

```

In[98]:= data = {{18, 106.8, 107}, {20, 108.4, 108.1}, {22, 109, 108.9}, {24, 109.4, 109.6},
  {26, 110.2, 110.4}, {28, 111, 111.1}, {30, 111.9, 111.9}, {32, 112.7, 112.5},
  {34, 113.3, 113.5}, {36, 114.1, 114.2}, {38, 115, 114.9}, {40, 115.7, 115.8},
  {42, 116.6, 116.4}, {44, 117.3, 117.4}, {46, 117.9, 118.1},
  {48, 118.8, 118.8}, {50, 119.5, 119.7}, {52, 120.8, 120.6}, {54, 121.1, 121},
  {56, 121.7, 121.7}, {58, 122.7, 123}, {60, 123.4, 123.3}, {62, 124.4, 124.1},
  {64, 124.8, 124.8}, {66, 125.4, 125.5}, {68, 126.3, 126.3},
  {70, 127, 126.8}, {72, 128, 127.9}, {74, 128.6, 128.5}, {76, 129.1, 129.3}};
separated = Join[data[[All, {1, 2}]], data[[All, {1, 3}]]];

model = LinearModelFit[separated, T, T]

plot = Show[
  Plot[model[T], {T, Min[data[[All, 1]]], Max[data[[All, 1]]]}],
  ListPlot[separated, PlotStyle -> {Red}],
  AxesLabel -> {"Temperatura (°C)", "Resistência elétrica (Ω)"}
]
Export[NotebookDirectory[] <> "Images/Pt100-Experimental.pdf", plot];

data = {{18, -20.9, -21.2}, {20, -19.9, -20.1}, {22, -17.4, -18.6},
  {24, -16.2, -16.7}, {26, -15.9, -16.2}, {28, -14, -13.7},
  {30, -13.3, -13.3}, {32, -11.5, -11.4}, {34, -10.7, -10.8},
  {36, -9.2, -9}, {38, -8.1, -8.2}, {40, -6, -6.7}, {42, -5.3, -4.4},
  {44, -4.3, -4}, {46, -2.8, -2.6}, {48, -1.5, -1.8}, {50, -0.4, -0.3},
  {52, 1, 0.8}, {54, 2.4, 1.9}, {56, 3.4, 3.5}, {58, 4.4, 4.8}, {60, 5.7, 6},
  {62, 7.2, 7.2}, {64, 8.2, 8.6}, {66, 10, 10.1}, {68, 10.8, 10.9},
  {70, 12.5, 12.3}, {72, 13.6, 13.8}, {74, 15, 15}, {76, 16.2, 15.9}};
separated = Join[data[[All, {1, 2}]], data[[All, {1, 3}]]];

model = LinearModelFit[separated, T, T]

plot = Show[
  Plot[model[T], {T, Min[data[[All, 1]]], Max[data[[All, 1]]]}],
  ListPlot[separated, PlotStyle -> {Red}],
  AxesLabel -> {"Temperatura (°C)", "Resistência elétrica (mV)"}
]
Export[NotebookDirectory[] <> "Images/Pt100-Experimental-Bridge.pdf", plot];

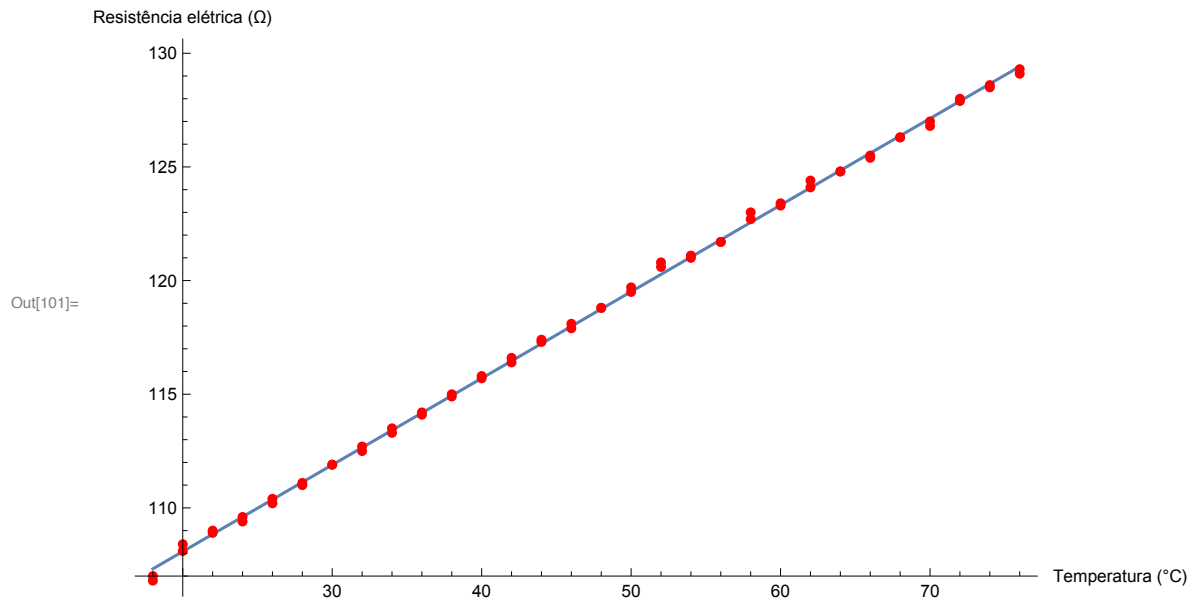
Export[NotebookFileName[EvaluationNotebook[]] <> ".pdf", EvaluationNotebook[]];

```

```

Out[100]= FittedModel[100.46+0.38099 T]

```



Out[105]= `FittedModel` [$-32.1378 + 0.63584 T$]

