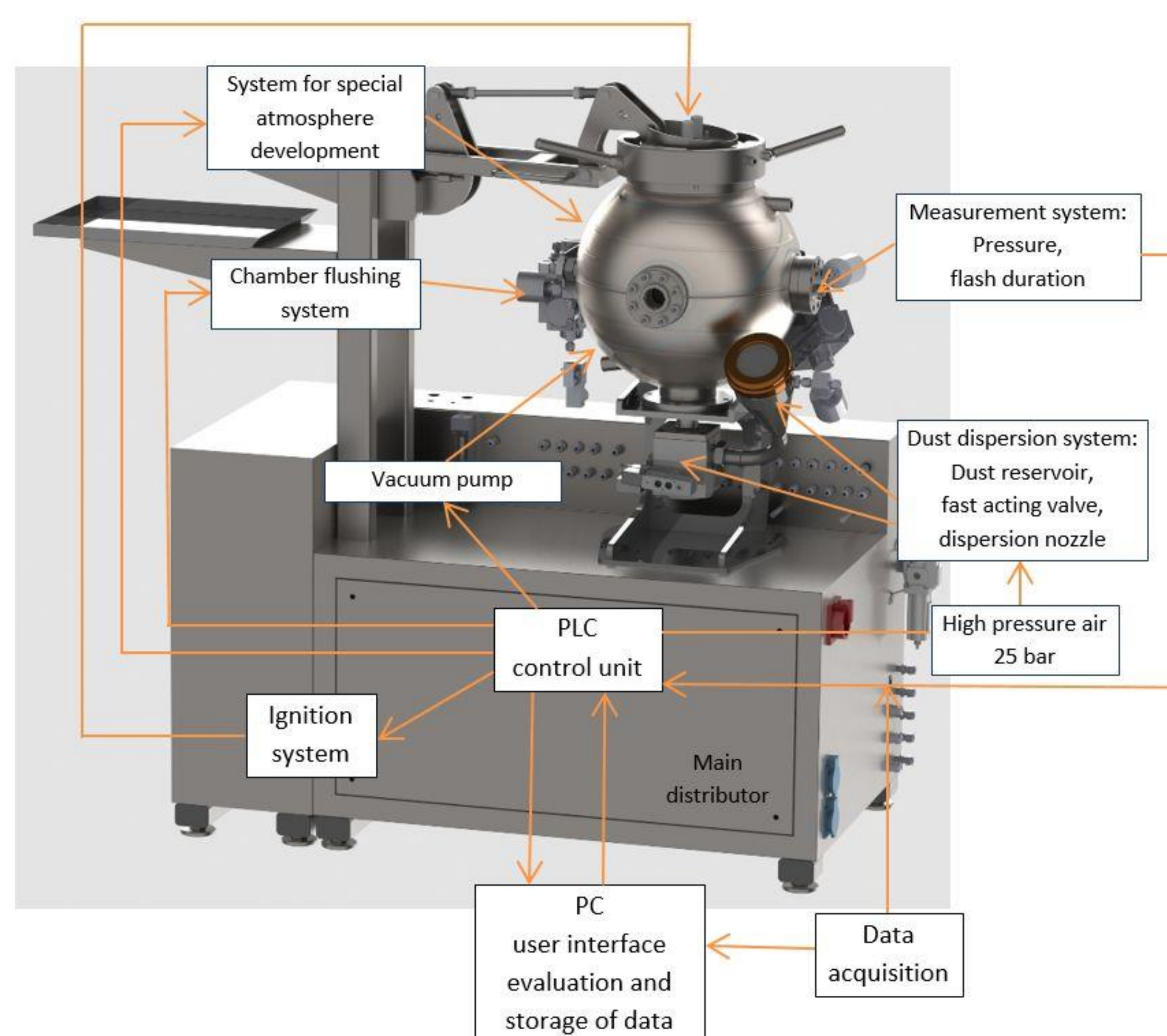
