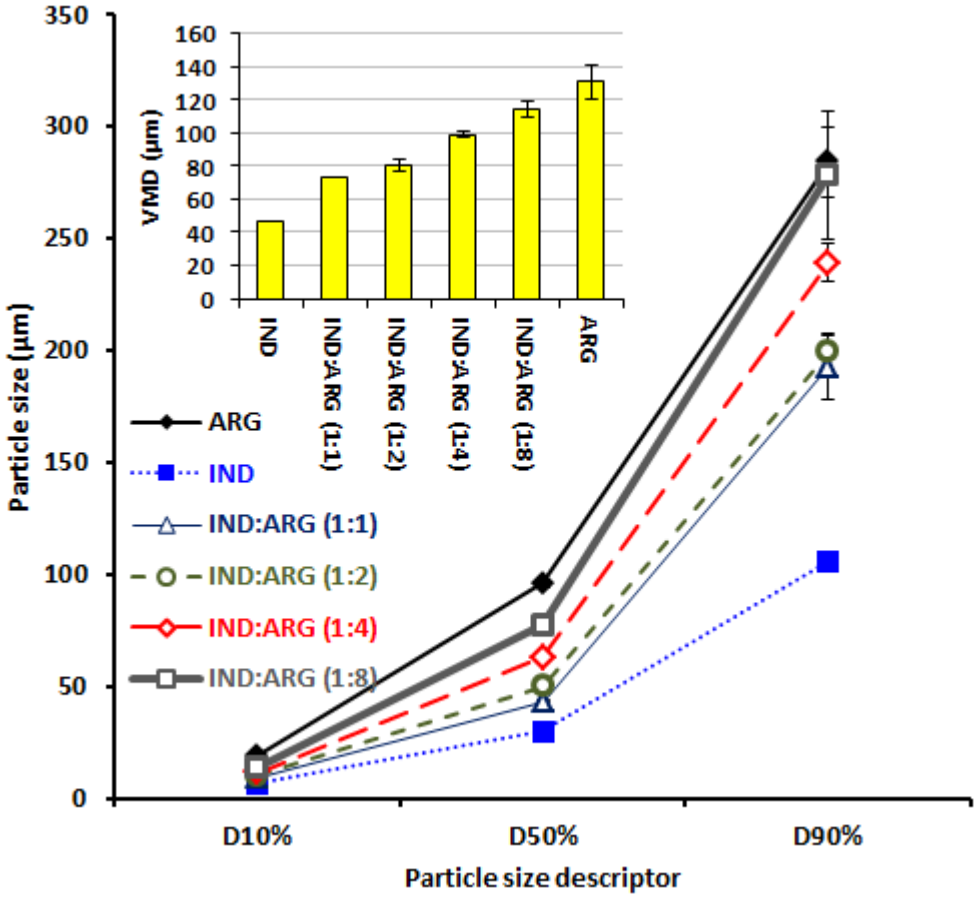


Fig. 1. Particle size at 10% ($D_{10\%}$), 50% ($D_{50\%}$, median diameter) and 90% ($D_{90\%}$) volume distribution and volume mean diameter (VMD) of arginine (ARG), indomethacin (IND) and IND:ARG physical mixtures at different ratios (1:1, 1:2, 1:4 and 1:8). Results are represented as mean±SD, (n= 3).

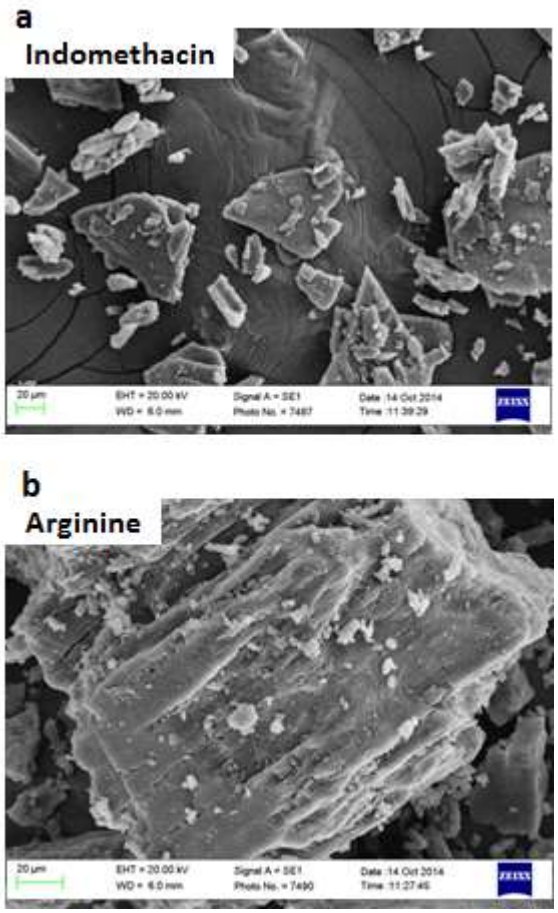


Fig. 2. Scanning electron microscope (SEM) images of indomethacin (**a**) and arginine (**b**).

