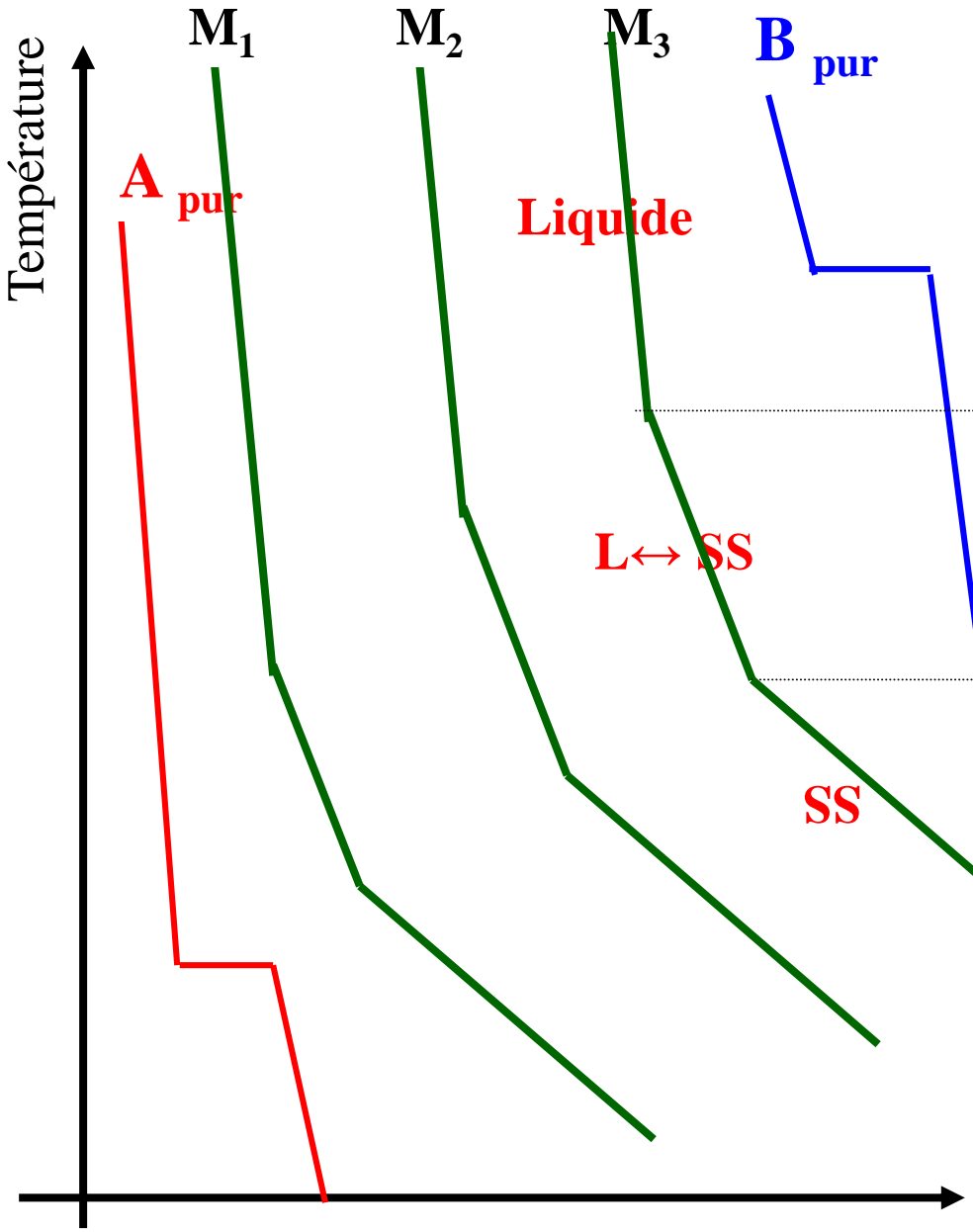
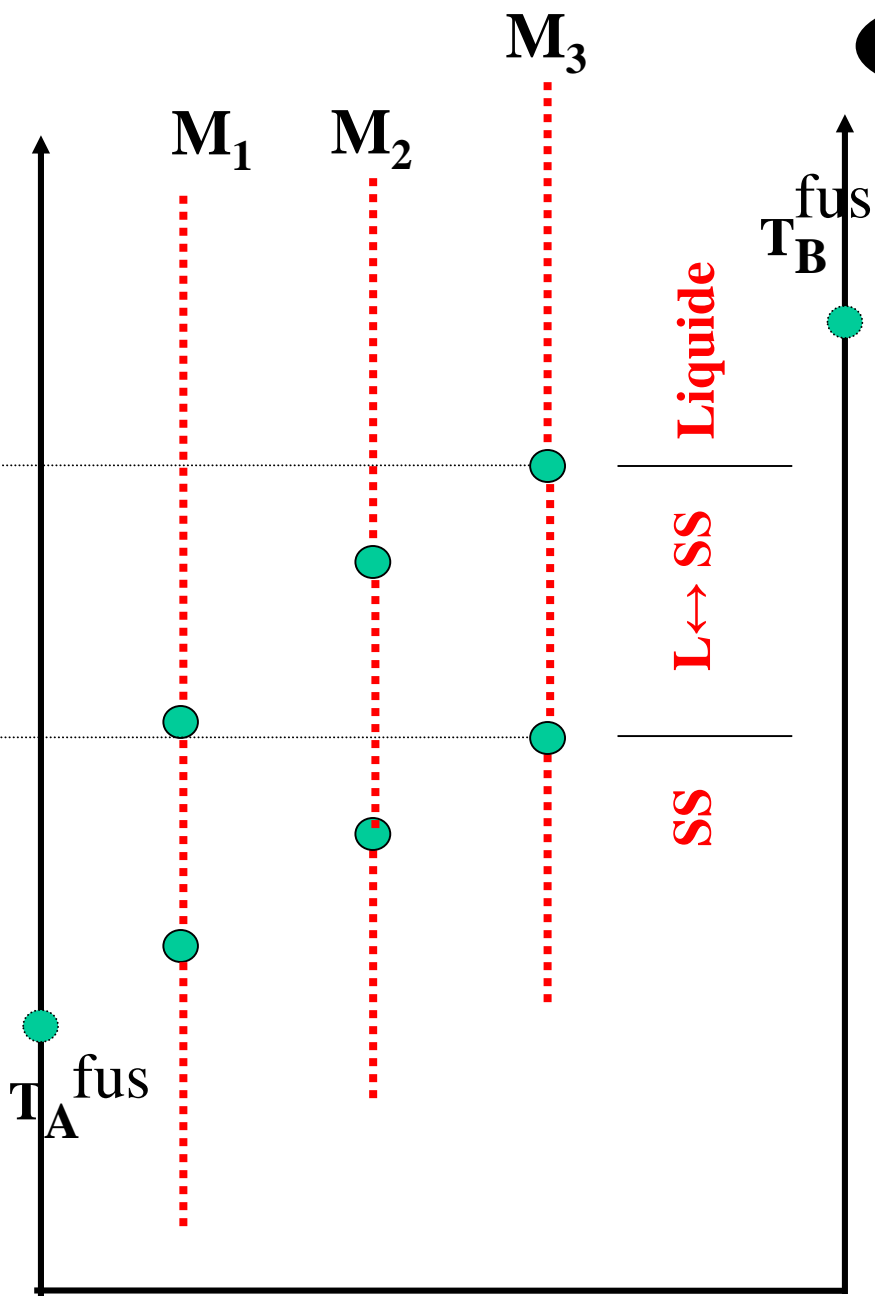


