Contact

www.linkedin.com/in/pantchostoyanov (LinkedIn)
www.iam.kit.edu/zbs/english/Forschung_stoyanov.php (Company)

Top Skills

Scanning Electron Microscopy
AFM
Materials Science

Languages

English
German

Certifications

Six Sigma - Green Belt
Intro to Lean
Learning to Teach

Publications

Nanoscale sliding friction phenomena at the interface of diamond-like carbon and tungsten
Micro-scale sliding contacts on Au and Au-MoS2 coatings
Influence of Humidity on the Tribological Performance of Unmodified Soybean and Sunflower Oils
Micro-Tribological Performance of Au-MoS2 Nanocomposite and Au/MoS2 Bilayer Coatings
Experimental and numerical atomistic investigation of the third body formation process in dry tungsten/tungsten-carbide tribo couples

Patents

Method and Apparatus for Pulse Pressure Molding
Sliding contact for high and ultra high vacuum applications

Pantcho Stoyanov

Aerospace & Tribological Materials
East Hartford, Connecticut, United States

Experience

Concordia University
Associate Professor
September 2020 - Present (5 years 2 months)

Pratt & Whitney
Principal Engineer - Clearance & Tribological Materials
February 2016 - December 2020 (4 years 11 months)
Hartford, Connecticut Area

Kennametal
Senior Innovation Engineer R&D
November 2013 - January 2016 (2 years 3 months)

Responsible for leading Innovation Ventures Group development programs from the discovery through development and commercialization. Provide technical expertise to identify new strategic technologies and market areas for Kennametal. Establish a strong network with external global partners to collaborate on essential projects. Provide technical knowledge and assistance to other ongoing projects.

Current projects include:
•Development of corrosion and wear resistant materials produced by additive manufacturing
•Development of a process to produce thin film coatings on critical components in extreme conditions for key business segments.

Fraunhofer Institute IWM - KIT
Postdoctoral Researcher
October 2011 - October 2013 (2 years 1 month)

Coordinate DFG study on understanding deformation mechanism and interfacial processes of materials for applications in extreme environmental conditions (e.g. high temperature, high pressures and radiation) using various experimental approaches and classical atomistic simulations.

McGill University

Research Associate
May 2011 - October 2011 (6 months)

Coordinated study on characterization and failure analysis of nanolayered and cosputtered coatings for applications in aerospace and micro-devices (NEMS/MEMS).

Education

McGill University
Ph.D., Materials Engineering · (2007 - 2011)

Loyola Marymount University
M.S., Mechanical Engineering · (2005 - 2007)

University of California, Santa Barbara
B.S., Mathematical Sciences · (2001 - 2005)

Activity

09/24/2025, Dennis Davis added candidate to Staff Mechanical Engineer - Rings

09/26/2025, Dennis Davis updated candidate from Staff Mechanical Engineer - Rings

10/14/2025, Viewed by Dennis Davis