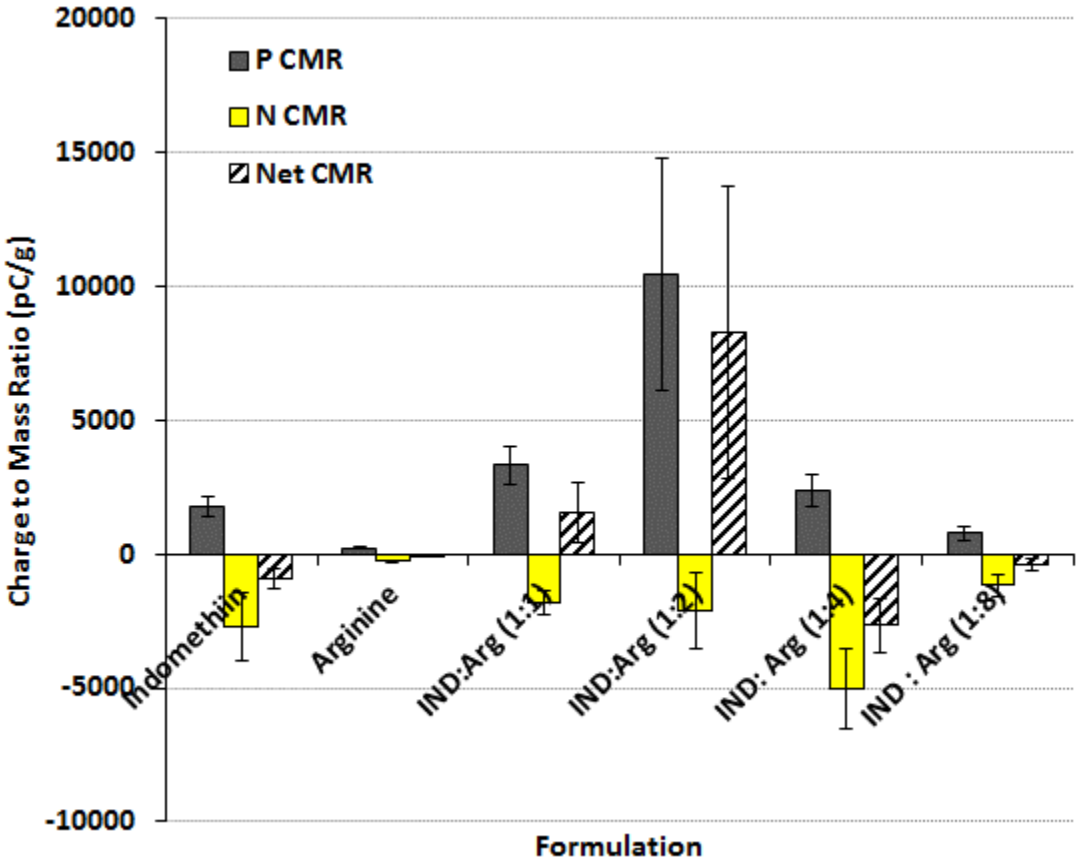


Fig. 3. Positive charge–to–mass ratio (P–CMR), negative charge–to–mass ratio (N–CMR) and net charge–to–mass ratio (Net–CMR) of indomethacin (IND), arginine (ARG) and IND:ARG physical mixtures at different ratios (1:1, 1:2, 1:4 and 1:8). Results are represented as mean±SD, (n= 3).