14:18



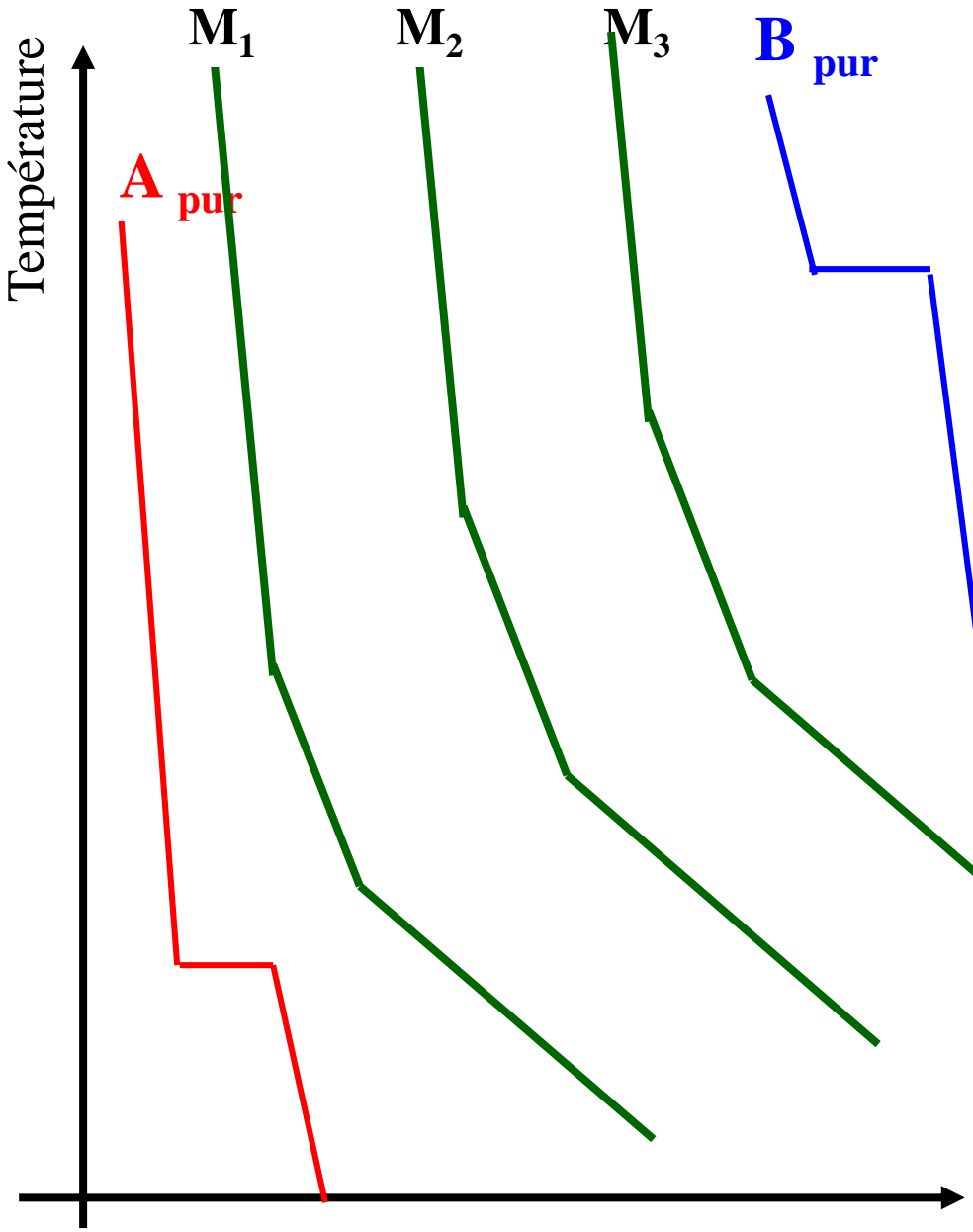
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Temps



