Coulomb (J) vs Exchange (K) Matrix Construction
RECURSUM-Accelerated McMurchie-Davidson Algorithm

Legend:
- J Matrix (Coulomb)
- K Matrix (Exchange)

X-axis: Alkane Chain (Number of Shells)
- CH_4 (11 shells): 2.4×
- C_2H_6 (18 shells): 2.1×
- C_3H_8 (25 shells): 2.0×
- C_4H_{10} (32 shells): 2.0×

Y-axis: Construction Time (ms)