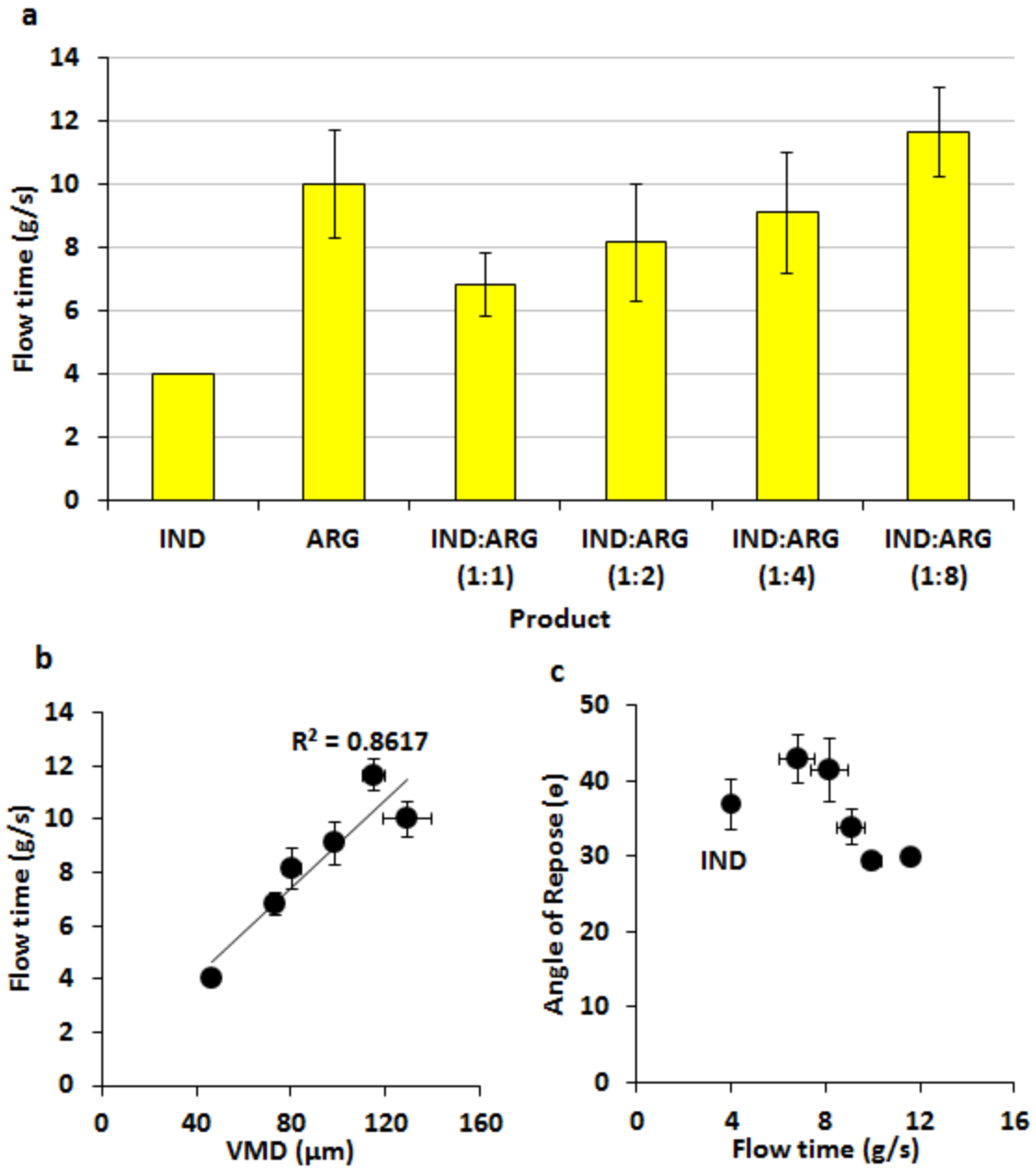


Fig. 4. Flow time (**a**); flow time in relation to angle of repose (**b**) and volume mean diameter (VMD) (**c**) of several powders under investigation, i.e., indomethacin (IND), arginine (ARG) and IND:ARG physical mixtures at different ratios (1:1, 1:2, 1:4 and 1:8). Results are represented as mean±SD, (n= 3).

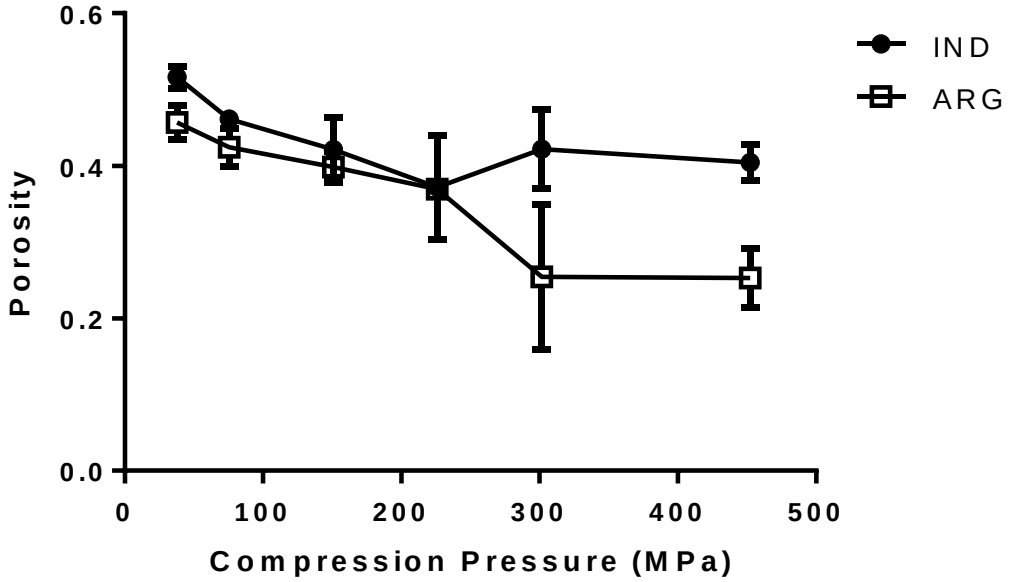


Fig. 5. Plots of tablet porosity against compression pressure, showing the compressibility of IND and ARG. Results are represented as mean±SD, (n= 3).

