
Surface Temperature Vs Emissivity

```
clear all
close all
x = linspace(0,1);
y=((8.4259*10^9)./(2-x)).^(1/4);
plot (x,y, 'LineWidth',2);
title ('Surface Temperature Vs. bulk emissivity', 'FontSize', 15);
ylabel('Surface Temperature (K)', 'FontSize', 20);
xlabel('Emissivity', 'FontSize',20);
hold on
y1=288 + 0*x;
plot (x,y1, 'color','k', 'LineWidth',2);
text(.1,286, ' \uparrow Current Surface Temperature of Earth');
hold on
y2 = 273+0*x;
plot (x,y2, 'color','r', 'LineWidth',2);
text(.6,271, ' \uparrow Freezing Point of Water');
```

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