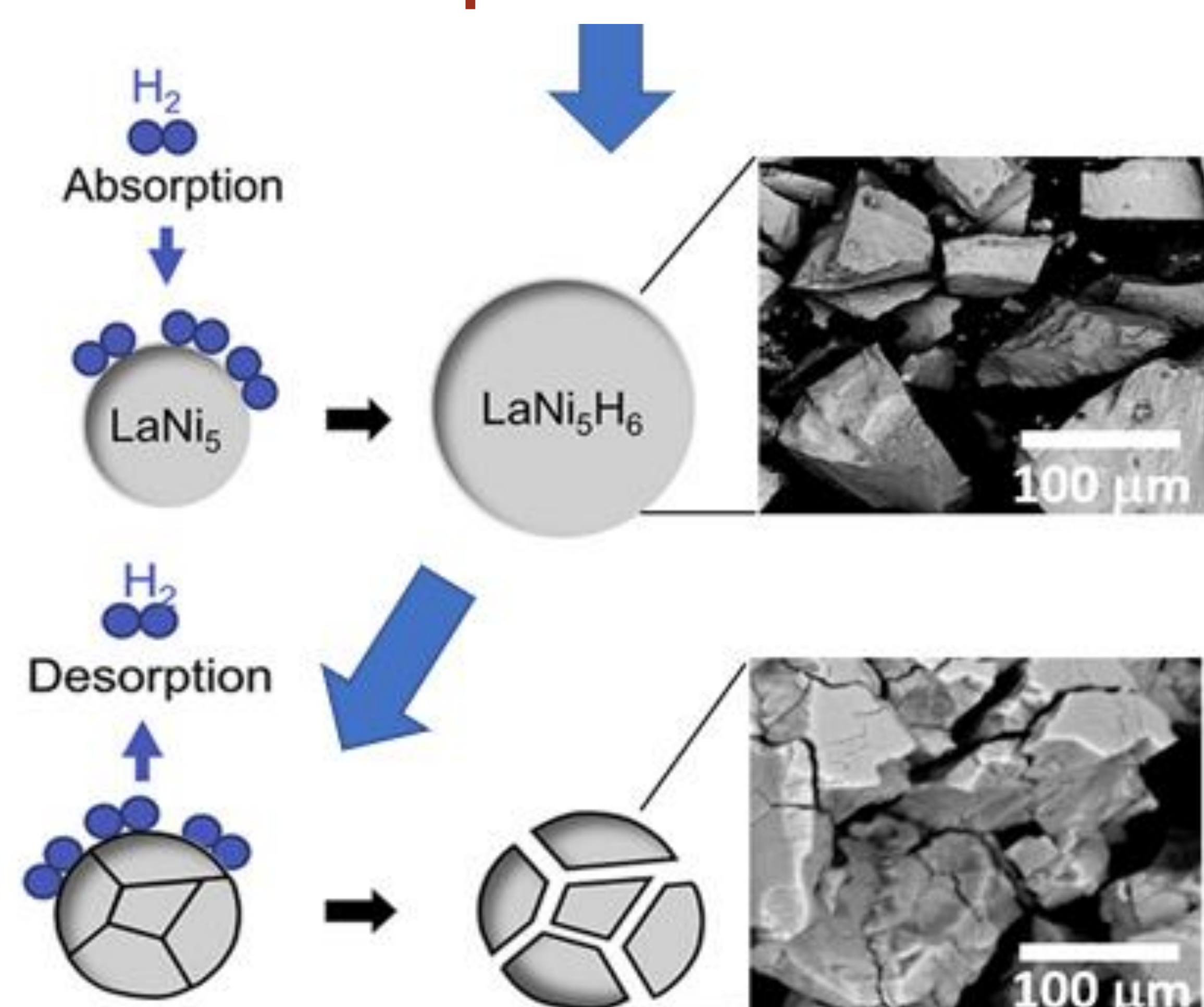