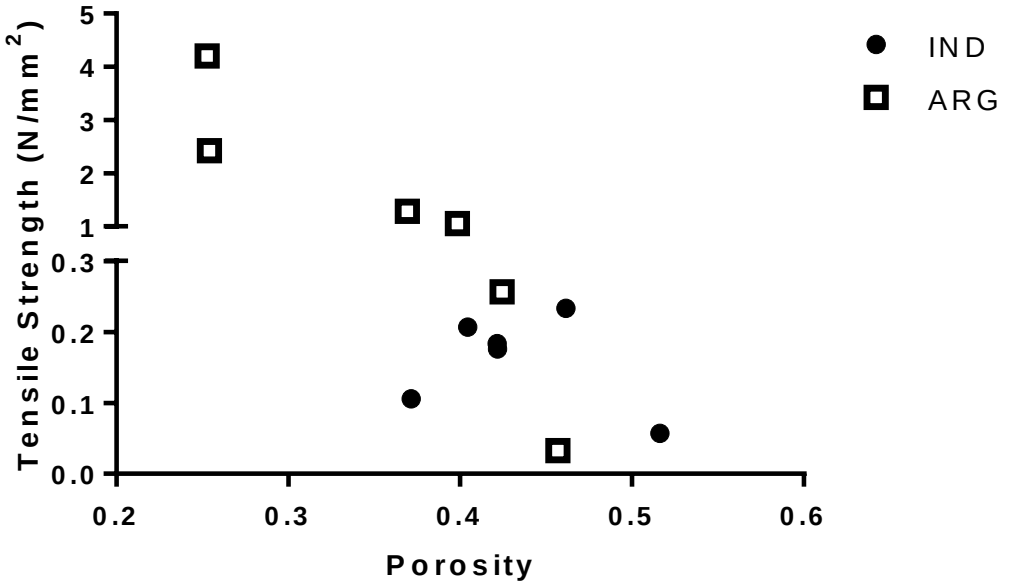


Fig. 6. Plots of tablet tensile strength against porosity, showing the compactability of IND and ARG (n= 3).

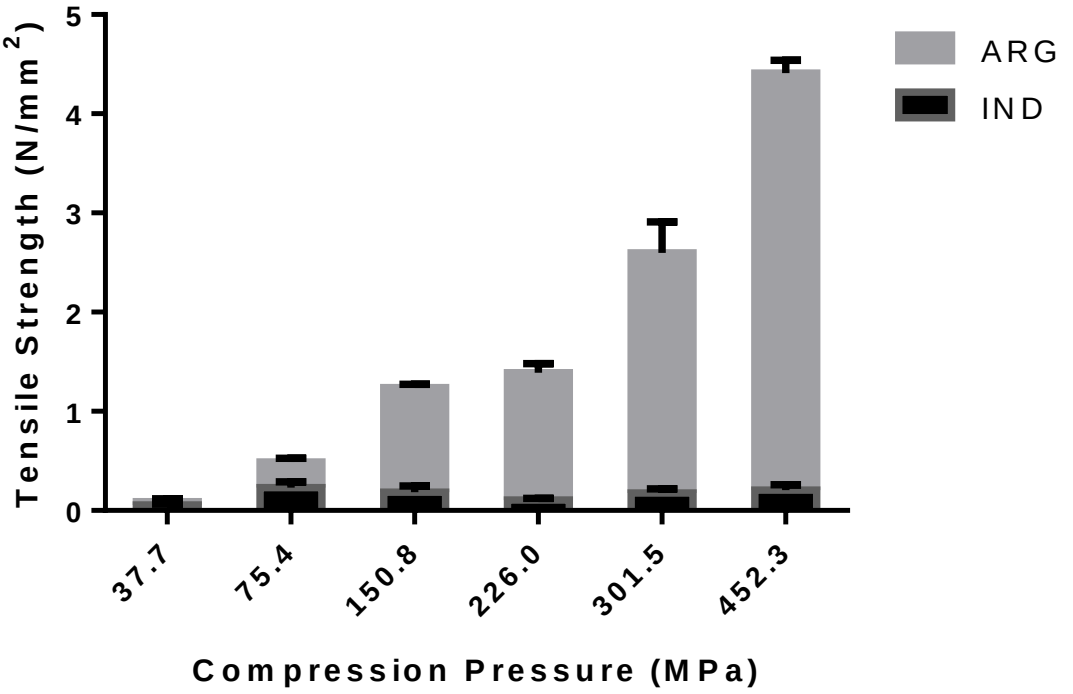


Fig. 7. Plots of tablet tensile strength against compression pressure, showing the tabletability of IND and ARG. Results are represented as mean+SD, (n= 3).

