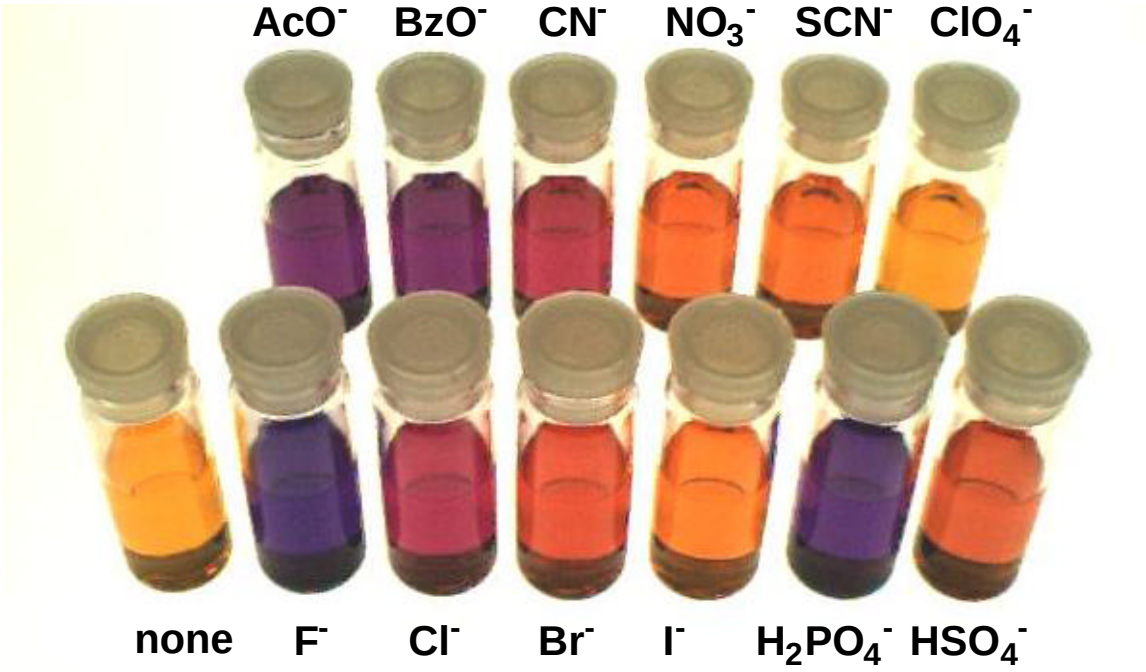
Supporting Information for:

Off-the-Shelf Colorimetric Anion Sensors

Hidekazu Miyaji and Jonathan L. Sessler*

Off-the-Shelf Anion Sensors

Finding Systems that Sense Anions without Recourse to Synthesis!



1,2-diaminoanthraquinone in dichloromethane (1×10^{-4} M). The color changed from yellow to dark purple by F^-, to red by Cl^-, to reddish orange by Br^-, to orange by I^-, to purple by $H_2PO_4^-$, to orange by HSO_4^-, to purple by AcO^- and BzO^-, to red by CN^-, to orange by NO_3^-, to orange by SCN^- (Anion: 100 equiv.).

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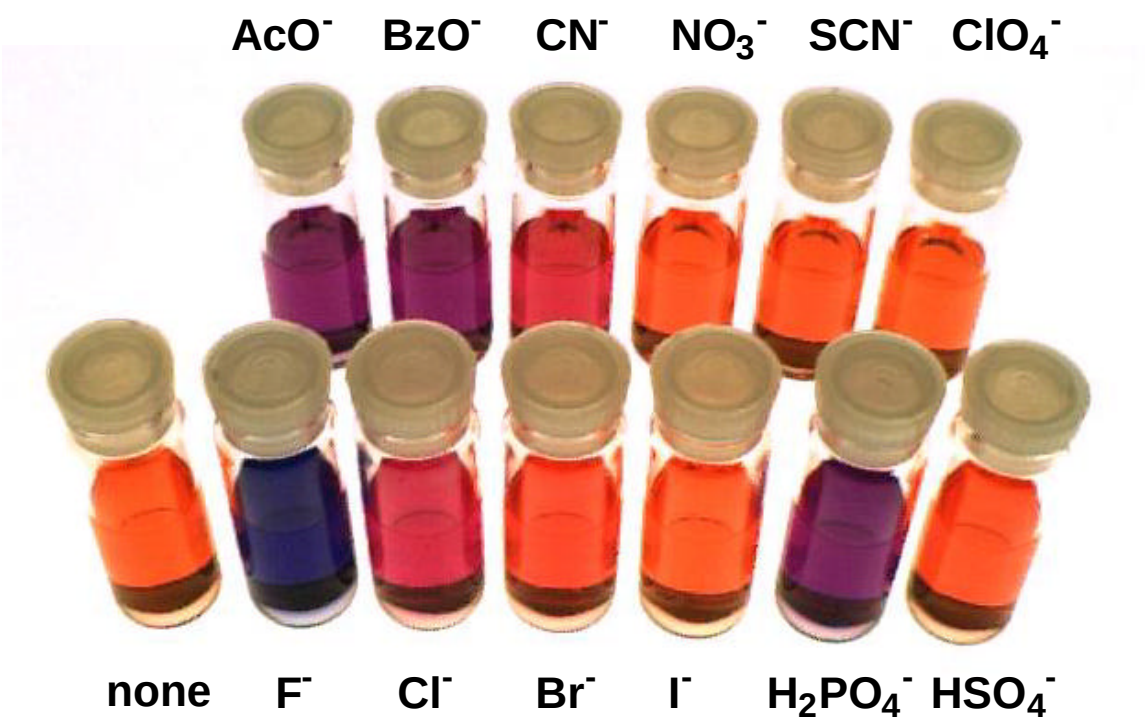