# Safety characteristics of metal hydride materials for hydrogen materials for hydrogen storage - Comparison of $\text{LaNi}_5\text{H}_6$ and $\text{LiBH}_4$

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## Interests & Set-up:



Explosion characteristics of hydrid–air mixture & The 20-L explosion vessel at ERC of VŠB – TU Ostrava .

## Results

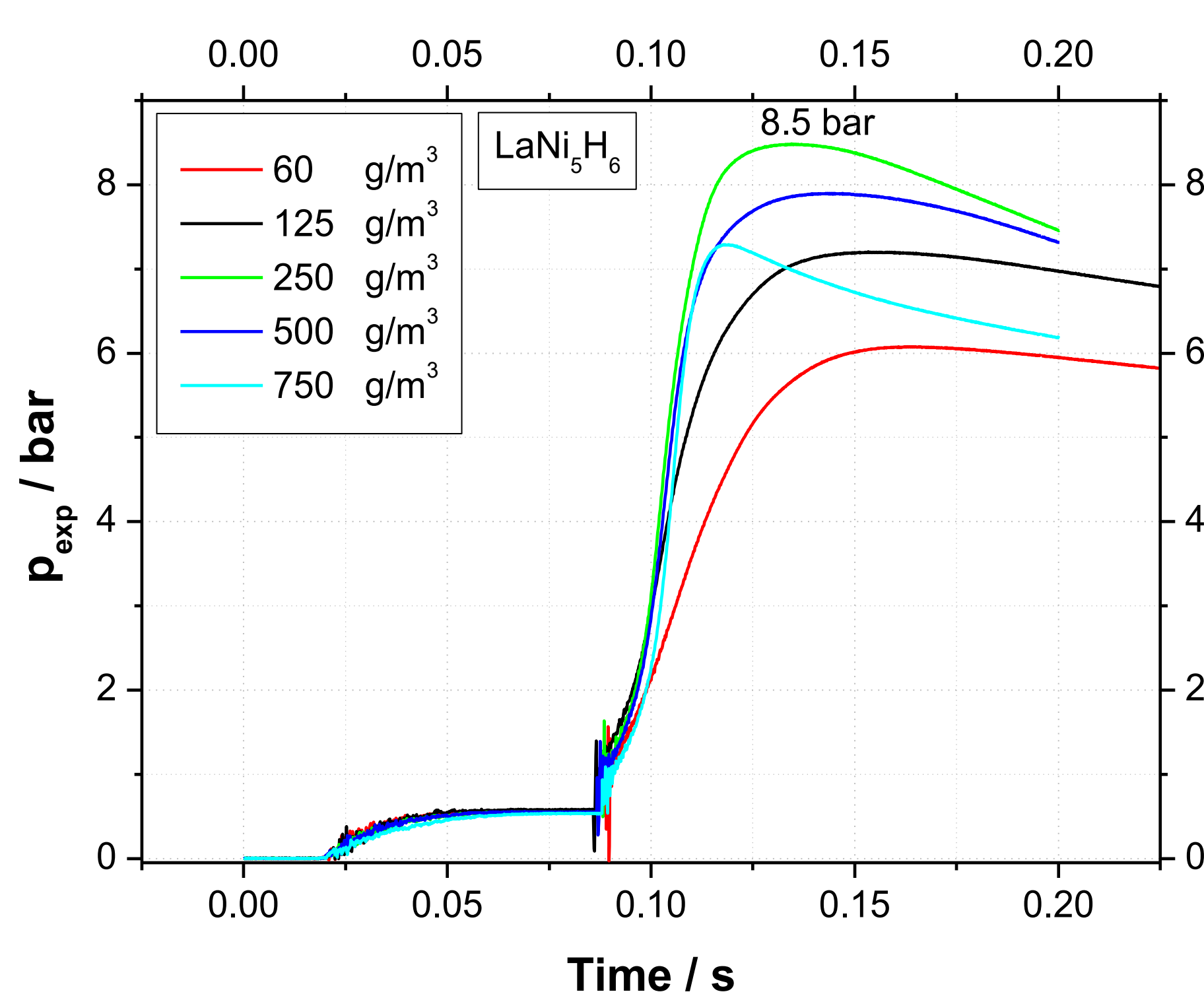


Fig. 1. The dependence of pressure on time of  $\text{LiBH}_4$  for  $1500 \text{ g/m}^3$ .