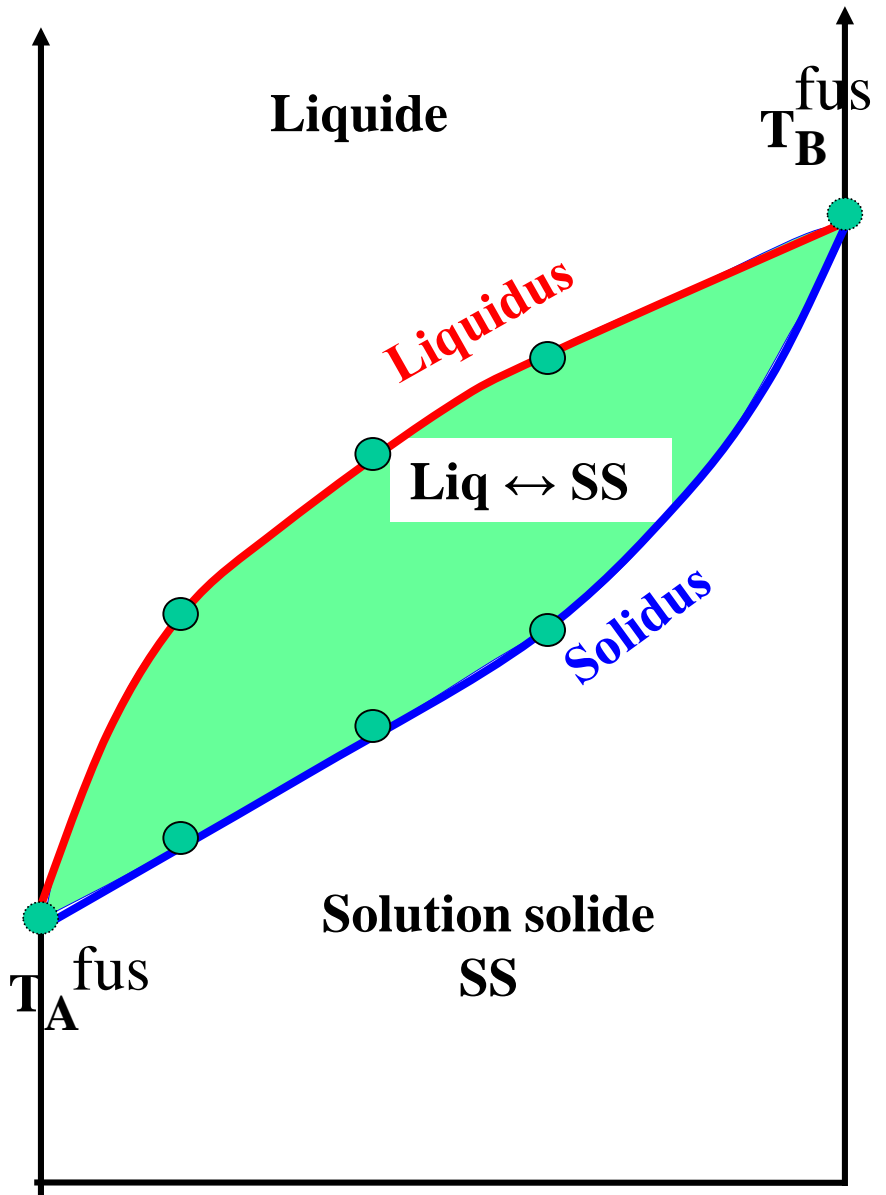
A

B



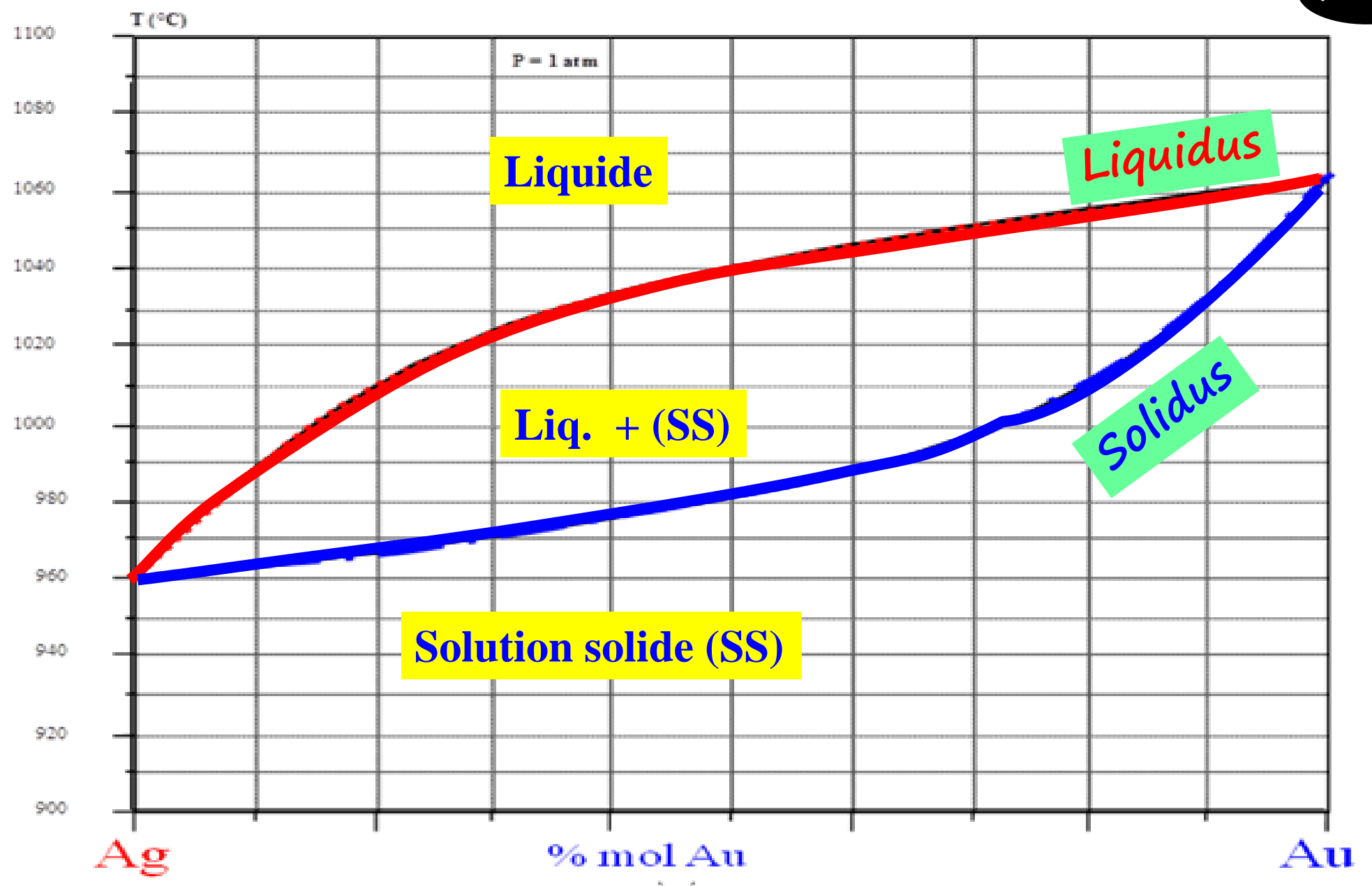
