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## Publications

### Books

1. Gray, M.R. *Upgrading Petroleum Residues and Heavy Oils*, Marcel Dekker, New York, April 1994, 348 pp.

### Refereed Journal Papers:

(The corresponding author is noted with an asterisk)

1. Karimi, A.; Gray, M.R.\* "Effectiveness and Mobility of Catalysts for Gasification of Bitumen Coke", *Fuel*, accepted for publication, July 2010.
2. Yang, Z.; Li, Q.; Gray, M.R.; Chou, K.C.\* "Structures of water molecules at solvent/silica interfaces", *Langmuir*, accepted for publication July 2010.
3. Alshareef, A.H.; Azyat, K.; Tykwinski, R.R.; Gray, M.R.\* "Measurement of Cracking Kinetics of Pure Model Compounds by Thermogravimetric Analysis", *Energy and Fuels*, 25 pp., accepted for publication June 2010.
4. Bagheri, S.R.; Bazyleva, A.; Gray, M.R.; McCaffrey, W.C.; John M Shaw, J.M.\* , Observation of Liquid Crystals in Unreacted Heavy Petroleum Fractions, *Energy and Fuels*, 21 pp, accepted for publication June 2010.
5. Sabbah, H.; Morrow, A.L.; Pomerantz, A.E.; Mullins, O.C.; Tan, X.; Gray, M.R.; Azyat, A.; Tykwinski, R.R.; Zare, R.N. "Comparing Laser Desorption Laser Ionization Mass Spectra of Asphaltenes and Model Compounds", *Energy and Fuels*, 28 pp, accepted for publication May 2010.
6. Atoosa Zahabi, A.; Gray, M.R.; Czarnecki, J.; Dabros, T.\* "Flocculation of silica particles from a model oil solution: Effect of adsorbed asphaltenes. *Energy and Fuels*, 24, 3616–3623 (2010).
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12. Ali, M.; Courtney, M., Boddez, L.; Gray, M.R.\* "Coke Yield and Heat Transfer in Reaction of Liquid-Solid Agglomerates of Athabasca Vacuum Residue", *Canadian Journal of Chemical Engineering*, 88(1), 48-54 (2010).
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### **Patents**

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