

## Connector quality and its effect on measurements with screen-printed sensors (SPE)

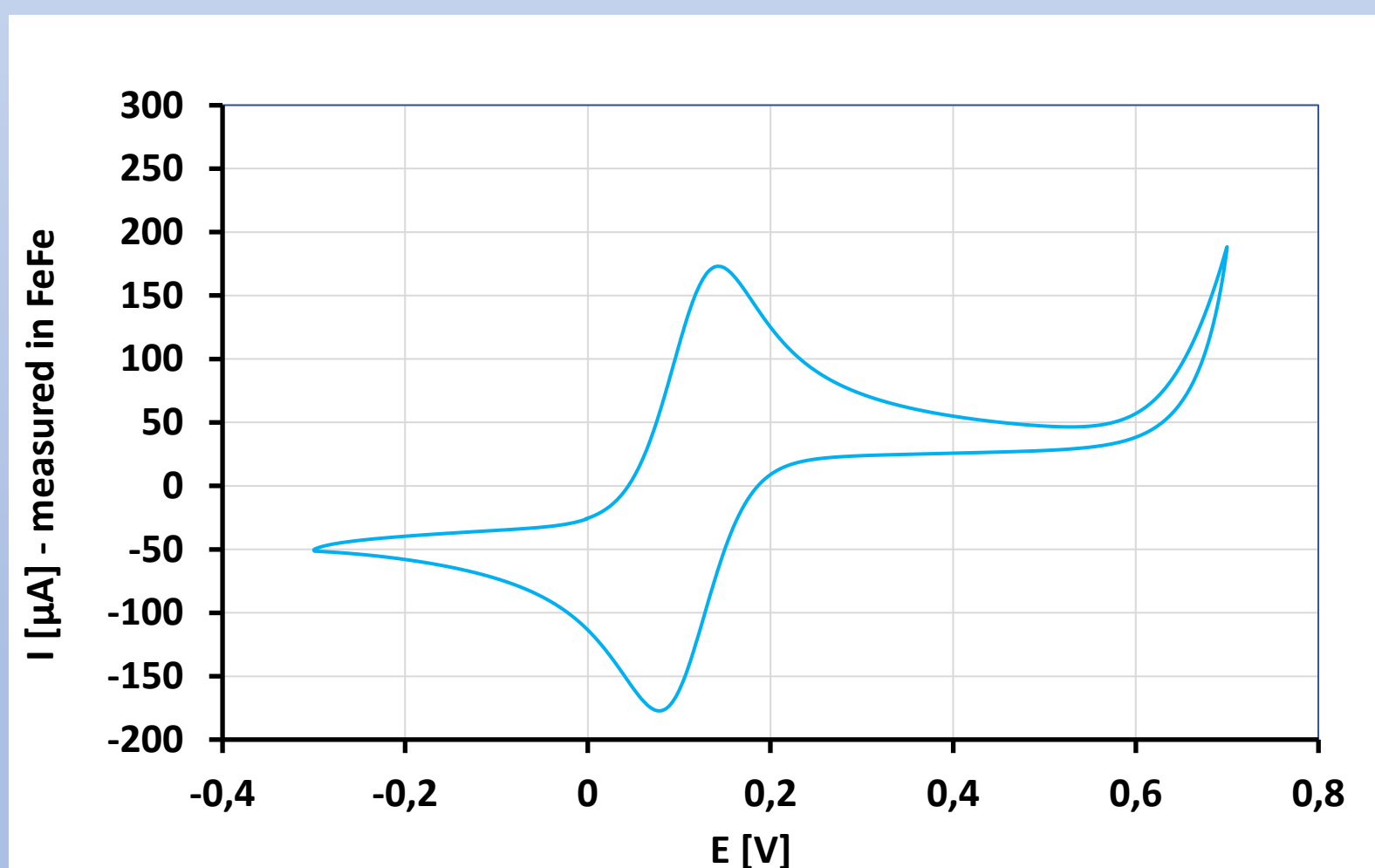
During electrochemical measurements with SPE sensors, care must be taken that liquid does not get into the KA1. connector contacts.



