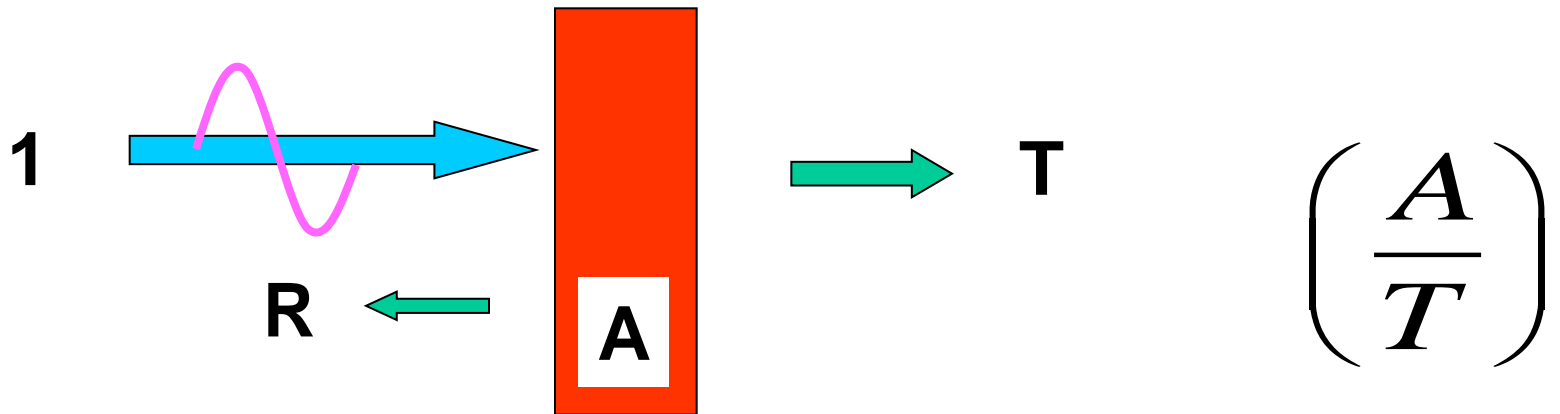




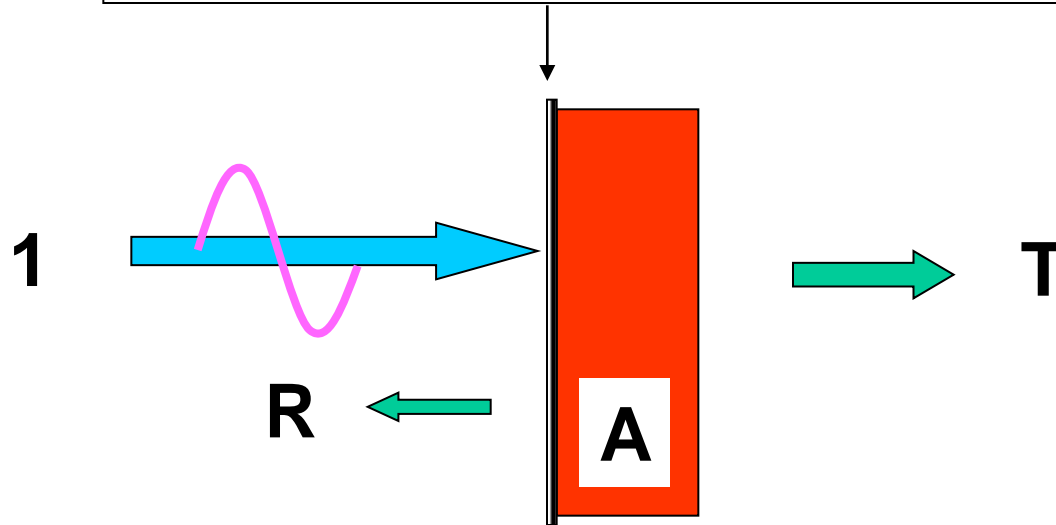
# Wave Nature of Deuterium Flux Permeating through Palladium Thin Film with Nanometer Coating Layers --- ( I I ) Theoretical Model ----

