



# Symposium on Fuels of the Future\*

Rocky Mountain Regional Meeting, October 17-20, 2012

We want your contributions, go to [rmm2012.sites.acs.org](http://rmm2012.sites.acs.org) to submit your abstract!

## Invited Speakers

### Biomass

Dr. Gregg Beckham (NREL) "Identifying new routes to improve cellulase enzymes for biofuels production with computer simulations"

Prof. Linda Broadbelt (Northwestern) "Mechanistic modeling of fast pyrolysis of cellulose to predict bio-oil composition"

Dr. Stefan Czernik (NREL) "Catalytic pyrolysis of biomass for fuel production"

Dr. Ariana Beste (ORNL) "Lignin model pyrolysis: a computational approach"

Prof. Ken Reardon (CSU) "Isolation and characterization of lignin-degrading microorganisms from rainforest soil"

Prof. Matt Posewitz (CSM) "Photons to fuels: manipulating metabolic partitioning to improve bioenergy carrier yields in algae"

### Fuels/Engines

Prof. Gregory Bogin (CSM) "The role of the Ignition Quality Tester as a validation tool for ignition kinetics of low volatility fuels"

Dr. Robert McCormick (NREL) "Biodiesel, cold weather, and polymorphic Phase"

Dr. Chitral Naik (Reaction Design) "Understanding the performance of advanced engines through CFD simulations with detailed reaction mechanisms"

### Alternatives

Dr. Andrea Ambrosini (SNL) "Synthesis and characterization of oxide materials for thermochemical CO<sub>2</sub> splitting using concentrated solar energy"

Prof. Joann Lighty (Univ. of Utah) "Soot oxidation kinetics: Pressure and fuel comparisons"

Prof. Umit Ozkan (Ohio State) "Catalytic and electro-catalytic performance of doped perovskites: Control of oxygen mobility"

Prof. Neal Sullivan (CSM) "Ceramic devices for biofuels synthesis"

Questions? - Contact Prof. Tony Dean ([amdean@mines.edu](mailto:amdean@mines.edu)) or Prof. Andy Herring ([aherring@mines.edu](mailto:aherring@mines.edu))

