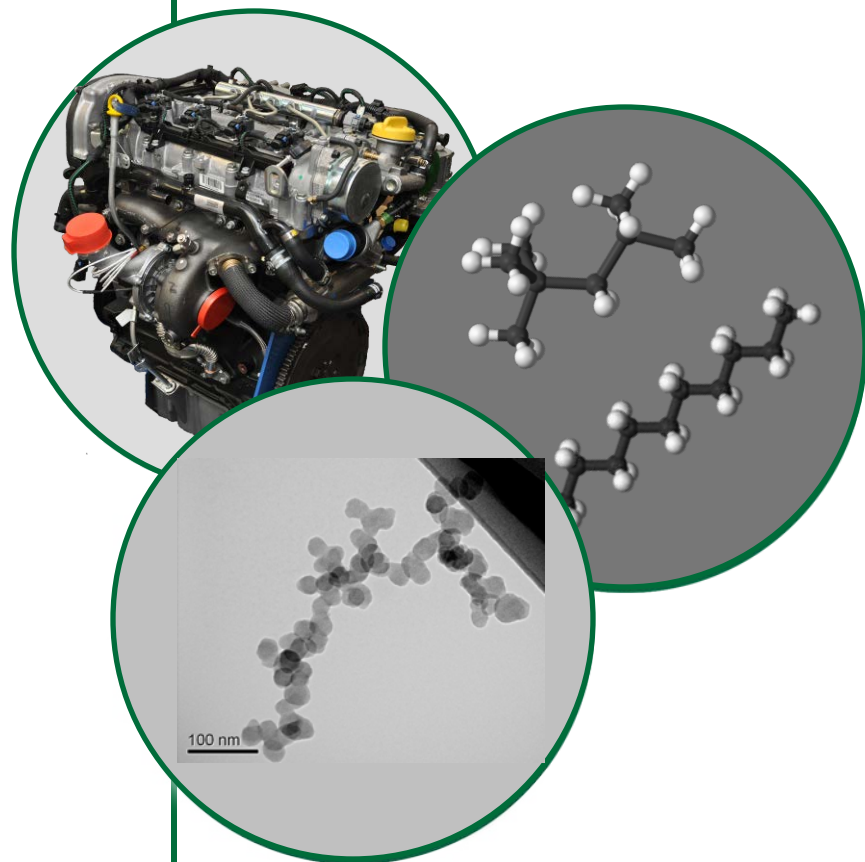


Particulate Matter Characteristics for Highly Dilute Stoichiometric GDI Engine Operation

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- We have been **characterizing engine particles** since 1990's
 - * Particle size, number, chemistry and morphology
 - * Diesel, PFI, PCCI, HCCI, GDI, RCCI, HECC, **GDI+EGR**
- This has led to many tools, analysis methods, publications
 - * Extraction and thermal desorption GC-MS for chemistry
 - * Making particle morphology “quantitative”



- Focus of Poster : Dilute GDI PM
 - * Higher efficiency for stoich GDI
 - * EGR shown to reduce PM

