

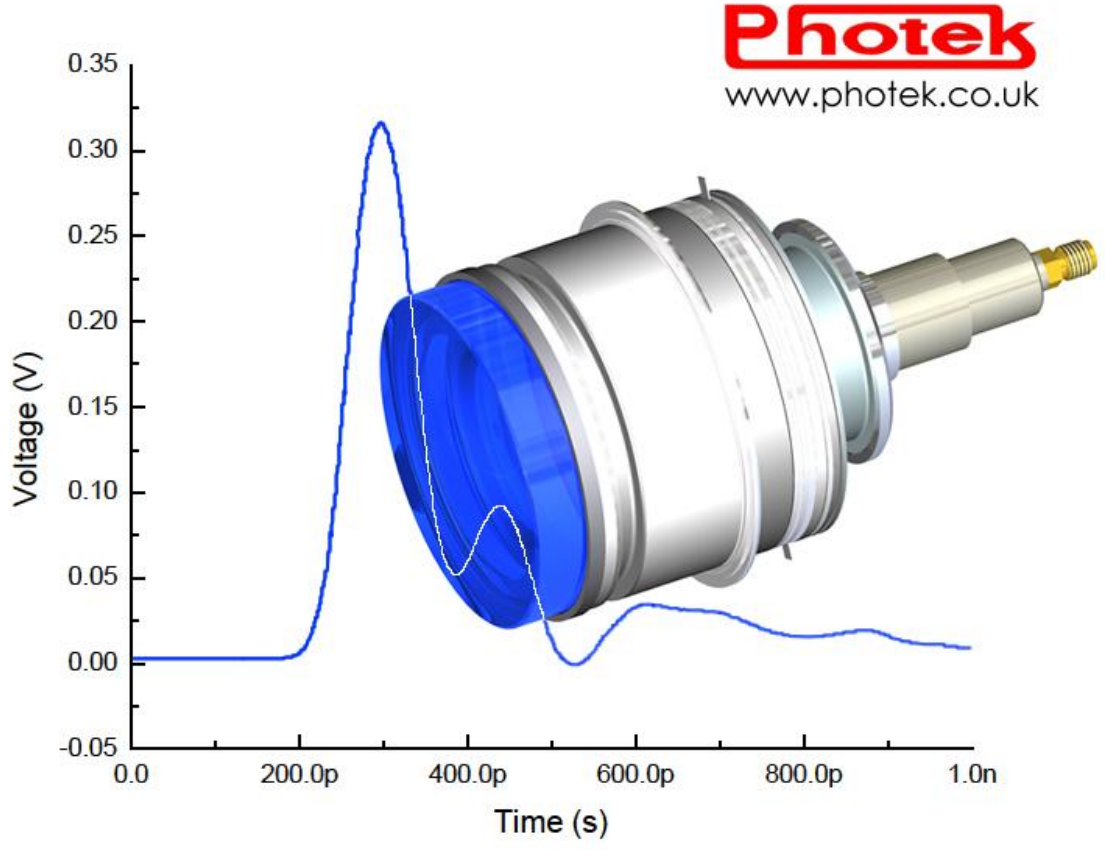
## Can Diamond Out Perform MCPs?

- J Howorth, J Milnes G Jones (Photek)
- Jon Lapington (Leicester University)
- Paul May (Bristol University)

