Question 26 (4 marks)

A gas is produced when 10.0 g of zinc is placed in 0.50 L of 0.20 mol L^{-1} nitric acid. 4

Calculate the volume of gas produced at 25°C and 100 kPa. Include a balanced chemical equation in your answer.

N 2n - 2inc = 65.41g = 1 moleNH3 = Nime aud = 17.034g = 1 mole $3Z_n + 2NH_3 \longrightarrow Z_3N_3 + 146_{3}^{23}_{224,25} + 54,068$ 2n = 10.0g = 0.15\$ moles

