**Characterization of E-cigarette Smokes through Machine Learning Classification Algorithm**

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**Method**

Sample size validation

Smoke Sample Collection

* Discuss about e-cig brand
* Describe procedure of measurement

Sample Measurement

Setting: Carrier Flow of 5.6tls, sample flow of 0.3tls, tube pressure of 0.69, tube temperature 119, reaction time of 10 min for each precursor ions. List of precursor ions: H3O+, NO+, O2+, OH-, O2-, O-, NO2-, NO3-

Machine Learning Algorithm Training

* Avoid overfitting by validating set & calibration curve