1,2-diaminoanthraquinone in acetonitrile (1 x 10^{-4} M). The color changed from orange to dark purple by F^-, to red by Cl^-, to reddish orange by Br^-, to purple by $H_2PO_4^-$, to purple by AcO^- and BzO^-, to red by CN^- (Anion: 100 equiv.).

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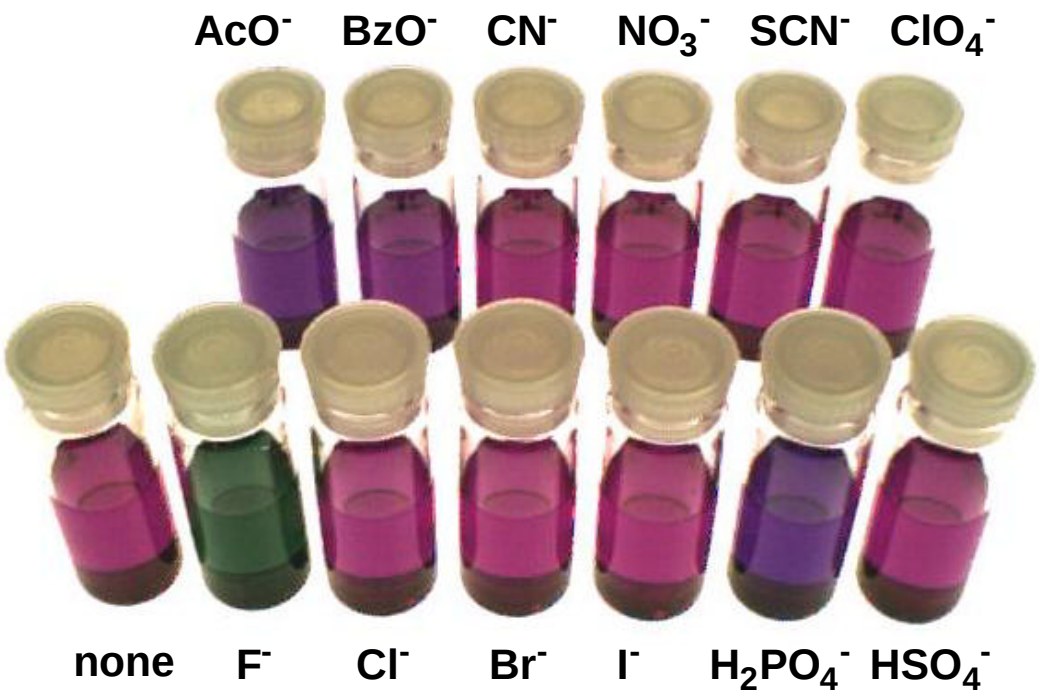

1,2-diaminoanthraquinone in DMSO (1 x 10^{-4} M). The color changed from red to green by F^-, to purple by $H_2PO_4^-$, AcO^- and BzO^- (Anion: 100 equiv.).

