



Melissa Mushrush, Ph.D.

Chemist, Product R&D
MOLYKOTE® Specialty Lubricants

Primary Responsibilities

- Product research and development of anti-friction coatings

Experience and Expertise

Melissa has been a chemist for the MOLYKOTE® Specialty Lubricants brand since 2017 after 14 years at The Dow Chemical Company. In her current role, Melissa is exploring new materials for anti-friction coatings to improve friction and wear performance.

The expertise Melissa brings to MOLYKOTE® includes vacuum technology, thin-film deposition, film and device characterization, process data management, statistics and error analysis, and accelerated testing methods.

Melissa began her work at Dow on the Research Assignments Program and worked on projects in homogeneous catalysis, epoxy electrical laminates, polymer light-emitting diodes and polyisocyanurate foams before joining the High Throughput Formulations Lab in early 2005. In late 2006, Melissa was recruited as part of a small core R&D group to start an effort in thin-film solar technology and played a key role in setting up new capabilities in deposition and characterization of thin-film solar cells based on copper indium gallium diselenide [Cu(In,Ga)Se₂ or CIGS]. Melissa led collaborations with the National Renewable Energy Laboratory (NREL) and the Institute for Energy Conversion at the University of Delaware to establish Dow's solar expertise. She also led the co-design of specialized vacuum equipment from Von Ardenne Anlagentechnik in Dresden, Germany.

Education

Bachelor of Arts, Chemistry and Russian Language & Literature,
Wesleyan University

Master of Science and Doctor of Philosophy, Inorganic Chemistry,
The Tobin Marks group, Northwestern University

External Representation

Melissa was a member of IEEE for many years and is currently a member of the Society of Tribologists and Lubrication Engineers (STLE).

About MOLYKOTE® Specialty Lubricants

For more than 70 years, customers around the world have trusted the MOLYKOTE® brand for performance and expertise to solve or prevent virtually any lubrication problem and to save energy. Available through a global network of channel partners, MOLYKOTE® brand lubricants – which include anti-friction coatings, compounds, dispersions, greases, oils and fluids, and pastes – serve the automotive market and industrial/maintenance, repair and overhaul (MRO) markets. For more information about the MOLYKOTE® brand, visit molykote.com.

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