



## **PMP Calibration Exercise**

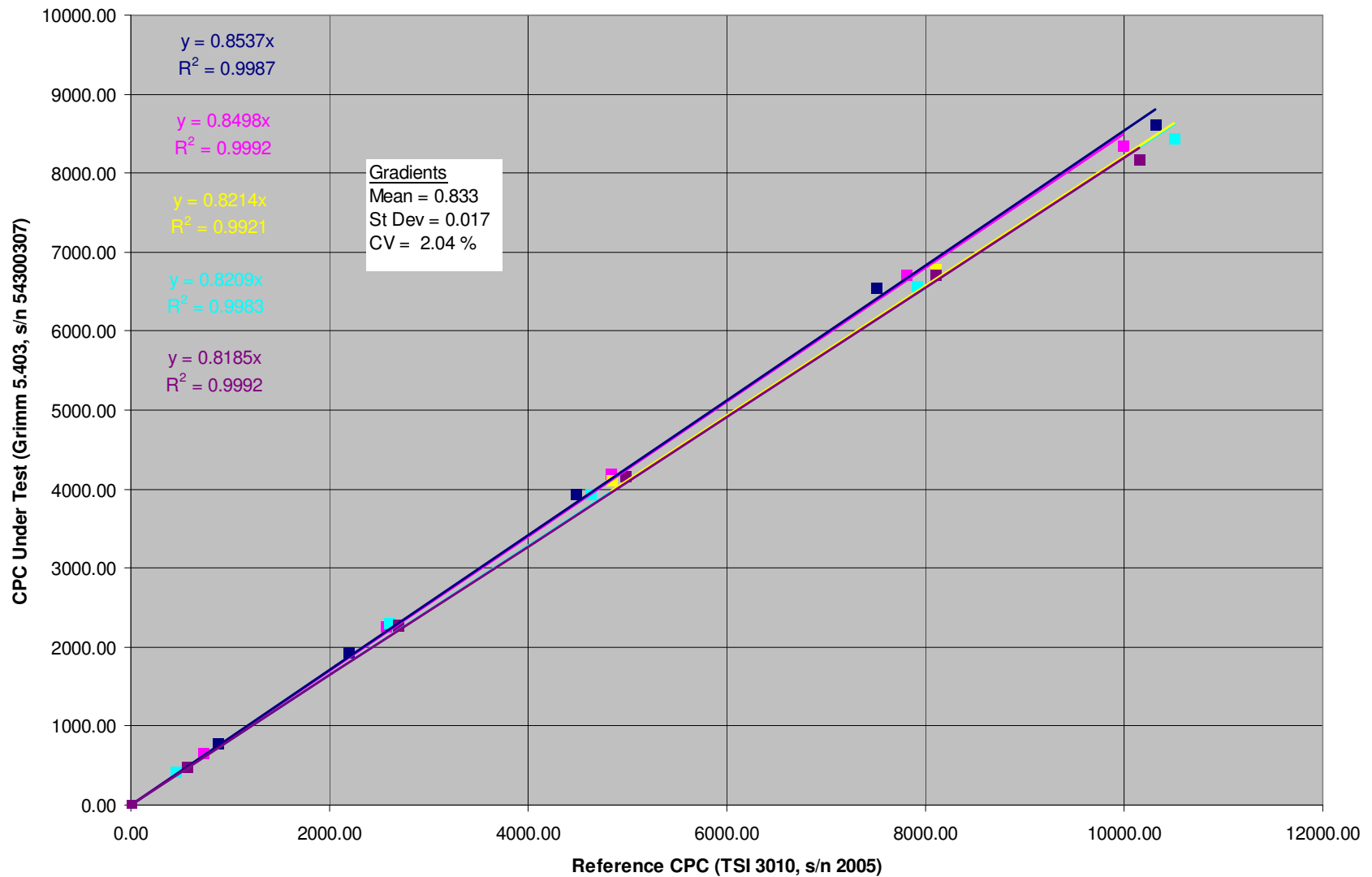
**Roger Davis, Ian Marshall, John Osbourn, Emma Sandbach & Jason Southgate**

