

## **BAB 5**

### **KESIMPULAN DAN SARAN**

#### **5.1 Kesimpulan**

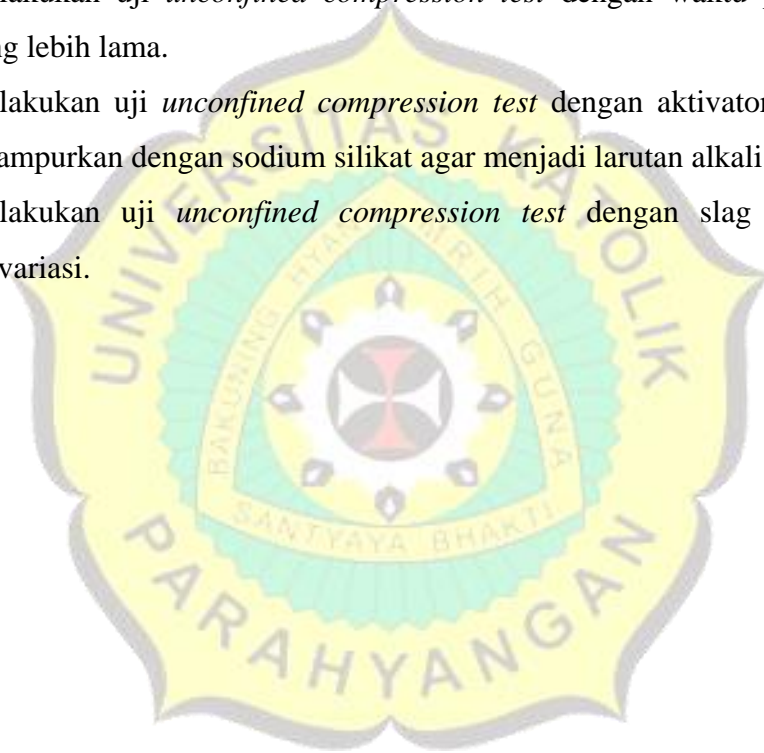
Dari hasil peneitian yang telah dilakukan, dapat ditarik kesimpulan bahwa:

- 1 Hasil dari uji *unconfined compression test* dapat ditarik kesimpulan bahwa dengan menambahkan *ferronickel slag* dan dicampurkan dengan aktivator sodium hidroksida dan sodium silikat dapat meningkatkan kuat tekan dan kuat geser kaolin.
- 2 Sampel kaolin berubah dari fase padat menuju cair pada kadar air 83%.
- 3 Waktu pengeringan (*curing*) sangat berpengaruh terhadap kuat tekan kaolin yang sudah dicampurkan *geopolymer* sebelum uji *unconfined compression test*.
- 4 Waktu pengeringan (*curing*) berpengaruh terhadap kadar air yang terdapat pada campuran sampel kaolin.
- 5 Perbandingan antara sodium silikat dan sodium hidroksida yang digunakan sebesar (1:1) agar mengurangi kadar air di dalam kaolin saat di uji.
- 6 Kuat tekan kaolin tertinggi terjadi pada saat dicampurkan dengan slag 10% dengan aktivator sodium hidroksida dan sodium silikat yang mengalami *curing* selama 21 hari.
- 7 Kuat geser kaolin tertinggi terjadi pada saat dicampurkan dengan slag 10% dengan aktivator sodium hidroksida dan sodium silikat yang mengalami *curing* selama 21 hari.

## 5.2 Saran

Dari hasil penelitian yang telah dilakukan, saran yang dapat diberikan adalah sebagai berikut:

- 1 Penyusutan kaolin saat mengalami pengeraman (*curing*) harus diperhitungkan dengan lebih presisi agar lebih efektif saat proses pembuatan sampel.
- 2 Melakukan uji *unconfined compression test* dengan perbandingan antara sodium hidroksida dan sodium silikat yang bervariasi.
- 3 Melakukan uji *unconfined compression test* dengan waktu pengeraman yang lebih lama.
- 4 Melakukan uji *unconfined compression test* dengan aktivator lain untuk dicampurkan dengan sodium silikat agar menjadi larutan alkali baru.
- 5 Melakukan uji *unconfined compression test* dengan slag yang lebih bervariasi.



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