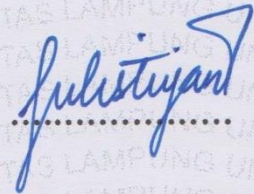


MENGESAHKAN

1. Tim Penguji

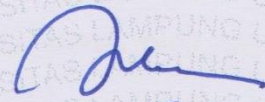
Ketua

: **Dr. Ir. Sri Ratna S., M.T.**



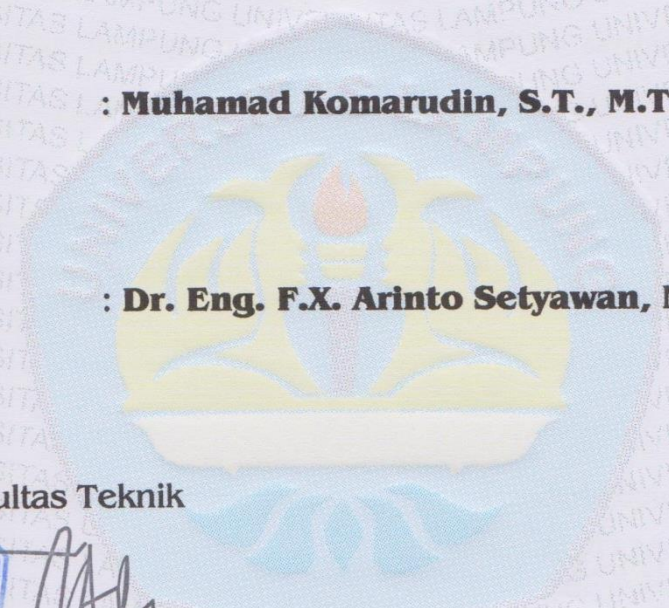
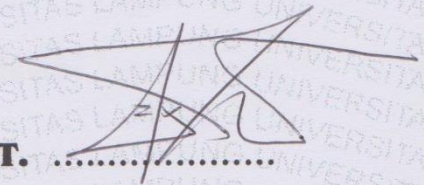
Sekretaris

: **Muhamad Komarudin, S.T., M.T.**



Penguji

: **Dr. Eng. F.X. Arinto Setyawan, M.T.**



2. Dekan Fakultas Teknik

Prof. Dr. Suharno, M.Sc.

NIP 19620717 198703 1 002



Tanggal Lulus Ujian Skripsi : 16 Desember 2015