List of Publications

The thesis work is based on the following publications and conference proceedings:

1. Effective interaction in Bose-Einstein Condensates: a many-body approach
   by Tapan Kumar Das, Anasuya Kundu, Sylvio Canuto and Bamali Chakrabarti
   communicated, 2007

2. Quality of Potential Harmonics Expansion Method for dilute Bose-Einstein Condensate
   by Anasuya Kundu and Bamali Chakrabarti
   Pramana 69, 329 (2007)

3. An approximate many-body calculation for trapped bosons with attractive interaction
   by Anasuya Kundu, Bamali Chakrabarti, Tapan Kumar Das and Sylvio Canuto

4. Behavior of a Bose-Einstein condensate containing a large number of atoms interacting through a finite-range interatomic interaction
   by Tapan Kumar Das, Sylvio Canuto, Anasuya Kundu, and Bamali Chakrabarti

5. A finite number of trapped interacting bosons: an approximate many-body calculation
   by Barnali Chakrabarti, Anasuya Kundu and Tapan Kumar Das

6. Application of potential harmonic expansion method to BEC: Thermodynamic properties of trapped $^{23}$Na atoms
   by Anasuya Kundu, Barnali Chakrabarti and Tapan Kumar Das
   Pramana 65, 61 (2005)

7. Short range two-body correlations in atomic clusters & Bose Einstein condensation
   by Anasuya Kundu, Barnali Chakrabarti and Tapan Kumar Das
   Conference report of TC-2005 (Topical conference on atomic and molecular physics), IACS