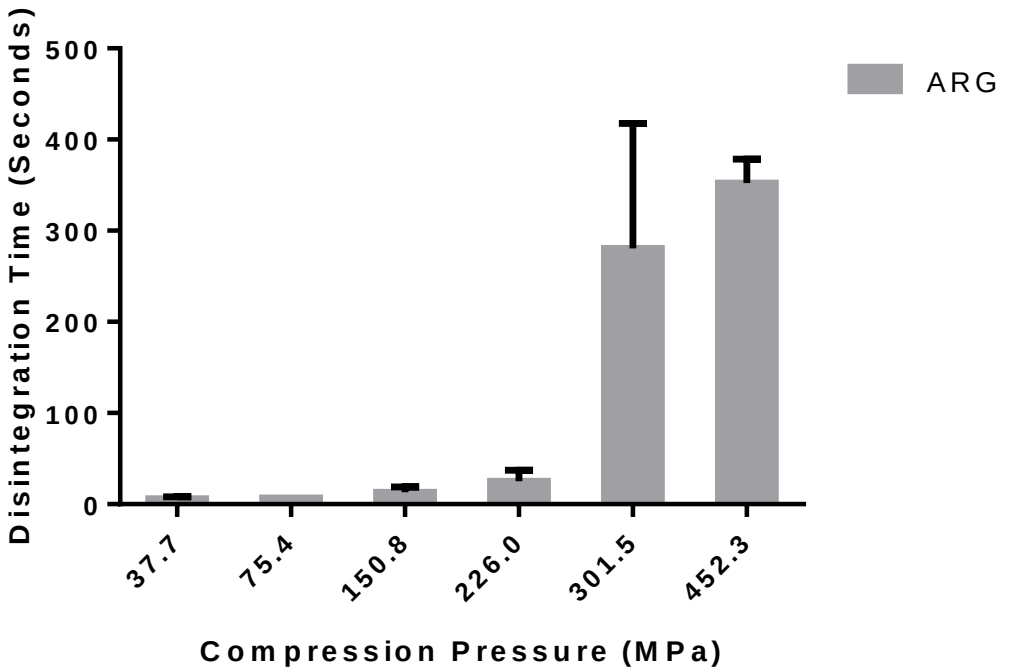
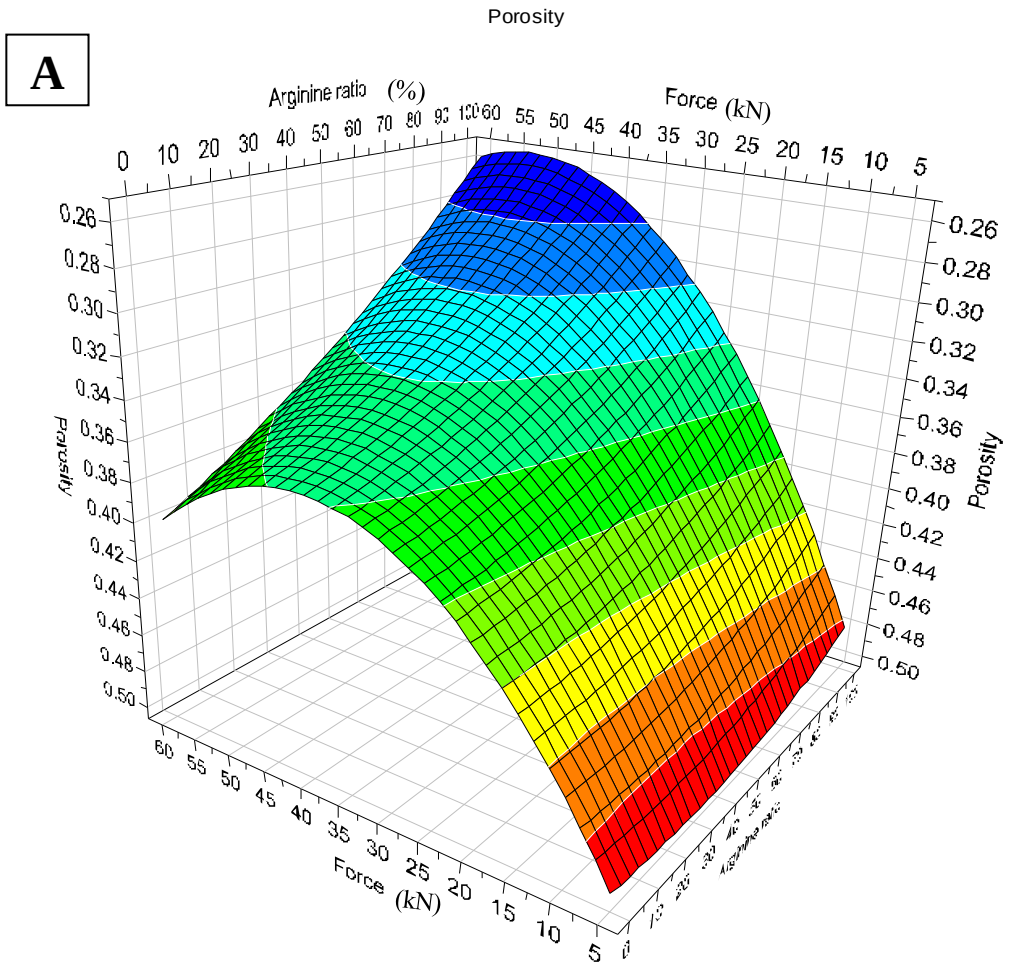
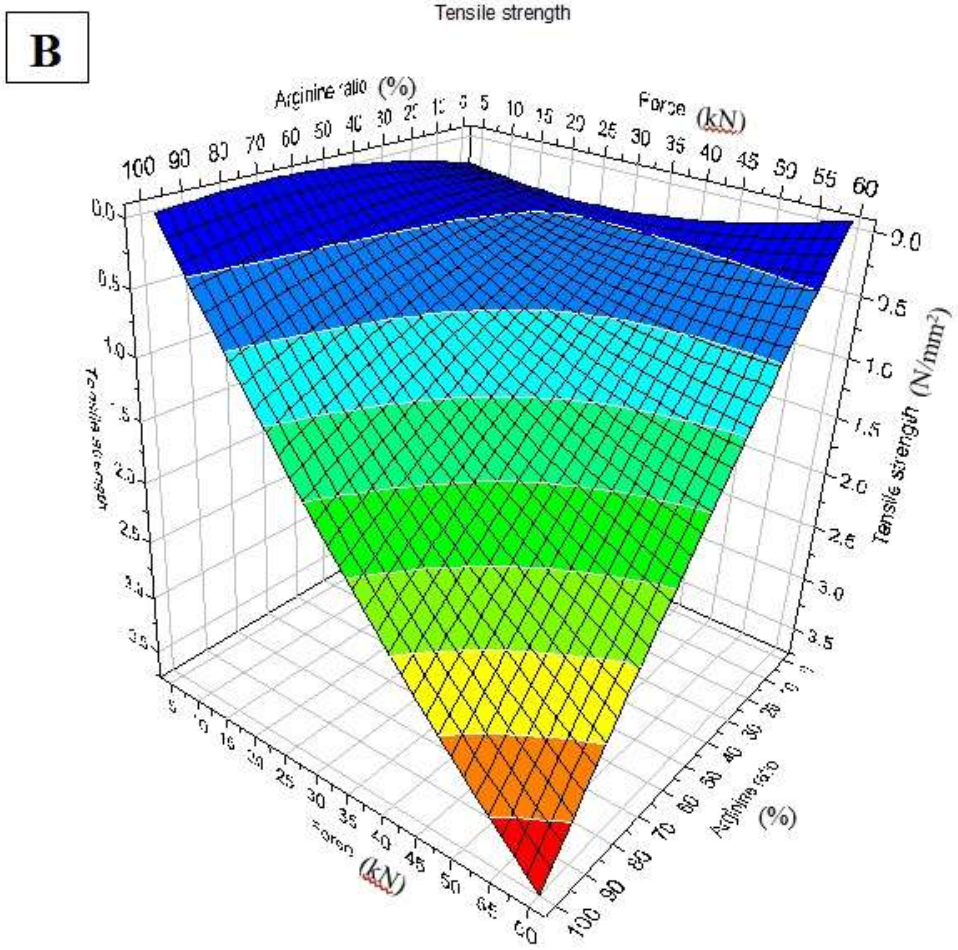