# Overview

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- PNC Secondary Validation / PNC Lower Cut-Off Diameter Performance Check
  - Reference PNC: TSI Model 3010 s/n 2005 calibrated July 2007 by TSI
  - Test PNC: GRIMM Model 5.403 s/n 54300307
  - NaCl aerosol
  - Neutralizer installed after electrostatic classifier
  - 5 repeat determinations
- VPR Primary Calibration
  - Matter Engineering MD192E/ASET15-1 s/n 100551/100596
  - 2 PNC method
  - NaCl aerosol
  - 5 repeat determinations at 30, 50 and 100 nm

# PNC Secondary Validation



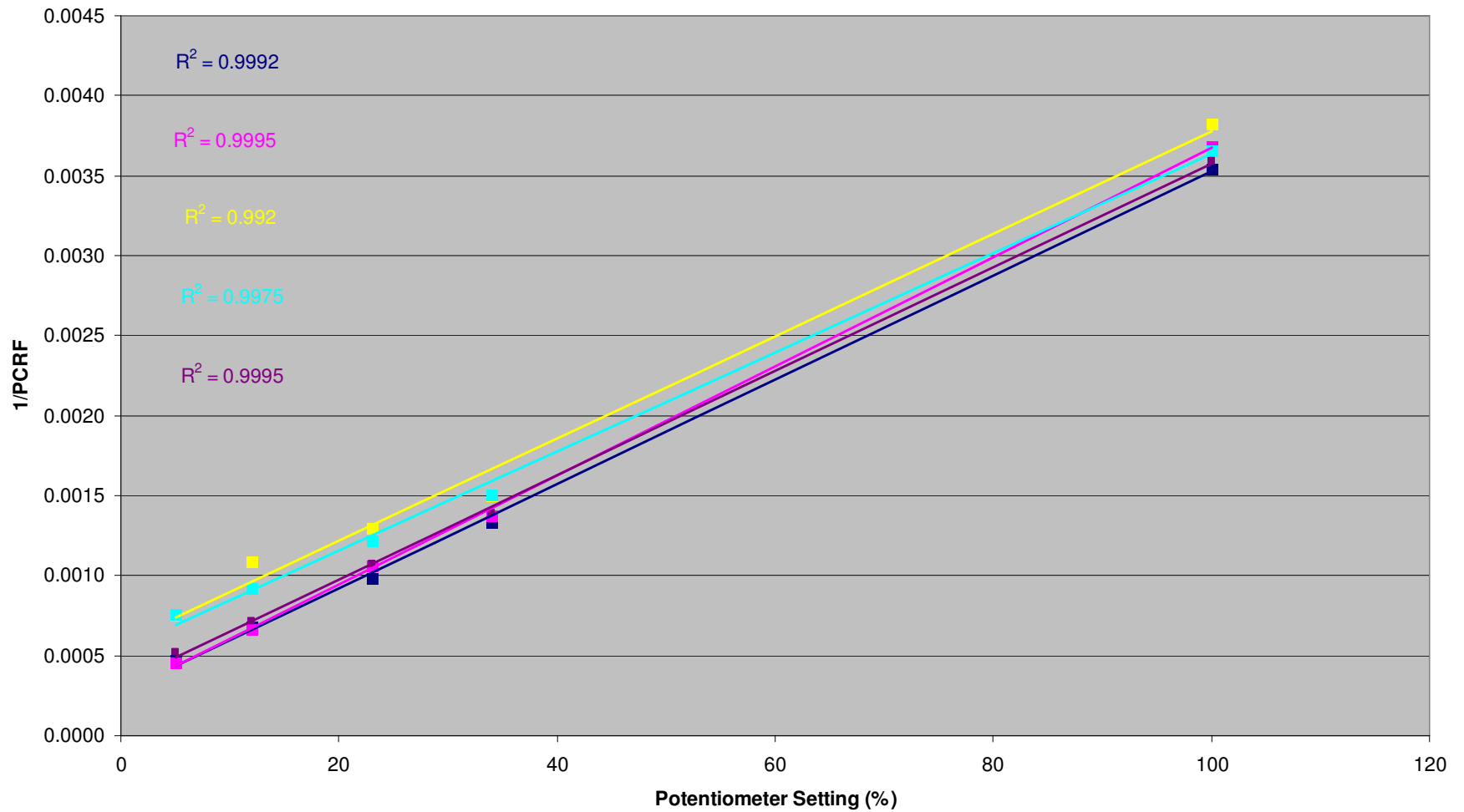
# Lower Cut-Off Diameter Performance Check

