Bielefeld, Germany. Diploma majoring in physical chemistry, supervised by Prof. K. Kohse-Höinghaus.
Thesis topic: *Detection of aromatic amino acids by excitation-emmission spectroscopy and time-resolved fluorescence spectroscopy*

RESEARCH VISITS

1997 Studies of chemistry at the Universidad de Salamanca, Spain, Physical Chemistry Group (Prof. J. Casado-Linarejos)

March/April 2002 Research stay at the Cornell Nanofabrication Facility, Cornell University, Ithaca (NY, USA)

April/May 2005 Research stay at the University of Tokyo, Japan, Applied Chemistry Group (Prof. T. Kitamori)

PROFESSIONAL EXPERIENCE

Since July 2008 Assistant Professor for Bioanalytics at the Department of Chemistry and Applied Biosciences, ETH Zürich, Switzerland

Since April 2006 Research Highlights Editor for Lab on a Chip (Royal Society of Chemistry)

2004-2008 ISAS- Institute for Analytical Sciences, Dortmund, Germany

Scientific interests:

- 1) Lab-on-chip-technologies and microfluidics in general, and in particular for biological and medical applications
- 2) Formation and analysis of particles and droplets on microchips
- 3) Single-molecule detection based on fluorescence spectroscopy and other high sensitivity detection techniques

2003-2004 Postdoc at the Max Planck-Institute for Biophysical Chemistry,
Göttingen, Germany
Projects:
1. Fluorescence correlation spectroscopy (FCS) to determine flow velocities,
and for kinetic studies in artificial and "biological" channels (neurons)
2. "Artificial cells": In vitro-translation of the Green Fluorescent Protein in
emulsion droplets formed in microfluidic channels

GRANTS AND AWARDS

1997 Erasmus/Socrates scholarship
1996-1999 Scholarship of the Studienstiftung des Deutschen Volkes
2002 Grant of the Deutscher Akademischer Austauschdienst, DAAD
2003 Award of the Westfälisch-Lippische Universitätsgesellschaft for the PhD thesis
2007 Fellowship of the Christiane Nüsslein-Vollhard-Stiftung