Full name: Schick, Christoph Erich Georg
Date and place of birth:
Present address:
Affiliation, title and degree: University of Rostock, Inst. of Physics
Prof. Dr. rer. nat. habil.

Short scientific biography:

1976 Diploma in Physics
Technical University of Leuna-Merseburg

1980 Ph.D. in Experimental Physics
Thesis: Time dependence of the enthalpy in the glass transition region of poly(vinyl chloride) (PVC)
Technical University of Leuna-Merseburg

1988 Habilitation in Experimental Physics
Title: Influence of the morphology on the molecular mobility in the amorphous regions of semi-crystalline polymers
Pedagogical University Güstrow

Employment:

1976 - 1979 Physics Department, Technical University of Leuna-Merseburg
research fellow

1979 - 1992 Physics Department, Pedagogical University Güstrow
senior research fellow, first assistant to professor

1992 - 2019 Physics Department, University of Rostock
professor

2008 - 2010 Director of the Institute of Physics, University of Rostock

2010 - 2012 Dean of the Faculty of Mathematics and Natural Science, University of Rostock

2012 - 2014 Vice Dean of the Faculty of Mathematics and Natural Science, University of Rostock

2014 - 2018 Member of the Academic Senate, University of Rostock

2017 - 2021 Butlerov Institute of Chemistry, Kazan Federal University, Kazan, Russia
Professor (part-time)

2018 – 2022 Tokyo Tech World Research Hub Initiative (WRHI), Tokyo, Japan
Specially Appointed Professor

2018 – today Member of the Competence Centre °CALOR, Department of Life, Light & Matter, Interdisciplinary Faculty, University of Rostock

Field of specialization:

- Polymer physics with a focus on the glass transition, melting, and crystallization
- Calorimetry with a focus on advanced techniques like temperature modulation (TMDSC), AC calorimetry on nanometer-thin films, and chip-based fast scanning calorimetry (FSC) with cooling and heating rates exceeding 10^6 K s^{-1},
- Currently, the focus is on the crystal nucleation in polymers and low molecular mass compounds at deep undercooling, even below the glass transition.
- Another active field is the application of fast scanning calorimetry to thermo-physical properties, like the melting transition of biomolecules and the determination of vapor/sublimation pressure and enthalpy of vaporization/sublimation of low volatile and thermally labile molecules

Other activities and awards:

- Editor “Thermochimica Acta” (2003 – 2019)
- German Society for Thermal Analysis (GEFTA); Board member
- Organizer of the biannual “Laehnwitzseminar on Calorimetry”

- Chairperson European Union funded COST Action P12 “Structuring of Polymers”
- Fellow of the North American Thermal Analysis Society (NATAS) 2005
- Mettler Toledo Award of the North American Thermal Analysis Society (NATAS) (2006)
- The James J. Christensen Memorial Award in Recognition of Outstanding Contributions to the Innovative Development and Use of Calorimetric Equipment, CALCON, USA (2008)
- The 2010 AICAT-SETARAM Award in recognition of outstanding contributions to advance the physical knowledge and knowledge generating tools related to ordering, crystallisation, aggregation or organization of synthetic polymers, AICAT, Italy (2010)
- The 2011 AFCAT Calvet Price, France
- Wissenschaftspreis der GEFTA 2014, Germany
- Doctor honoris causa (Dr. h.c.), Kazan Federal University, Russia (2019)

- **Scientific publications (>480 with >19,300 citations, h-index 76, Scopus 20.03.2024)**:

1. Andrianov, R.A., Schmelzer, J.W.P., Androsch, R., Mukhametzyanov, T.A., Schick, C.
   Radial growth rate of near-critical crystal nuclei in poly(L -lactic acid) (PLLA) in Tammann's two-stage development method
   Journal of Chemical Physics, 2023, 158(5), 054504
2. Gao, Y.L.; Zhao, B.; Vlassak, J.; Schick, C.
   Nanocalorimetry: Door opened for in situ material characterization under extreme non-equilibrium conditions (review)
   Progress in Materials Science 104 (2019) 53-137.
3. Vyazovkin, S.; Koga, N.; Schick, C. (Eds.)
   Handbook of Thermal Analysis and Calorimetry; Vol 6: Recent Advances, Techniques and Applications
   Elsevier (2018) 1 – 862.
4. Schick, C.; Androsch, R.; Schmelzer, J. W. P.
   Homogeneous crystal nucleation in polymers (Topical review)
   J Phys Condens Matter 29 (2017) 453002
5. Toda, A.; Androsch, R.; Schick, C.
   Insights into polymer crystallization and melting from fast scanning chip calorimetry
   Polymer (Feature Article), 91 (2016) 239-263.
6. Schick, C.; Mathot, V. (Eds.)
   Fast Scanning Calorimetry (Book)
   Springer (2016) 1 - 795
7. Cebe, P.; Hu, X.; Kaplan, D. L.; Zhuravlev, E.; Wurm, A.; Arbeiter, D.; Schick, C.
   Beating the Heat - Fast Scanning Melts Silk Beta Sheet Crystals
   Scientific Reports 3 (2013) 1130.
8. Zhuravlev, E., Schmelzer, J.W.P., Wunderlich, B., Schick, C.
   Kinetics of nucleation and crystallization in poly(ε-caprolactone) (PCL)
   Polymer, 2011, 52(9), pp. 1983–1997
9. Zhuravlev, E., Schick, C.
   Fast scanning power compensated differential scanning nano-calorimeter: 1. The device; 2. Heat capacity analysis
   Thermochimica Acta, 2010, 505(1-2), pp. 1–13; 14-21
10. Sargsyan, A., Tonoyan, A., Davtyan, S., Schick, C.
    The amount of immobilized polymer in PMMA SiO2 nanocomposites determined from calorimetric data
    European Polymer Journal, 2007, 43(8), pp. 3113–3127

Prof. C. Schick