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Repeat	23 nm Detection Efficiency (%)
1	53.49
2	53.90
3	54.76
4	53.90
5	54.76

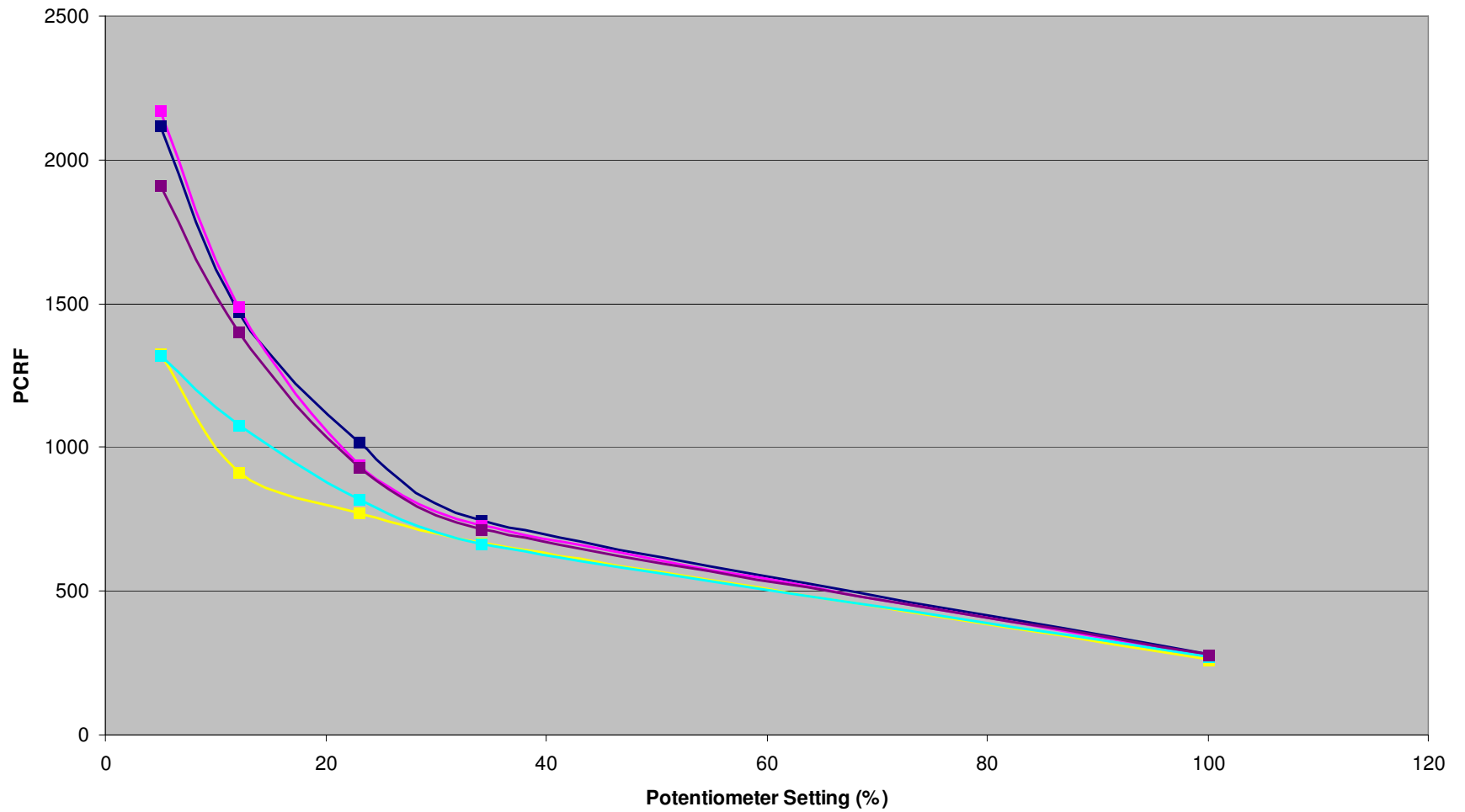
# VPR Primary Calibration

100 nm



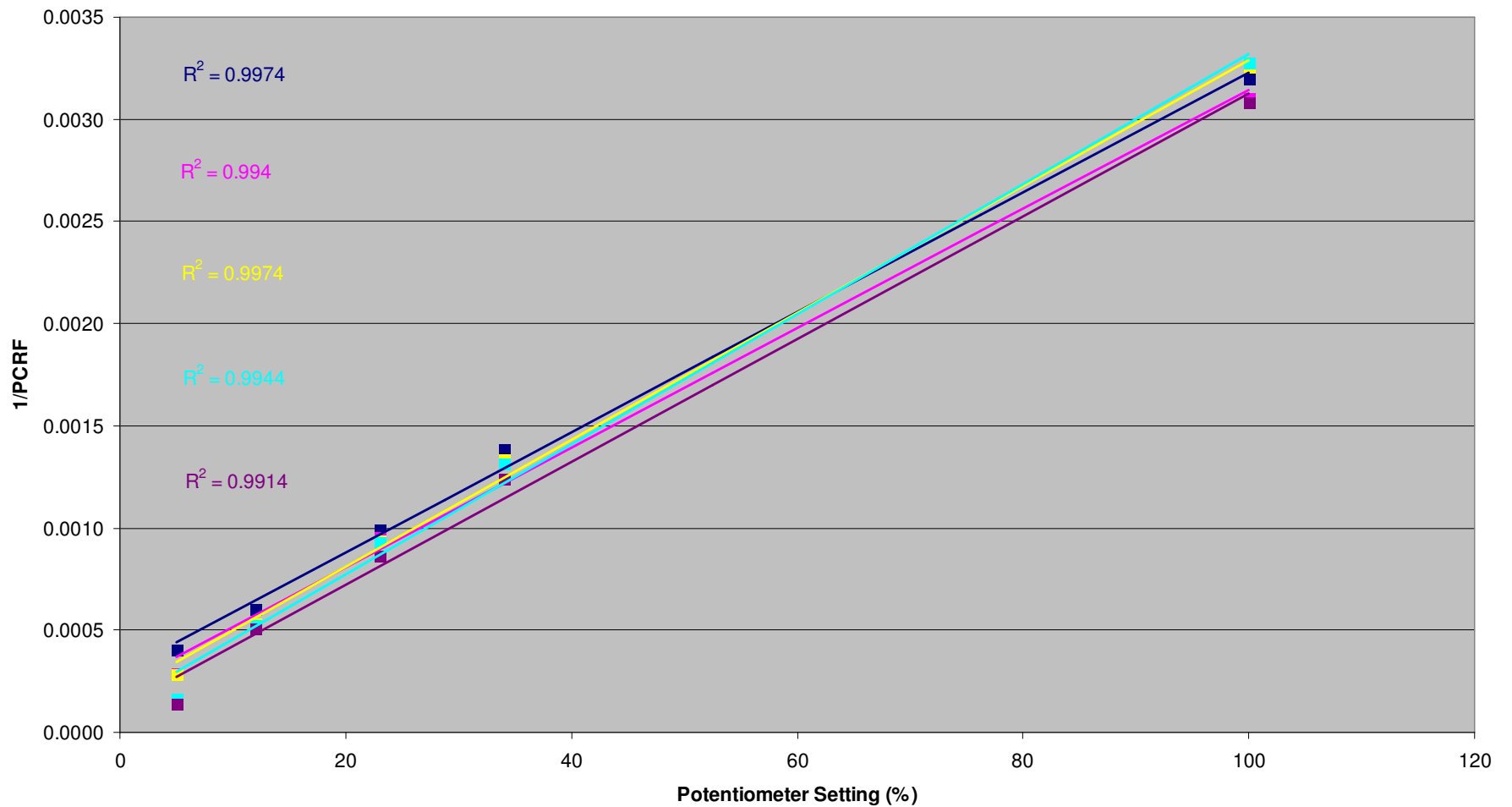
# VPR Primary Calibration

100 nm