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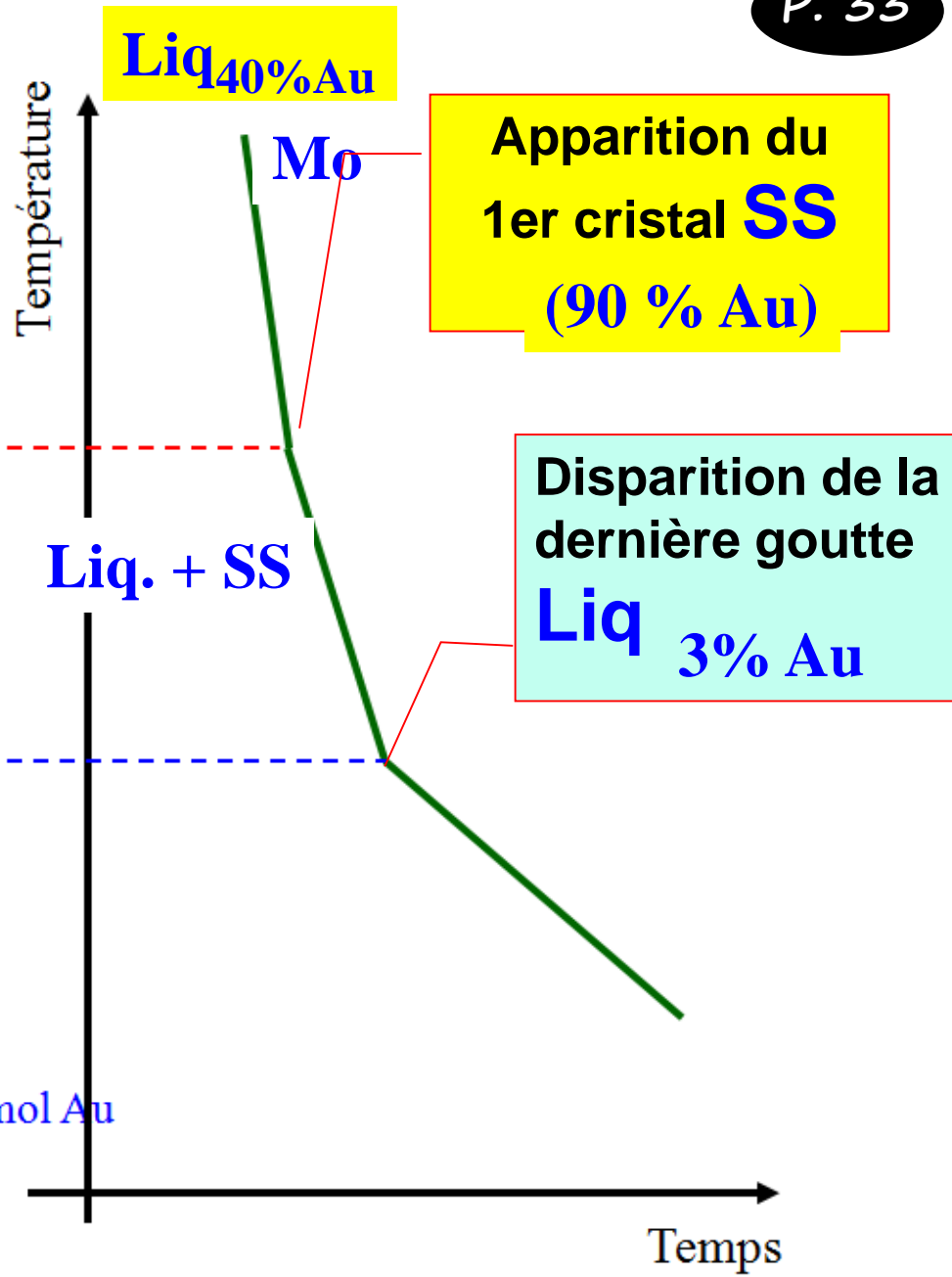
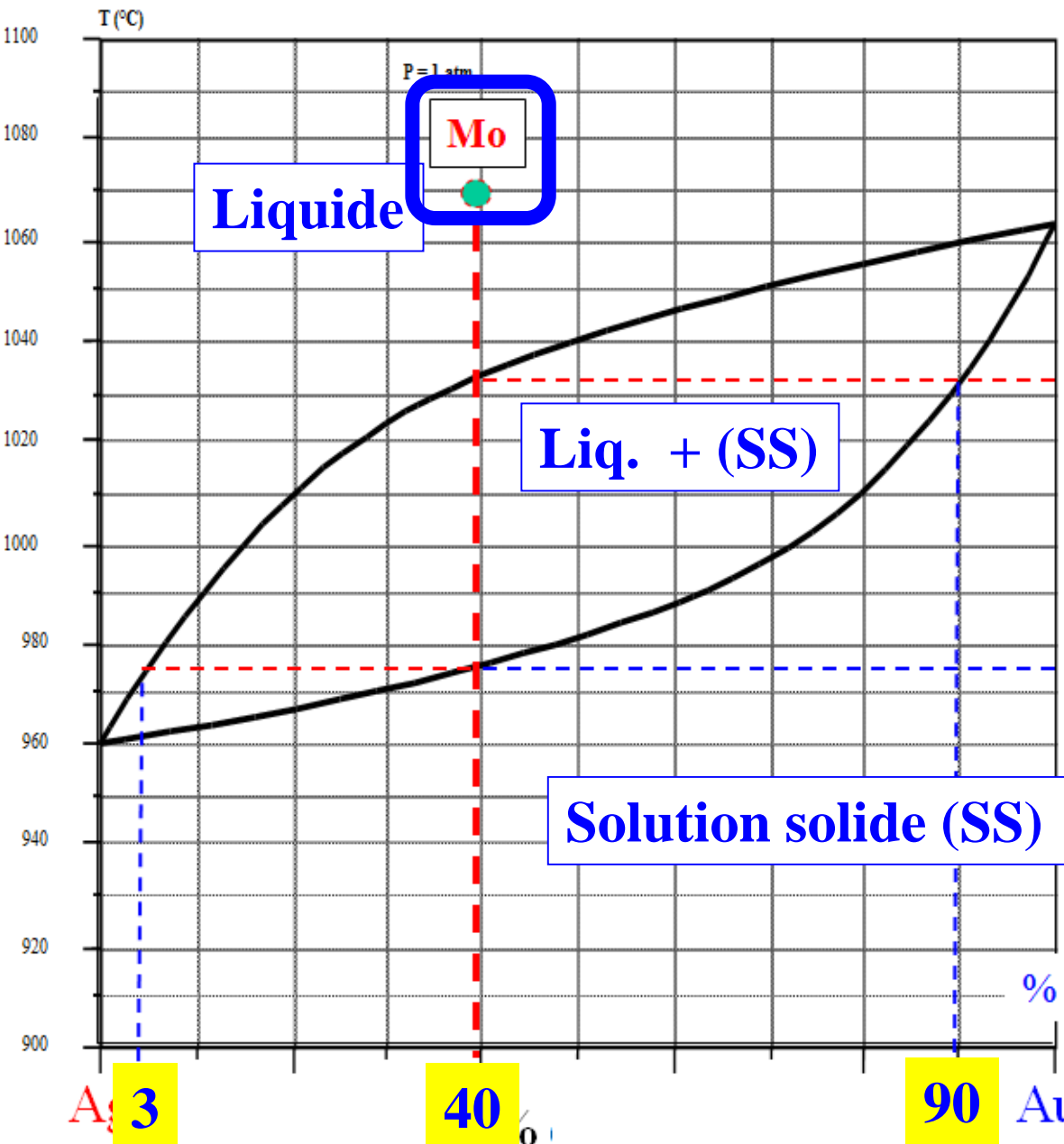
Temps



