

PD Dr. Ilme Schlichting



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08/03/1960, Kiel

Director

SCIENTIFIC VITA

- 1979 – 1987 Studies of Biology and Physics, Ruprechts-Karls-University, Heidelberg
- 1985 Diploma in Biology, Ruprechts-Karls-University, Heidelberg
- 1987 Diploma in Physics, Ruprechts-Karls-University, Heidelberg
- 1987 – 1990 PhD thesis, Max Planck Institute for Medical Research, Heidelberg
- 1990 PhD in Biology, Ruprechts-Karls-University, Heidelberg
- 1990 Postdoc, MPI for Medical Research, Heidelberg
- 1990 – 1992 Postdoc, Brandeis University, Waltham, MA, USA
- 1992 – 1993 Group leader, Dept. of Biophysics, MPI for Medical Research, Heidelberg
- 1994 – 2002 Group leader, Dept. of Physical Biochemistry, MPI of Mol. Physiology, Dortmund
- 1999 Habilitation in Biophysics, Ruprechts-Karls-University, Heidelberg
- 2002 – now Director, Max Planck Institute for Medical Research, Heidelberg
- 2006 – now Managing Director, Max Planck Institute for Medical Research, Heidelberg

COORDINATING FUNCTIONS

Since 2006 Managing Director, Max Planck Institute for Medical Research, Heidelberg

FIELDS OF INTEREST

Heme and flavin enzymes, reaction mechanisms, structural dynamics

CURRENTLY FUNDED PROJECTS

SFB623, project C7; DFG-Forschergruppe 526 Blaulicht-sensitive Photorezeptoren

Currently supervision of 1 diploma thesis, 4 doctoral theses, 2 habilitation theses

PUBLICATIONS (7 selected publications since 2000):

Jung A., Domratcheva T., Tarutina M., Wu Q., Ko WH., Shoeman RL., Gomelsky M., Gardner KH., **Schlichting I.** 2005. Structure of a bacterial BLUF photoreceptor: Insights into blue light-mediated signal transduction. *Proc. Natl. Acad. Sci. USA* **102**:12350-5

Denisov IG., Makris TM., Sligar SG., **Schlichting I.** 2005. Structure and chemistry of cytochrome P450. *Chemical Rev.* **105**: 2253-2277

Fedorov R., Vasan R., Ghosh D.K., **Schlichting, I.** 2004. Structures of nitric oxide synthase isoforms complexed with the inhibitor AR-R17477 suggest a rational basis for specificity and inhibitor design. *Proc. Natl. Acad. Sci. USA* **101**: 5892-5897

Schlichting, I. 2000. Accounts of Chem. Crystallographic Structure Determination of Unstable Species. *Research* **33**: 532-538.

Schlichting, I., Berendzen, J., Chu, K., Stock, A.M. Maves, S.A., Benson, D.E., Sweet, R.M., Ringe, D., Petsko, G.A. & Sligar, S.G. 2000. The Catalytic pathway of Cytochrome P450cam at Atomic Resolution. *Science* **287**: 1615-1622.

Brunori, M., Vallone, B., Cutruzzola, F., Travaglini-Allocatelli, C., Berendzen, J., Chu, K., Sweet, R.M. & **Schlichting, I.** 2000. The role of cavities in protein dynamics: crystal structure of a novel photolytic intermediate of myoglobin. *Proc. Natl. Acad. Sci USA*. **97**: 2058-2063

Chu, K., Vojtechovsky, J., McMahon, B.H., Sweet, R.M., Berendzen, J. & **Schlichting, I.** 2000. Structure of a ligand binding intermediate in wildtype carbonmonoxy myoglobin. *Nature* **403**: 921-923.