

DFG Applicant Questionnaire

Applicant

Surname, first name
Starke, Peter

Date of birth
04.02.1977

Nationality
German

Current position
Professor in the Department of Materials Science and Materials Testing at the University of Applied Sciences Kaiserslautern

Work address
**Schoenstr. 11
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Home address
**Konrad-Zuse-Str. 67
67663 Kaiserslautern/Germany**

Telephone
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2. Educational background

- 2.1 University qualification
1996: High school diploma, Kurpfalz-Gymnasium Mannheim
- 2.2 Attendance at institutions of higher education
1997-2002: University of Kaiserslautern, Mechanical Engineering, Design and Materials Science
- 2.3 Academic exams (date, location, examiner, with distinction?)
2002: University of Kaiserslautern, Diploma
2007: University of Kaiserslautern, Dr.-Ing.

Title of doctoral thesis:

Fatigue life calculation of metallic materials under constant amplitude and service loading

Grade
Dr.-Ing.

- 2.4 Research experience since completing studies
2002-2007: Research assistant, Institute of Materials Science and Engineering at the University of Kaiserslautern
2007-2012: Research associate, head of the group "Fatigue Life Calculation" and director of the fatigue laboratory, Institute of Materials Science and Engineering at the University of Kaiserslautern
since 2006: Teaching activities at University of Kaiserslautern, Dresden International University and Saarland University
2012-2013: Senior research associate at Fraunhofer IZFP Saarbrücken
2013-2018: Senior research associate at the chair of Non-Destructive Testing and Quality Assurance/Saarland University
since 2018: Professor in the Department of Materials Science and Materials Testing at the University of Applied Sciences Kaiserslautern

3. Non-research related activities

- 3.1 Military service/alternative civilian service/child care
1996-1997: Military service

4. Has your work previously been funded by the DFG?

Yes



Prof. Dr. Peter Starke, 11.02.2019

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List of most important publications:

1. H. Kramer, P. Starke, M. Klein, D. Eifler, Cyclic Hardness Test PHYBAL_{CHT} - short-time procedure to evaluate cyclic properties of metallic materials, *Int. J. Fat.* 63 (2014) 63, 78–84.
2. H. Knobbe, P. Starke, S. Hereñú, H.-J. Christ, D. Eifler, Cyclic deformation behaviour, microstructural evolution and fatigue life of duplex steel AISI 329 LN, *Int. J. Fat.* 80 (2015) 81-89.
3. P. Starke, D. Eifler, C. Boller, Fatigue assessment of metallic materials beyond strain measurement, *Int. J. Fat.* (2015) 274-279.
4. M. Klein, P. Starke, D.S. Nowak, C. Boller, F. Walther, Separation of surface, subsurface and volume fatigue damage effects in AISI 348 steel for power plant applications, *MP Materials Testing* 58,7-8 (2016) 601-607.
5. C. Boller, P. Starke, Enhanced assessment of ageing phenomena in steel structures based on materials data and non-destructive testing, *Materialwissenschaft und Werkstofftechnik* 47, No. 10 (2016) 876-887.
6. P. Starke, H. Wu, C. Boller, Advanced evaluation of fatigue phenomena using non-destructive testing methods, *Materials Science Forum*, Vol. 879 (2016) 1841-1846.
7. P. Starke, A. Bäumchen, H. Wu, SteBLife – A new short-time procedure for the calculation of S-N-curves and failure probabilities, *MP Materials Testing* 60,2 (2018), 121-127.
8. P. Starke, H. Wu, Use of non-destructive testing methods in a new one-specimen test strategy for estimating fatigue data, *Int. J. Fat.* 111 (2018) 177-185.
9. P. Starke, D. Eifler, F. Walther, Model-based correlation between electrical resistance and the dislocation structure of fatigued ICE R7 wheel steel, *MP Materials Testing* 60 (7-8) (2018) 669-676.
10. P. Starke, H. Wu, C. Boller, SteBLife – The enhanced short-time evaluation procedure for materials fatigue data generation, *Materials Science Forum* 941 (2018) 2395-2400.