

LIST OF SYMBOLS

BHAE	=	t-butylated hydroxyanisole equivalent
CE	=	coating efficiency (%)
D_m	=	dried matter of coating solution on the coated particles (kg/kg)
d_p	=	particle diameter (m)
E	=	energy consumption (MJ)
g	=	gram
GAE	=	gallic acid equivalent
Ga	=	Galileo number
H	=	bed height (m)
H_{mf}	=	bed height at minimum fluidization (m)
HPLC	=	high performance liquid chromatography
kg	=	kilogram
M_{TECR}	=	mass of overall TECR (kg)
MC	=	moisture content (% w.b.)
M_i	=	mass of initial sample before drying in oven (g)
M_f	=	mass of sample after drying in oven (g)
N_{fk}	=	number of fissured kernels
PID	=	proportional-integral-differential
S_r	=	spray rates of coating solution (mL/min)
SEC	=	specific energy consumption (MJ/kg TECR)
T_{ai}	=	inlet air temperatures (°C)
TAC	=	total antioxidant capacity
TDM_{WR}	=	total dry mass of white rice before coating (g)

LIST OF SYMBOLS (CONTINUED)

TDM_{TECR}	=	total dry mass of TECR (g)
TECR	=	turmeric extract coated rice
TES	=	turmeric extract solution (mL)
TPC	=	total phenolics content
TPC_{SOL}	=	total phenolics content of prepared turmeric extract solution (mg GAE/mL)
TPC_{TECR}	=	total phenolics content of TECR (mg GAE/g dry mass sample)
TPC_{WR}	=	total phenolics content of white rice before coating (mg GAE/g dry mass sample)
u_f	=	fluid velocity (m/s)
U_{mf}	=	minimum fluidization velocity (m/s)
w	=	coating content on particles surface (kg/kg)
W_c	=	deposited mass of coating (kg)
W_{cs}	=	mass of coating solution sprayed onto the fluidized particles (kg)
W_p	=	mass of core particles (kg)
ΔP	=	bed pressure drop (Pa)
ε	=	void fraction
μ_f	=	fluid viscosity (kg/m·s)
ϕ_p	=	particle sphericity
ρ_f	=	fluid density (kg/m ³)
ε_{mf}	=	void fraction at minimum fluidization
ρ_p	=	particle density (kg/m ³)

LIST OF SYMBOLS (CONTINUED)

Subscripts

ai	=	inlet air
c	=	coating
cs	=	coating solution
i	=	initial
f	=	final
fk	=	fissured kernel
fl	=	fluid
m	=	mass
mf	=	minimum fluidization
p	=	particle
SOL	=	solution
TECR	=	turmeric extract coated rice
WR	=	white rice