

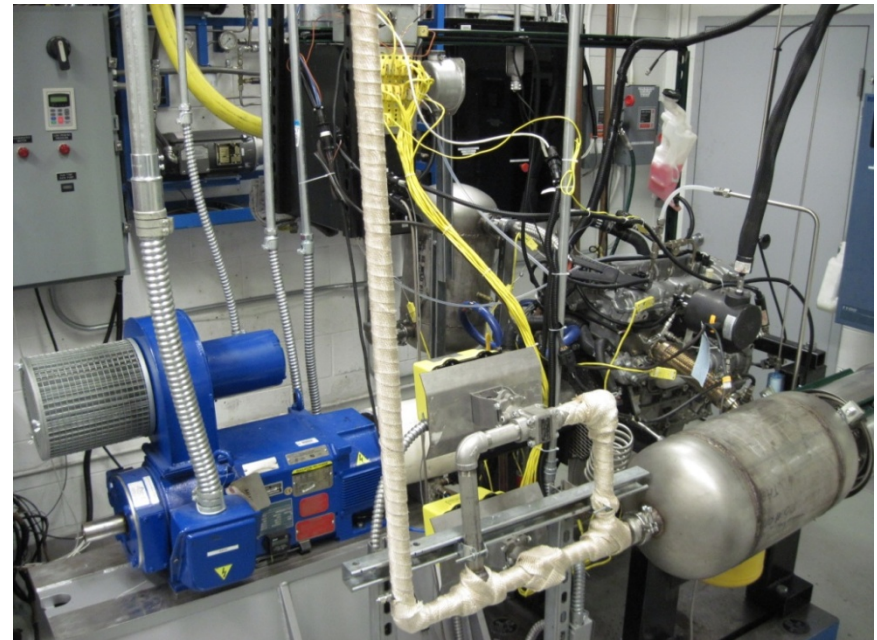
# Study of Engine Operating Parameter Effects on GDI Engine Particle-Number Emissions

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***Poster Location P-10***



# Study of Engine Operating Parameter Effects on GDI Engine Particle-Number Emissions

## Motivation

- Gasoline direct injection (GDI) technology tends to have higher particulate matter mass and particle number (PN) emissions than conventional port fuel injection technology.

## Objectives

- Determine engine control parameter effects on engine-out PN emissions
- Study the impact of ethanol-blended gasoline on PN emissions
- Study PN emissions during engine cold start
- Develop engine control strategies to minimize PN emissions

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