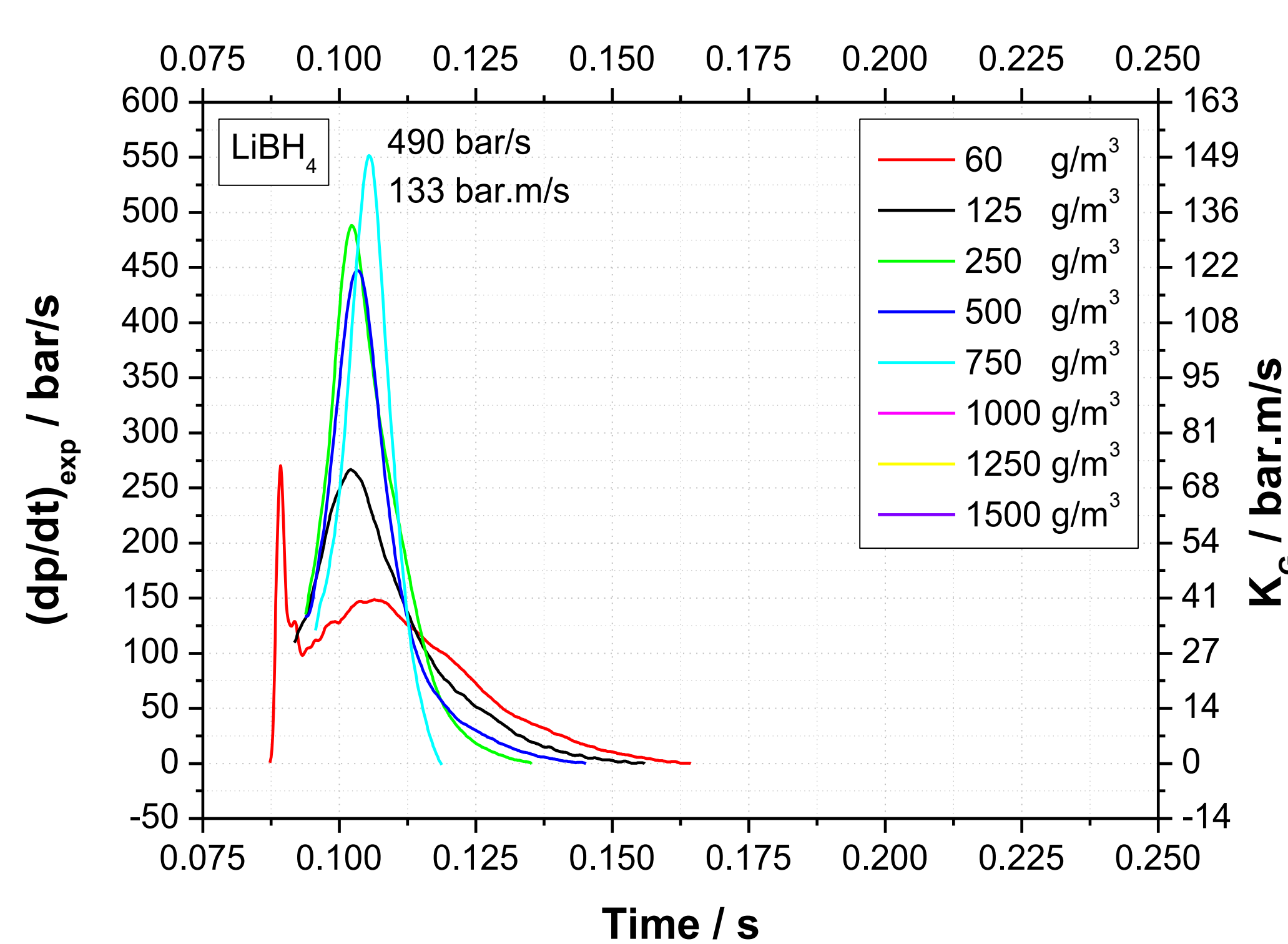


Fig. 2. The dependence of pressure rise on time of  $\text{LiBH}_4$  for  $1500 \text{ g/m}^3$ .