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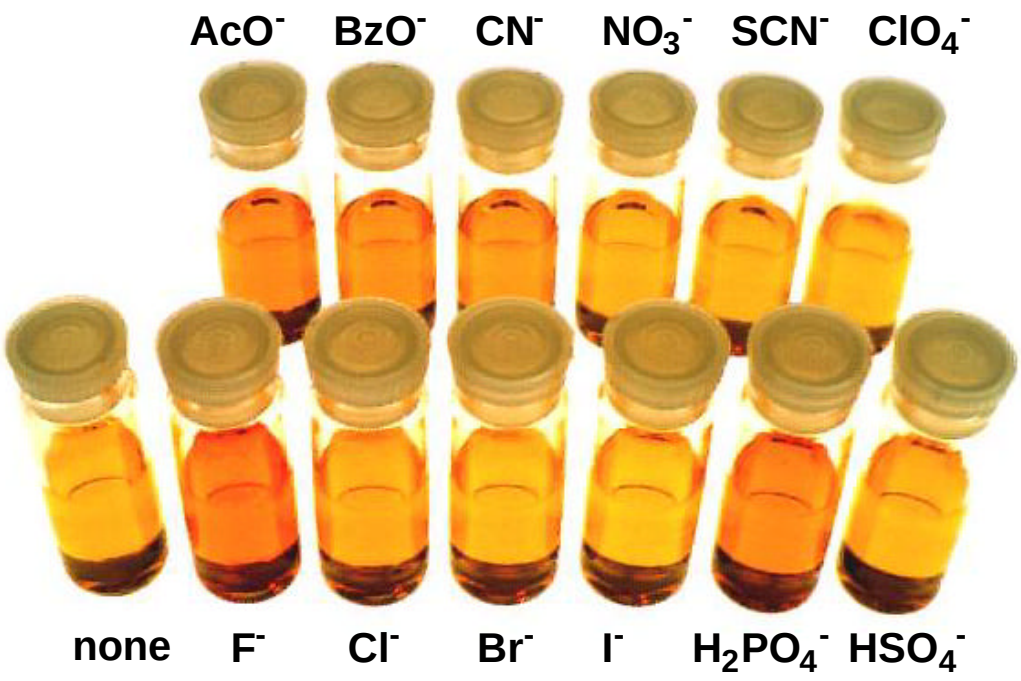

1,8-diaminoanthraquinone in dichloromethane (1×10^{-4} M). The color changed from orange to reddish orange by F^-, $H_2PO_4^-$, AcO^-, BzO^- and CN^- (Anion: 100 equiv.).

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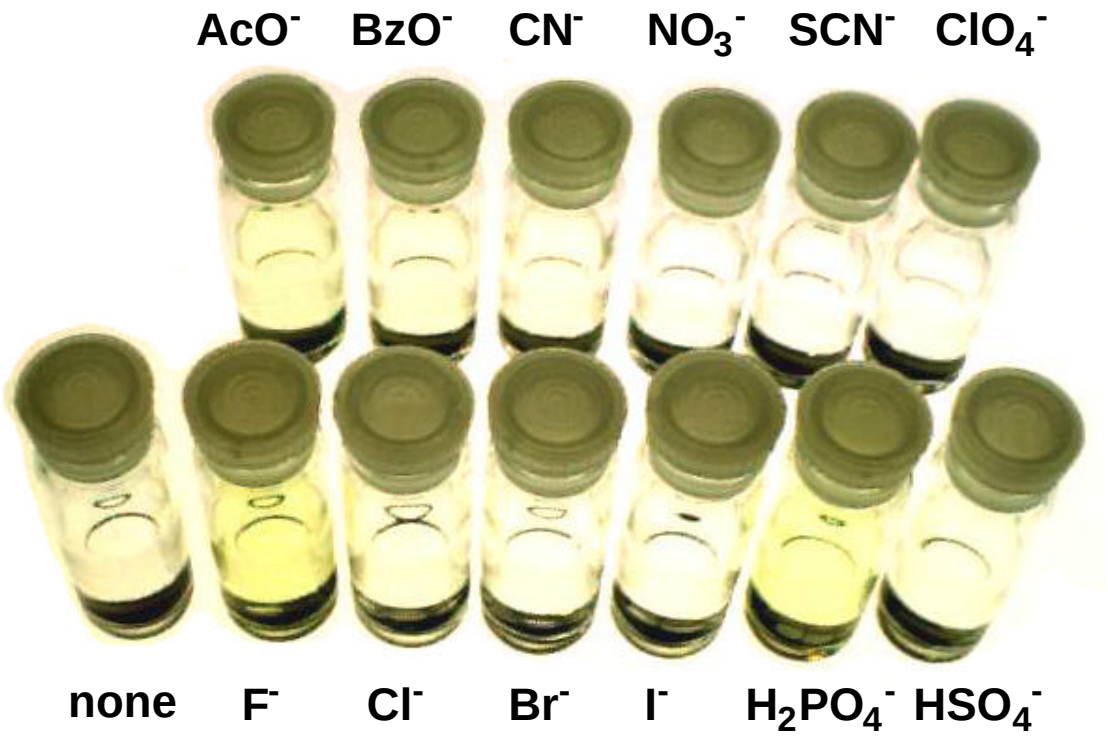

4-nitroaniline in dichloromethane (1×10^{-4} M). The color changed from colorless to yellow by F^-, $H_2PO_4^-$, AcO^-, BzO^- and CN^- (Anion: 100 equiv.).

