

# Curriculum Vitae

Matthias Hoffmann

2006

## *Personal Details*

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*Name* Matthias Hoffmann  
*Address* Hachbergweg 2, 79341 Kenzingen, Germany  
*Nationality* German

## *Education*

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- 2006** Dr. rer. nat. in physics (magna cum laude)  
University of Freiburg.  
PhD thesis: Novel techniques in THz TDS
- 2001** Diploma in Physics, University of Freiburg, (1.4)  
Diploma Thesis: Development of fast readout electronics for COMPASS  
(High energy physics experiment at CERN)
- 2000** Staatsexamen in Chemistry and Physics (2.0),  
University of Freiburg  
Subjects: organic and inorganic chemistry,  
Quantum mechanics and Field Theory
- 1993** Abitur, Gymnasium Kenzingen, (1.2)

## Work Experience

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2006-	Postdoctoral Research Associate Massachusetts Institute of Technology, Cambridge, MA
2002-2006	Research Assistant University of Freiburg: Research in THz spectroscopy: Fiber coupling and dispersion compensation of femtosecond lasers, optimization of materials for fast photoswitches, Lab Automation with LabView, Data analysis and modelling Teaching physics to students
March- September 2005	Research assistant at COM center, Danish Technical University, Copenhagen
1999-2005	Support of financial software (accounting) and webmaster at Institut für Religionspädagogik, Freiburg
1993-1994	Civil Service Kreiskrankenhaus Emmendingen

## Publications

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- *Terahertz time-domain spectroscopy and imaging of artificial RNA*, M. Fischer, M. Hoffmann, H. Helm, R. Wilk, F. Rutz, T. Kleine-Ostmann, M. Koch, P. U. Jepsen, *Optics Express* **13**,5205 (2005)
- *Terahertz-Time-Domain-Spektroskopie mit einem leistungsoptimierten elektrooptischen Detektionsverfahren*, S. Gorenflo, I. Hinkov, A. Lambrecht, B. M. Fischer, M. Hoffmann, H. Helm, P. U. Jepsen, *Technisches Messen* **72**, 7-8 (2005)
- *Chemical recognition in terahertz time-domain spectroscopy*, B. Fischer, M. Hoffmann, H. Helm, G. Modjesch, and P. Uhd Jepsen, in *Special Issue on Terahertz Technology, Semiconductor Science and Technology* **20**, S246-S253 (2005)
- *Micro Array Biochips - Thousands of Reactions on a Small Chip, Section: Terahertz Spectroscopy* B. M. Fischer, M. Hoffmann, H. Helm, P. Uhd Jepsen T. Kleine-Ostmann, F. Rutz, M. Koch, *Biophotonics: Visions for Better Health Care.*, Springer 2006

## Conference Presentations

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- *Systematischer Vergleich zwischen THz-TD und FTIR-Spektroskopie*, Matthias Hoffmann, Martin Rumold und Hanspeter Helm, DPG Tagung Frankfurt, 2006
- *Schnelle Detektorchips für die THz-TD-Spektroskopie*, Matthias Hoffmann, Peter Uhd Jepsen, Hanspeter Helm, FMF Kolloquium Titisee, 2005

- *RNA spot imaging*, M. Hoffmann, B. Fischer, P.U.Jepsen, H. Helm, OTST Orlando, 2005
- *Fasergekoppeltes THz Spektrometer*, M. Hoffmann, B. Fischer, P.U.Jepsen, DPG Tagung Berlin, 2005
- *Fasergekoppeltes THz-Spektrometer*, M. Hoffmann, B. Fischer, P.U.Jepsen, FMF -Kolloquium, 2004
- *Spectroscopic Measurements of Biomolecules and Pharmaceuticals in the far infrared*, B. Fischer, M. Walther, M. Hoffmann, P. Jepsen, H. Helm, FHG Terahertz Workshop, 2004

## *Thesis Work*

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- *Novel techniques in THz time domain spectroscopy*, PhD Thesis, Freiburg, 2006
- *Integration eines RISC-Mikroprozessors zur Überwachung des CATCH*, Diploma Thesis, Freiburg, 2001
- *Aufbau einer Signalquelle zum Test von schnellen Datenaufnahmesystemen*, Zulassungsarbeit, Freiburg, 2000

## *Computer Skills*

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LabView, Matlab, Mathematica, SolidWorks, Delphi, HTML, PHP  
the usual MS products

## *Miscellany*

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*Languages* German, English, some French and Danish

*Hobbies* Music, guitar playing, sports

## References

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- Keith A. Nelson  
Massachusetts Institute of Technology  
Room 6-026  
77 Massachusetts Ave. Massachusetts, MA 02139
- Prof. Dr. Hanspeter Helm  
Stefan-Meier-Str. 19  
79104 Freiburg, GERMANY  
hanspeter.helm@physik.uni-freiburg.de  
Tel: (+49)(0)761  
203 5738  
Fax: (+49)(0)761 203 5955  
Secretary: (+49)(0)761 203 5723
- Peter Uhd Jepsen COM  
Danish Technical University, Lyngby  
Ørstedes Plads, 345v  
2800 Kgs. Lyngby  
jepsen@com.dtu.dk  
Telefon: 4525 5711  
Fax: 4593 6581
- Dr Bernd M Fischer  
The University of Adelaide  
School of Electrical and Electronic Engineering  
Adelaide SA 5005 AUSTRALIA  
Phone +61 8 830 34115  
bfischer@eleceng.adelaide.edu.au