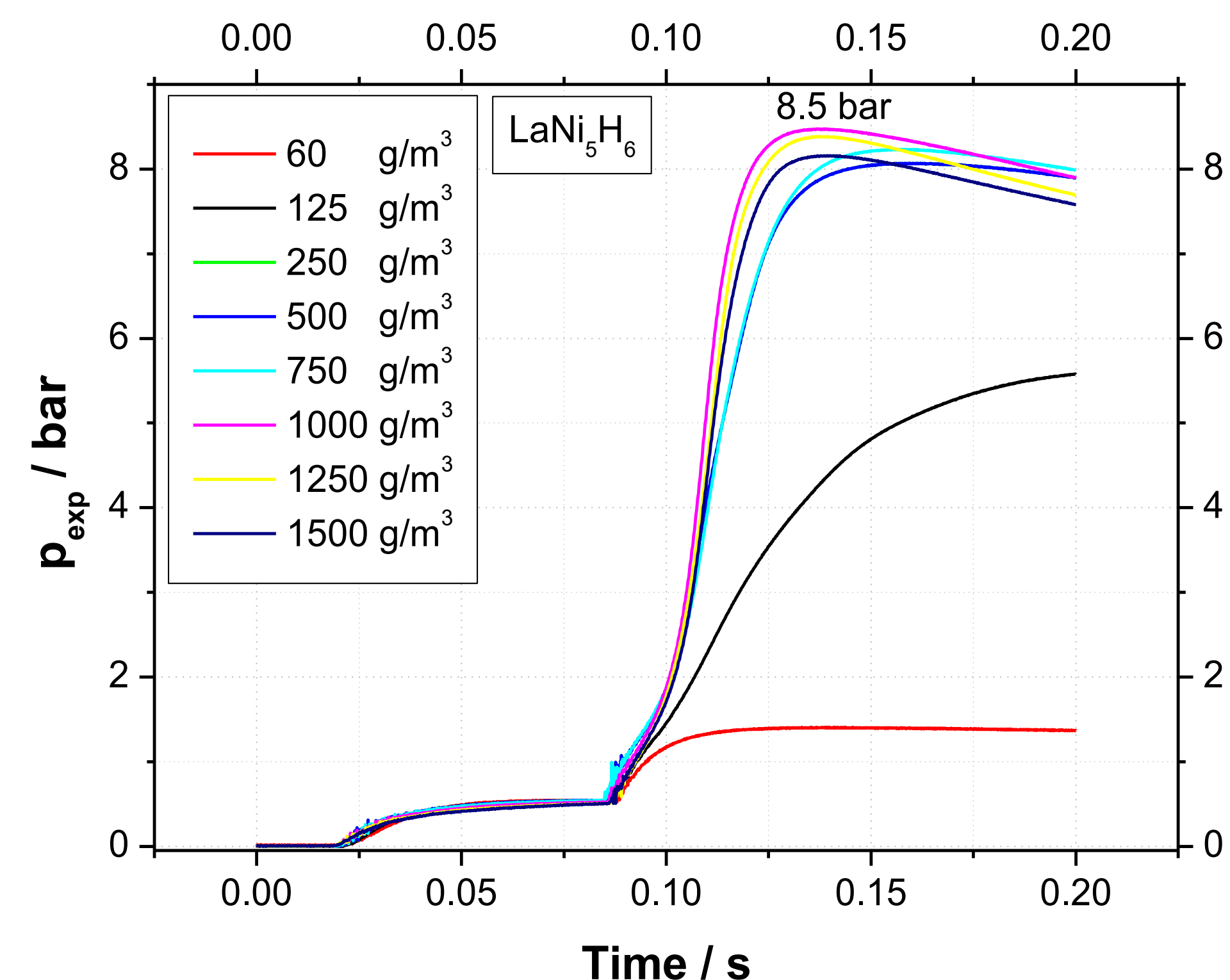


Fig. 3. The dependence of pressure on time of  $\text{LaNi}_5\text{H}_6$  for  $60\text{-}1500 \text{ g/m}^3$