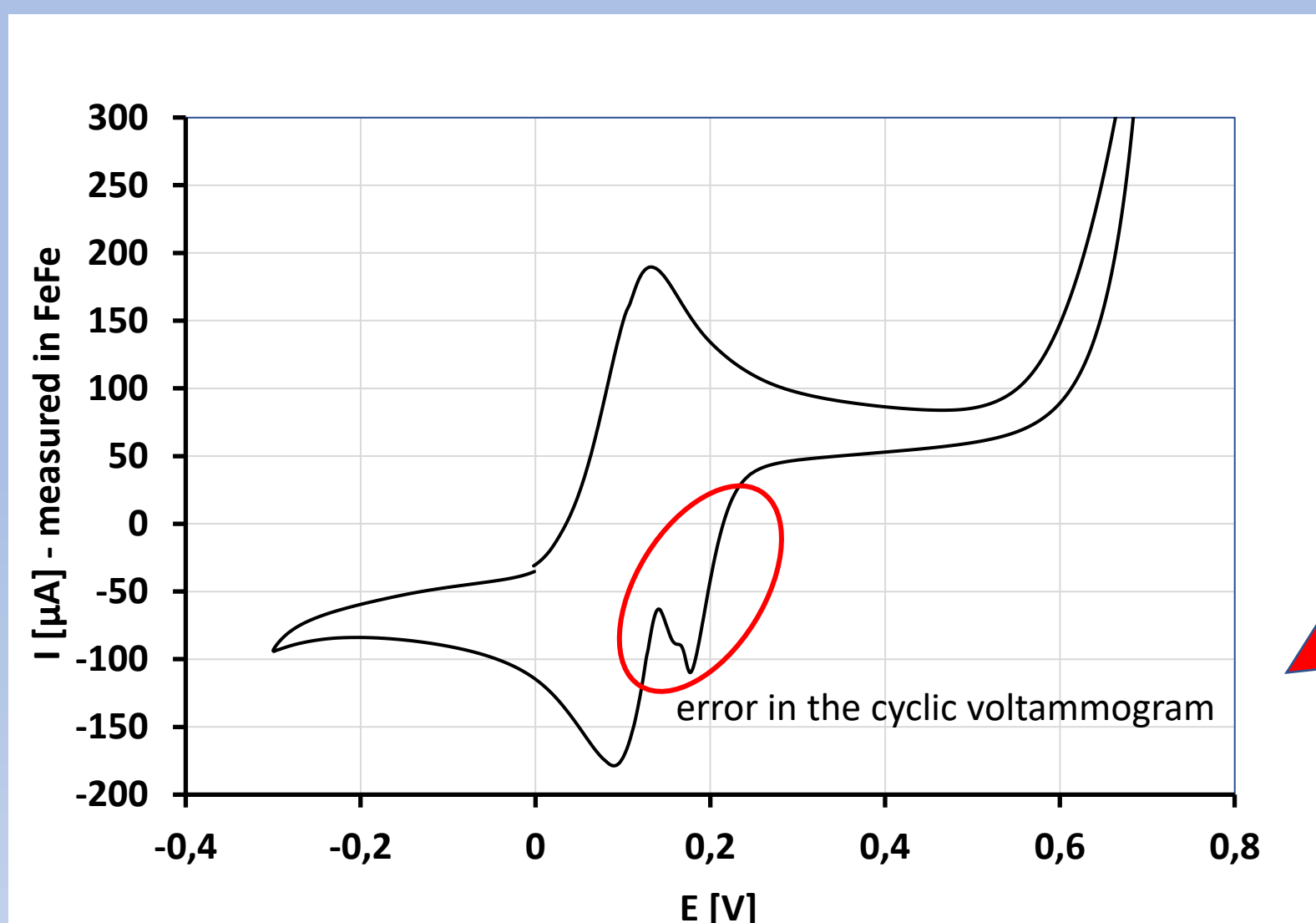
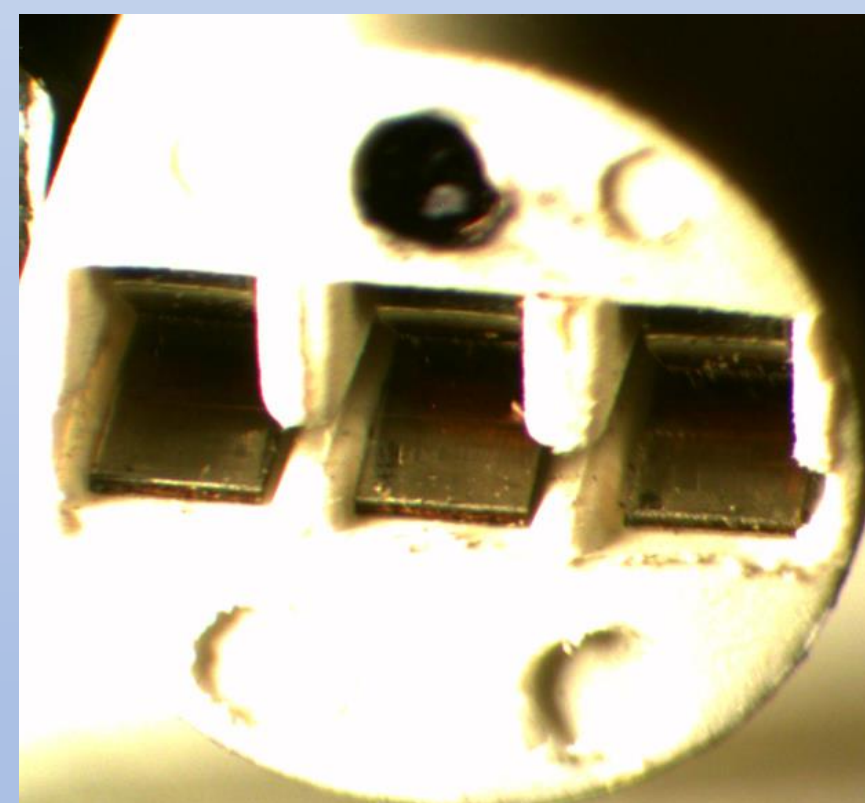
The optimal amount of solution in cell TC6 is about 6 ml

