Evaluation of CV-Curves

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Data courtesy of

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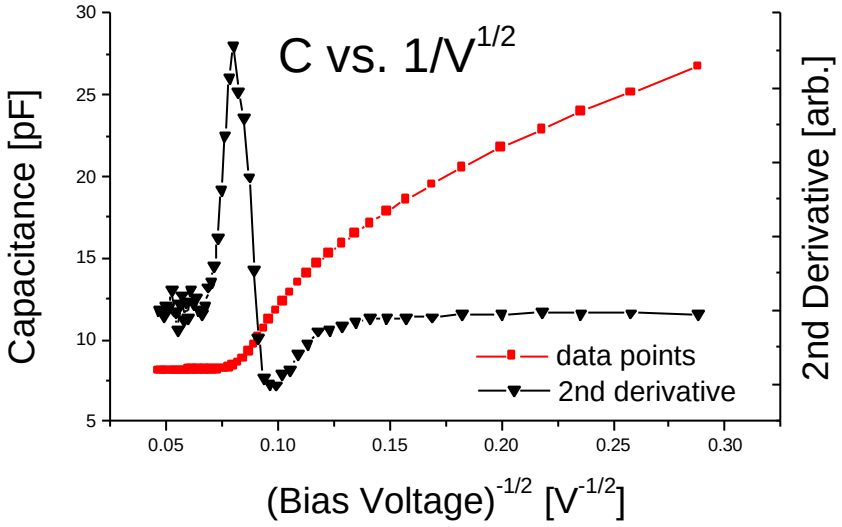
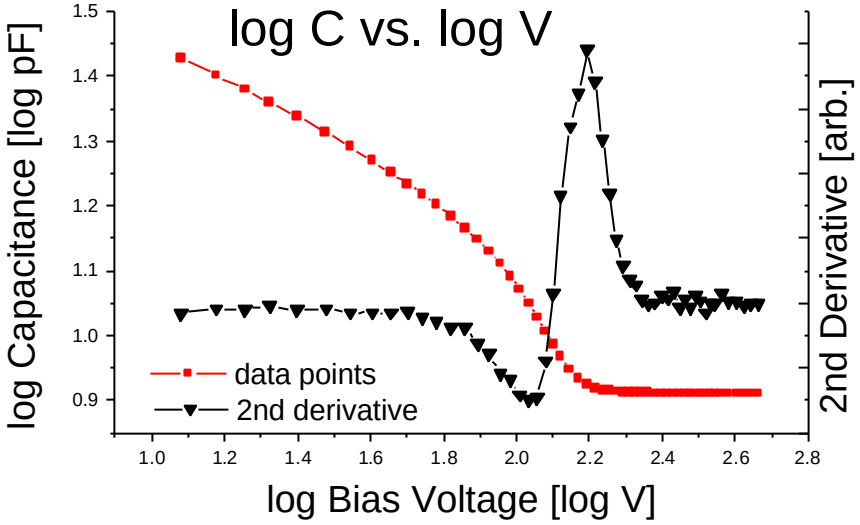
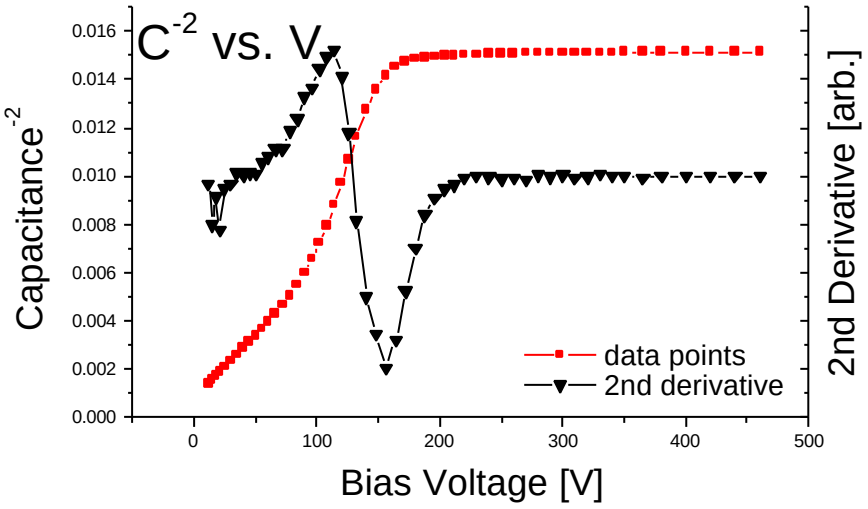
Motivation