Fig. 8. Disintegration time ARG (IND tablets failed to disintegrate within 20 minutes and results were removed from graph for clarity). Results are represented as mean+SD, (n= 3).


A
Porosity
Arginine ratio (%)
Force (kN)
Porosity


B
Tensile strength
Arginine ratio (%)
Force (kN)
Tensile strength (N/mm²)

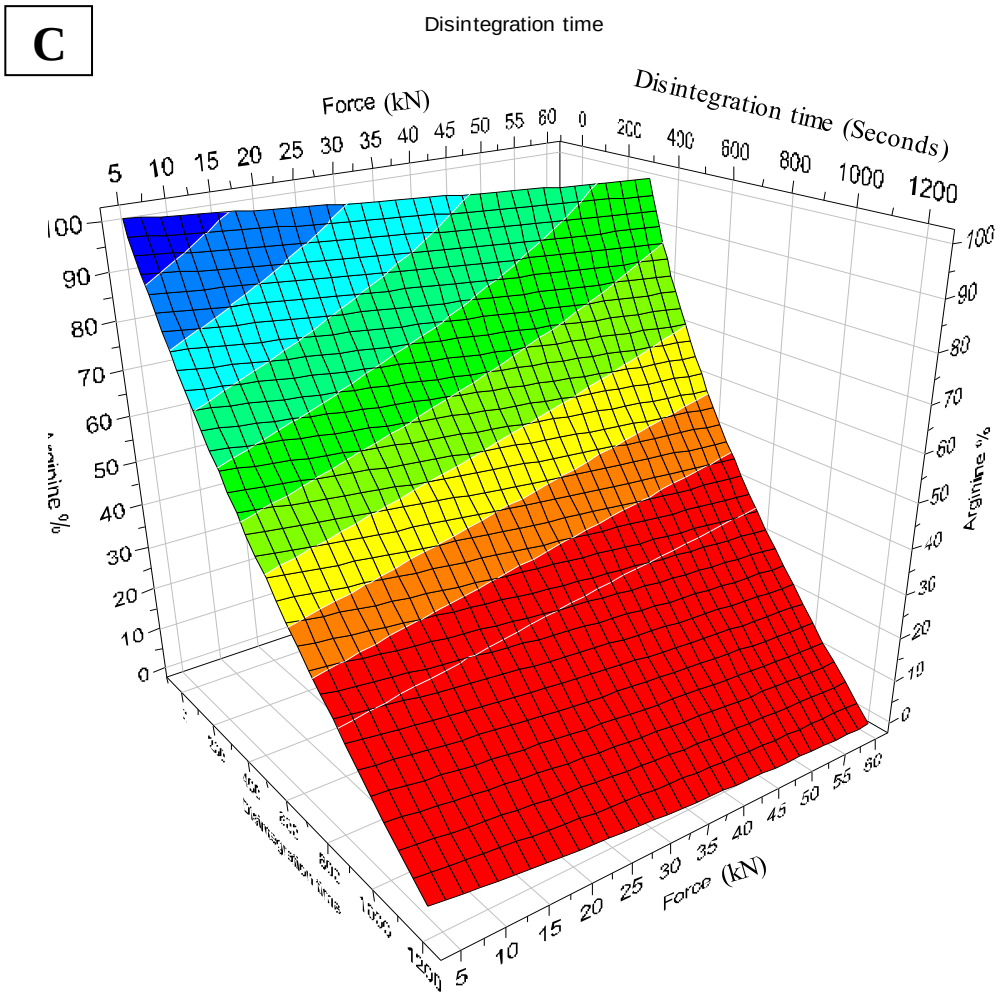


Fig. 9. Surface response plot showing the effect of compression pressure and arginine ratio on tablet porosity for (A), tablet tensile strength for (B), tablet disintegration time (C) for IND/ARG binary mixtures.