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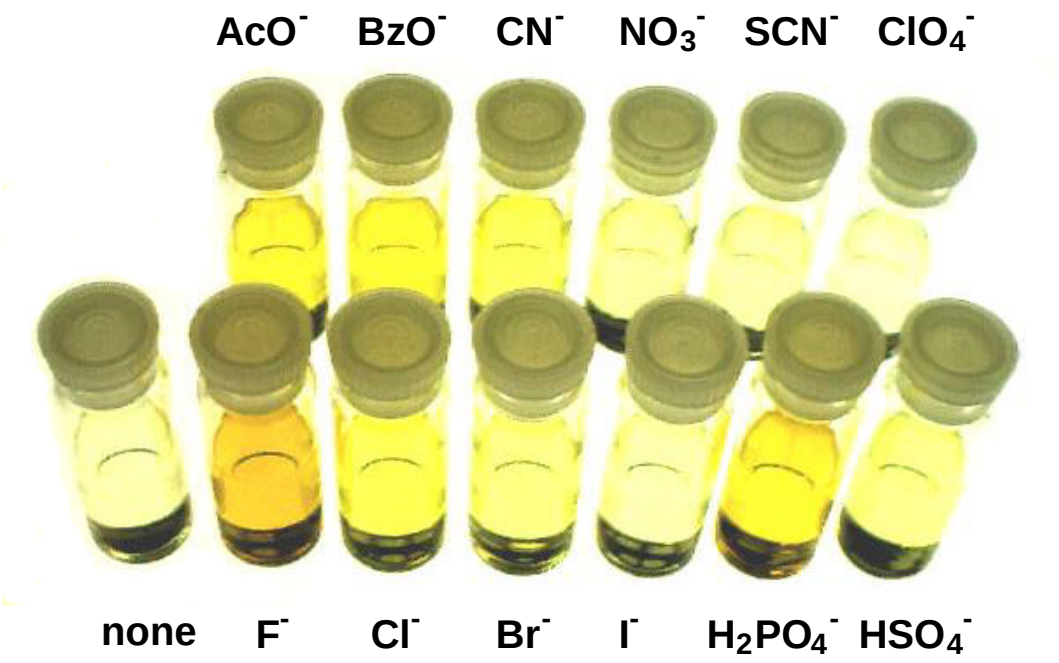

4-nitro-1,2-phenylenediamine in dichloromethane (1×10^{-4} M). The color changed from pale yellow to orange by F^-, to intence yellow by Cl^-, $H_2PO_4^-$, AcO^-, BzO^- and CN^-, to yellow by Br^-, HSO_4^-, NO_3^- and SCN^- (Anion: 100 equiv.).

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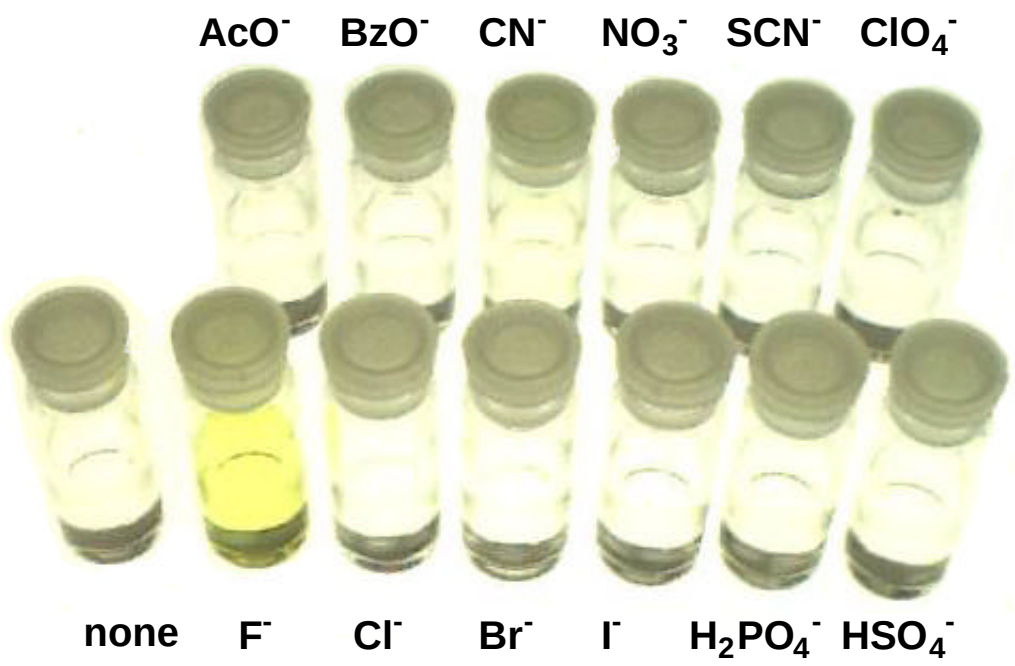

L-leucine-4-nitroanilide in dichloromethane (1×10^{-4} M). The color changed from colorless to intense yellow by F^-, to weak yellow by CN^- (Anion: 100 equiv.).

