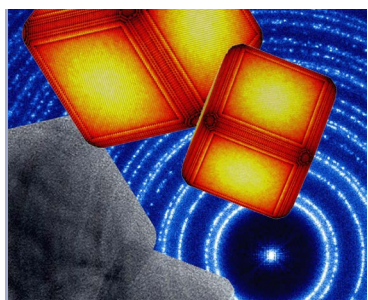


PD Dr.-Ing. Alberto Leonardi earned his Ph.D. in Materials Science and Engineering from the University of Trento, Italy. Over the next 15 years, he dedicated his career to investigating nanomaterials, holding prestigious postdoctoral positions at Indiana University Bloomington (USA), FAU Erlangen-Nürnberg, and ISIS Neutron and Muon Source (UK). In 2022, he joined the UK Synchrotron facility Diamond Light Source as a research scientist for the Dual Imaging and Diffraction instrument. He became a member of the International Centre for Diffraction Data (ICDD) in 2020, a prestigious invitation-only scientific society. He is also a UK STEM Ambassador and a member of the UKRI EPSRC peer review college.



His research focuses on the chemical-physical processes affecting the synthesis and performance of nanoarchitected materials, integrating computational and experimental methods. Nanomaterials, with their structural disorder, offer exciting possibilities as their properties can be significantly different from bulk materials and can be tuned via their microstructure. These materials address key societal challenges, enhancing performance in medicine, aerospace, environmental remediation, electronics, and energy sectors. Recently, he has embarked on studying clays and layered nano materials, which are environmentally compatible and abundant in Europe, making them ideal for sustainable applications

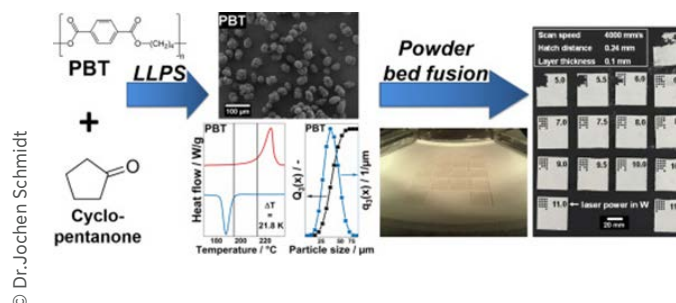


Dr. Jochen Schmidt studied chemistry at Friedrich Schiller University of Jena (FSU). After his diploma, he joined the Institute of Physical Chemistry of FSU, where he investigated nanomaterials with an emphasis on studies on colloidal charge and size-effects in the solubility behavior of nanoparticulate metal oxides. At FSU he also obtained his doctoral degree in physical chemistry prior to joining Institute of Particle Technology (LFG, now: IPT) of FAU in 2008.



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His research interests are in the formulation of particle systems for technical applications using an interdisciplinary approach based on methods and principles of particle technology, mechanical process engineering, colloid and interface sciences and material sciences. His main research activities are devoted to formulation of disperse systems and particle engineering with a focus on the development of processes for production, functionalization and characterization of powder systems for additive manufacturing. His projects amongst others have been part of collaborative research center 814 "Additive Manufacturing" at FAU and priority program 2122 "Materials for Additive Manufacturing".



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Herzliche Einladung zum Tag des CBI 2025



**18. Juni 2025
ab 15:00 Uhr
Hanns-Hofmann-
Hörsaal (KS I)
Cauerstraße 4,
Erlangen**

Im Namen des Departments Chemie- und Bioingenieurwesen (CBI) lade ich Sie herzlich ein zum

Tag des CBI 2025

am Mittwoch, den 18. Juni 2025,
ab 15:00 Uhr,
im Hanns-Hofmann-Hörsaal (KS I),
Cauerstr. 4, 91058 Erlangen

Im Anschluss an die Veranstaltung bitten wir alle Gäste, Ehemaligen, Studierenden, Mitarbeitenden, Professorinnen und Professoren zum gemütlichen Beisammensein im Rahmen des Sommerfests der Fachschaftsinitiative CBI, CEN, LSE und EnTe im Innenhof der Cauerstr. 4.

Wir freuen uns auf die Begegnung und die Gespräche mit Ihnen.

Prof. Dr. Dr. Oliver Friedrich
Sprecher des Departments

Programm

15:00 Uhr

Begrüßung durch den Sprecher des
Departments CBI

Prof. Dr. Dr. Oliver Friedrich

15:05 Uhr

Grußwort des Dekans der Technischen Fakultät

Prof. Dr.-Ing. habil. Kai Willner

Vorträge

15:15 Uhr

Characterization of Multiphase Systems in Process Engineering by the Investigation of Their Thermophysical Properties

PD Dr.-Ing. Thomas M. Koller

15:50 Uhr

Unlocking Mechanical Secrets in Nanoarchitected Materials

Dr. habil. Alberto Leonardi

16:25 Uhr

Polymer Particle Systems for Powder Bed Fusion Additive Manufacturing: Production, Functionalization and Characterization

Dr. rer. nat. Jochen Schmidt

Ausklang

Ab 17:00 Uhr

Geselliges Beisammensein im Rahmen des Sommerfestes der Fachschaftsinitiative CBI

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Wie Lin, Seyed Reza Mousavi, Manuela Richert & Robert Bokszaider

PD Dr.-Ing. Thomas M. Koller

studied Chemical and Biological Engineering (CBI) and received his doctorate in CBI at FAU in 2016. He obtained his postdoctoral lecture qualification in Thermodynamics at FAU Erlangen-Nürnberg in 2024. Since 2017, he has been an academic staff member at the Institute of Advanced Optical Technologies – Thermophysical Properties (AOT-TP). He is a member of the International Association for Transport Properties and in the editorial board of the International Journal of Thermophysics. In 2023, he received the "ECTP-Netzsch Young Scientist Award" for his scientific achievements in thermophysical property research.



The research of his group focuses on the characterization of multiphase systems in process engineering by investigating their thermophysical properties. Objects of investigation are vapor-liquid systems where, e.g., liquid organic hydrogen carriers are of current interest, liquid-liquid systems with partially miscible liquid phases, and dispersions of solid or liquid particles in a continuous liquid phase. Advanced experimental and modeling techniques are applied and further developed to obtain reliable information about relevant thermophysical properties, in particular interfacial tension, viscosity, and thermal conductivity, which also helps to develop relationships with the fluid structure on a microscopic level.