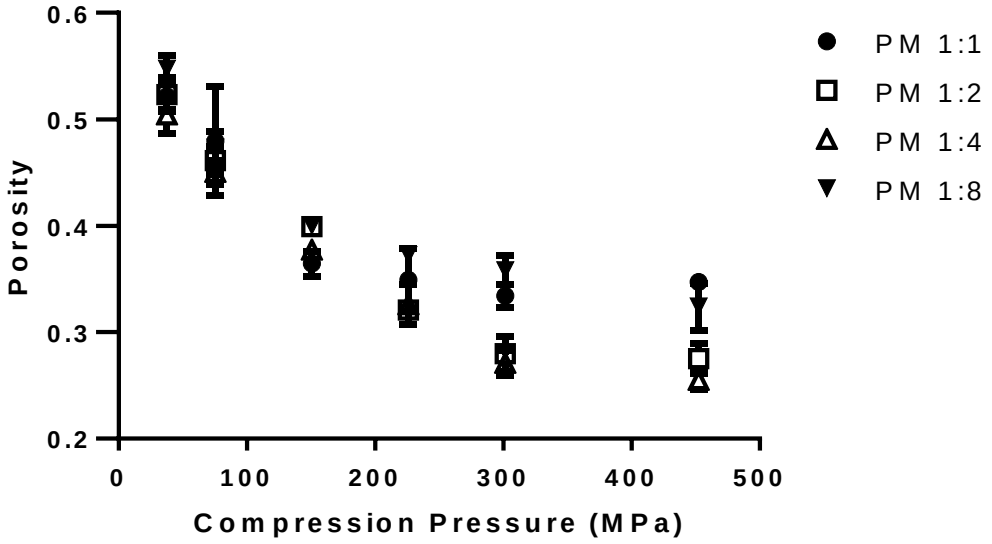


Fig.10. Plots of tablet porosity against compression pressure; compressibility of IND, L-arginine and PM's. Results are represented as mean+SD, (n= 3).

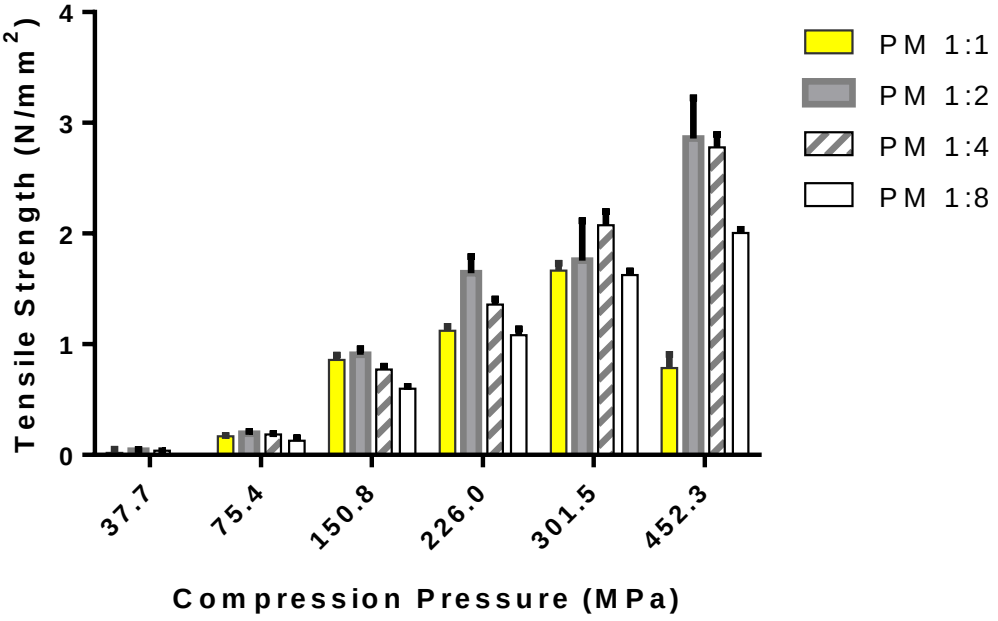


Fig.11. Plots of tablet tensile strength against compression pressure showing tabletability of IND and ARG physical mixtures. Results are represented as mean+SD, (n= 3).

