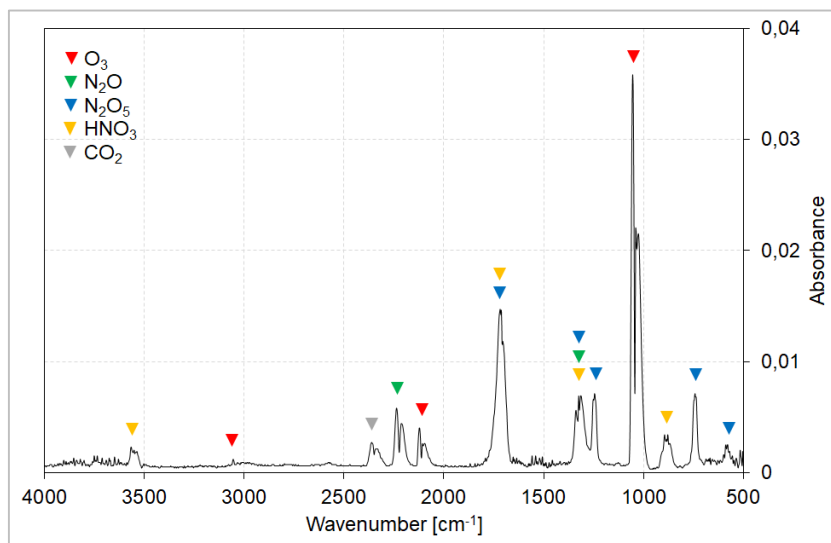


Analysis of plasma-, flame-processes and other radiation sources

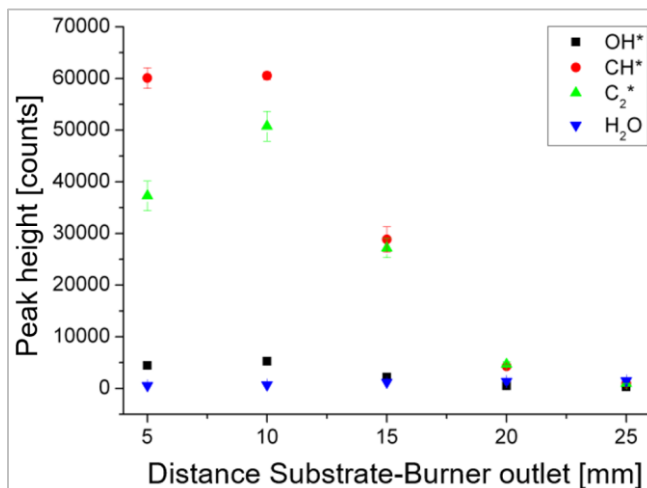
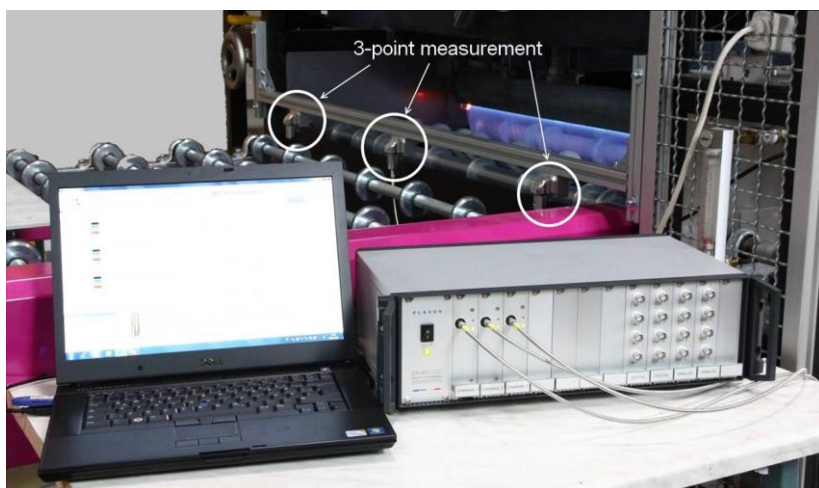
Transfer offer

For the evaluation and optimisation of activation or coating procedures is an analytical characterisation essential of the technical process itself. Optical emissions from the radiation sources can be used to determine the gas composition or the formation of reaction products. Gas and/or waste gas analyses, for example by means of FTIR, supplement these emission measurements. Temperature measurements provide an indication of possible treatment parameters that, for example, are too intensive for the activation of plastics and cause thermal damage. INNOVENT has a broad range of analytical methods that can be used stationary in the lab or for mobile measurement campaigns.

FTIR spectroscopy of the generated molecules of an atmospheric pressure plasma source



Optical emission spectroscopy on a flame coating process



Analytical methods

- Optical emission spectroscopy (OES)
- FTIR spectroscopy of the radiation source, on gas analysis cells & on treated / coated substrates possible
- Gas detectors (O₃, NO, NO₂, NH₃, CH₄O, C₂H₆O)
- Temperature measurements with thermocouples or by thermal imaging with IR thermometers
- UV-Meter with 4 sensors (230 – 520 nm)

Analyses suitable for:

- Plasmas (low pressure, atmospheric pressure, in aqueous medium) & plasma coatings (PECVD, PVD)
- Flame & flame coatings (CCVD)
- Spray coating processes, such as plasma-, flame-, arc-, laser assisted spraying
- Light sources like laser, LED, gas-discharge lamps

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