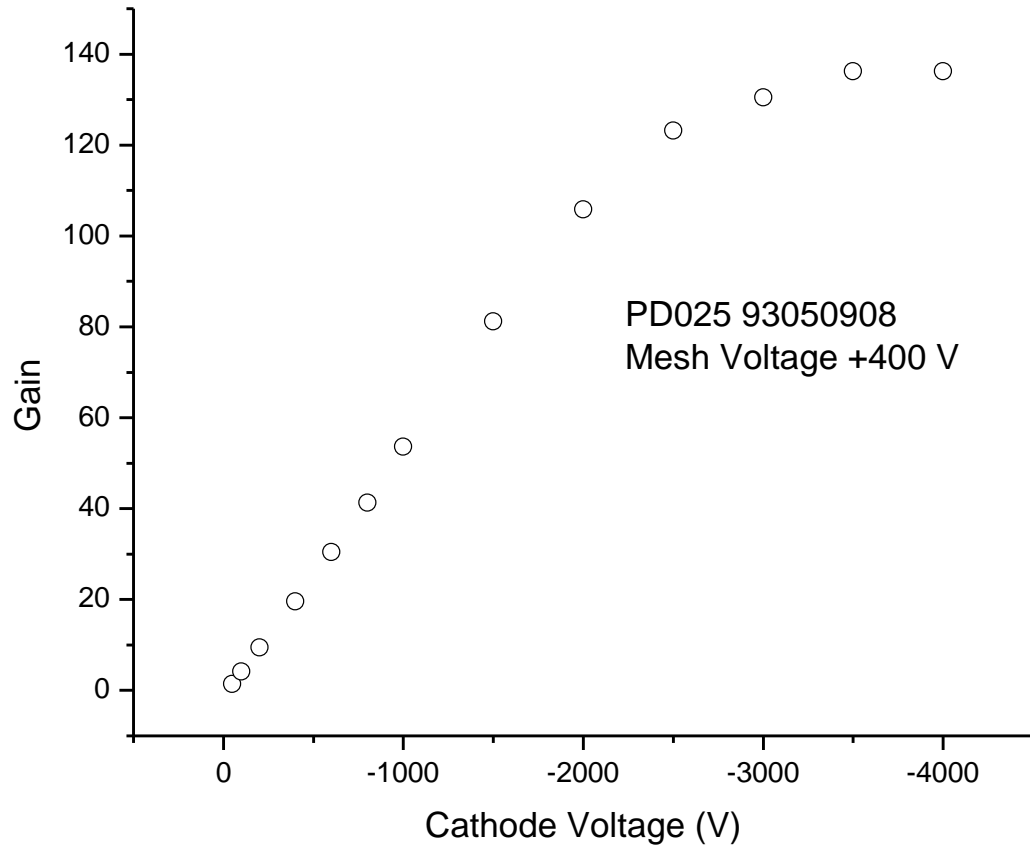
# Contents

- Results to date
- Present R&D programme
- Projected performance

