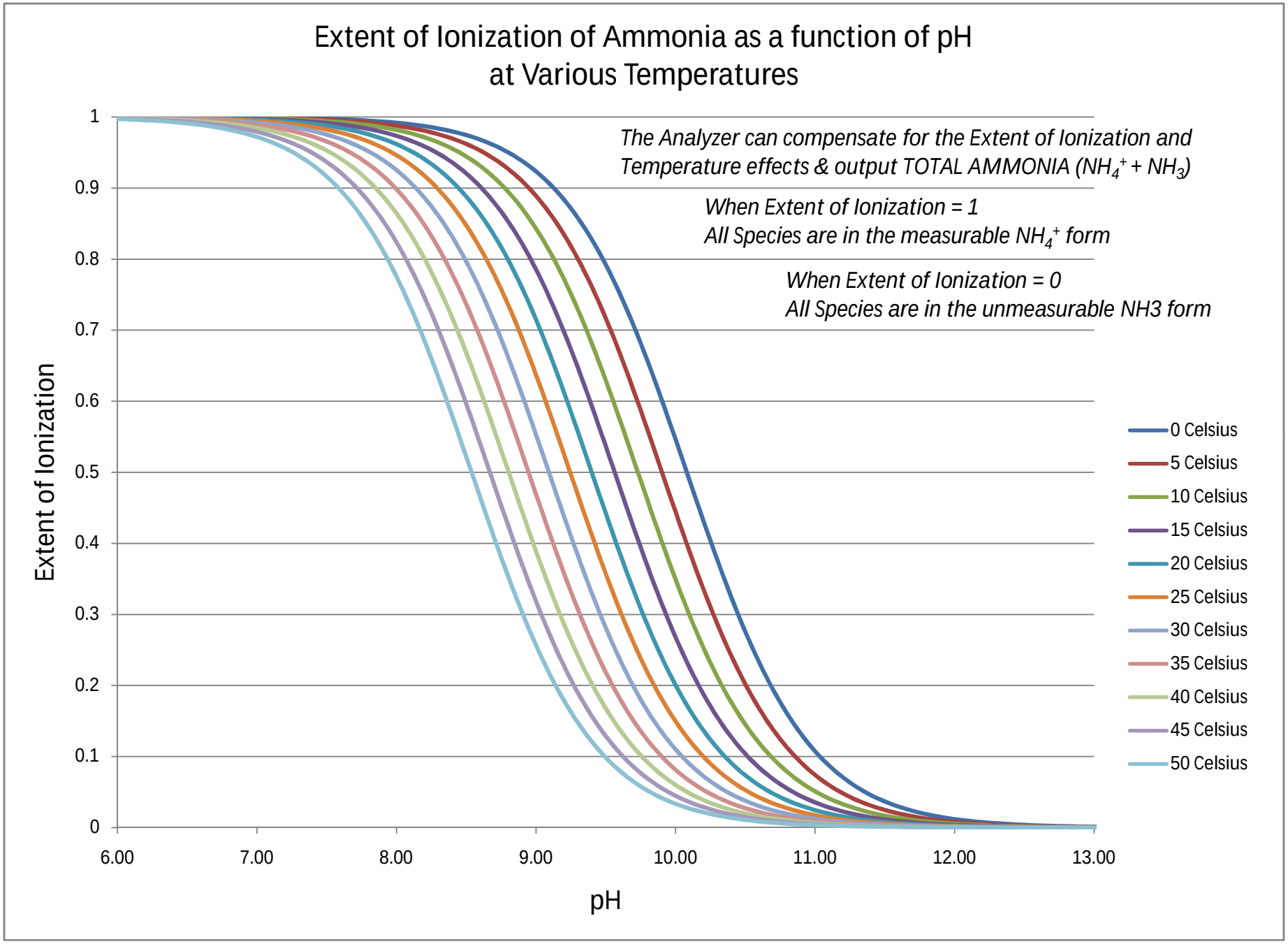
Extent of Ionization of Ammonia as a function of pH
at Various Temperatures
The Analyzer can compensate for the Extent of Ionization and
Temperature effects & output TOTAL AMMONIA ($NH_4^+ + NH_3$)
When Extent of Ionization = 1
All Species are in the measurable NH_4^+ form
When Extent of Ionization = 0
All Species are in the unmeasurable NH3 form
Extent of Ionization
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
pH
0 Celsius
5 Celsius
10 Celsius
15 Celsius
20 Celsius
25 Celsius
30 Celsius
35 Celsius
40 Celsius
45 Celsius
50 Celsius