

**C-band Linear Collider with C.M. Energy 500 GeV to 1 TeV**, N. AKASAKA, H. ISHII, K. KUBO, H. MATSUMOTO, S. MATSUMOTO, S. TAKEDA, T. SHINTAKE, K. OIDE and K. YOKOYA, KEK; H.S. LEE, PAL; K. WATANABE, Tohoku Univ; O. TAKEDA, TOSHIBA - A linear collider with the centre-of-mass energy 500 GeV to 1 TeV using C-band (5712 MHz) RF system for the main linac is proposed. It is shown that the choice of the main accelerating frequency is not a crucial issue from the view point of the luminosity per rf power on the accelerating structure and that the C-band is a good compromise between a relatively high accelerating gradient and the technical difficulty of the high power RF system. An optimization of the collider parameters and a brief sketch of the RF system will be presented. The detail of the parts of the RF system will be given in a separate talk.