



PlasTEP

Dissemination and fostering of plasma based environmental technological innovation

Future activities based on the PlasTEP project

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PlasTEP+ objectives

PlasTEP has the following aims:

- Attracting investments in plasma-based air and water cleaning technologies using the developed plasma devices during the main stage project PlasTEP.
- Presentation of target group specific results of the field tests during workshops and seminars.



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PlasTEP+ activities

Following field tests planned for PlasTEP+:

- Maritim supplier (Poland): removal of styrene odor
- chemical company (Estonia): reduction of H₂S and aliphatic VOC
- biomass power plant (Denmark): NO_x reduction
- biomass power plant (Sweden): NO_x reduction at two different types of boilers: biomass (peat) and waste-to-energy plants
- pig farm (Germany): removal of odour at a closed stable
- paint facility (Poland): removal of organic solvents
- water plant (Germany or Estonia) or test at Betonstal removal of VOC from non-stationary exhaust, high concentrations during drying of components



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PlasTEP+ activities

Following dissemination activities planned for PlasTEP+:

- International workshop for new electron beam technologies including new trends in water cleaning (resp.: INCT)
- Workshop for exhaust gas cleaning in Poland (resp.: WTUS)
- Application seminar in Denmark (resp.: DTU)
- Application seminar “New trends in application of modern electron beam generation in air pollution” in Poland (resp.: INCT)
- Workshop for exhaust gas cleaning in Sweden (resp.: UU)
- Workshop for exhaust gas cleaning in Germany (resp. INP)
- Final presentation at a BSR conference



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Other project activities

interaction of plasma and catalyst

- UT: Estonian Science Foundation project for 4 years
- INP + LUT: fundamental research project

Air cleaning

- WTUS + Rafflenbeul + INEOS PARAFORM: “novel purification technique for the treatment of waste air in the manufacturing process of paraformaldehyde plasma assisted formaldehyde destruction in waste air” (LIFE+)
- VGTU: A catalytic air cleaning device, proposal for EUREKA / BONUS
- KTU: development of a prototype for intake air treatment for the private homes to reduce odour and particles of biomass combustion.



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Other project activities

Water treatment

- UU, INP, KTU, IMP, DTU, TZV, BNPT :Plasma processes in water, including cleaning of water (Planned activity e.g StarDust)
- KTU: Methods of plasma for decomposing organic dyes from textile industry wastewater

Electron beam flue gas treatment

- INCT: project in Saudi Arabia

Surface water cleaning

- WTUS / IMP / INP: Attracting oil skimmers producers
- UU: Plasma processing and treatment of inner surfaces



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Thank you for your attention!

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