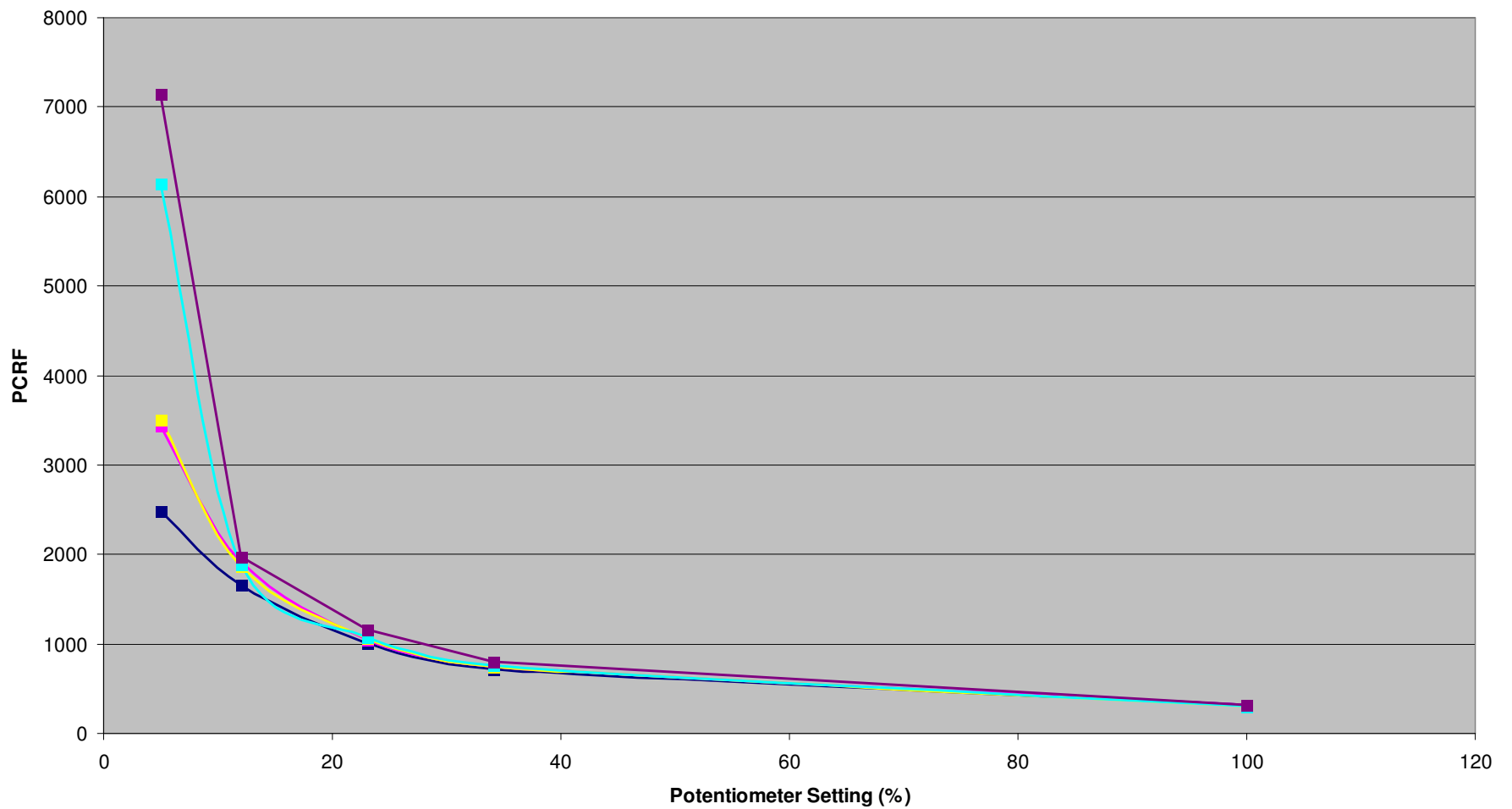
# VPR Primary Calibration

50 nm



# VPR Primary Calibration

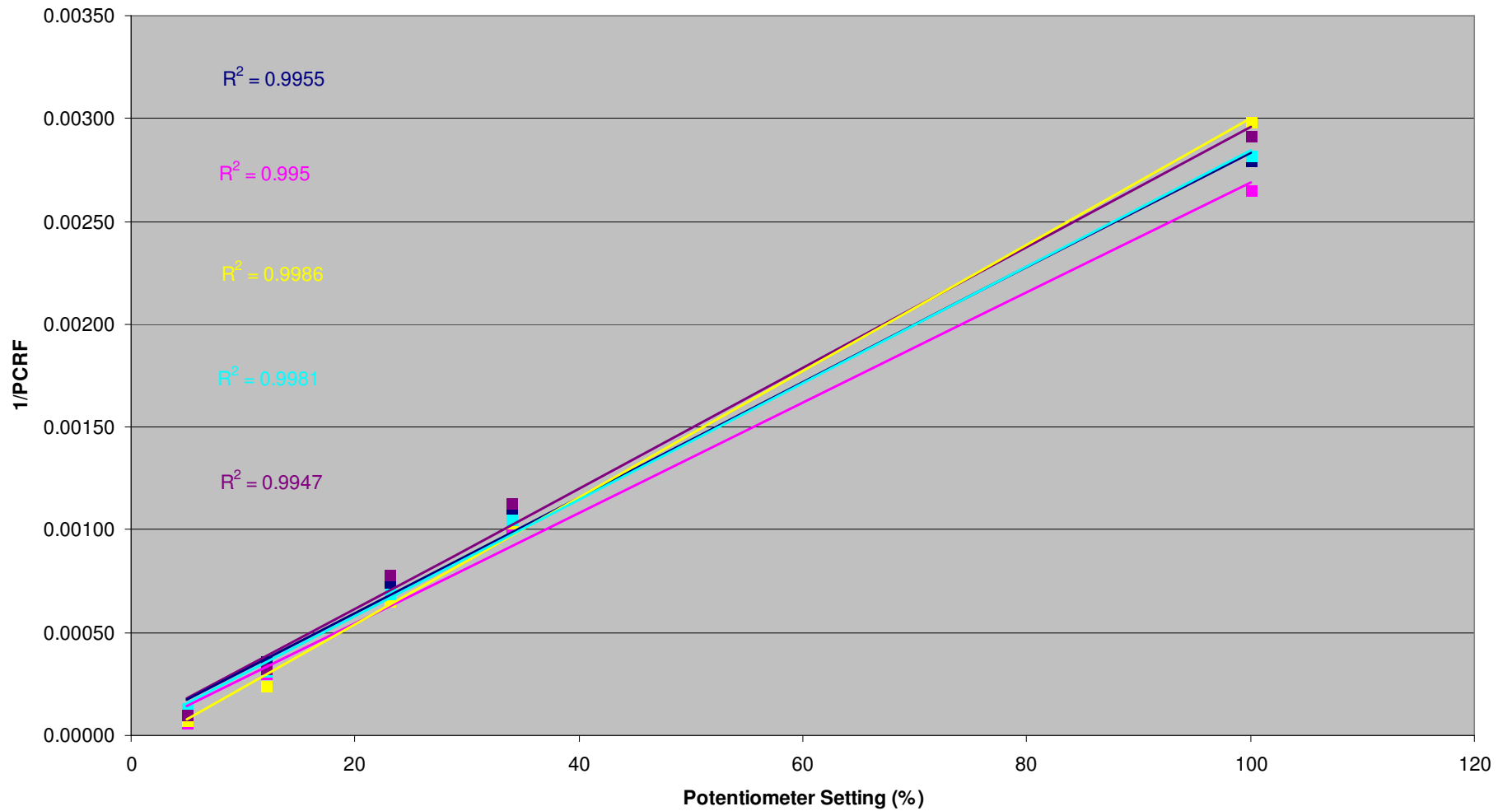
50 nm





