

the compounds having a wide range dissociation energies. However, our data of phenolic resin decomposition indicate that there is good qualitative agreement between coal conversion at 400 °C and the phenol yield at 440 °C.

## Conclusions

The solvent ability for coal liquefaction was evaluated using phenolic resin as an Australian brown coal model. The choice of a phenolic resin as a model for the liquefaction of Yallourn coal at 440 °C under nitrogen allowed the prediction of liquefaction yields in a series of 13 model solvents, a hydrogenated anthracene oil, and a recycle solvent. Between 380 and 440 °C resin decomposition, there was a change in mechanism such that at lower temperatures the response to donor solvents and nondonor solvents was similar, while at higher temperatures the donor solvents were more effective liquefaction solvents. In a further study the application of this solvent ability evaluation to many liquefaction solvents using other resins such as larger, straight phenolic resin or high o-phenolic resin is to be investigated.

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**Registry No.** Tetrahydroquinoline, 25448-04-8; dihydrophenanthrene, 26856-35-9; naphthalene, 91-20-3; 1-decene, 872-05-9; 1-methylnaphthalene, 90-12-0; dihydroanthracene, 613-31-0; tetralin, 119-64-2; fluorene, 86-73-7; decalin, 91-17-8; phenanthrene, 85-01-8; indene, 95-13-6; *n*-octadecane, 593-45-3; anthracene, 120-12-7.

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Hideyuki Tagaya,\* Tsuyoyuki Ono, Koji Chiba

Faculty of Engineering

Yamagata University

Yonezawa, Yamagata 992, Japan

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## ADDITIONS AND CORRECTIONS

### Implications of Large RGA Elements on Control Performance [Volume 26, Number 11, page 2323]. Sigurd Skogestad and Manfred Morari\*

Page 2325. Equation 13 should read

$$r(w) < 1 / (\|\Lambda(jw)\|_1 + k(n)) \quad (13)$$