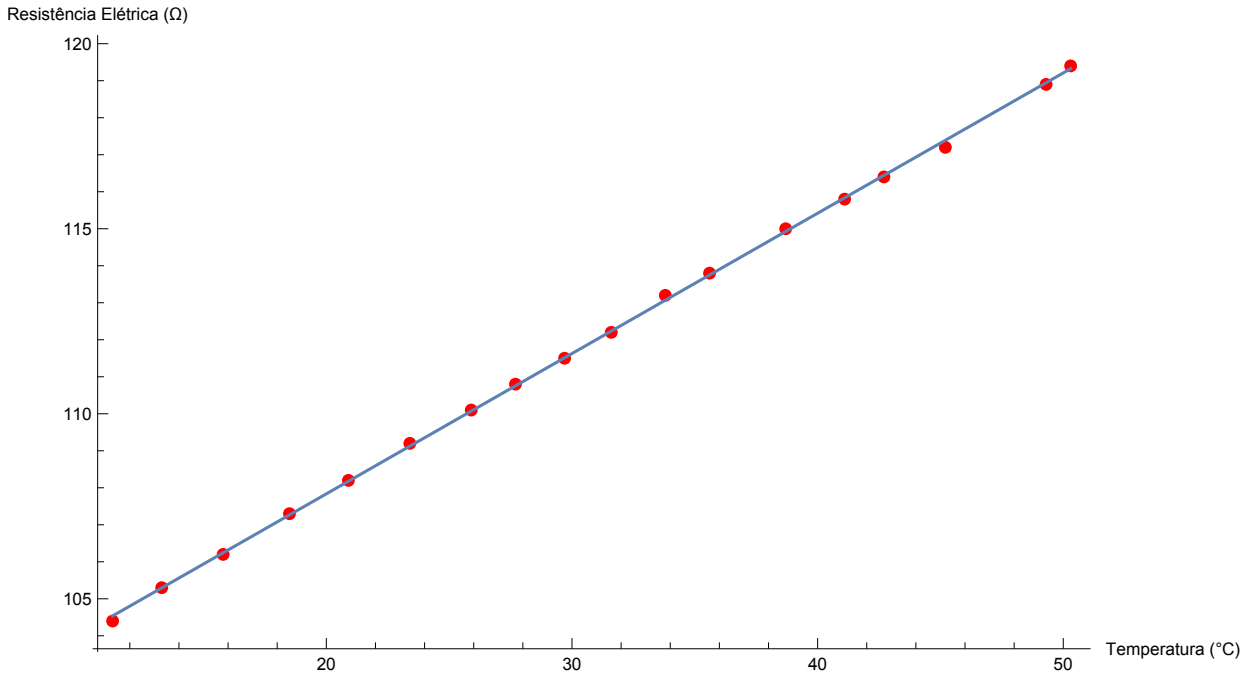
```
data = {{11.3, 104.4}, {13.3, 105.3}, {15.8, 106.2}, {18.5, 107.3},
    {20.9, 108.2}, {23.4, 109.2}, {25.9, 110.1}, {27.7, 110.8}, {29.7, 111.5},
    {31.6, 112.2}, {33.8, 113.2}, {35.6, 113.8}, {38.7, 115}, {41.1, 115.8},
    {42.7, 116.4}, {45.2, 117.2}, {49.3, 118.9}, {50.3, 119.4}};

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]]]}],
    AxesLabel → {"Temperatura (°C)", "Resistência Elétrica (Ω)"}
   ];
Show[tf, ImageSize → Full]
Export[
  NotebookDirectory[] <> "Images/Temperatura/ResistenceTransferFunction.pdf", tf];
```

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

```
R^2 = 1.
```



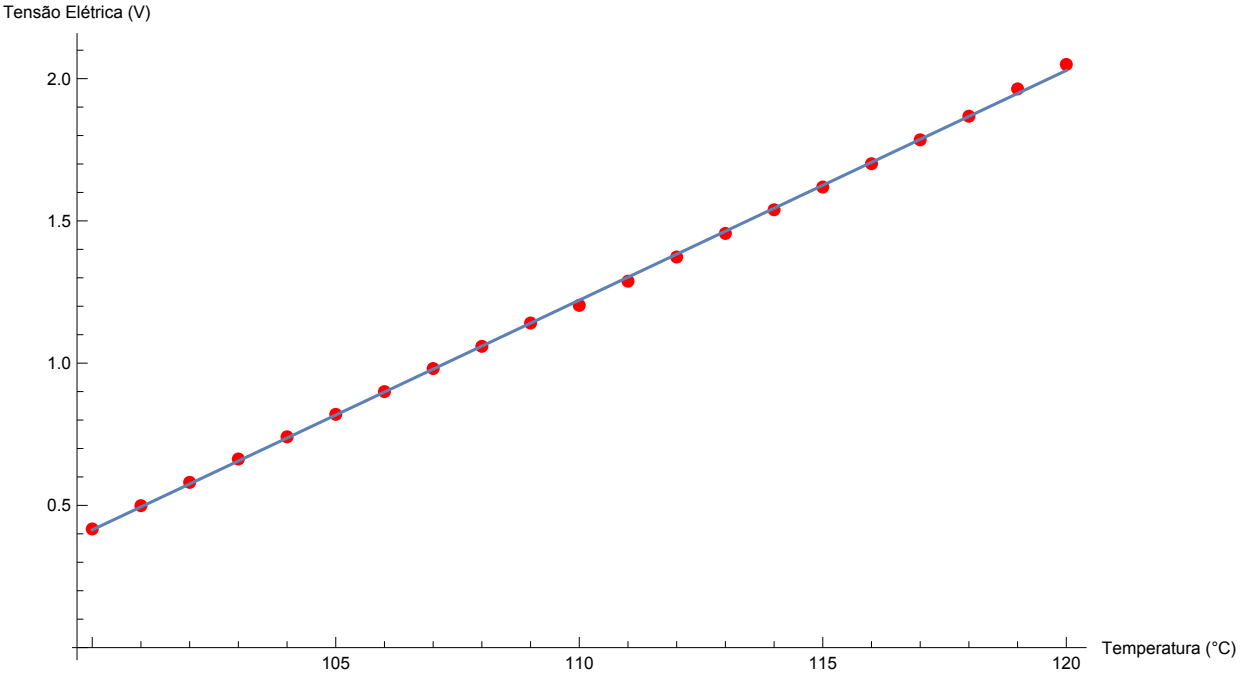
```
data = {{100, 0.417}, {101, 0.499}, {102, 0.581}, {103, 0.663}, {104, 0.741},
    {105, 0.82}, {106, 0.9}, {107, 0.981}, {108, 1.059}, {109, 1.141}, {110, 1.203},
    {111, 1.288}, {112, 1.373}, {113, 1.456}, {114, 1.539}, {115, 1.619},
    {116, 1.701}, {117, 1.785}, {118, 1.868}, {119, 1.964}, {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]]]}],
    AxesLabel → {"Temperatura (°C)", "Tensão Elétrica (V)"}
   ];
Show[tf, ImageSize → Full]
Export[NotebookDirectory[] <>
    "Images/Temperatura/ConditionatedTransferFunction.pdf", tf];
```

```
V[T] = -7.66095 + 0.0807481 T
```

```
R^2 = 0.999955
```



In[1927]:=

```
Export[NotebookFileName[] <> ".pdf", EvaluationNotebook[]];
```