

## Scientific awards and honors

Chair and Laboratory for Measurement and Sensor Systems, Competence Center BIOLAS, Czarske Lab, TU Dresden

year	name	award
2021	Prof. Dr. Christian Kupsch	Franz Stolze Preis 2021 for his Doctor thesis "Ultrasonic imaging method for complex suspension flows in small geometries: Investigation of the zinc-air flow battery", donation with 1 000 Euro, Berlin/Dresden, 10/2021 With the Dr. Manfred Freimark and Gudrun Stolze donated "Franz Stolze Prize", the Society of Friends and Supporters of TU Dresden e.V. annually honors excellent scientific theses by students and dissertations of young scientists from TU Dresden in the field of energy technology.
2021	Dipl.-Ing. Clemens Matthias Bilsing	DGaO Young Talent Award 2021 for his diploma thesis with the title "Novel laser measurement system with adaptive image correction using helical wave fronts and a deformable mirror". The prize of the DGaO (The Germany Society for Applied Optics - The German Branch of European Optical Society) will be awarded in Bremen.
2021	Dr.-Ing. Hannes Radner	Dr.-Ing. Siegfried Werth Preises für seine hervorragende Dissertation "Adaptive optische Wellenfrontkorrektur unter Einsatz des Fresnel-Leitsterns und eines hybriden Regelkreises implementiert auf einem Field-Programmable System-on-Chip", Mai 2021
2020	Dr. Katrin Philipp	Dr. Wilhelmy-VDE-Prize 2020 for Promotion of Female Engineers. Awarded for the PhD thesis "Investigation of aberration correction and axial scanning in microscopy employing adaptive lenses" with endowment of 3 500 Euro by Association for Electrical, Electronic & Information Technologies (Verband der Elektrotechnik Elektronik & Informationstechnik e. V., VDE), German National Committee of CIGRE, Frankfurt am Main. With 36,000 members (including 1,300 companies) the VDE is one of the largest technical and scientific associations in Europe, December 2020
2020	Jakob Dremel,	Theodore Maiman-Scholarship of WLT e.V. (Wissenschaftliche Gesellschaft für Lasertechnik, Scientific Society for Laser Technology), December 8th, 2020

2020	Dr. Katrin Philipp	Heinrich-Barkhausen-Prize of Faculty Electrical and Computer Engineering of TU Dresden for her PhD thesis "Investigation of aberration correction and axial scanning in microscopy employing adaptive lenses". The Heinrich-Barkhausen-Prize is sponsored by the Carl Friedrich von Siemens Foundation and is awarded annually for the best dissertation completed at the Faculty Electrical and Computer Engineering in the past year, donation with 2 500 Euro, October 2020
2020	Prof. Juergen Czarske	Laser Instrumentation Award 2020 of IEEE Photonics Society, New York City, NY, USA (July 2020)
2020	Jan Grottke	Friedrich von Klinggräff-Medal 2020 from the Foundation of German Student Corps
2020	Dipl.-Ing. Johannes Stange	SICK-Prize for Sensor and Measurement Systems 2019 from the Faculty Electrical and Computer Engineering of TUD for the diploma thesis "Investigation of an adaptive-optical correction of interface disturbances in flow measurement technique", June 2020
2020	Dr.Katrin Philipp	Sick-Prize for Measurement Technique 2019 of TU Dresden for her PhD thesis "Investigation of aberration correction and axial scanning in microscopy employing adaptive lenses", June 2020
2020	Jan Grottke	Friedrich von Klinggräff-Medal 2020 from the Foundation of German Student Corps
2020	Dr.Katrin Philipp	Bertha-Benz Promotionspreis 2020
2020	Benedikt Krug	SEW Eurodrive Foundation for the Study Prize 2019
2020	Prof. Jürgen Czarske	"SPIE Community Champion for outstanding volunteerism", awarded by SPIE President John Greivenkamp, The University of Arizona ( Jan. 2020)

