

CV Univ.-Prof. Dr.-Ing. Alois K. Schlarb

PERSONAL DATA

Nationality: German
Date of birth: April 9, 1956
Place of birth: Bad Kreuznach, Germany



ADDRESS

Lehrstuhl für Verbundwerkstoffe/Composite Engineering
Gottlieb-Daimler-Straße, Bld. 44
67663 Kaiserslautern
Germany
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POSITION: Department Head “Chair of Composite Engineering”

KPIs:

Peer-reviewed publications: 78; Books (Ed) and contributions: > 50; Patents: > 50; h-index: 20

ACADEMIC EDUCATION

1984-1989 Polymer Science and Engineering, University of Kassel, Germany
1977-1984 Mechanical Engineering, University of Kaiserslautern, Germany (Dipl.-Ing.)

SCIENTIFIC QUALIFICATIONS

Dr.-Ing. University of Kassel, Department of Mechanical Engineering; Thesis: “Zum Vibrationsschweißen von Polymerwerkstoffen ” (with distinction)

PROFESSIONAL DATA

Present academic positions:

Since 2018 Visiting Professor, Qingdao University of Science and Technology (QUST)
Since 2002 Full Professor, Composite Engineering, Technische Universität Kaiserslautern (TUK)

Previous academic/industrial positions held:

2002-2008 Executive Director/Research Director of Institut fuer Verbundwerkstoffe GmbH, Kaiserslautern, Germany
2001-2002 Vice President and Head of Marketing, Research and Development, Hospital Care Division, B. Braun Medical AG, Switzerland
1998-2000 Head of Research and Development, Medical Division, B. Braun Medical AG, Switzerland
1995-1997 Head of Development, Sulo Streuber & Lohmann GmbH & Co KG, Herford, Germany
1989-1995 Materials Scientist and Project Manager, Polymer Research Lab, BASF SE, Ludwigshafen, Germany
1988-1989 Chief Engineer, Institut fuer Werkstofftechnik (Polymer Materials), University of Kassel, Germany
1984-1989 Research Assistant, Institut fuer Werkstofftechnik, University of Kassel, Germany

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RESEARCH GOALS

- Hybrid materials on different length scales
- Process-structure-property relationships in plastics and hybrid materials
- Friction and wear of polymers and polymer based hybrids

OFFERS of a PROFESSORSHIP

2012: The Petroleum Institute, Abu Dhabi, United Arab Emirates; rejected

2002: Composite Engineering, University of Kaiserslautern, Germany; accepted

1992: Polymer Processing, University of Applied Science Kaiserslautern, Germany; rejected

REVIEWER

- Alexander von Humboldt-Stiftung AvH
- Bayrische Forschungsstiftung
- Bundesministerium für Bildung und Forschung BMBF
- Deutscher Akademischer Austauschdienst DAAD
- Deutsche Forschungsgemeinschaft DFG
- Joanneum Research, Österreich
- Wissenschaftsrat WR
- Composites Science and Technology
- International Journal of Materials and Structural Integrity
- SAMPE Journal
- Strain
- WEAR
- Zeitschrift Kunststofftechnik

POSITIONS and MEMBERSHIPS

- Scientific Alliance of Polymer Technology (WAK) www.wak-kunststofftechnik.de
2005-2015: Member of the board
2009-2015: Spokesman
- Society for the Advancement of Materials and Process Engineering (SAMPE) Deutschland e.V. www.sampe.de.
2003-2015: President
- Scientific Board, K2013, Dusseldorf
- Scientific Board, K2016, Dusseldorf
- Scientific Board, K2019, Dusseldorf
- Advisory Board, MAICarbon
- Advisory Board, Carbon Campus 4.0
- Deutsche Gesellschaft fuer Materialkunde e.V. (DGM)
- Gesellschaft für Tribologie e.V.
- Editorial Board, Journal of Composite Materials
- Editorial Board, Strain – International Journal for Experimental Mechanics
- Editorial Board, Journal of Polymer Technology

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SELECTED PUBLICATIONS

Peer-reviewed

1. Nomai, J.; Schlarb, A.K.: Effects of nanoparticle size and concentration on optical, toughness, and thermal properties of polycarbonate. *Journal of Applied Polymer Science* 136 (23), **2019**. DOI:10.1002/app.47634
 2. Kamerling, S.; Schlarb, A.K.: Locally induced chemical conversion processes – A means to control tribological properties of polymer composites? *Composites Science and Technology* 175, S. 69-76, **2019**. DOI:10.1016/j.compscitech.2019.03.011
 3. Lin, L.; Ecke, N.; Kamerling, S.; Sun, C.; Wang, H.; Song, X.; Wang, K.; Zhao, S.; Zhang, J.; Schlarb, A.K.: Study on the impact of graphene and cellulose nanocrystal on the friction and wear properties of SBR/NR composites under dry sliding conditions. *Wear* 414-415, S. 43-49, **2018**. DOI: 10.1016/j.wear.2018.07.027
 4. Lin, L.; Pei, X.-Q.; Bennewitz, R.; Schlarb, A.K.: Friction and wear of PEEK in continuous sliding and unidirectional scratch tests. *Tribology International* 122 (**2018**), S. 108-113. DOI: 10.1016/j.triboint.2018.02.035
 5. Nomai, J.; Schlarb, A.K.: Environmental Stress Cracking (ESC) Resistance of Polycarbonate/SiO₂ Nanocomposites in Different Media. *Journal of Applied Polymer Science*, **2017**. DOI: 10.1002/app.45451
 6. L.Y. Lin, Schlarb A.K.: Effect of the varied load conditions on the tribological performance and the thermal characteristics of PEEK-based hybrid composites, *Tribology International* (**2016**), DOI: 10.1016/j.triboint.2016.04.025
 7. Suksut, B.; Schlarb A.K.: Influence of TiO₂ nanoparticles on non-isothermal crystallization of PP in a wide range of cooling rates analyzed by fast scanning DSC. *J. APPL. POLYM. SCI.* (**2016**), DOI: 10.1002/app.43944
 8. Pei, X.-Q.; Bennewitz, R.; Schlarb, A.K.: Mechanisms of Friction and Wear Reduction by Carbon Fiber Reinforcement of PEEK, *Tribol Lett* (**2015**). DOI: 10.1007/s11249-015-0520-7
 9. Schlarb, A. K.; Suwitaningsih, D. N.; Kopnarski, N.; Niedner-Schatteburg, G.: Supermolecular Morphology of Polypropylene Filled with Nanosized Silica. *J. APPL. POLYM. SCI.* 131 (**2014**), 1, DOI: 10.1002/APP.39655.
 10. Zhang G.; Chang L.; Schlarb A. K.: The roles of nano-SiO₂ particles on the tribological behavior of short carbon fiber reinforced PEEK. *COMPOSITES SCIENCE AND TECHNOLOGY*, 69 (**2009**) 7-8, 1029-1035
 11. Schlarb, A.K., Yang, J.L., Zhang, Z.: Creep Resistance of Thermoplastic Nanocomposites. *Key Engineering Materials* 345-346 (**2007**), pp. 1621-1624.
 12. Friedrich, K.; Zhang, Z.; Schlarb, A.K.: Effects of various fillers on the sliding wear of polymer composites. *Composites Science and Technology*, 65 (**2005**), 2329-2343
- Others
13. Friedrich, K.; Schlarb, A.K. (Eds): *Tribology of Polymeric Nanocomposites: Friction and Wear of Bulk Materials and Coatings*. Elsevier Ltd, Oxford; Auflage: 2. Auflage (**2013**)

Kaiserslautern, 10 May 2019