A

B

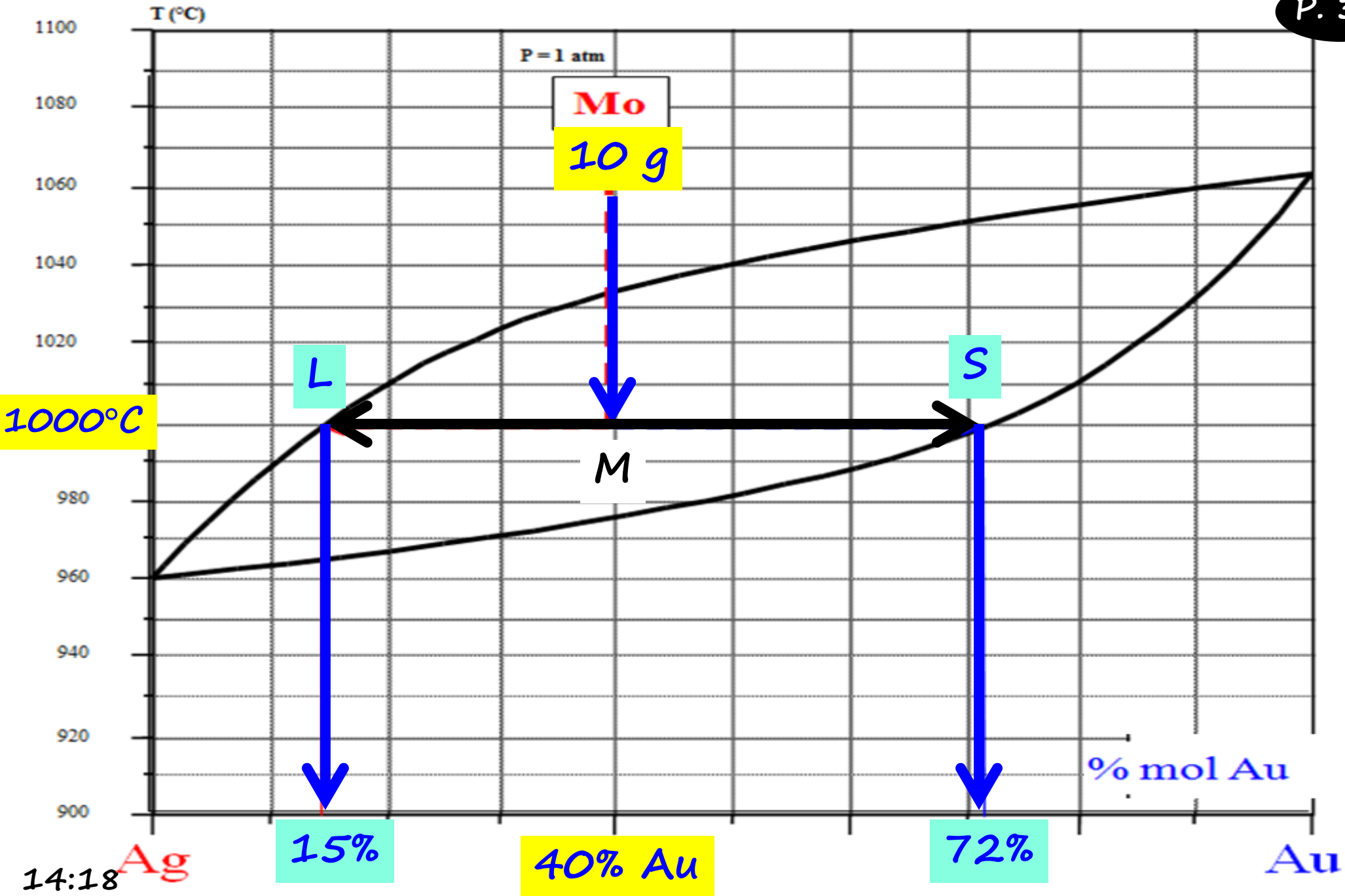


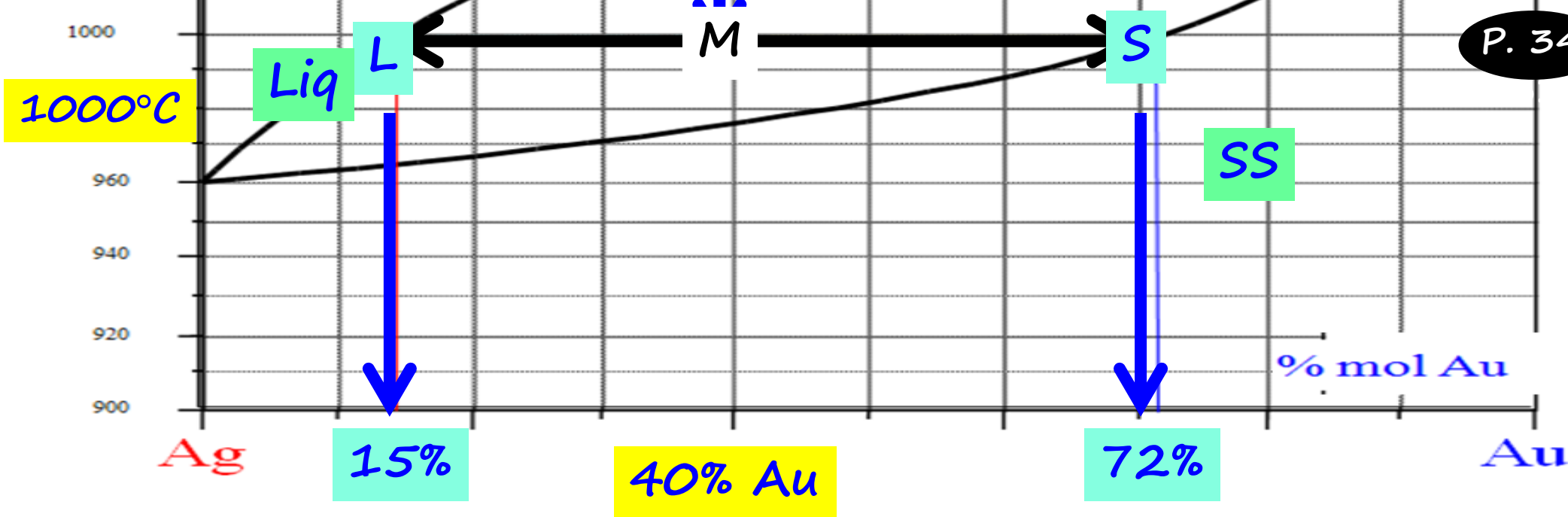


Ag 3
14:18

40

90 Au





à $T=1000^{\circ}\text{C}$:

$$\frac{n_{\text{liq}}}{72-40} = \frac{n_{\text{SS}}}{40-15} = \frac{n_{\text{Liq}} + n_{\text{SS}}}{72-15}$$

$$n_{\text{Liq}} = (72 - 40) \cdot (n_{\text{Liq}} + n_{\text{SS}}) / (72-15) = 0,561 \cdot (n_{\text{Liq}} + n_{\text{SS}}) \quad \text{moles}$$

