

MecaNano Pitching Event + Round Table on Machine Learning Applications (WG1–WG3)

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Flue-gas desulfurization

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Scrubbing with seawater is a reliable technology for flue-gas desulfurization in power plants or in marine engines. Then, the removed sulphur is released to the atmosphere, or effluents are released to the sea. In both cases, stringent legal limits for both emissions and effluents are in effect that must be met. There are many input parameters (sulfur content, flow rate, temperature of the flue gas), processing parameters (seawater flow rate in scrubber, temperature, height of scrubber), and environmental parameters (air temperature, air velocity, humidity for emissions, and seawater temperature, current velocity, salinity, and pH for effluent dispersion). We would like to use ML to provide us with the proper processing parameters, given the input and environmental parameters, that obey the stringent legal limits.

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