

BAB 5

KESIMPULAN DAN SARAN

5.1 Kesimpulan

Berdasarkan hasil penelitian dengan membandingkan metode ekstraksi pada kondisi subkritik (250 °C, 50 bar, 150 menit) dengan ekstraksi secara konvensional (85 °C, 1 bar, 150 menit), dan variasi penambahan zat aditif berupa asam sitrat, EDTA, dan NH₄OH seperti yang disajikan pada bab IV, dapat disimpulkan beberapa hal berikut :

1. Penambahan zat aditif menghasilkan nilai persentase *recovery* nikel yang lebih tinggi dibandingkan tanpa penambahan zat aditif dan tidak efektif untuk aluminium.
2. Metode subkritik tanpa zat aditif lebih baik dibandingkan metode konvensional untuk mengekstraksi aluminium.
3. Metode subkritik dengan zat aditif tidak lebih baik dibandingkan metode konvensional untuk mengekstraksi nikel.

5.2 Saran

Dari hasil penelitian yang telah dilakukan terdapat beberapa saran yang dapat diberikan untuk penelitian dengan topik yang sama selanjutnya. Adapun saran yang dapat diberikan sebagai berikut :

1. Dapat dikembangkan lebih jauh mengenai penggunaan zat aditif, terutama zat aditif asam.
2. Metode pengujian UV-Vis perlu dipastikan tidak terganggu oleh zat aditif yang digunakan.
3. Memastikan pengompleks yang digunakan untuk analisis selektif terhadap logam yang diinginkan dan tidak dipengaruhi oleh logam lainnya.

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