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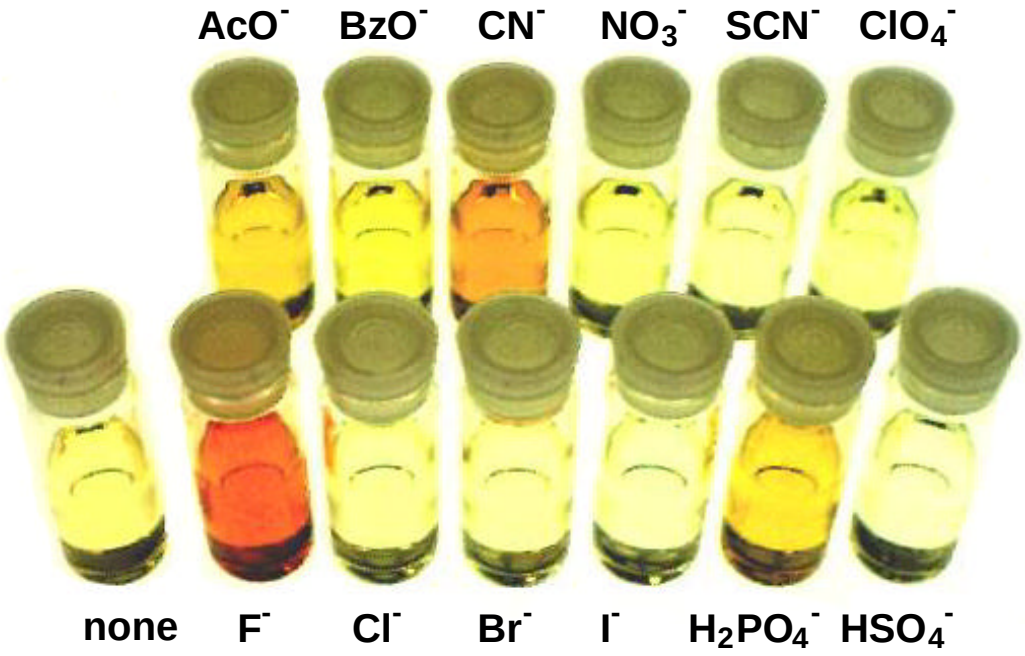

1-(4-nitrophenyl)-2-thiourea in DMSO (1 x 10^{-4} M). The color changed from pale yellow to orange by F^- and CN^-, to intense yellow by $H_2PO_4^-$, AcO^- and BzO^- (Anion: 100 equiv.).

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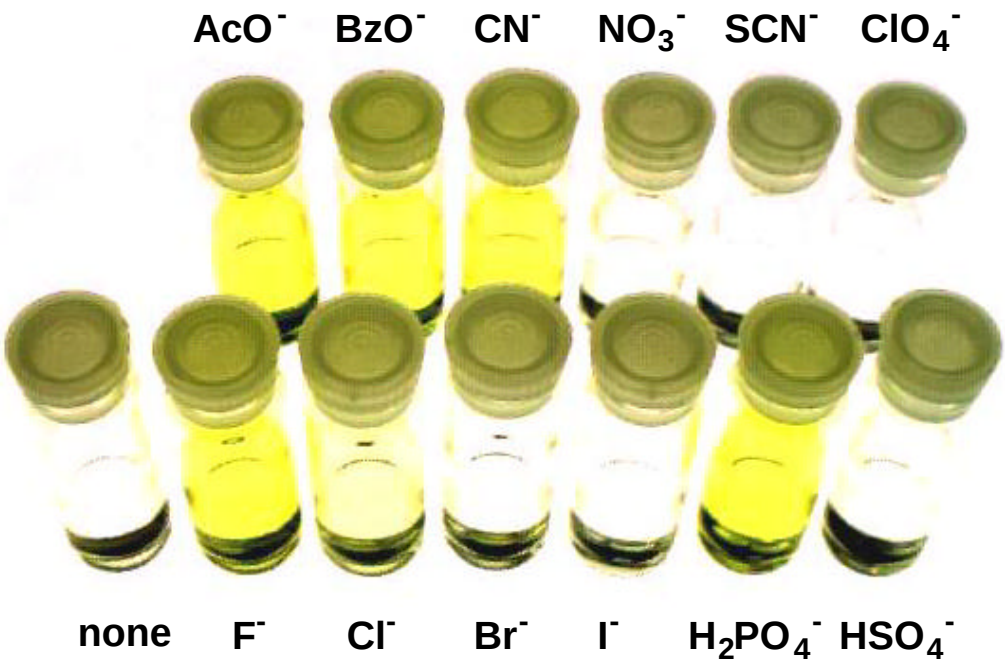

4-nitrophenol in dichloromethane (1 x 10^{-4} M). The color changed from colorless to intense yellow by F^-, $H_2PO_4^-$, AcO^-, BzO^- and CN^-, to yellow by Cl^- (Anion: 100 equiv.).