Liquide (15% mol. Au)

$$n_{\text{SS}} = (40 - 15) \cdot (n_{\text{Liq}} + n_{\text{SS}}) / (72-15) = 0,439 \cdot (n_{\text{Liq}} + n_{\text{SS}}) \quad \text{moles}$$

SS (72%mol. Au)

$$\text{à } T=1000^{\circ}\text{C: } \frac{n_{\text{liq}}}{72-40} = \frac{n_{\text{SS}}}{40-15} = \frac{n_{\text{Liq}} + n_{\text{SS}}}{72-15}$$

$$n_{\text{Liq}} = (72 - 40) \cdot (n_{\text{Liq}} + n_{\text{SS}}) / (72-15) = 0,561 \cdot (n_{\text{Liq}} + n_{\text{SS}}) \quad \text{moles}$$

Liquide (15% mol. Au)

$$n_{\text{SS}} = (40 - 15) \cdot (n_{\text{Liq}} + n_{\text{SS}}) / (72-15) = 0,439 \cdot (n_{\text{Liq}} + n_{\text{SS}}) \quad \text{moles}$$

SS (72%mol. Au)

$$n_{\text{tot}} = (n_{\text{Liq}} + n_{\text{SS}}) \quad \text{Correspond à un mélange de 10 g contenant 40\%mol. Au)}$$

$$n_{\text{tot}} = \frac{10}{M_{40\%Au}} = \frac{10}{0,40 \cdot M_{Au} + 0,60 \cdot M_{Ag}} = 0,07 \quad \text{moles}$$

$$M_{Au} = 196, \quad M_{Ag} = 107,87 \quad \text{g/mol}$$

$n_{tot} = (n_{Liq} + n_{SS})$ Correspond à un mélange de 10 g contenant 40%mol. Au)

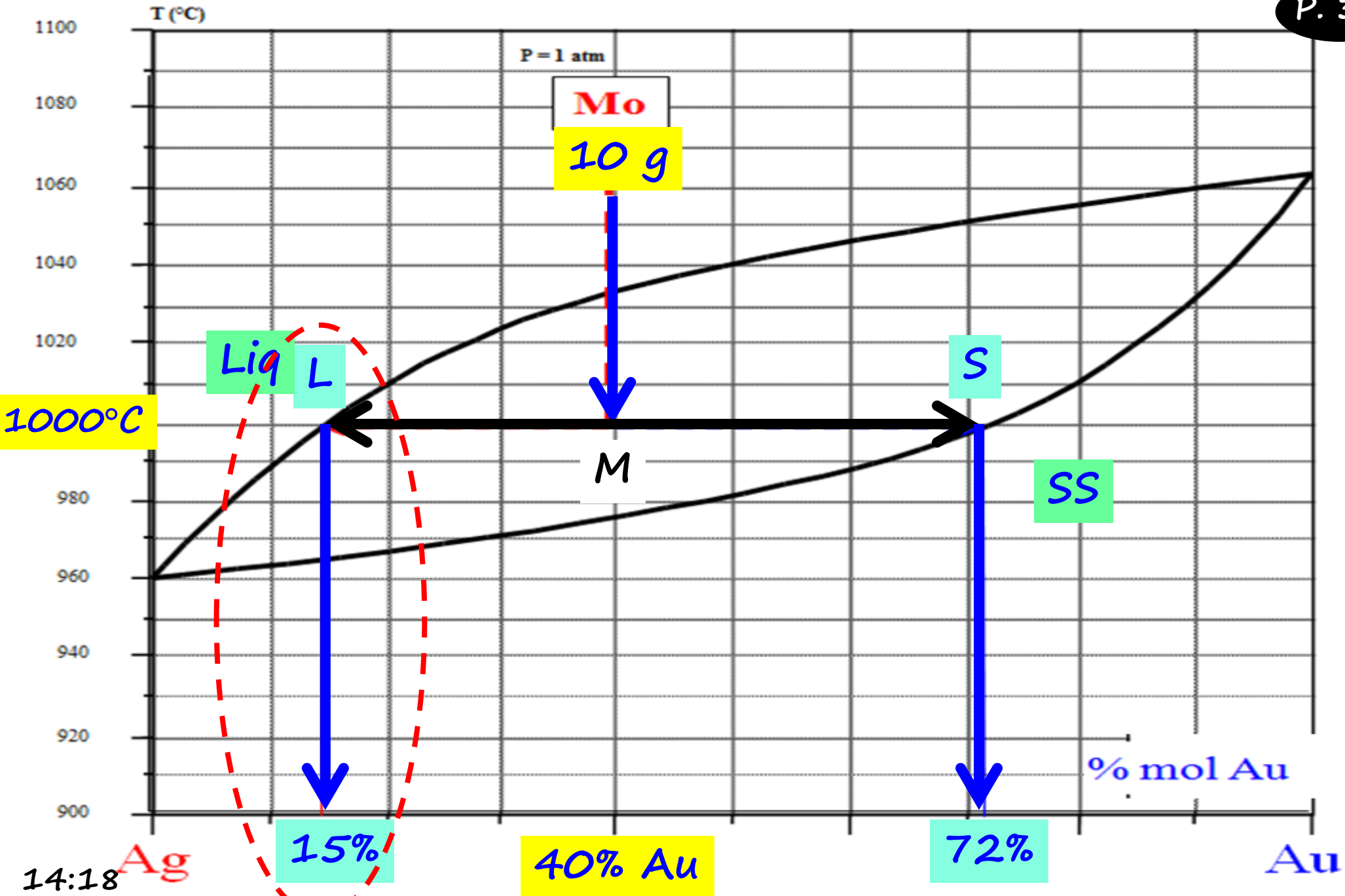
$$n_{tot} = \frac{10}{M_{40\%Au}} = \frac{10}{0,40 \cdot M_{Au} + 0,60 \cdot M_{Ag}} = 0,07 \text{ moles}$$