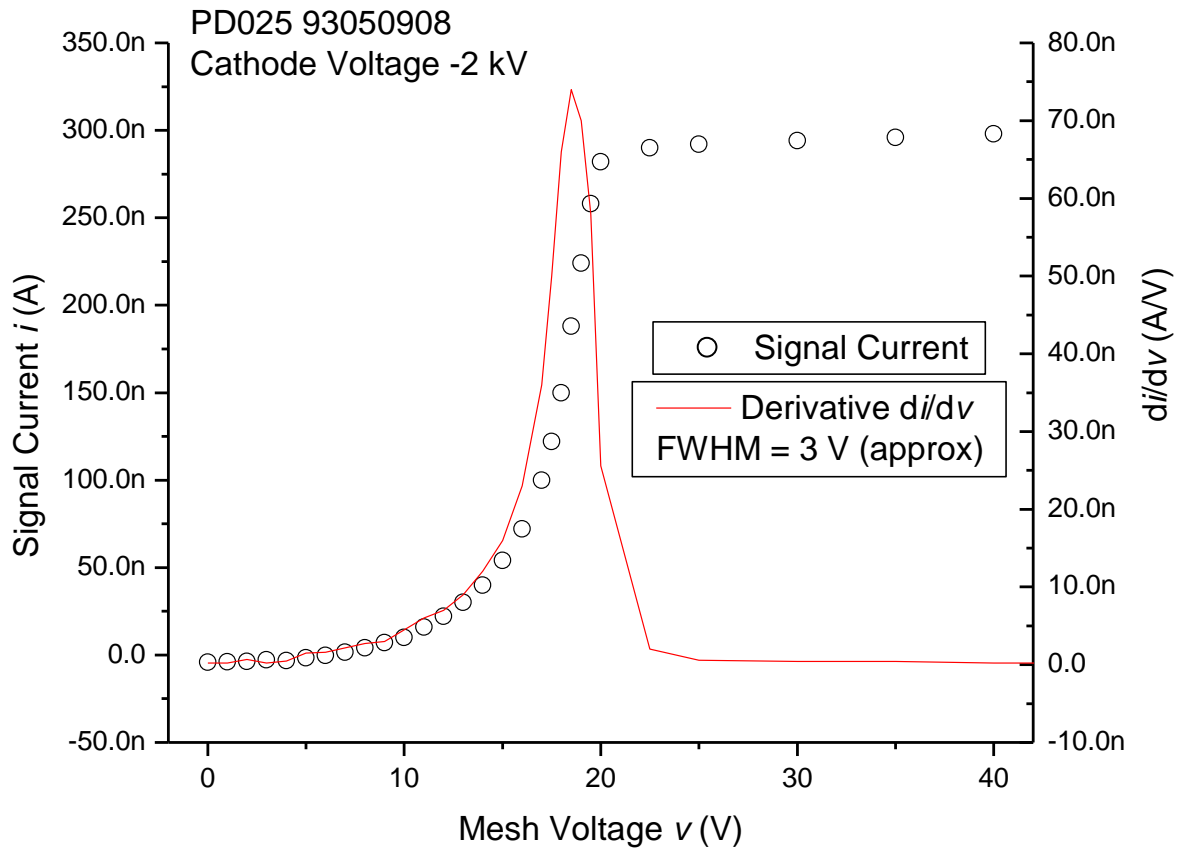
# Time Resolution



# Gain



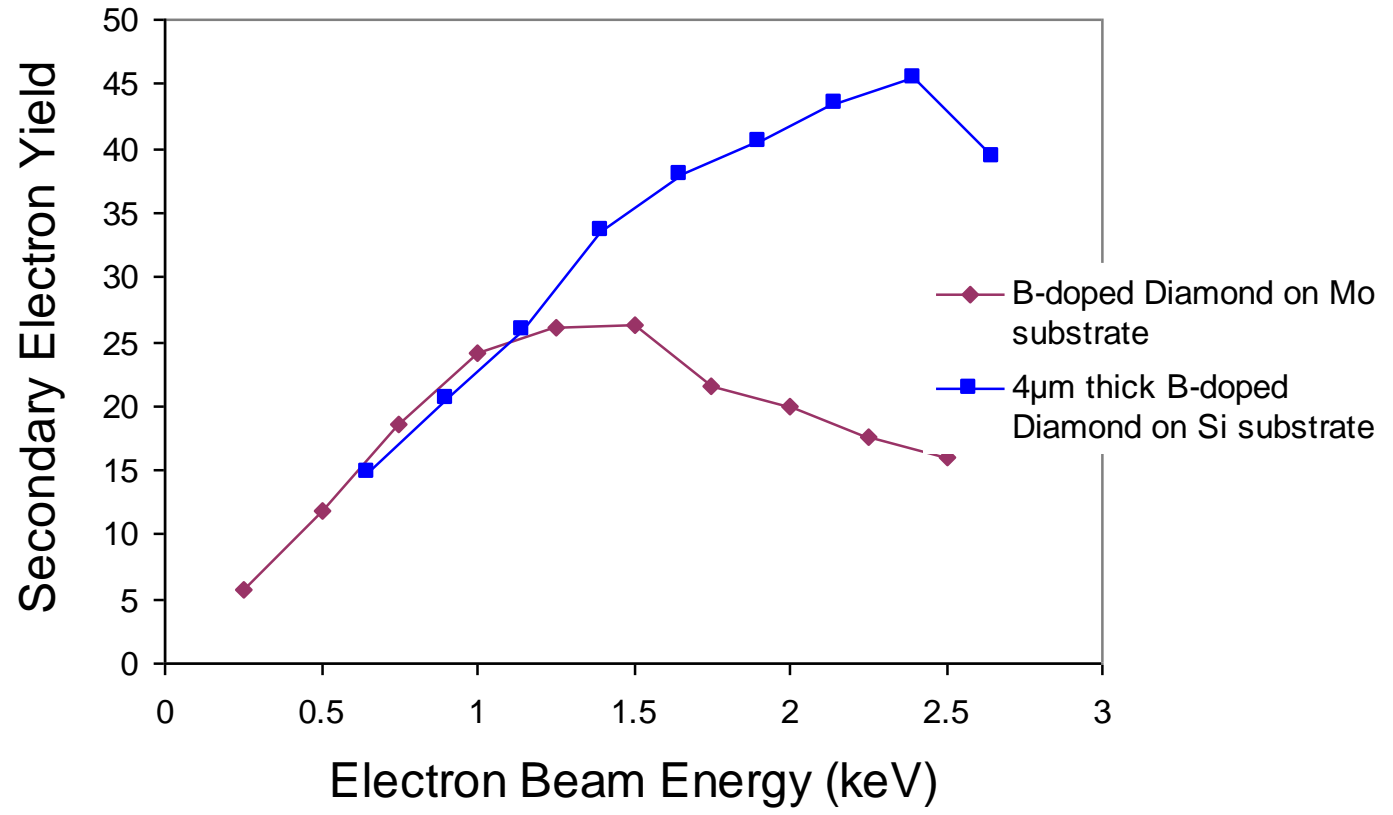
# Electron Energy Distribution