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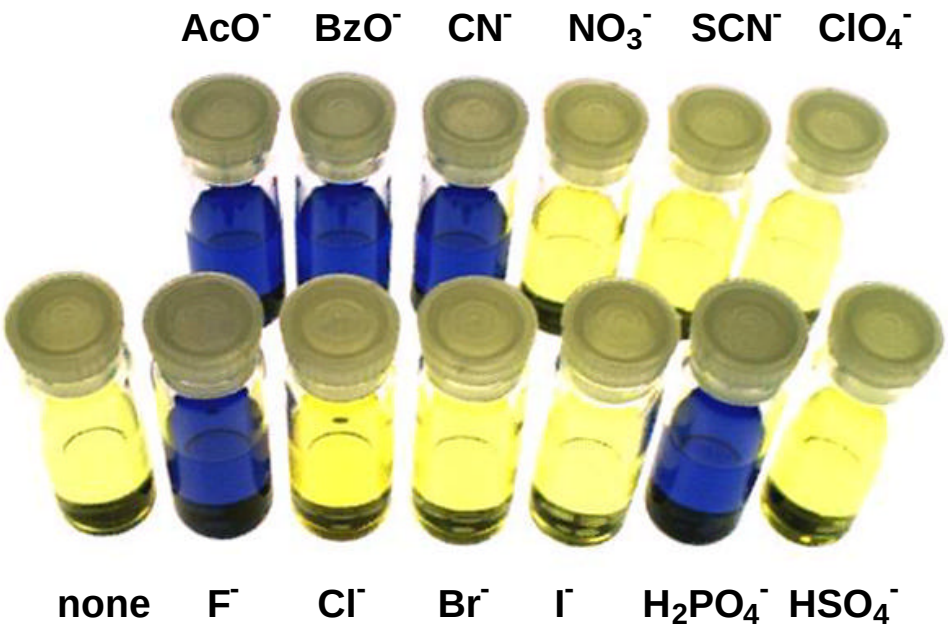

Alizarin in dichloromethane (1 x 10^{-4} M). The color changed from yellow to blue by F^-, $H_2PO_4^-$, AcO^-, BzO^- and CN^- (Anion: 100 equiv.).

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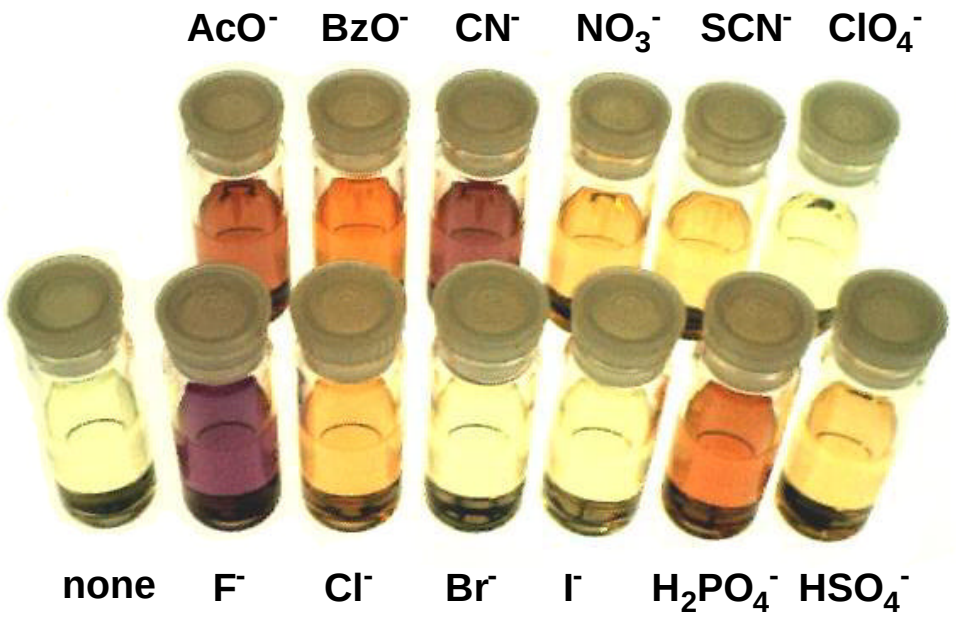

2,2′-bi(3-hydroxy-1,4-naphthoquinone) in dichloromethane (1 x 10^{-4} M). The color changed from yellow to purple by F^-, CN^-, to reddish orange by $H_2PO_4^-$, AcO^- BnO^-, to yellow by Cl^-, HSO_4^-, NO_3^- and SCN^- (Anion: 100 equiv.).