2019	Tilo Stock	SICK Nachwuchsförderpreis 2019, Thema: „Robuste Ultraschallstrukturbildgebung durch einen Multimode-Wellenleiter mittels Deep Learning“
2019	Prof. Jürgen Czarske	Joseph Fraunhofer Award/Robert M. Burley Prize for his promising contributions in the field of computer-based adaptive laser metrology
2019	Dipl.-Ing. Arne Klač	Franz Stolze Award 2019 for his diploma thesis "Ultrasonic-based flow imaging of a hot metal melt through a multimode waveguide"
2019	Richard Nauber	SICK-faculty prize 2018 for Sensors and measuring system technology for his Dissertation "Investigation of imaging ultrasonic measurement technology for transient flow processes in magnetohydrodynamics"
2019	Stefan Rothe	SICK-faculty prize 2018 for Sensors and measuring system technology for his diploma thesis "Investigation of Information Security on the Transmission Layer in Multimode Fibre Communication Systems"
2019	Benedikt Krug	Hans-Pundt-Preis 2018 of VDE Dresden for his diploma thesis "Investigations on Brillouin elastography using a pulsed laser for biomedical applications".
2019	Johannes Stange	SICK Young Talent Awards 2018 for Measurement and Sensor System Technology for his student research project "Design and Testing of an Adapted Controller for a Wavefront Correction System".
2019	Elias Scharf	SICK Young Talent Award 2018 for measurement and sensor system technology for his diploma thesis "Construction of a holographic endoscope using coherent fiber bundles with self-calibration".
2019	Christian Kupsch	R.W.B. Stephens Preis (Elsevier) beim 2019 International Congress on Ultrasonics, Brügge, Belgien für den Beitrag "Superresolution ultrasound flow imaging of suspensions in narrow channels"

2018	Robert Kuschmierz	Prize of the Dr. Ing. Siegfried Werth Foundation, Gießen for his Dissertation/PhD Thesis "Interferometric laser sensors for three-dimensional, in-situ measurement of rotating bodies" (endowment: 1,500 EUR)
2018	Nektarios Koukourakis, M. Kreysing, J. Czarske	3rd Best Presentation Award focus on Adaptive Optics Paper "Wavefront shaping method to focus through mouse skull" Imaging and Applied Optics Congress in Orlando, Florida, USA of OSA (The Optical Society)
2018	Lars Büttner, M. Teich, H. Radner, J. Czarske	2nd Best Presentation Award focus on Adaptive Optics Paper: "Dynamic Adaptive Optical Image Correction for Velocimetry" Imaging and Applied Optics Congress in Orlando, Florida, USA of OSA (The Optical Society)
2018	Dirk Schubert	DGaO Young Talent Award for his Diploma thesis "Investigation of Amplitude and Phase Modulation by Coherent Fiber Bundles", awarded at Conference of German Society of Applied Optics (DGaO) in Aalen
2018	Jürgen Czarske	SAW - Saxon Academy of Sciences Leipzig (Sächsische Akademie der Wissenschaften zu Leipzig) Full member of the technical science class
2018	Mantvydas Kalibatas	Prize for Talented Students of the SEW-EURODRIVE Foundation for his Diploma thesis "Ultrasound imaging through multimode waveguides using Time Reversal Virtual Arrays" (endowment: 2,500 EUR)
2017	Robert Kuschmierz	SICK Measurement Technology Award 2017 (University Award) for his dissertation "Interferometric laser sensors for three-dimensional, in-situ measurement of rotating bodies" (endowment: 5,000 EUR)
2017	Mantvydas Kalibatas	SICK Promotion Award 2017 for Sensor Technology and Measuring System Technology (Faculty Award) for his Diploma thesis "Ultrasound Imaging by Multimode Waveguides with Time Reversal Virtual Arrays"
2017	Dirk Schubert	SICK Young Talent Award 2017 for Measuring and Sensor System Technology for his Diploma thesis "Investigation of Amplitude and Phase Modulation by Coherent Fiber Bundles"

2017	Benedikt Krug	SICK Young Talent Award 2017 for Measuring and Sensor System Technology for his Bachelor thesis (Studienarbeit) "Phase shifting holography for adaptive optics"
2017	Jürgen Czarske	Certificate of Recognition, SPIE Student Chapter (President Katrin Philipp)
2017	Jürgen Czarske	Admission to the Scientific Society of Laser Technology e. V. (WLT)
2017	Dirk Schubert, Robert Kuschmierz, Jürgen Czarske	1st Prize at the 118th Annual Conference of the DGaO in Dresden for the poster "Pixelation-free light pattern generation through multi-core fibers using digital optical technologies"
2016	Daniel Haufe	Heinrich Barkhausen Award Faculty Award for the best dissertation, topic "Investigation of optical methods for the simultaneous measurement of flow and sound fields on aeroacoustic silencers" (endowment: 5,000 EUR)
2016	Johannes Gürtler	3rd place at the Green Photonics Promotion Award of the Fraunhofer IOF for his Diploma thesis "Investigation of the flow phenomena at a high-pressure injection nozzle"
2016	Micha Schuster, Robert Kuschmierz, Andreas Fischer, Jürgen Czarske	Best Student Paper of the 18th VDI / ITG Symposium Sensors and Measuring Systems in Nürnberg for the presentation "Uncertainty measurements for non-incremental shape measurement of rotating objects"
2015	Daniel Haufe	SICK Measurement Technology Award 2015 for his dissertation "Investigation of optical methods for the simultaneous measurement of flow and sound fields on aeroacoustic silencers" (endowment: 5,000 EUR)
2015	Christian Kupsch	SICK Promotion Award 2015 for Sensor Technology and Measuring System Technology for his diploma thesis "Design, Characterization and Application of a Plenoptic 3D-Flow Measuring System"

