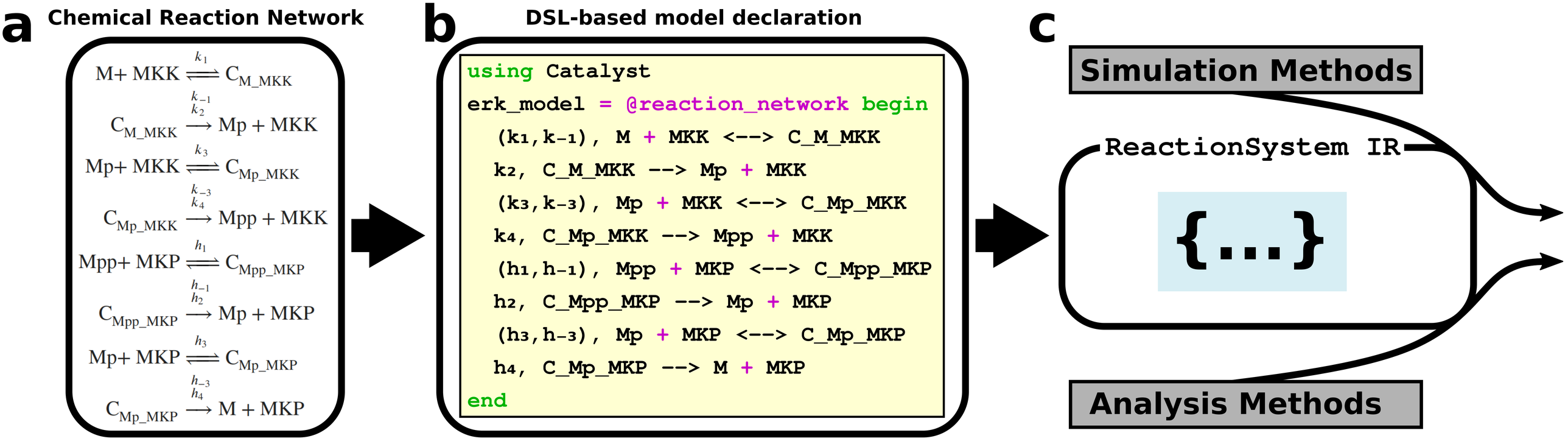
a
Chemical Reaction Network
M+ MKK ⇌ C_M_MKK (k1, k-1)
C_M_MKK → Mp + MKK (k2)
Mp+ MKK ⇌ C_Mp_MKK (k3, k-3)
C_Mp_MKK → Mpp + MKK (k4)
Mpp+ MKP ⇌ C_Mpp_MKP (h1, h-1)
C_Mpp_MKP → Mp + MKP (h2)
Mp+ MKP ⇌ C_Mp_MKP (h3, h-3)
C_Mp_MKP → M + MKP (h4)
b
DSL-based model declaration
using Catalyst
erk_model = @reaction_network begin
(k1,k-1), M + MKK <--> C_M_MKK
k2, C_M_MKK --> Mp + MKK
(k3,k-3), Mp + MKK <--> C_Mp_MKK
k4, C_Mp_MKK --> Mpp + MKK
(h1,h-1), Mpp + MKP <--> C_Mpp_MKP
h2, C_Mpp_MKP --> Mp + MKP
(h3,h-3), Mp + MKP <--> C_Mp_MKP
h4, C_Mp_MKP --> M + MKP
end
c
Simulation Methods
ReactionSystem IR
{...}
Analysis Methods