**SiO₂**

- **calibration range**
  - 0-100 wt. %

- Linear regression equation:
  - \( y = 0.9987x + 0.25 \)
  - \( R^2 = 0.9999 \)
  - \( n = 130 \)
  - SEE = 0.220

- **SiO₂** measured concentration vs reference value
  - Linear regression equation:
    - \( y = 0.9909x + 0.62 \)
    - \( R^2 = 0.9988 \)
    - \( n = 130 \)
  - SEE = 0.654

- **SiO₂** measured concentration vs reference value (less NIST-694)
  - Linear regression equation:
    - \( y = 0.9997x + 0.25 \)
    - \( R^2 = 0.9999 \)
    - \( n = 130 \)
  - SEE = 0.490 wt. %

- Calibration range: 0-100 wt. %

- Reference value: NIST-694
\[ y = 8.5118x^{0.657} \]
\[ R^2 = 0.1141 \]

\[ y = 1.2532x^{0.638} \]
\[ R^2 = 0.0449 \]

\[
\text{SiO}_2
doped
\]

\[
\text{norm'd}
\]

\[
\text{Determina@on limit (50% RSD at } 2\sigma) \]
\[
0.2 \pm 0.1 \text{ wt%}
\]

\[
\text{SiO}_2
\]

\[
y = 20.227x^{-0.854} \]
\[ R^2 = 0.17287 \]

\[
y = 45.379x^{-1.282} \]
\[ R^2 = 0.36724 \]