

1 Personal Details

Name Tim Grüne
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Email tim.gruene@psi.ch
Date of birth 29th January 1974
Nationality German



“Visions are important impulses for science. I turn visions into reality and make them accessible to the research community.”

2 Research Experience

Principal Investigator at the Laboratory for Biological Research, PSI, since August 2015.

- proved importance of the Timepix detector for electron diffraction and imaging [1]
- stabilised data integration with error corrections

Research Fellow with Prof. G. M. Sheldrick, 2007 – 2015

- Invited Candidate W2–Professorship, Univ. Lübeck; April 2015
- proved $R_{complete}$ concept [2]
- overturned 60–year–old dogma on K^+ channels [4]
- collaborated in challenging crystallographic problems [3,4,5,6,8]
- improved SHELXL-2013 w.r.t. neutron data
- co-supervised PhDs and Masters at University and Max-Planck-Institutes

Beamline Scientist Australian Synchrotron 2007

- beamline commissioning with first users
- set up crystallographic software and computing

Postdoc with Prof. G. M. Sheldrick, 2003 – 2007

- developed KNUSPR for automated tracing of nucleic acids
- responsible for the SHELX server and computer network
- supervised group members and collaborators at synchrotron trips

PhD EMBL Grenoble / Université Josef-Fourier Grenoble, *Structural studies on ISWI, an ATP-dependent nucleosome remodelling factor.*, Dr habil. C. W. Müller, Oct. 1999–3rd Oct 2003; mark: “Excellent”

- collected data, processed, solved, and refined the C-terminus of ISWI

- subcloned, expressed, purified, and crystallised the C-terminus of ISWI

3 Conference Organisation

Organiser PSI Workshop 3D Electron Crystallography, Sep. 2017

Organiser SHELX Symposium 2012, including sponsorship from DELL and Bruker AXS

Co-organiser SHELX workshops 2006, 2011

Session Chair IUCr Meeting Montreal, 2014

Session Chair International School of Crystallography, Erice, 2012

Reviewer

Acta Crystallographica

IUCrJ

Nature Communications

Nature Structural & Molecular Biology

PLOS One

Beamline BM14, ESRF Grenoble, France

4 Teaching Experience & Supervision

Member of several PhD thesis committees. Supervision of several PhD students and numerous Master students, advanced practicals. 16-year-old M. Wette successfully implemented `knuspr-gui` for `Coot` with DFG grant Gr 4216/1-1

Structure Determination (M.Sc. Chemistry) full term lecture with practical, 2012 – 2014

Crystallography for Biologists PhD program MPI / University with practical, 2004–2012

CCP4 Workshop Chicago talks + tutorials, 2008–present

Lab Rotations Supervision of numerous students

5 Fellowships and Grants

SNF Project Applications of Electron Nanocrystallography for Organic and Macromolecular Structure Determination

SNI Argovia–Project A3EDPI Application of 3D Electron Diffraction for the Pharmaceutical Industry

SNI Argovia–Project HPD4FED Hybrid pixel detectors for electron diffraction of nano-samples

DFG “Sachmittelbeihilfe” Gr 4216/1-1 GUI for my program KNUSPR, 09/2012 – 08/2013

EMBO Longterm Fellowship ALTF 1071-2003 Nucleic Acids Tracing, 01/2004–12/2006

EMBL PhD fellowship 10/1999–09/2003

6 Higher Education Degree

Diplom Physics TH Karlsruhe / Imperial College London 1993–1999

- Diploma Thesis: *Kristallstrukturen der beiden Proteinkomplexe Humanes Serum Albumin mit Stearat und Humanes Serum Albumin mit Oleat*; Supervisors: Prof K Hümmer and Dr S Curry

7 Miscellany

Languages	German, English (advanced proficiency), French (basic communication)
Computing	Linux, *BSD (administrator level)
Software	Most crystallographic software (teaching level)
Programming	C/C++, L ^A T _E X, HTML, scripting
Leisure	Swimming (open Water & pool), skiing, cooking, theatre & cinema

Villigen, 30th June 2017