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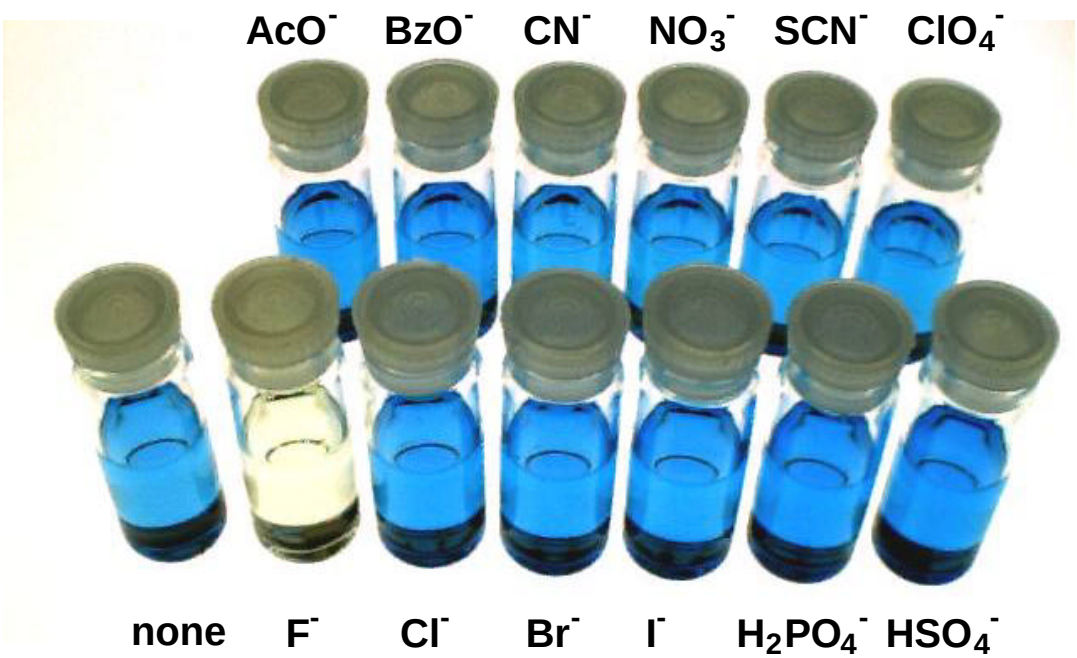

Acid blue 45 in DMSO (1×10^{-4} M). The color changed from blue to colorless by F^-.

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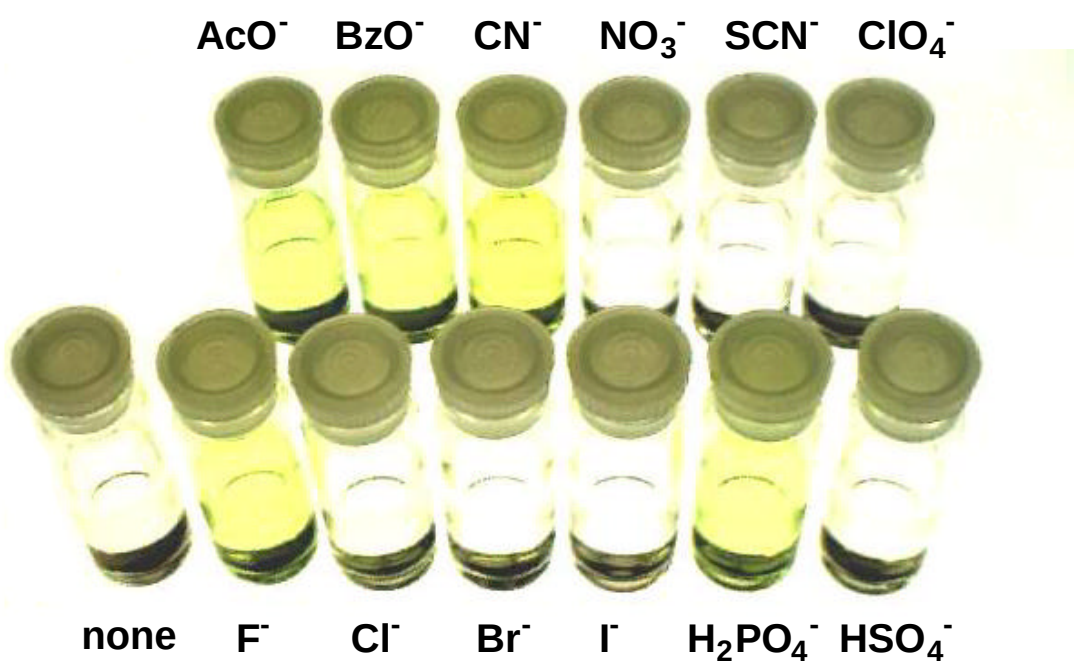

Naphthol AS in dichloromethane (1×10^{-4} M). The color changed from colorless to fluorescent yellow by F^-, $H_2PO_4^-$, AcO^-, BzO^- and CN^- (Anion: 100 equiv.).

