-

- · ., · ·

-mail: prohoda_net@list.ru; Yurid2006@yandex.ru)

,

,

.

.

.

2014

(, ,

,

.).

.

:

$$\frac{\partial C}{\partial t} + \nabla C \vec{V} - \nabla(K\nabla C) = R_C - \frac{\partial}{\partial z}(w_c C)$$

(1)
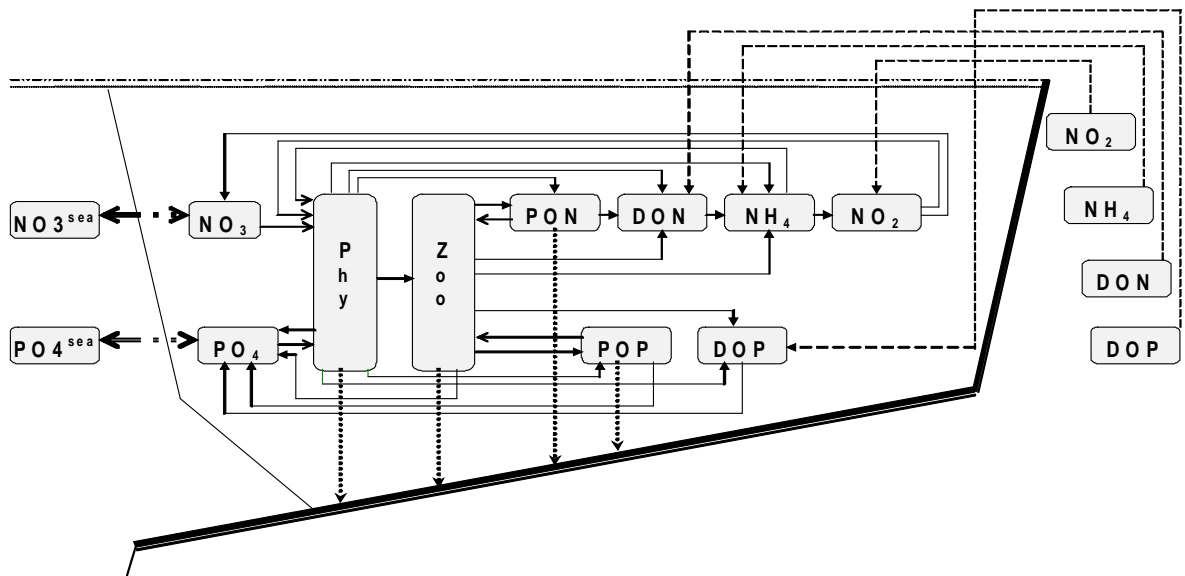
-

, - , R_C - ( ), '

, w_c -

, C - .

(

,

,

)

- - O-N-S-P-Mn

,

,

.

, ,

,

.

- - ,

, .

- ,

, - ,

, ,)

.

, . ,

H_2S, S0, SO4, Mn_2, Mn_4, Fe_2, Fe_3

– (. 1).
:   ,   ,   .
-                    (
,   )   (
,   ,   ,   ).

–   -
-                       .

(   ).

. 1.   .

,   ,

,   .

,
-        .
,

10   .
.   "   "
(,   ),
;   "   "
–   ,   .
(Phy),   (Zoo),   :   (PO$_4$),
(   ) –   ,
(DOP) –   ;   :

(NO$_3$), (NO2), (NO$_4$),
(PON), (DON).

:

$$\frac{dC_i}{dt} = R_{c_i} - SedC_i + Flux\ (C_{0_i} - C_i) + Pol\ (C_{P_i} - C_i),$$

(2)

: i = Phy, Zoo, PO$_4$, POP, DOP, NO$_3$, NO$_2$, NH4, DON, PON; R$_{Ci}$ - ,
- ; Sed –
, ; Flux
($_{0i}$ - $_i$) - (Flux
); $_{0i}$ –
; Pol ($_i$ - C$_i$) – ; $_i$ –
DOP, DON, NH$_4$, NO$_2$.

,
.
.
,
.
-
, .
-
«PowerSim», ,
.
1 , 0,001 .

.
, , -
, .

,
.

,
.
Flux
, , ,
, .

(.).
,
, ,
,
.
, ,
.