$$M_{Au} = 196, \quad M_{Ag} = 107,87 \quad \text{g/mol}$$

$$n_{liq} = 0,561 \cdot 0,07 = 0,039 \text{ mole}$$

$$m_{liq} = n_{liq} \cdot M_{liq}$$

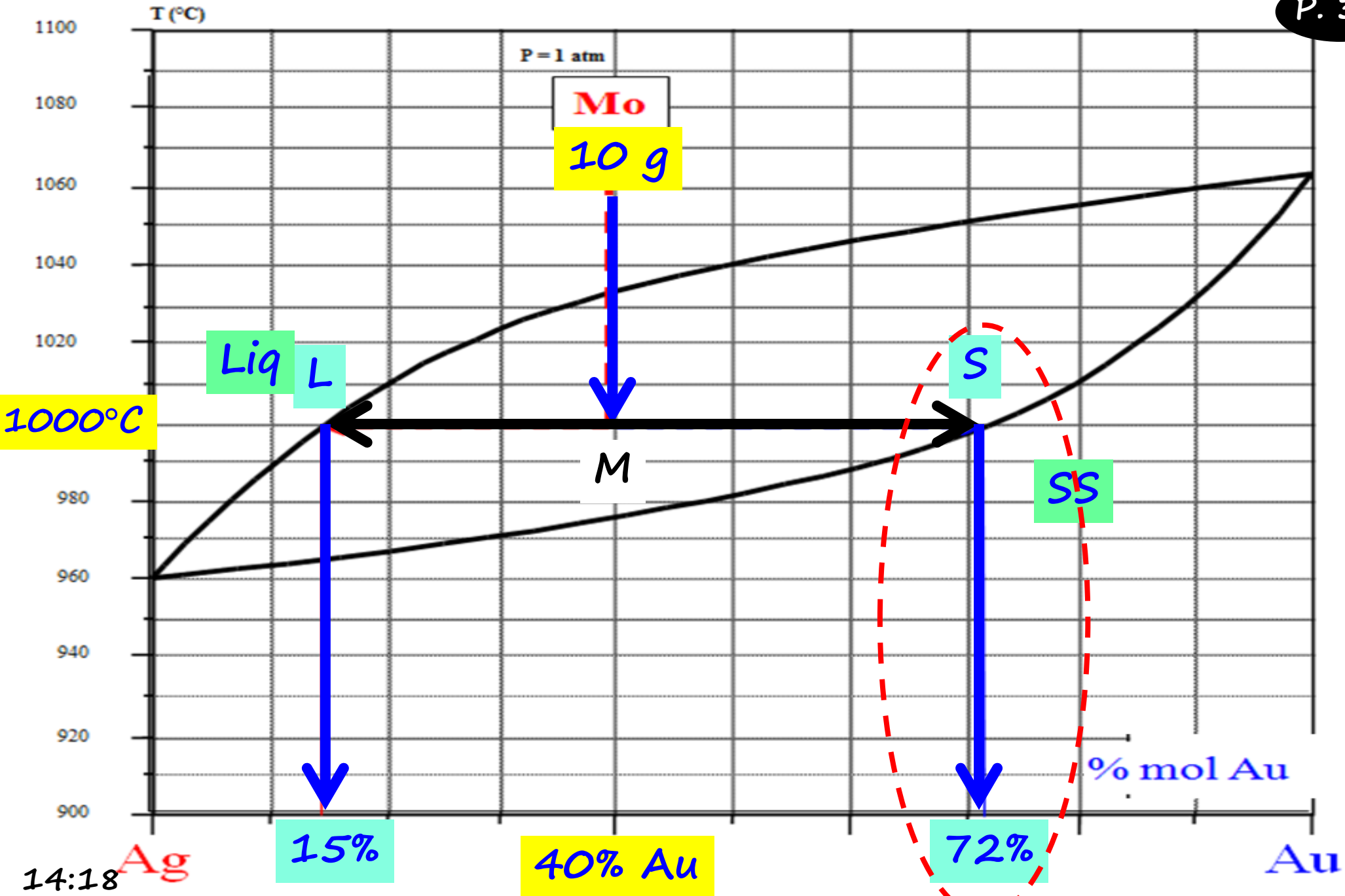
$M_{liq} ?$



$$\begin{aligned} m_{\text{liq}} &= n_{\text{liq}} \cdot M_{\text{liq}} \\ &= n_{\text{liq}} \cdot (0,15 \cdot M_{\text{Au}} + 0,85 \cdot M_{\text{Ag}}) \end{aligned}$$

$$m_{\text{SS}} = n_{\text{SS}} \cdot M_{\text{SS}}$$

$$n_{\text{SS}} = 0,439 \cdot 0,07 = 0,031 \text{ mole}$$



$$\begin{aligned} m_{\text{liq}} &= n_{\text{liq}} \cdot M_{\text{liq}} \\ &= n_{\text{liq}} \cdot (0,15 \cdot M_{\text{Au}} + 0,85 \cdot M_{\text{Ag}}) \end{aligned}$$

$$\begin{aligned} m_{\text{SS}} &= n_{\text{SS}} \cdot M_{\text{SS}} \\ &= n_{\text{SS}} \cdot (0,72 \cdot M_{\text{Au}} + 0,28 \cdot M_{\text{Ag}}) \end{aligned}$$

$$\text{Vérification: } m_{\text{SS}} + m_{\text{liq}} = 10 \text{ g}$$