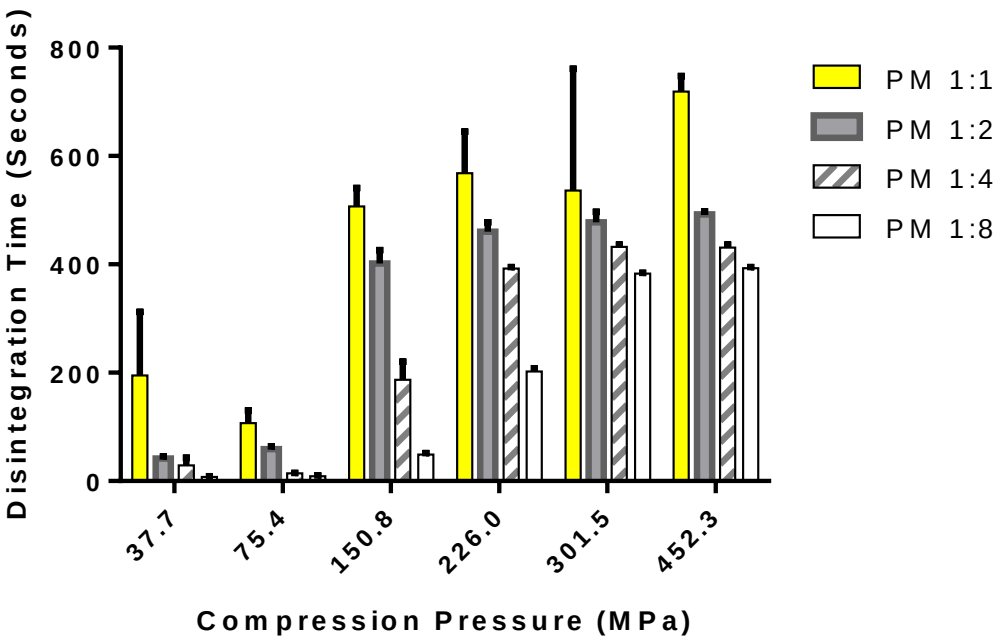


Fig.12. Plots of disintegration time against compression pressure for IND and ARG physical mixtures. Results are represented as mean+SD, (n= 3).

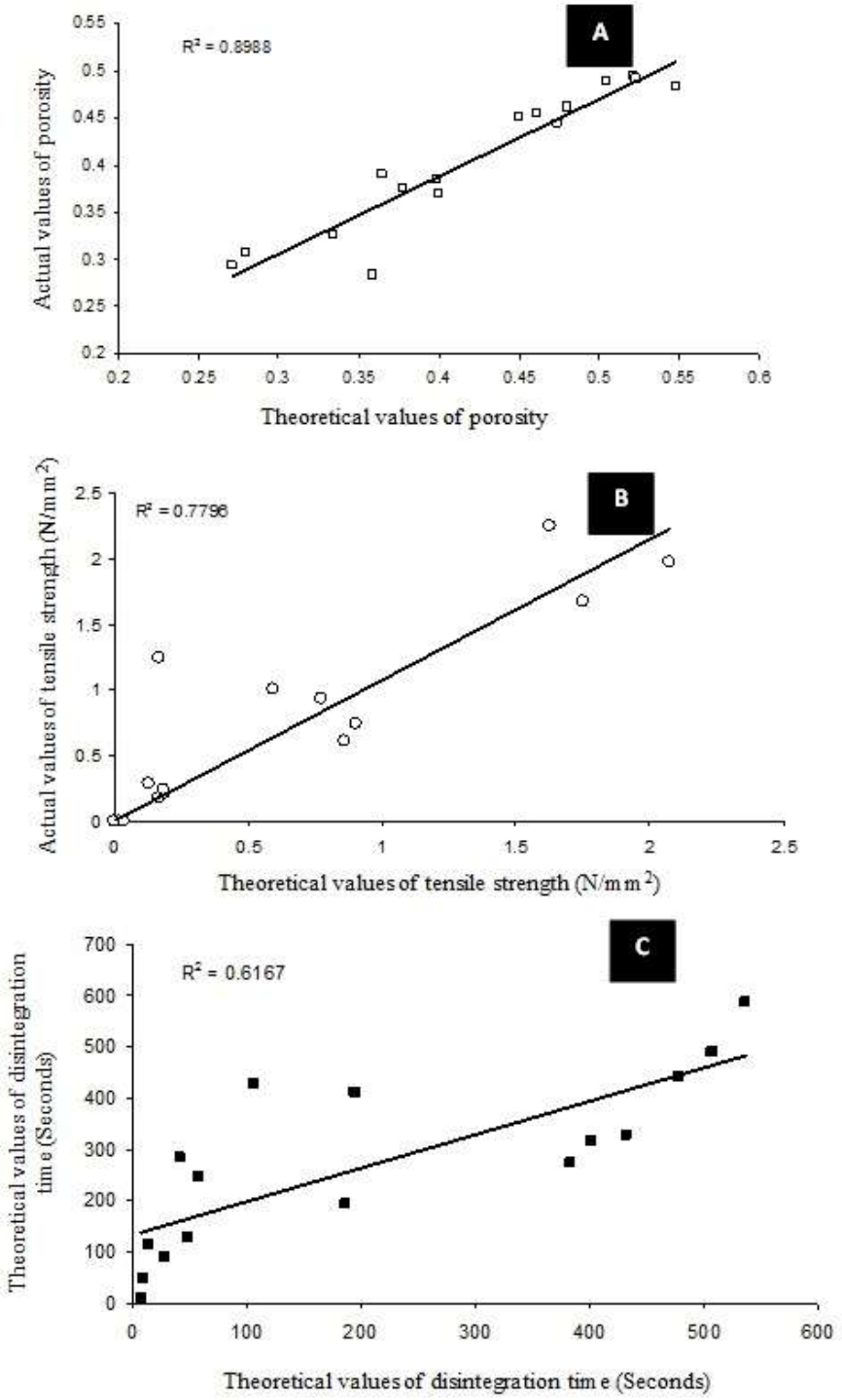


Fig.13. Correlations between actual and theoretical values for measuring tablets' porosity (A), tablets' tensile strength in N/mm^2 (B) and tablets' disintegration time in seconds(C).