## PLots for Existing SR and MRR Values

```
import pandas as pd
In [1]:
          import matplotlib.pyplot as plt
          import seaborn as sns
In [2]: data = pd.read_excel("Inconel_Compiled_Data_New_elems.xlsx")
          sns.set(style="ticks")
In [3]:
          sns.set_style("darkgrid")
          s= sns.catplot(data = data, x = "Surface Roughness (μm)",
                             y = "Type",
                             hue = "Type",
                             aspect= 2,
                             height = 6).set(title = 'Type vs SR (Existing)')
          s.savefig("Type_vs_SR_(Existing).jpg")
                                                     Type vs SR (Existing)
             Inconel 600
             Inconel 601
           Inconel 603-XL
                        OFFICE CY
                                   ************
             Inconel 625
                                                                                                       Inconel 600
                                                                                                       Inconel 601
                                                                                                       Inconel 603-XL
             Inconel 690
                                                                                                      Inconel 625
             Inconel 706
                                                                                                       Inconel 706
                                                                                                       Inconel 718
                                                                                                       Inconel X-750
Inconel 800
             Inconel 718
                         AND THE SHOULD WAY TO BE
                                                                                                       Inconel 825
                         25409. ... Yes 51 1
            Inconel X-750
             Inconel 800
             Inconel 825
                                         10
                                                    20
Surface Roughness (μm)
          s= sns.catplot(data = data, x = "MRR (mm3/min)",
In [4]:
                         y = "Type",
                         hue = "Type",
                         aspect= 2,
                         height = 6).set(title = 'Type vs MRR (Existing) on Log Scale')
          plt.xscale('log')
          s.savefig("Type_vs_MRR_(Existing)_log_scale.jpg")
```