```
In[434]:= data = {{11.3, 104.4}, {13.3, 105.3}, {15.8, 106.2}, {18.5, 107.3},
        {20.9, 108.2}, {23.4, 109.2}, {25.9, 110.1}, {27.7, 110.8}, {29.7, 111.5},
        {31.6, 112.2}, {33.8, 113.2}, {35.6, 113.8}, {38.7, 115}, {41.1, 115.8},
        {42.7, 116.4}, {45.2, 117.2}, {49.3, 118.9}, {50.3, 119.4}};

model = NonlinearModelFit[data, R0 (1 + α T), {R0, α}, {T}];
Print[R[T], " = ", Normal[model]]
Print[R^2, " = ", model["RSquared"]]

tf = Show[
    ListPlot[data, PlotStyle → Red],
    Plot[model[T], {T, Max[data[[All, 1]]], Min[data[[All, 1]]]}]
    ];
Show[tf, ImageSize → Full]
Export[NotebookDirectory[] <>
    "Images/Temperatura/ResistenceTransferFunction.pdf", tf];
```

R[T] = 100.252 (1 + 0.00378207 T)

$R^2$ = 1.
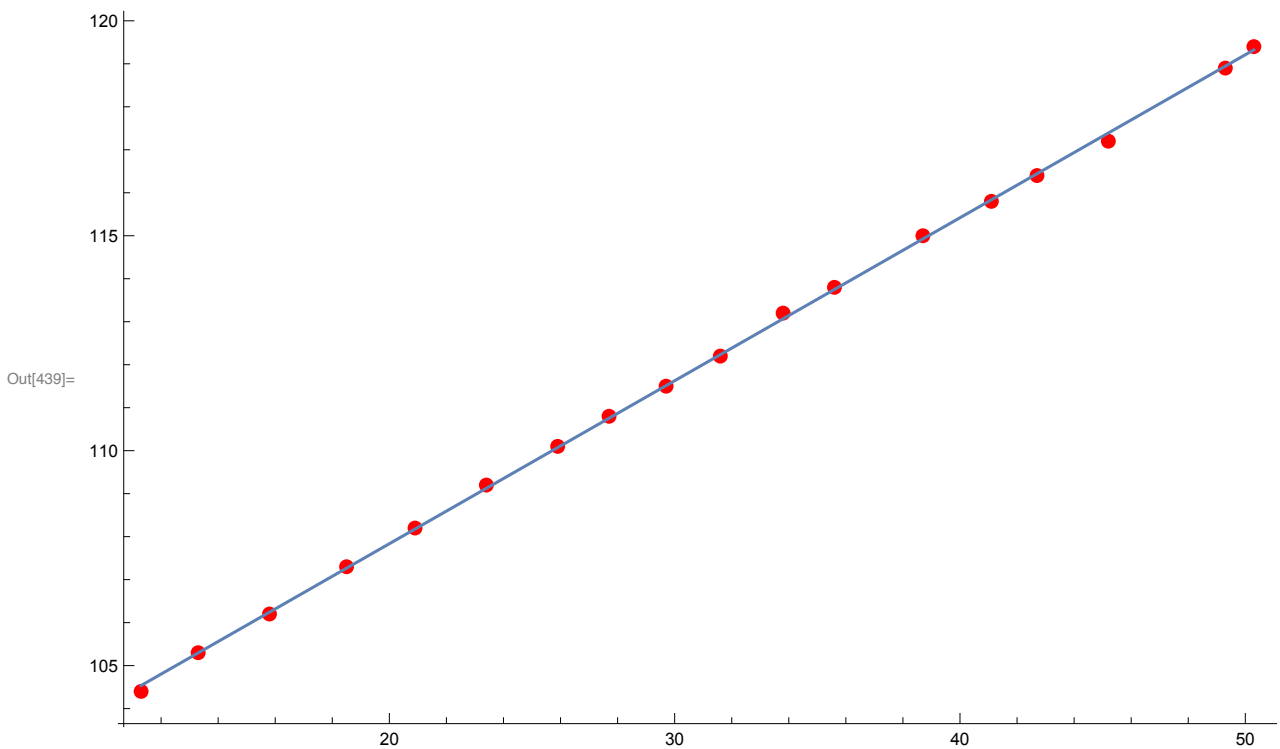
```
In[441]:= data = {{100, 0.417}, {101, 0.499}, {102, 0.581}, {103, 0.663}, {104, 0.741},