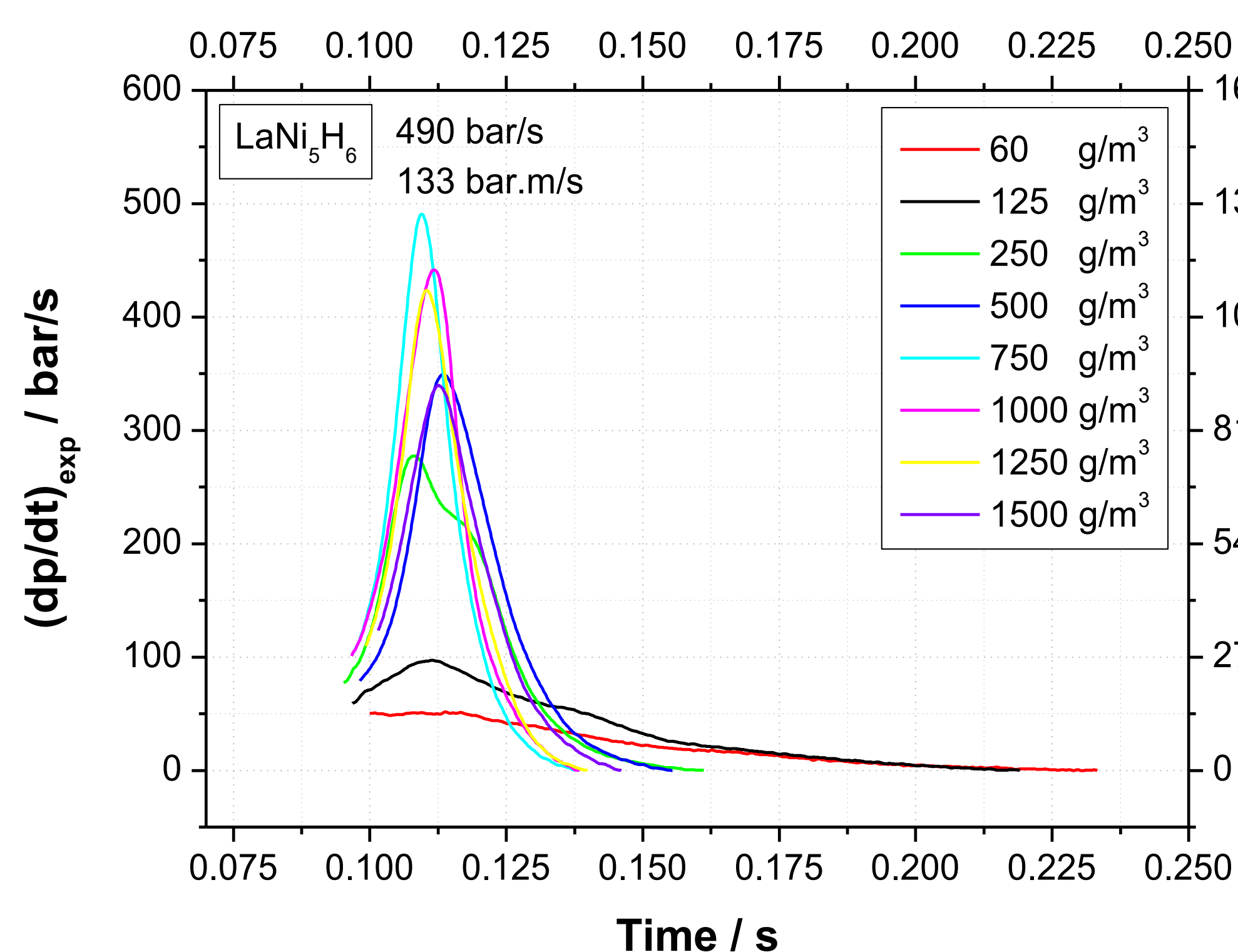


Fig. 4. The dependence of pressure rise on time of  $\text{LaNi}_5\text{H}_6$  for  $60\text{-}1500 \text{ g/m}^3$ .