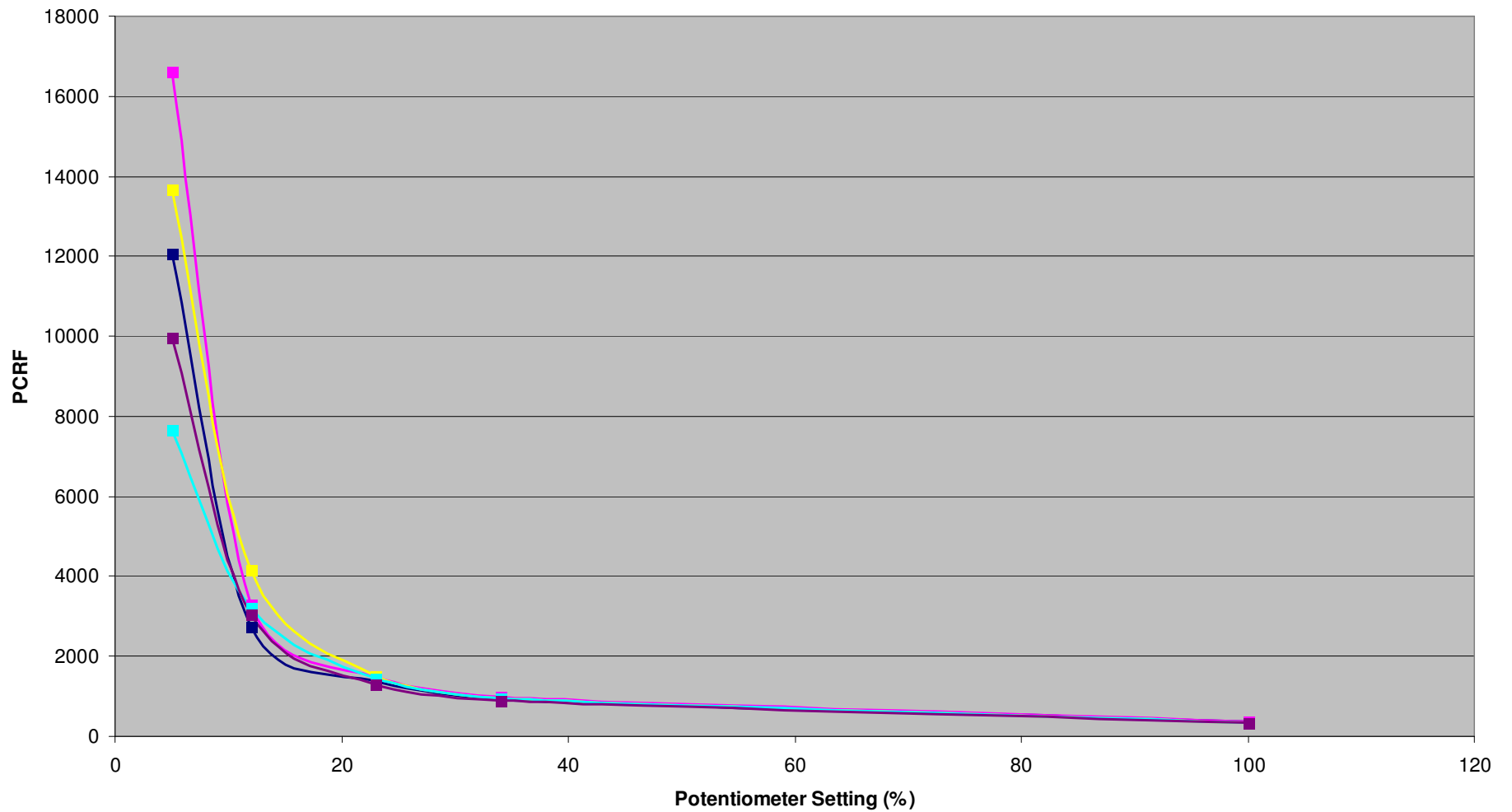
# VPR Primary Calibration

30 nm



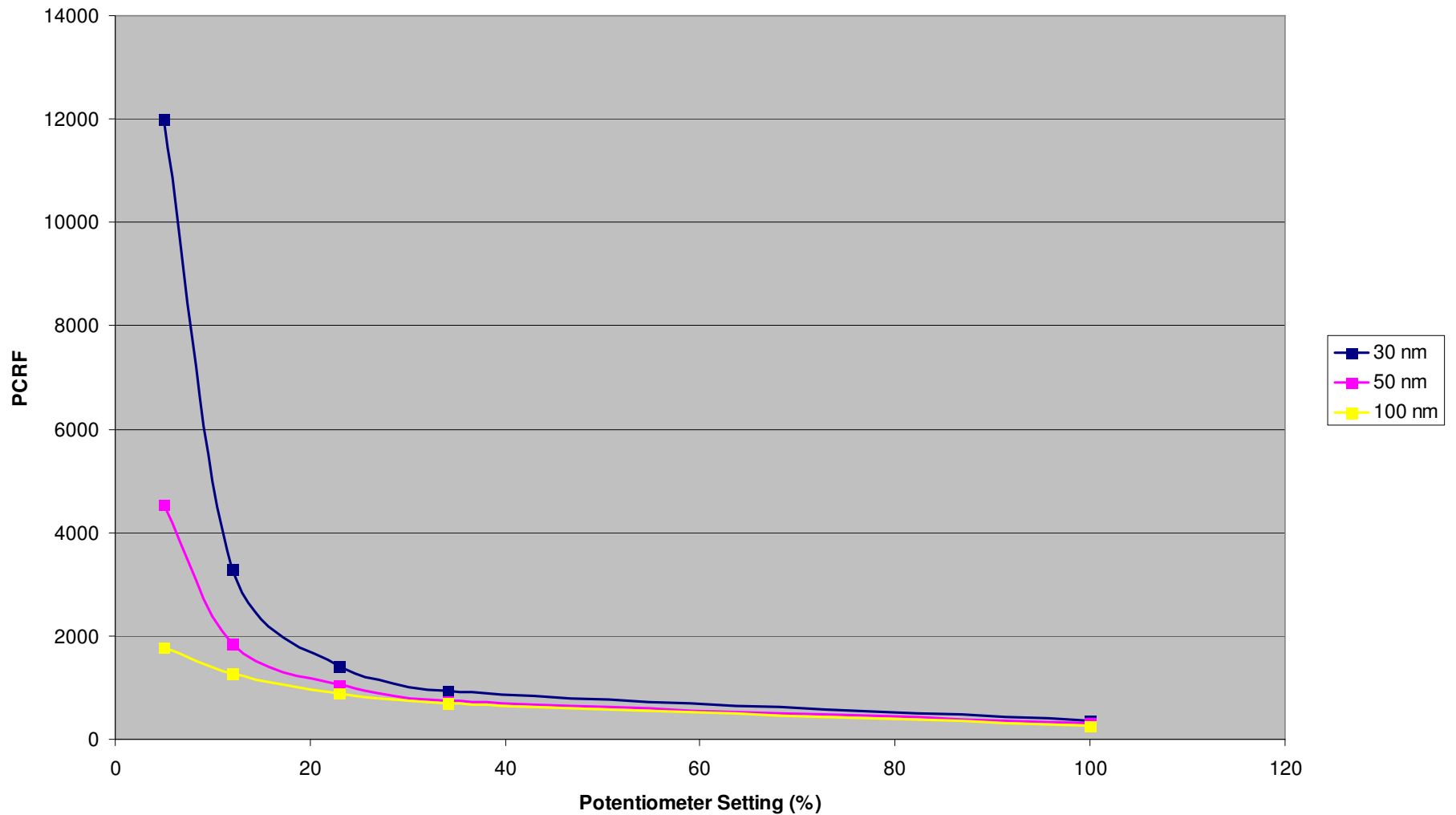
# VPR Primary Calibration

30 nm



# VPR Primary Calibration

PCRf Summary



# VPR Primary Calibration

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	Potentiometer Setting (%)				
	100	34	23	12	5
$f_{r(100\text{ nm})}/f_{r(30\text{ nm})}$	1.29	1.34	1.58	2.60	6.78
$f_{r(100\text{ nm})}/f_{r(50\text{ nm})}$	1.15	1.07	1.19	1.47	2.57