

PBM 2026 Conference Program

Wednesday, October 7, 2026

Time	Program
9:00-9:45	Registration
9:45-10:00	Opening ceremony
10:00-10:30	Keynote Lecture 1 - Prof. Danijela Gregurec, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany "Engineering dynamic magnetic nano-biointerfaces for wireless interrogation and modulation of the nervous system"
10:30-10:45	Talk 1: Boosting performance of additively manufactured rare-earth permanent magnets through nanoparticle-modified feedstock <i>Nadine Stratmann, University of Duisburg-Essen</i>
10:45-11:00	Talk 2: Inductively expandable supraparticles as microscopic force generators for remote mechanical actuation <i>Leoni Luthardt, Friedrich-Alexander-Universität Erlangen-Nürnberg</i>
11:00-11:30	Coffee break
11:30-11:45	Talk 3: Magnetodielectric effect in composite magnetoactive elastomers based on soft and hard magnetic microparticles <i>Anna S. Semisalova, University of Duisburg-Essen</i>
11:45-12:00	Talk 4: Nanocrystal shape diagrams via inverse design simulations <i>Arne Bringewatt, Friedrich-Alexander-Universität Erlangen-Nürnberg</i>
12:00-12:30	Poster talks day 1
12:30-13:30	Group picture + Lunch break
13:30-14:45	Poster section
14:45-15:15	Keynote lecture 2 - Prof. Emanuele Marino, University of Palermo, Italy "From nanocrystals to designer colloids: engineering emergent properties through hierarchical assembly"
15:15-15:30	Talk 5: Fabrication of three-dimensional aerogel network using morphology controlled silver bismuth sulfide nanoparticles <i>Suvadip Saha, University of Hamburg</i>
15:30-15:45	Talk 6: Investigating the electrochemical behavior and reaction performance of film-like metal nanonetworks <i>Pavel Khavlyuk, Ruhr University Bochum</i>
15:45-16:00	Talk 7: Influence of charge transfer states on non-radiative relaxation pathways in REF[W04]:Eu3+ <i>Priya Pandey, Heinrich Heine University Düsseldorf</i>
16:00-16:30	Coffee break
16:30-16:45	Talk 8: Multidimensional control in the synthesis of silver-gold nanoparticles: Composition, size, and shape <i>N. E. Traoré, Friedrich-Alexander-Universität Erlangen-Nürnberg</i>
16:45-17:00	Talk 9: In-situ methodology for quantifying charge kinetics of individual microparticles <i>Hans-Christoph Töpper, ETH Zürich</i>

17:00–17:15	Talk 10: Impedance spectroscopy reveals tunneling and contact dependent conduction in conductive polymer composites <i>Lingyu Liu, Leibniz Institute for New Materials</i>
17:15–17:30	Talk 11: Characterization of magnetic particle mobility and orientation in soft media by Mössbauer spectroscopy <i>Joachim Landers, University of Duisburg-Essen</i>
19:30–	Conference dinner

Thursday, October 8, 2026

Time	Program
08:30–09:00	Keynote Lecture 3 – Prof. Peter Reiss, IRIG SyMMES, France “Continuous flow synthesis of colloidal semiconductor quantum dots”
09:00–09:15	Talk 12: Rapid parameter screening for non-aqueous ZnO nanostructure synthesis through millifluidics <i>Lena Arndt, Universität Braunschweig</i>
09:15–09:30	Talk 13: Process intensification in one-pass continuous synthesis of InP-based quantum dots with sequential core and shell growth <i>Heer Shah, University of Duisburg-Essen</i>
09:30–09:45	Talk 14: Ligand-directed formation of Ag ₂ S nanoparticles in aqueous microwave synthesis: from coordination chemistry to continuous flow processing <i>K. David Wegner, Federal Institute for Materials Research and Testing Berlin</i>
09:45–10:00	Talk 15: Coupling discrete and continuous population balances for scalable nanoparticle modelling <i>Lukas Pflug, Friedrich-Alexander Universität ErlangenNürnberg</i>
10:00–10:15	Talk 16: High-throughput particle separation using dielectrophoresis <i>Georg R. Pesch, TU Wien, Austria</i>
10:15–10:45	Coffee Break
10:45–11:00	Talk 17: Functionalized metal-silica nanoparticles as multi-functional fillers for advanced elastomeric nanocomposites <i>Lorenzo Alberti, University of Milano-Bicocca Milano</i>
11:00–11:15	Talk 18: Hierarchical cracks in drying suspensions <i>Meysam Bagheri, Friedrich-Alexander-Universität Erlangen-Nürnberg</i>
11:15–11:30	Talk 19: Architected BaTiO ₃ particle composites printed by masked dtereolithography for decoupled mechanical and piezoelectric response <i>Ebubekir Can Güneş, University of Bremen</i>
11:30–11:45	Talk 20: Hairy hybrid nanoparticles with immobilised enzymes for highly-sensitive electrochemical biosensors <i>Anila Antony, University of Bayreuth</i>
11:45–12:15	Poster talks day 2
12:15–13:00	Lunch Break
13:00 – 14:00	Poster
14:00–14:30	Keynote Lecture 4 – Prof. Alexandra Teleki, Uppsala University, Sweden

14:30–14:45	Talk 21: Tailoring hetero-aggregates via triple-flame spray pyrolysis <i>Xiao-Xue Wang, University of Bremen</i>
14:45–15:00	Talk 22: Polymer ceramic composite thin films by powder aerosol deposition – from particles to materials architectures <i>Karen Lienkamp, Saarland University</i>
15:00–15:15	Talk 23: Inverse identification and adaptive Bayesian optimisation for calibrating bondedparticle models of frozen particle-fluid systems <i>Amirali Khosrozadeh, Hamburg University of Technology</i>
15:15–15:30	Talk 24: Cold-start-induced catalyst particle degradation in PEM fuel cell catalyst coated membranes <i>Viktor Mackert, ZBT Duisburg</i>
15:30–15:45	Talk 25: Microwave plasma gas-phase processing: from recycled metallic powders to engineered spherical micro- and nanoparticles for advanced applications <i>Sophie M. Schnurre, University of Duisburg-Essen</i>
15:45–16:00	Poster awards + closing remarks
16:00–16:30	Coffee and snacks