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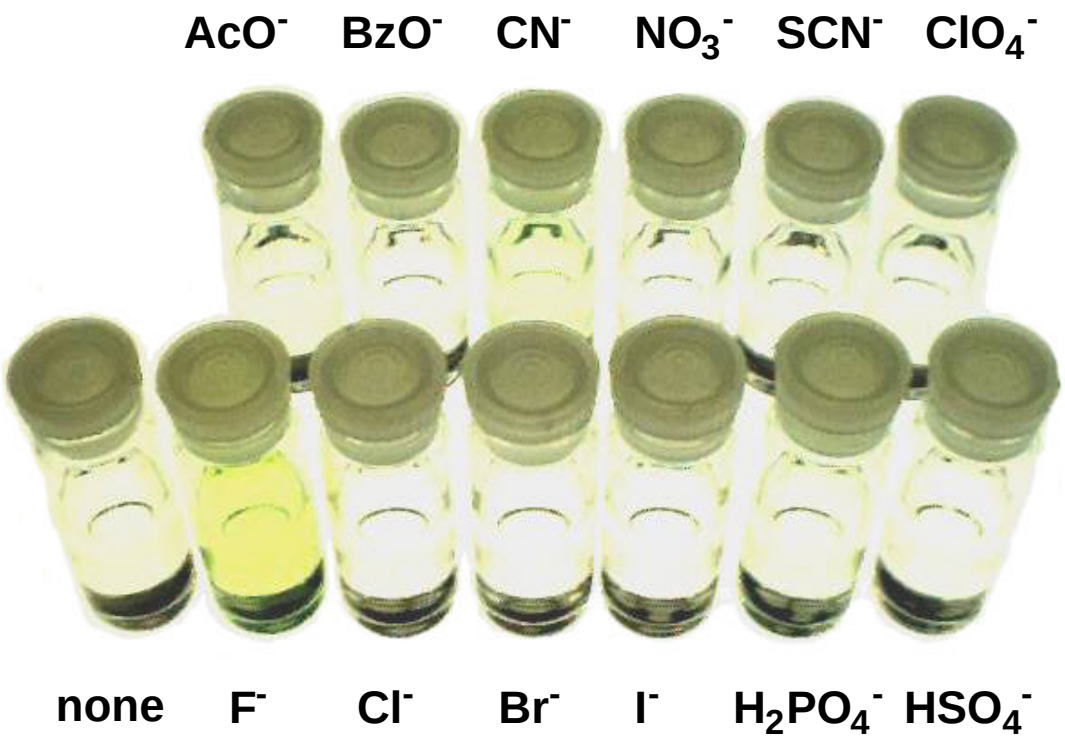

9(*10H*)-acridone in DMSO (1 x 10^{-4} M). The color changed from colorless to fluorescent yellow by F^-, $H_2PO_4^-$, AcO^- and CN^- (Anion: 100 equiv.).

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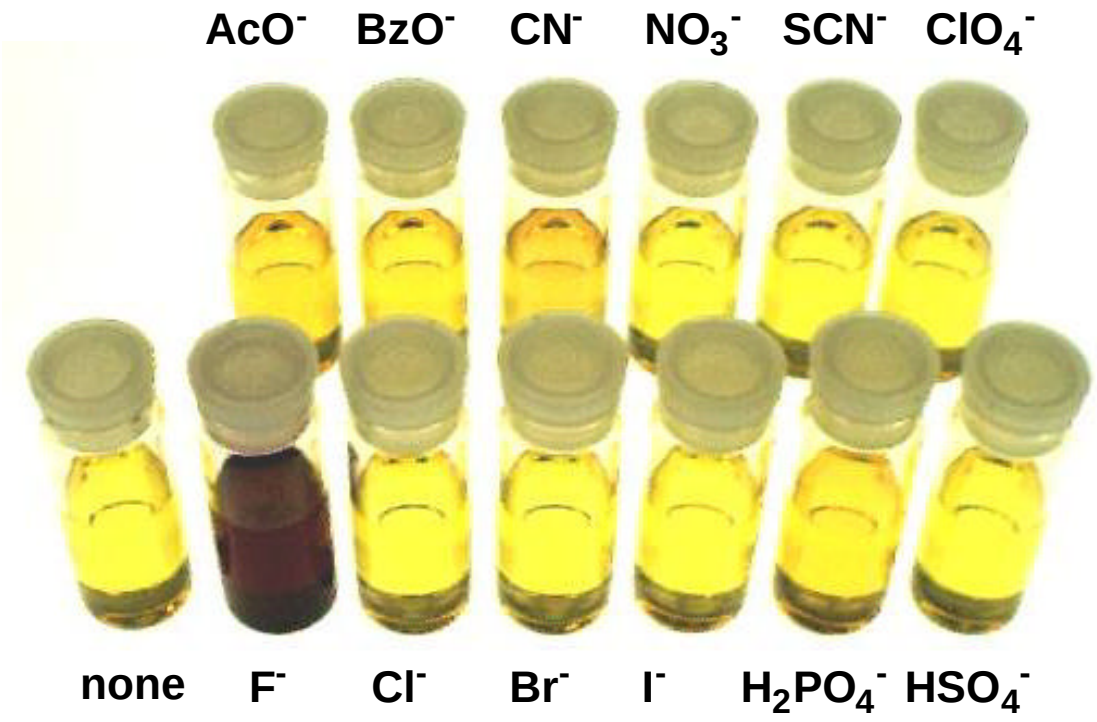

Direct yellow 50 in DMSO (1 x 10^{-4} M). The color changed from yellow to red by F^-, to orange by $H_2PO_4^-$ and CN^- (Anion: 100 equiv.).