Chairs overview

Chair:

Caterina Minelli Principal Research Scientist



Affiliation

National Physical Laboratory

Background

Dr. Caterina Minelli joined NPL in July 2010. Caterina leads the development of the metrology underpinning the industrial exploitation of nanoparticles and particle systems, with focus on Nanomedicine. She acts as an expert in the ISO TC229 (Nanotechnologies) and TC24/SC4 (Particle characterisation) and has been driving internationally a range of standardisation efforts in the area, including the VAMAS TWA34 Project 10 interlaboratory comparison on measurement of nanoparticle concentration. Caterina is currently working with international measurement experts and instrument manufacturers at increasing confidence and repeatability in the measurement of particle physico-chemcal attributes. Caterina is also the NPL lead for medicine manufacturing. Within this activity, Caterina is liaising with Pharmaceutical companies and research centres to support innovation in the manufacturing of both traditional and novel medicines.

Chair:

Nadim Akhtar Senior Principal Scientist



Affiliation

AstraZeneca

Background

Nadim Akhtar, Ph.D., is a Senior Principal Scientist in the New Modalities and Parenteral Development Department in Pharmaceutical Technology and Development function at AstraZeneca. Nadim has been working for AstraZeneca since 2007. During this time Nadim has worked on both early and late stage portfolio supporting development of small molecules and new modalities i.e. oligonucleotides, peptides, polymeric nanoparticles, dendrimers, and mRNA products. Nadim is currently responsible for developing characterisation and control strategies for New Modalities.

Chair:

Luigi Calzolai Project leader



Affiliation

European Commission's Joint Research Centre

Background

Dr Luigi Calzolai is a scientist working on nanobiotechnology, in particular developing methods for detection and characterization of nanoparticles in complex matrices (food, cosmetics, environment, biological systems) in support of EU legislation on nanomaterials.

In 2009 he joined the Joint Research Center of the European Commission where his research focuses on the development of methods for the characterization of nanoparticles in complex matrices, nanomedicines, therapeutic antibodies, and the interaction of soft nanomaterials with biological systems. He was a member of the Core Expert Team of the European Union Nanomedicine Characterization Laboratory

He is an expert on advanced structural analysis (NMR, CD) of biomolecules and techniques for the characterization of nanomaterials such as FFF, DLS, MALS, CPS and hyphenated technique.

Chair:

Vince Hackley Senior Scientist and Research Chemist



Affiliation

National Institute of Standards and Technology

Background

Dr. Hackley is a senior scientist and research chemist at the National Institute of Standards and Technology (NIST), a non-regulatory science agency within the U.S. Department of Commerce, where he led a multidisciplinary project team focused on the study, detection, characterization, and quantification of engineered nanomaterials for nearly 15 years. Efforts emphasized the use of orthogonal and hyphenated techniques, and the application of analytical concepts. Currently he is focused on measurements and standards for nano-enabled therapeutics. Dr. Hackley leads efforts to produce nanoscale and microscale certified reference materials that underpin measurement development and commerce. He is a subject matter expert, project leader and committee officer in international standards development organizations, including ISO and ASTM International. He is on the steering board for the International Symposium on Field- and Flow-based Separations, the scientific advisory board for the journal Environmental Science: Nano, the scientific oversight committee for the National Cancer Institute's Nanotechnology Characterization Laboratory and is a Fellow of the Royal Society of Chemistry. He has authored or co-authored more than 130 papers on particle science and technology, nanomaterials in biomedical applications, environmental science, and analytical methodology applied to nanotechnology.