

DR. ILIA N. IVANOV

Distinguished Scientist,
Distinguished Battelle Inventor,
*Center for Nanophase Materials
Sciences* - Oak Ridge National
Laboratory



SPCEET RESEARCH SEMINAR SERIES

MACHINE LEARNING CENTRIC SYSTEM FOR ADVANCED CHARACTERIZATION OF THIN FILM RESPONSE TO ENVIRONMENT

DATE: WEDNESDAY, FEBRUARY 26TH
TIME: 11:15 AM - 12:15 AM
LOCATION: Q 315

BIO

Dr. Ilia N Ivanov earned his Ph.D. in Photochemistry and Physical Chemistry from Bowling Green State University in 1998 after completing an M.S. in Nuclear and Physical Chemistry from Russian University of Chemical Technology in Moscow. He specializes in understanding and controlling thin film material assembly through machine learning models. His research focuses on identifying metastable states for materials assembly and developing scalable machine learning autonomous processes to bridge fundamental and applied science.

ABSTRACT

The classic design of experiments is traditionally a time-consuming process that involves meticulous planning, data interpretation, and the construction of hypotheses by skilled researchers. In this context, we introduce a novel, machine-intelligent experimental framework that facilitates the concurrent dynamic assessment of various material properties, including electrical, optical, gravimetric, and viscoelastic attributes, within a programmable dynamic setting.