Measurements were made with the same sensor, in one case a new connector was used and in the other case a **defective connector with corroded contacts**.

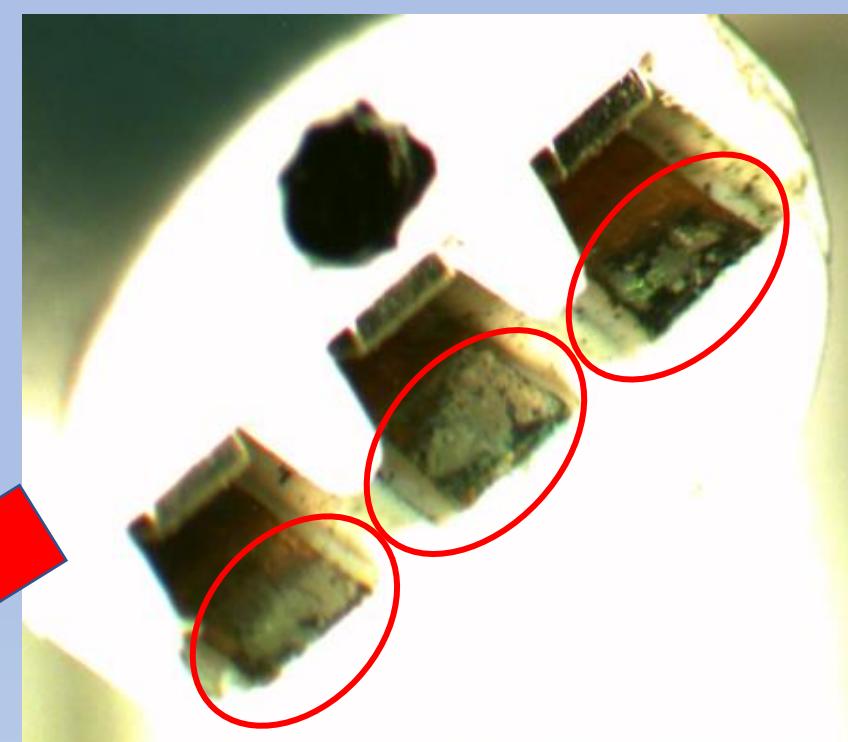
Below are examples of cyclic voltammetry measurements of AC1. SPE sensor in a solution of 0.005 M potassium ferri-ferrocyanide in 0.2 M KOH. Voltage range +700 to -300 mV, scan rate 50 mV/s. An eDAQ potentiostat with the Echem measurement program was used for the measurement.



New connector



Defective connector with corroded contacts !



Due to moisture, improper storage, etc., corrosion of the connector contacts may occur over time. Such a defective connector then affects the measured results - see graph.