## Correlation (Flux & Heat)

$$1 - R = A + T$$



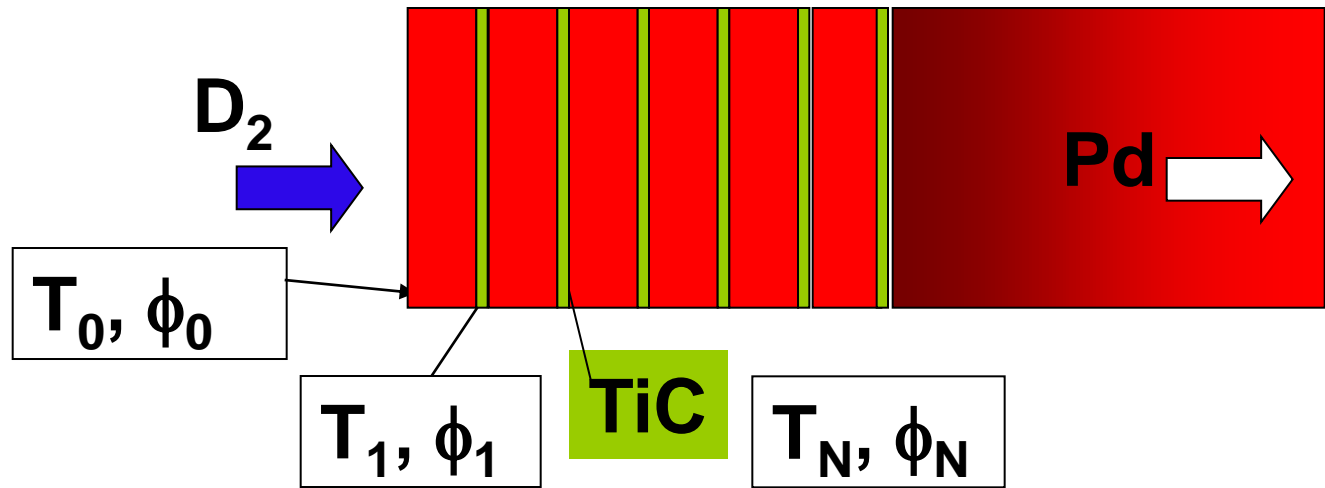
# Nano-Meter Coating Layers



## Wave Model Identity

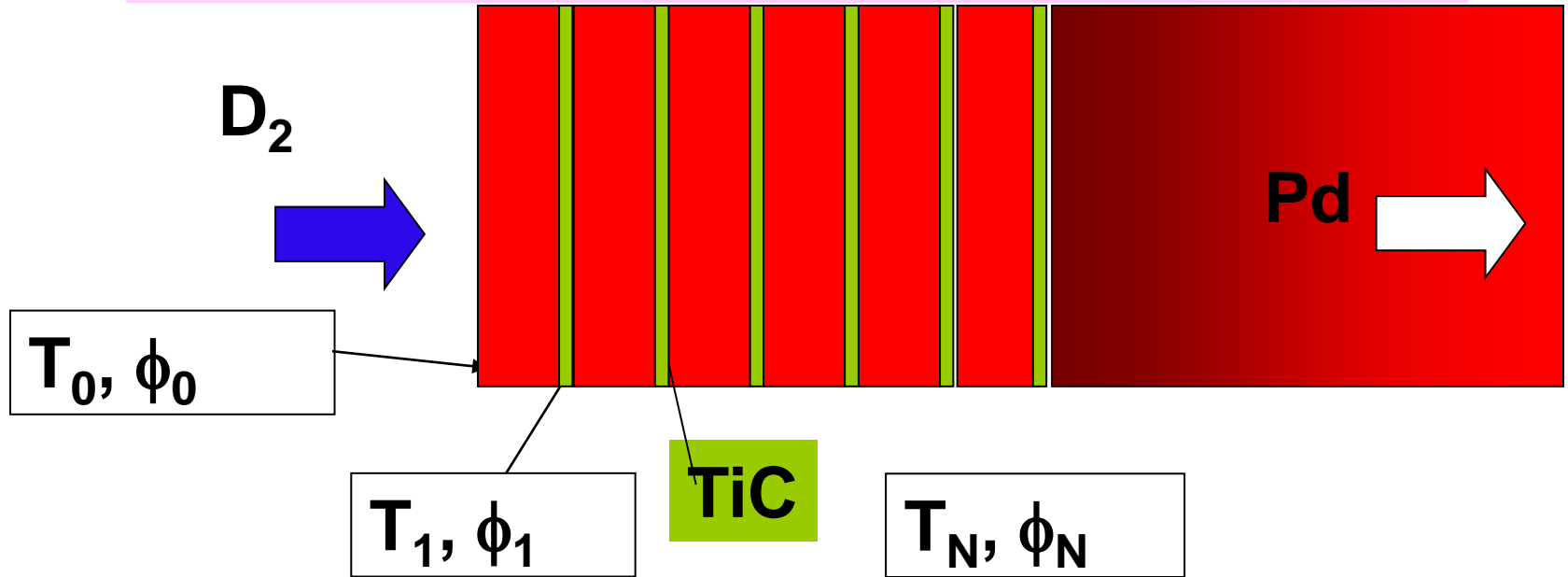
$$\frac{A_{0N}}{T_{0N}} = \frac{A_0}{T_0} + \frac{A_N}{T_N} + \frac{A_0}{T_0} * \frac{A_N}{T_N}$$

# Multiple Nano-Meter Coating Layer



$$T_{0N} = \frac{T_0 * T_N}{T_0 * T_N + (\sqrt{1-T_0} - \sqrt{1-T_N})^2 + 4\sqrt{(1-T_0)(1-T_N)}(\text{Cos}[\frac{\phi_0 + \phi_N}{2}])^2}$$

# High Deuterium Flux with High Loading



❖ High Flux with Coating Layer Build-up High Loading Surface (**Iwamura super lattice**)

❖ **Super Wave** may affect Phase  $\phi_0$  &  $\phi_1$  → High Flux ( $T_{0N}$ )

❖ High Flux ( $T_{0N}$ ) Introduces More Absorption ( $A_{0N}$ ) in Surface Layers (**Correlation** btn Flux & Heat)