       {105, 0.82}, {106, 0.9}, {107, 0.981}, {108, 1.059}, {109, 1.141}, {110, 1.203},
       {111, 1.288}, {112, 1.373}, {113, 1.456}, {114, 1.539}, {115, 1.619},
       {116, 1.701}, {117, 1.785}, {118, 1.868}, {119, 1.964}, {120, 2.05}};

     model = NonlinearModelFit[data, V0 + β T, {V0, β}, {T}];
     Print[V[T], " = ", Normal[model]]
     Print[R^2, " = ", model["RSquared"]]

     tf = Show[
        ListPlot[data, PlotStyle → Red],
        Plot[model[T], {T, Max[data[[All, 1]]], Min[data[[All, 1]]]}]
        ];
     Show[tf, ImageSize → Full]
     Export[NotebookDirectory[] <>
        "Images/Temperatura/ConditionatedTransferFunction.pdf", tf];
```
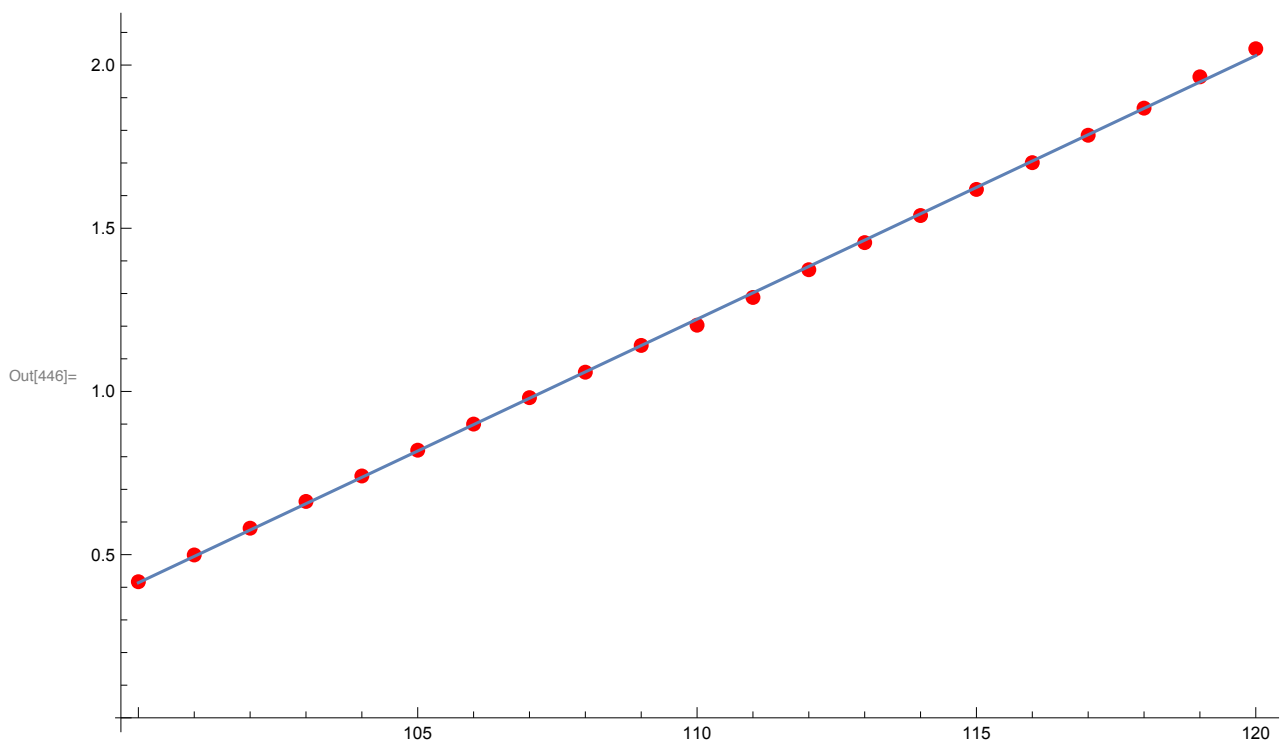
$V[T] = -7.66095 + 0.0807481\,T$

$R^2 = 0.999955$

Out[446]=



```
In[448]:=
     Export[NotebookFileName[] <> ".pdf", EvaluationNotebook[]];
```