2015	Johannes Gürtler	SICK Young Talent Award 2015 for Measuring and Sensor System Technology for his diploma thesis "Investigation of the flow phenomena at a high-pressure injection nozzle"
2015	Bob Fregin	SICK Young Talent Award 2015 for Measuring and Sensor System Technology for his thesis "Design and Characterization of a Multimode Laser Doppler Anemometer"
2015	Jürgen Czarske	Fellow Award from EOS based on his research achievements in the field of optics and photonics and his service to the Optics and Photonics Community; awarded in Berlin
2015	Jürgen Czarske	Fellow of OSA (The Optical Society) awarded during the CLEO (Conference on Lasers and Electro-Optics) in San Jose, California, USA
2015	Christian Kupsch	Hans Pundt Award of the VDE District Association Dresden 2015 for his diploma thesis "Design, Characterization and Application of a Plenoptic 3D-Flow Measuring System"
2015	Johannes Gürtler	Franz Stolze Award 2015 for his diploma thesis "Investigation of the flow phenomena at a high-pressure injection nozzle"
2015	Jürgen Czarske	SPIE Fellow (SPIE: The international society of optics and photonics), awarded in San Francisco, CA, USA
2015	Jürgen Czarske	Upgraded to the status of Senior Member of the IEEE (Institute of Electrical and Electronics Engineers), New York City, NY, USA
2015	Jürgen Czarske	Upgraded to the status of Senior Member of the SPIE (The International Society of Optics and Photonics. Formerly: Society of Photographic Instrumentation Engineers), Bellingham, Washington, USA

2015	Jörg König	DGaO Young Talent Award for his dissertation "Investigation of interferometric measurement techniques for multidimensional velocity measurement of small-scale convective transport processes in electrochemistry", awarded at the Conference of German Society of Applied Optics (DGaO), Hannover
2014	Robert Kuschmierz, A. Fischer, Jürgen Czarske	1st Prize of the Outstanding Paper Award "Precision Measurement", Measurement Science and Technology (MST) Highlights of 2014 for their article "Multiple wavelength interferometry for distance measurements of moving objects with nanometer uncertainty"
2014	Jörg König	SICK Promotion Award 2014 for Sensors and Measuring System Technology for environmental protection for his dissertation "Investigation of interferometric measurement techniques for multidimensional velocity measurement of small-scale convective transport processes in electrochemistry"
2014	Hannes Radner	SICK Promotion Award 2014 for Sensors and Measuring System Technology for environmental protection for his diploma thesis "Design and Characterization of a Multi-Variable Control for a Wavefront Correction System with Adaptive Lenses"
2014	Hannes Beyer	SICK Promotion Award 2014 for Sensors and Measuring System Technology for environmental protection for his thesis "Online-enabled implementation of signal filtering and quadrature demodulation for the detection of transient flow structures by means of ultrasound measurements"
2014	Christoph Leithold	SICK Young Talent Award 2014 for Measurement and Testing Technology for his diploma thesis "Investigations on Wavefront Correction by Adaptive Optics for Laser-Optical Flow Velocity Measurements"
2014	Hannes Radner	SICK Young Talent Award 2014 for Measurement and Testing Technology for his thesis "Investigation of the self-calibration of the sensor position on a multi-dimensional ultrasonic flowmeter"
2014	Jürgen Czarske	Awarded by the German Research Foundation (DFG) with a Reinhart Koselleck project on topic "Adaptive laser systems with wavefront control and phase conjugation for flow measurements in refractive index effects"