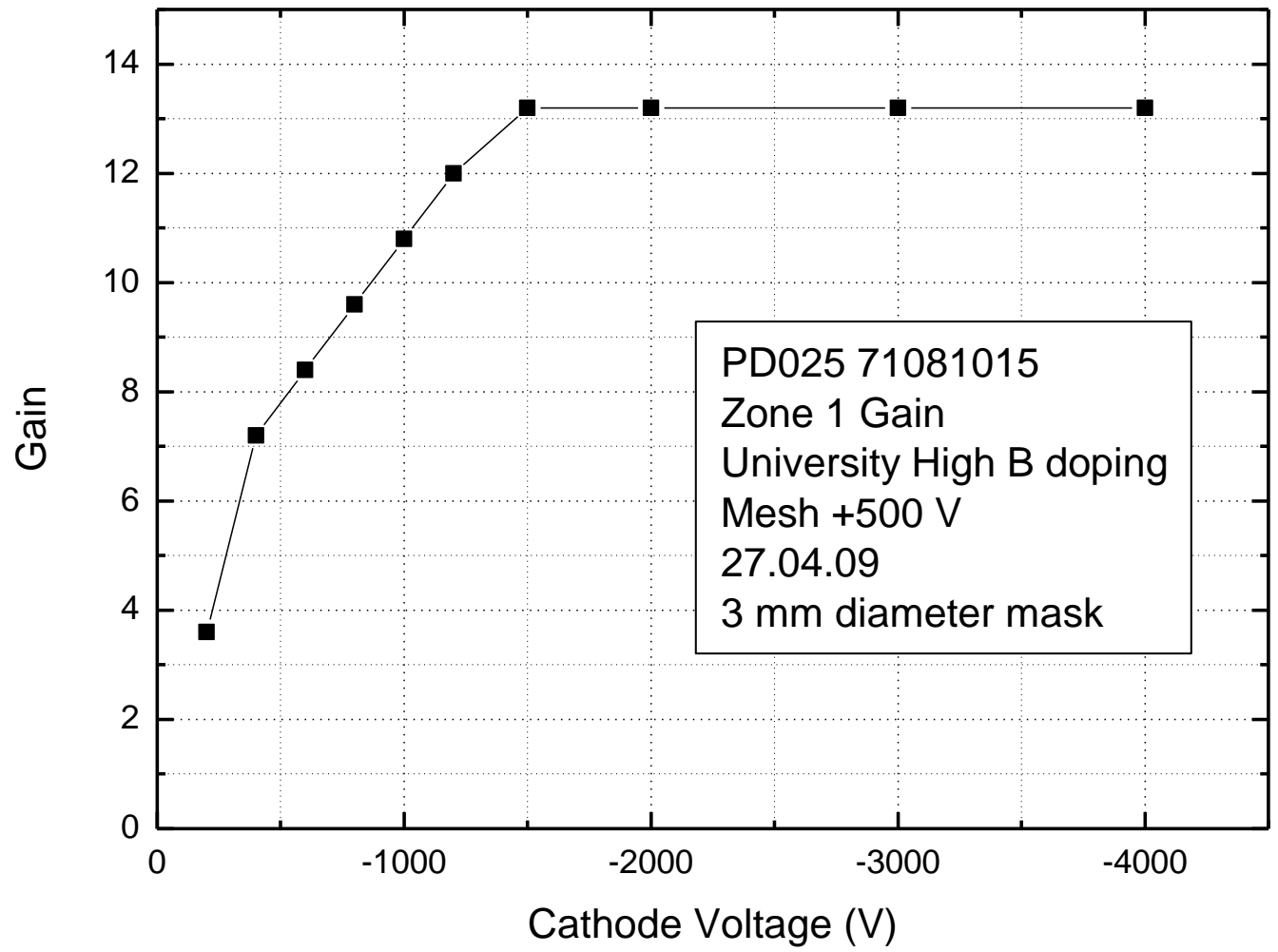


## Present R&D Programmes

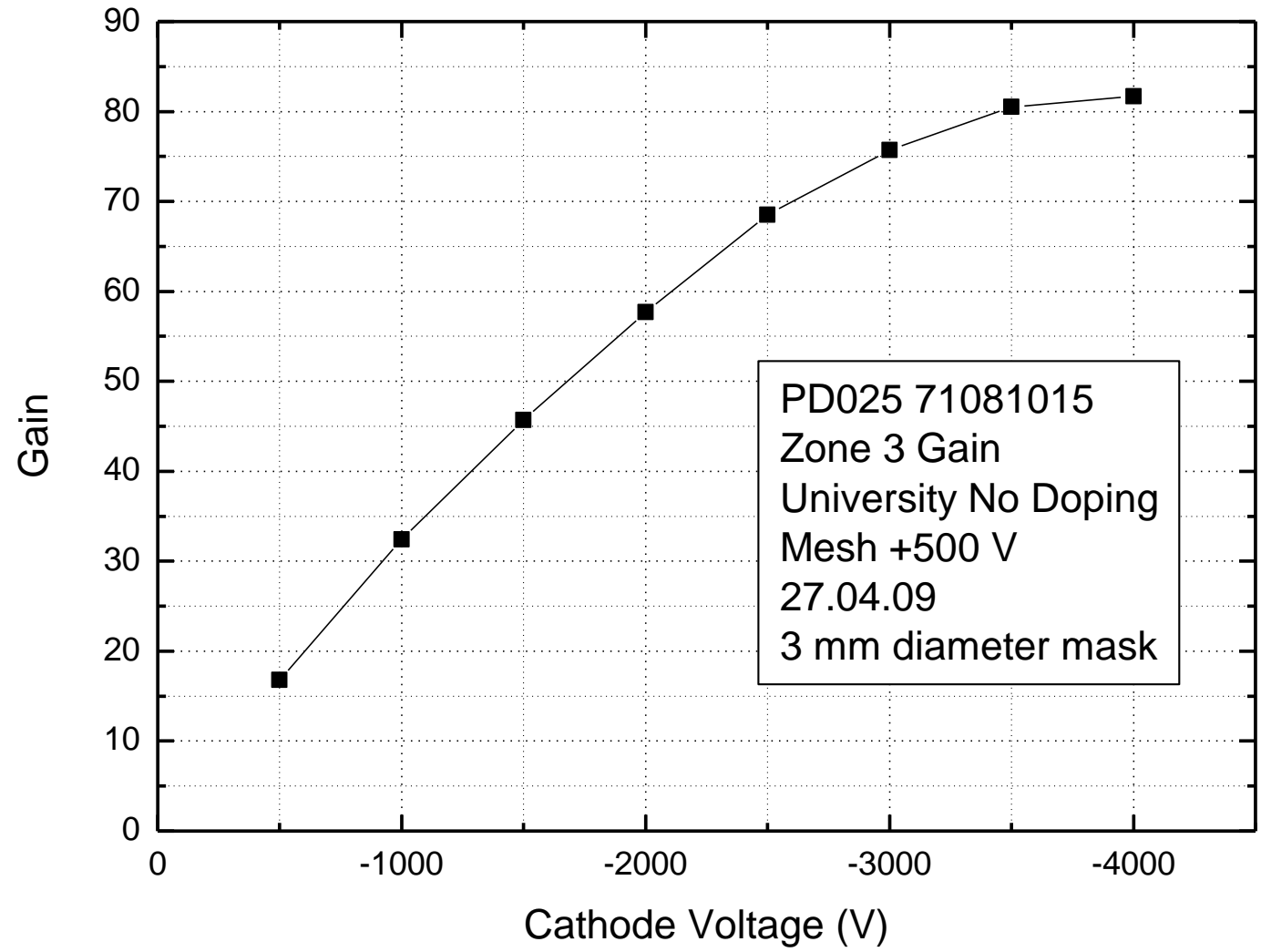
- 3 year UK government funded collaboration
  - Bristol University
  - Rutherford Appleton Labs
  - Leicester University
  - AWE
  - Photek
- University of Erlangen and Photek

