

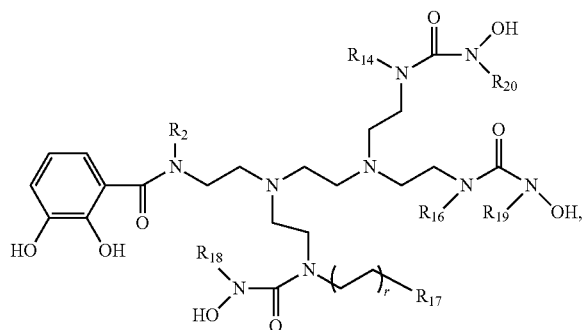
wherein

$R_2$ ,  $R_{14}$ ,  $R_{16}$ ,  $R_{18}$ , and  $R_{19}$ , individually, include H, OH, or an alkyl group having from 1 to 10 carbon atoms;

$R_{17}$  includes  $NH_2$ ,  $C(=O)OH$ , maleimide, dibromo-maleimide, isothiocyanate, alkyne, or azide; and

$r$  is from 0 to 4.

[0328] 27. A composition of embodiment 23, including a structure:



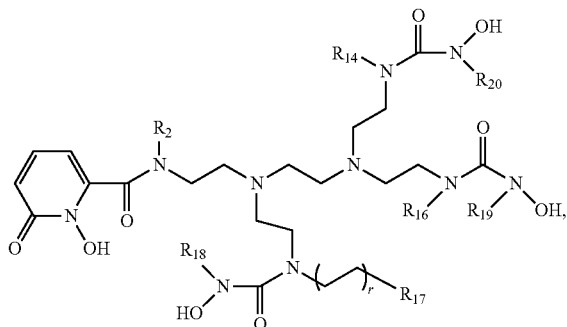
wherein:

$R_2$ ,  $R_{14}$ ,  $R_{16}$ ,  $R_{18}$ ,  $R_{19}$ , and  $R_{20}$ , individually, include H, OH, or an alkyl group having from 1 to 10 carbon atoms;

$R_{17}$  includes  $NH_2$ ,  $C(=O)OH$ , maleimide, dibromo-maleimide, isothiocyanate, alkyne, or azide; and

$r$  can be from 0 to 4.

[0329] 28. A composition of embodiment 23, including a structure:



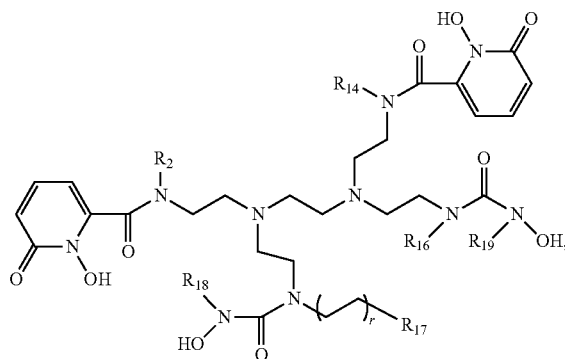
wherein:

$R_2$ ,  $R_{14}$ ,  $R_{16}$ ,  $R_{18}$ ,  $R_{19}$ , and  $R_{20}$ , individually, include H, OH, or an alkyl group having from 1 to 10 carbon atoms;

$R_{17}$  includes  $NH_2$ ,  $C(=O)OH$ , maleimide, dibromo-maleimide, isothiocyanate, alkyne, or azide; and

$r$  can be from 0 to 4.

[0330] 29. A composition of embodiment 23, including a structure:



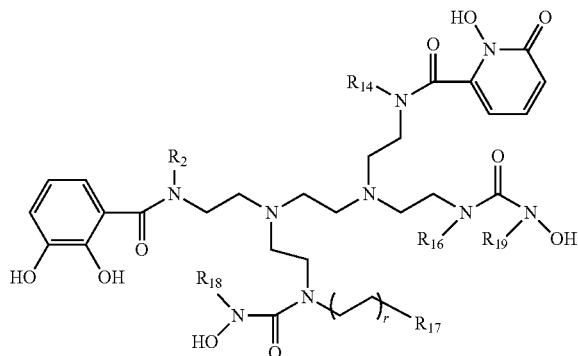
wherein:

$R_2$ ,  $R_{14}$ ,  $R_{16}$ ,  $R_{18}$ , and  $R_{19}$ , individually, include H, OH, or an alkyl group having from 1 to 10 carbon atoms;

$R_{17}$  includes  $NH_2$ ,  $C(=O)OH$ , maleimide, dibromo-maleimide, isothiocyanate, alkyne, or azide; and

$r$  is from 0 to 4.

[0331] 30. A composition of embodiment 23, including a structure:



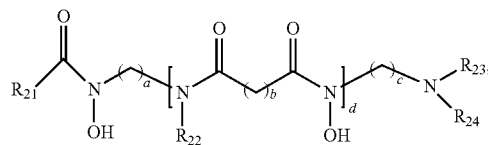
wherein:

$R_2$ ,  $R_{14}$ ,  $R_{16}$ ,  $R_{18}$ , and  $R_{19}$ , individually, include H, OH, or an alkyl group having from 1 to 10 carbon atoms;

$R_{17}$  includes  $NH_2$ ,  $C(=O)OH$ , maleimide, dibromo-maleimide, isothiocyanate, alkyne, or azide;

$r$  is from 0 to 4.

[0332] 31. A composition, including a structure:



wherein:

$R_{21}$  and  $R_{22}$ , individually, include H, OH, or an alkyl group having from 1 to 10 carbon atoms;

$R_{23}$  includes H, OH, an alkyl group having from 1 to 10 carbon atoms, or  $(CH_2)_e R_a$ , where  $R_a$  is  $NH_2$ ,  $C(=O)OH$ , maleimide, dibromo-maleimide, isothiocyanate, alkyne, or azide;