

Palas® Training Course “Aerosol Generation and Dilution”

Monday, 09 September 2019, 8:30 am to 4:30 pm
Palas GmbH, Greschbachstr. 3b, 76229 Karlsruhe, Germany

Content

Application of the Palas® aerosol generators for the generation of solid and liquid test aerosols as well as the dilution of test aerosols

Theory (focus 1/3):

1. Basics of the aerosol generation for test aerosols according to VDI 3491
2. Limits of the aerosol generation
3. Operation principle of the aerosol generators
4. Operation principle of the dilution systems

Practice (focus 2/3):

1. Start-up and filling of the aerosol generators:
 - a. Generation of droplet aerosols from liquids with the AGF 2.0/10.0, UGF 2000, PLG 2000 H, PAG 1000
 - b. Generation of solid aerosols from salt solutions with the AGK 2000 and LSPG 16890
 - c. Generation of solid aerosols from powders and bulk material with the brush feeder RBG 1000 and the belt feeder BEG 1000
 - d. Generation of nanoparticles with the DNP digital 3000
 - e. Generation of monodisperse calibration aerosols with the MAG 3000
2. Influence of the operation parameters like dispersing volume flow, dispersing material and composition and temperature on the particle size distribution and particle concentration
3. Maintenance and cleaning
4. Proof of the dosing constancy at the Palas® calibration test rig:
 - a. Measurement of the generated particle size distributions with the aerosol spectrometer welas® digital 2000 for aerosols in the micrometer range
5. Start-up of the dilution systems:
 - a. Maintenance and cleaning
 - b. Proof of the dilution factor of cascaded systems

Speakers:



Dipl.-Ing. (FH) Sven Schütz
 Sales & Applications Engineer



Dipl.-Ing. (FH) Martin Schmidt
 Division Manager Aerosol
 Technology and Filter Test Systems

Palas GmbH
 Partikel- und Lasermesstechnik
 Greschbachstrasse 3b
 76229 Karlsruhe, Germany
 Phone: +49 (0)721 96213-0
 Fax: +49 (0)721 96213-33

Geschäftsführer/
 General Manager:
 Dr.-Ing.
 Maximilian Weiß
 Dr. Daniel Auer

BW-Bank Karlsruhe
 SWIFT-BIC: SOLA DE 33
 IBAN: DE77 6005 0101 7495 5026 59
 Deutsche Bank Karlsruhe
 SWIFT-BIC: DEUTDE33HAN
 IBAN: DE95 6607 0004 0095 9460 00

Handelsregister/
 Commercial Register:
 Mannheim HRB 103813
 Sitz des Unternehmens/
 Place of Business: Karlsruhe

USt-IdNr./VAT ID:
 DE 143585902
 St. Nr./Tax No.
 3 4416/07832
 www.palas.de