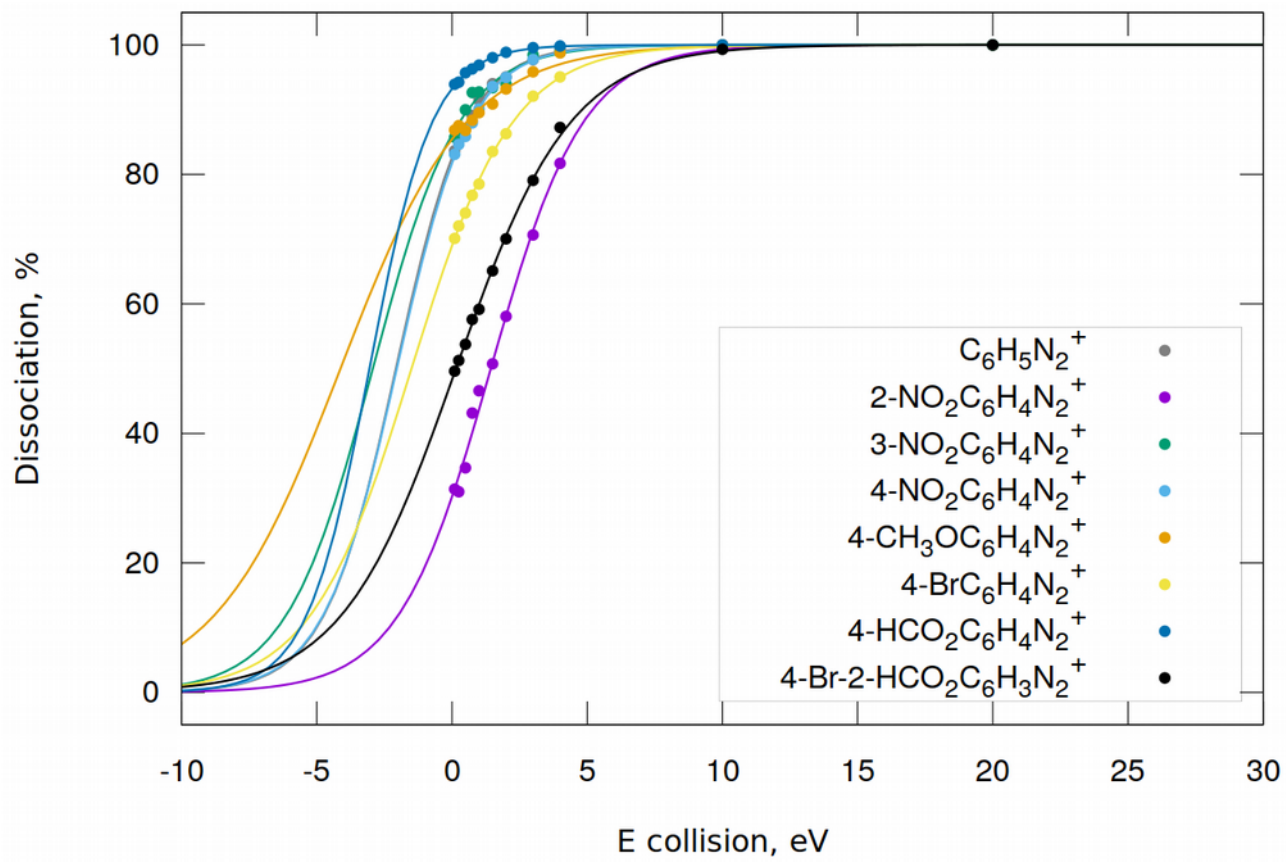

Fig. 1. Dissociation some aren diazonium cations

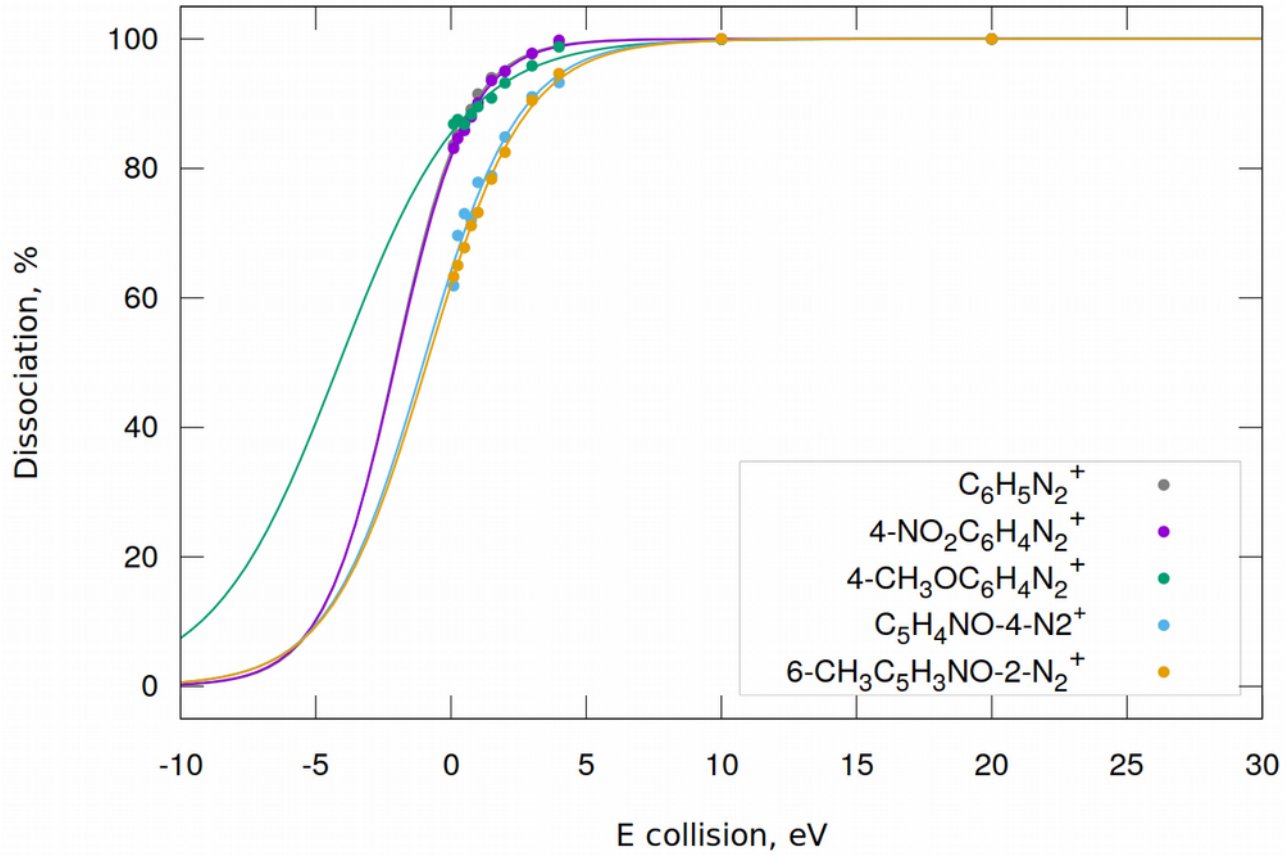

Fig. 2. Dissociation some NO-pyridines and aren diazonium cations

$$K_D = \frac{[Ar^+]}{[ArN_2^+]} = \exp\left(B + \frac{E_{collision}}{\Delta G}\right) \qquad (1)$$

Table 1.

Parameters of aproximation equation (1) for some diazonium salts

№	**Diazonium salts**	**$_{\Delta}$G, eV**	**B**
1.	$C_6H_5N_2^+$ TfO^-	1.33	1.56
2.	2-$NO_2C_6H_4N_2^+$ TfO^-	1.71	-0.84
3.	3-$NO_2C_6H_4N_2^+$ TfO^-	1.60	1.83
4.	4-$NO_2C_6H_4N_2^+$ TfO^-	1.36	1.50
5.	4-$NO_2C_6H_4N_2^+$ TsO^-	1.42	1.56
6.	4-$NO_2C_6H_4N_2^+$ BF_4^-	1.27	1.56
7.	4-$CH_3OC_6H_4N_2^+$ TfO^-	2.33	1.77
8.	4-$BrC_6H_4N_2^+$ TfO^-	1.77	0.80
9.	4-$HCO_2C_6H_4N_2^+$ TfO^-	1.16	2.63
10.	4-Br-2-$HCO_2C_6H_3N_2^+$ TfO^-	2.12	-0.07
11.	C_5H_4NO-4-N_2^+ TfO^-	1.76	0.58
12.	6-$CH_3C_5H_3NO$-2-N_2^+ TfO^-	1.80	0.49
13.	4-Br-2-$NO_2C_6H_3N_2^+$ TfO^-	2.11	-0.21
14.	$C_{10}H_7$-1-N_2^+ TfO^-	1.29	2.92