2014	Mathias Neumann	Dissertation Award of Commerzbank for his dissertation "Investigation of sensor systems for the high-resolution, non-invasive measurement of flow fields, volumetric forces and turbulences" Special Prize of the German Society for Materials Science e.V. (DGM)
2014	Jörg König, J. Czarske	as part of the awarding of the Dresdner Barkhausen poster prizes for students and young scientists
2013	Mathias Neumann	Dissertation Award of the Friedrich and Elisabeth Boysen Foundation 2013 for his dissertation "Investigation of sensor systems for the high-resolution, non-invasive measurement of flow fields, volumetric forces and turbulences"
2013	Katsuaki Shirai, Lars Büttner, Jürgen Czarske	Excellent paper honored at the 33rd Annual Meeting of the Japan Laser Society Tokyo, Japan
2013	Norman Thieme, U. Wilke	Placement in the TOP 20 at the Texas Instruments European Analog Design Contest with the development "A novel laser frequency stabilization for flow velocimetry"
2013	Mathias Neumann	3rd place at the Green Photonics Promotion Award for his dissertation "Investigation of sensor systems for the high-resolution, non-invasive measurement of flow fields, volumetric forces and turbulences"
2013	Mathias Neumann	Measurement Technology Award of the AHMT e. V. 2013 for his dissertation "Investigation of sensor systems for the high-resolution, non-invasive measurement of flow fields, volumetric forces and turbulences" (Best PhD thesis in measurement technology)
2012	Christian Blechschmidt	Hans Pundt Award of the VDE District Association Dresden 2012 for his Master thesis "Investigations to minimize the disturbance of wall reflexes in optical gap flow measurements"
2012	Daniel Haufe	Johannes Görge Award 2012 for his diploma thesis "Characterization and reduction of the disturbing effects of multiple scattering and background radiation in an optical flow measuring technique"



2012	Richard Nauber	ISUD-8 UBERTONE Student Paper Award 2012 "Dual-plane Ultrasound Array Doppler Velocimeter for Flow Investigations in Liquid Metals"
2012	Thorsten Pfister, P. Günther, F. Dreier, Jürgen Czarske	ASME-IGTI 2012 Controls, Diagnostics and Instrumentation committee best paper award 2012 American Society of Mechanical Engineers (ASME) Prize for the Paper "Novel Dynamic Rotor and Blade Deformation and Vibration Monitoring Technique"
2011	Daniel Haufe	Franz Stolze Award 2011 for his diploma thesis "Characterization and reduction of the disturbing effects of multiple scattering and background radiation in an optical flow measuring technique"
2010	Andreas Fischer	Heinrich Barkhausen Award 2010 (Siemens Foundation) Faculty Award for the best dissertation, topic "Contributions to Doppler Global Velocimetry with Laser Frequency Modulation - Precise Measurement of Velocity Fields in Turbulent Flows with High Time Resolution" (endowment: 5,000 EUR)
2010	Thorsten Pfister	2nd place of the Barkhausen Poster Award 2010 "Fiber-optic laser Doppler distance sensor with speed-independent measurement resolution"
2010	Andreas Fischer	Measurement Technology Award of the AHMT e. V. 2010 for his dissertation "Application of a Doppler Global Velocimeter with Laser Frequency Modulation for the Investigation of Turbulent Currents" (Best German-language dissertation in measurement technology)
2010	Andreas Fischer	Dissertation Award of Commerzbank for his work "Contributions to Doppler Global Velocimetry with Laser Frequency Modulation - Precise Measurement of Velocity Fields in Turbulent Flows with High Time Resolution"
2010	Kevin Mäder	Philips Prediploma Award 2010 to outstanding prediploma (Vordiplom) students of the faculty electrical and computer engineering of TU Dresden
2009	Andreas Fischer	Dr. Meyer-Struckmann Science Award 2009 for his dissertation "Application of a Doppler Global Velocimeter with Laser Frequency Modulation for the Investigation of Turbulent Currents" (endowment: 15,000 EUR)

2009	Jörg König	VDE Award 2009 for his diploma thesis "Investigations on the influence of scattered light power on the velocity measurement in flows with a Doppler Global Velocimeter with laser frequency modulation"
2009	P. Günther, T. Pfister, Lars Büttner, Jürgen Czarske	Best Paper Award of the international OPTO conference 2009 for their article "Laser-Doppler-Distance-Sensor Using Phase Evaluation for Position, Shape and Vibration Measurements"
2008	Jürgen Czarske, Lars Büttner, Thorsten Pfister	Berthold Leibinger Innovation Award 2008 for the outstanding research work "Laser-Doppler-Distance-Sensor and its Applications" (current endowment: 20,000 EUR, international prize with renowned jury, including Nobel Laureates Charles Townes, Ted Hänsch and Stefan Hell)
2007	Thorsten Pfister	Innovation Award of Industrieclub Sachsen 2007 for his dissertation "Investigation of novel laser Doppler methods for the position and shape measurement of moving solid surfaces" (endowment: 5,000 EUR)