- data set: provided by A. Chilingarov, taken on irradiated diode (fluence = 8.2E13neq/cm²) for analysis of frequency dependence
  (already shown at last ROSE-meeting and in ROSE/TN/2000-10)
- purpose: check for systematic errors in evaluation of C-V-curves with good dataset

Types of Diagrams

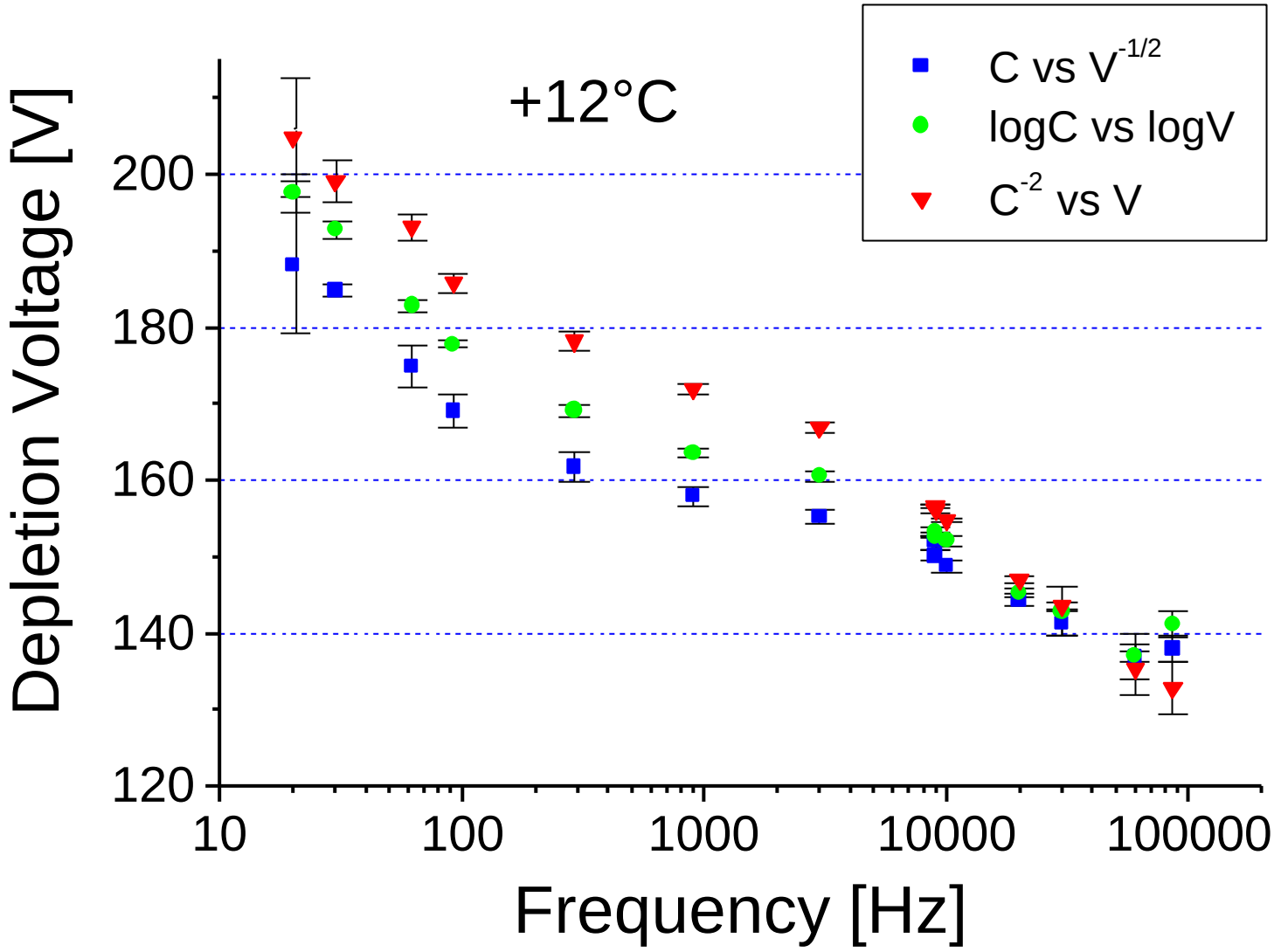




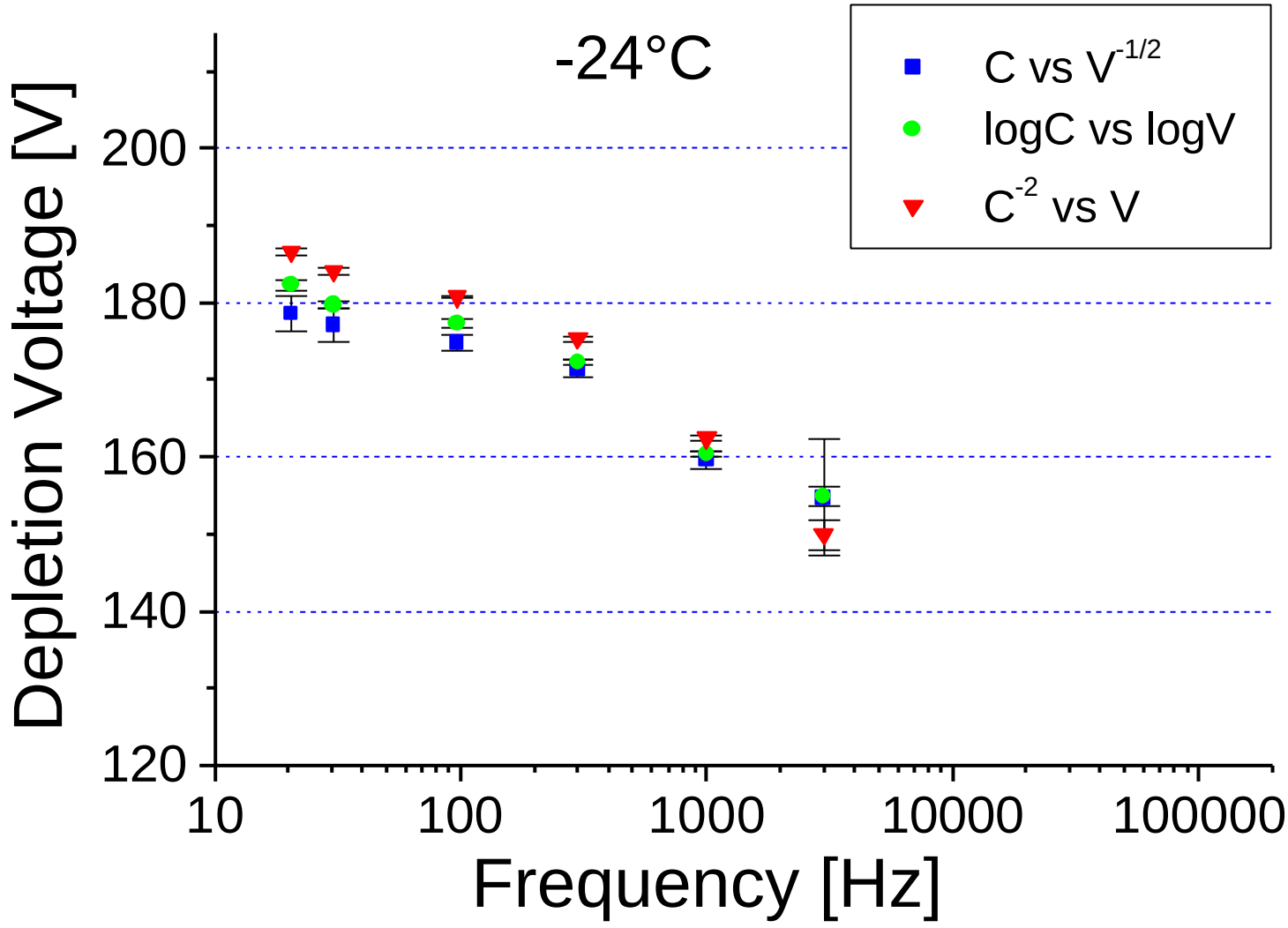


•for second derivative high resolution in V necessary

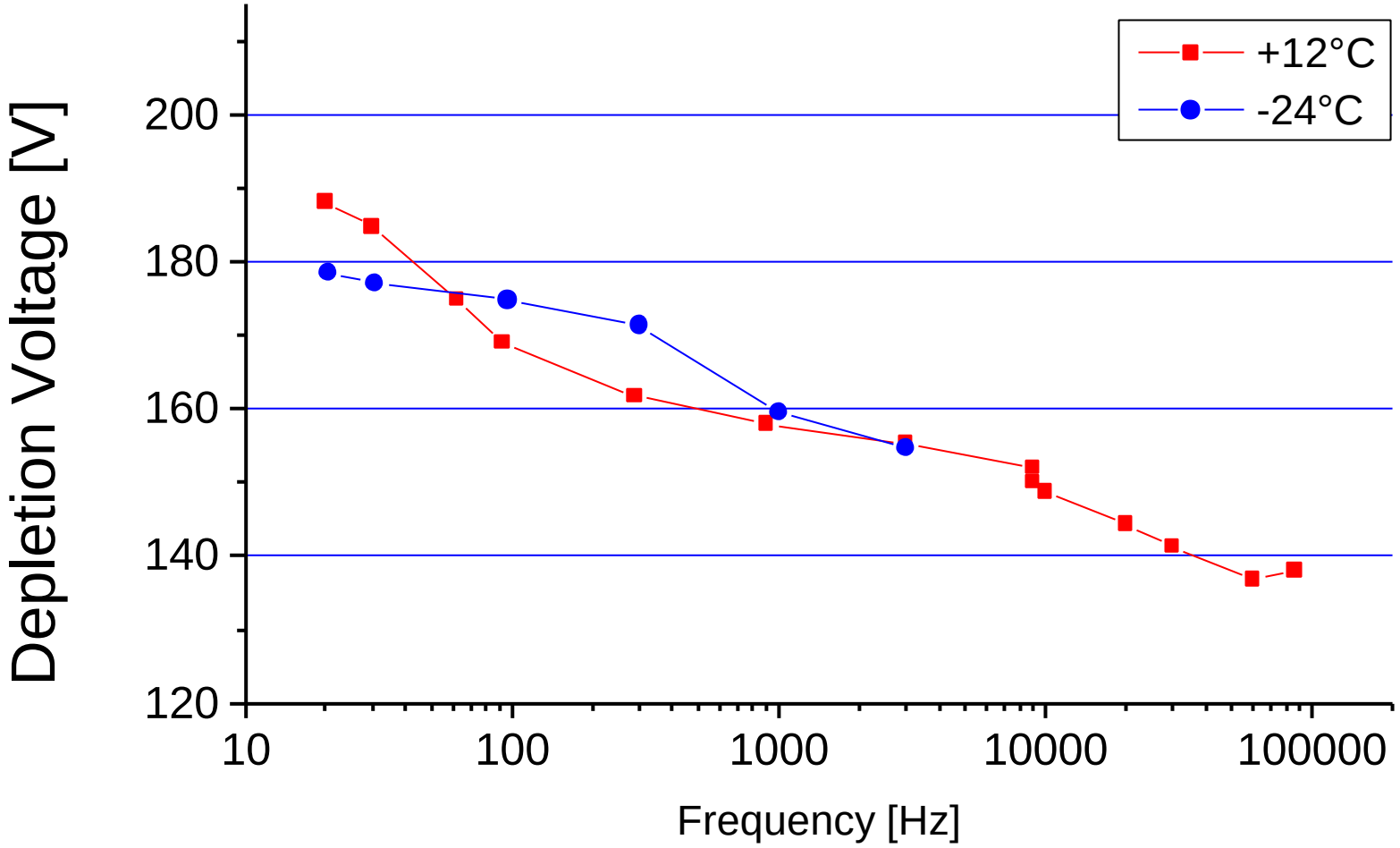
Different Frequencies and Diagrams



Different Frequencies and Diagrams



Shapes of the Frequency Dependence



Conclusions

- Standardization desired
- Proposal: 10 kHz, 10°C
  (20°C difficult for irradiated)
- comparison with charge collection measurements