Answer on Question \#79394-Chemistry - Physical Chemistry
Question:
what is the volume of 2.5 mol of nitrogen gas at S.T.P

## Solution:

$\mathrm{n}=\mathrm{V} / \mathrm{Vm}$;
Vm = $22.4 \mathrm{~L} / \mathrm{mol} ;$
$\mathrm{V}=\mathrm{n} * \mathrm{Vm}=2.5^{*} 22.4=56 \mathrm{~L}$.
Answer: 56 L .