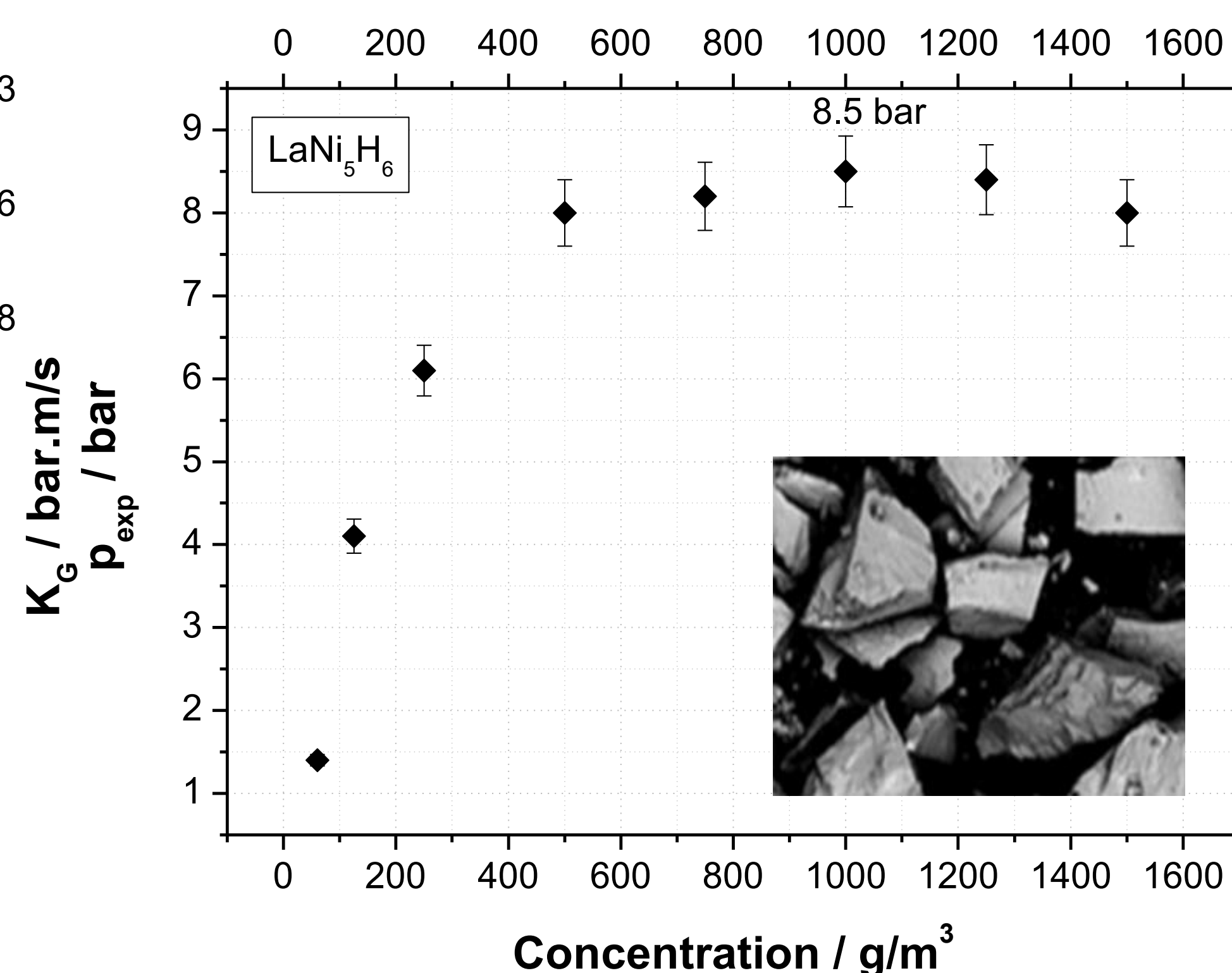


Fig. 5. The dependence of pressure on concentration of  $\text{LaNi}_5\text{H}_6$  for  $60\text{-}1500 \text{ g/m}^3$ .

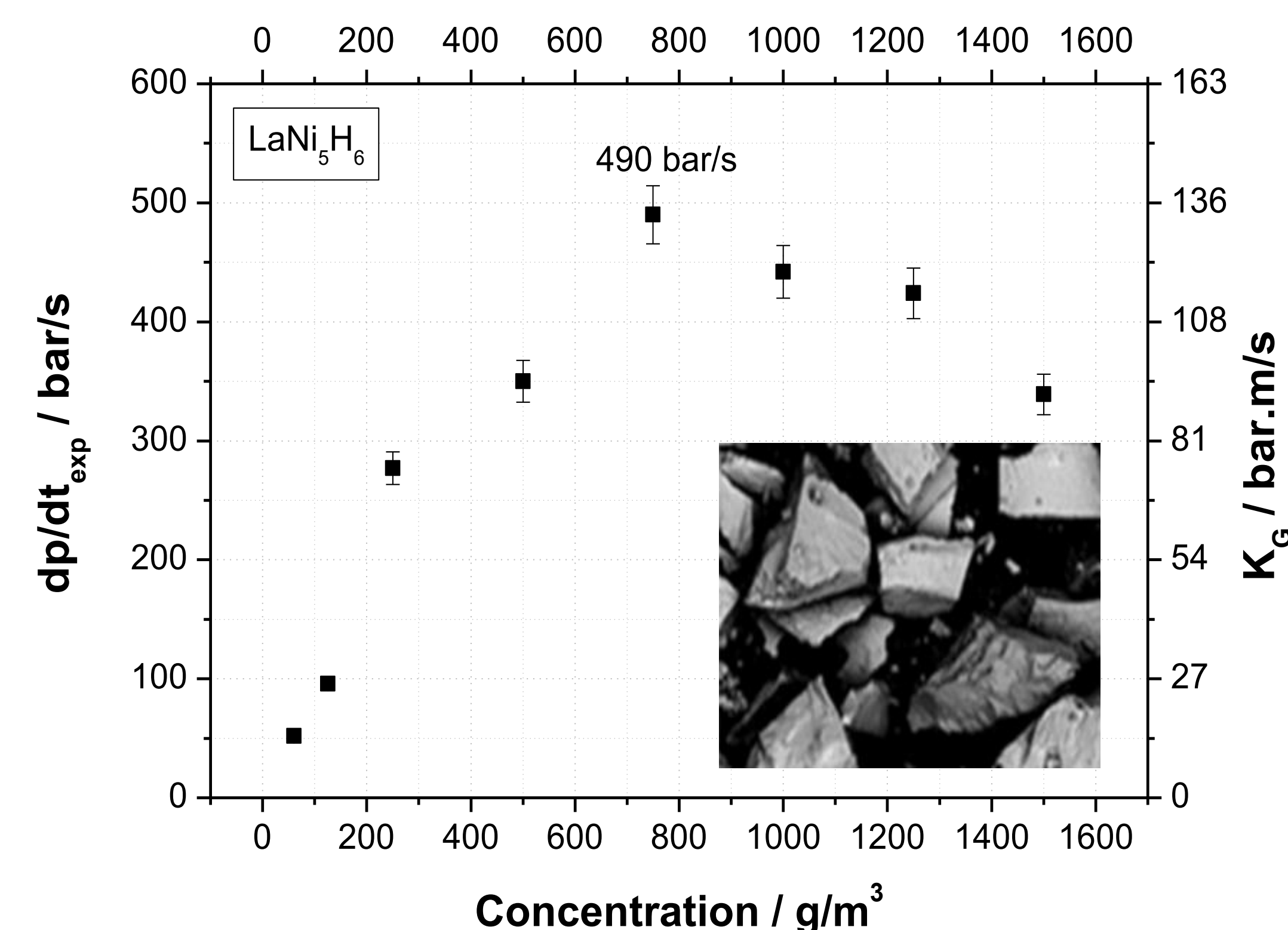


Fig. 6. The dependence of pressure rise on concentrations of  $\text{LaNi}_5\text{H}_6$  for  $60\text{-}1500 \text{ g/m}^3$ .