# Gain on Bristol Material

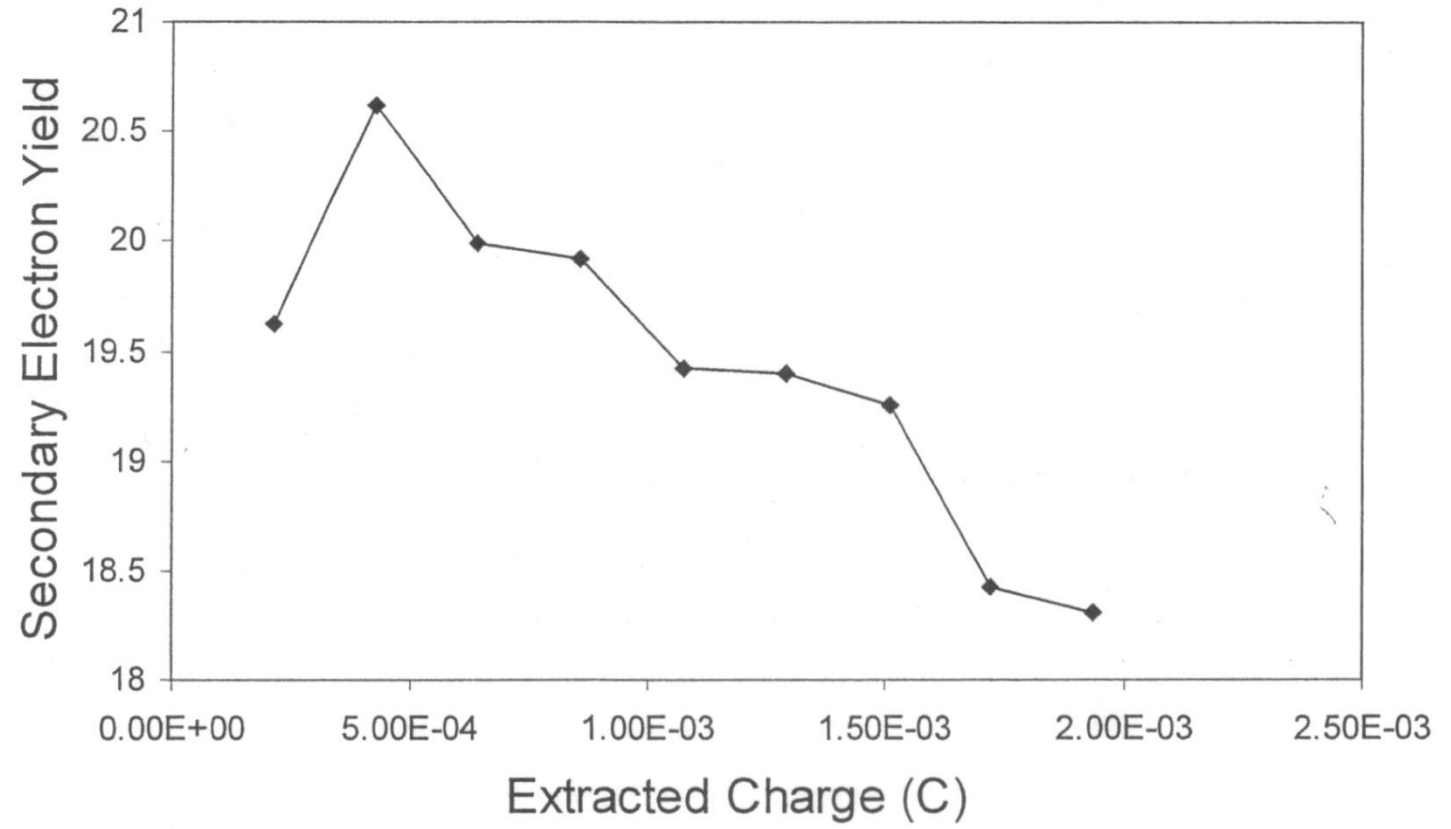




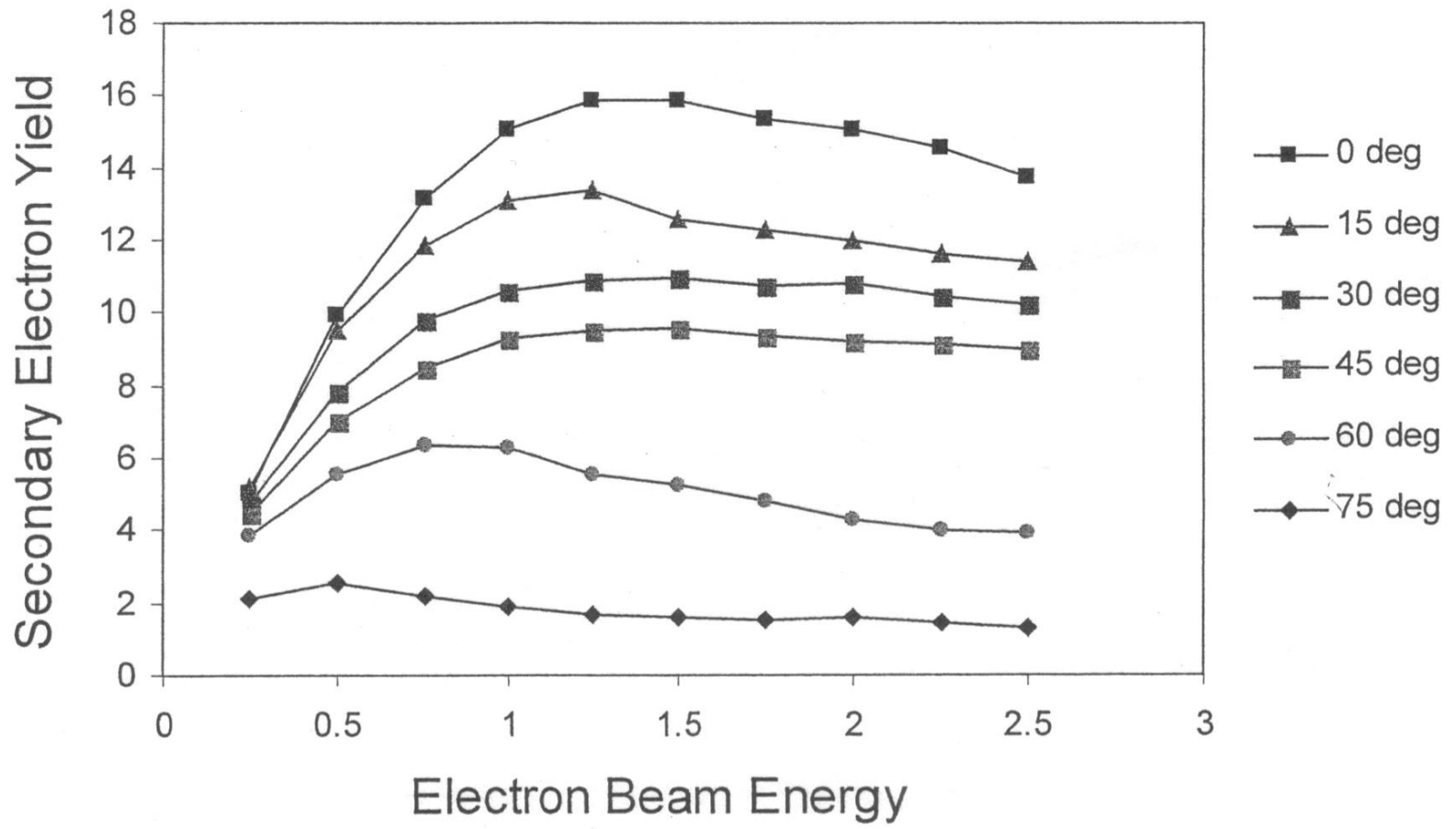




# First Life Test



# Angular Dependance



## Timing

- Projecting similar or better performance than MCP
- Results on single stage certainly better

## DQE

- Projecting better than MCP

## Lifetime

- Projecting life similar to conventional dynode photomultiplier

## Large Area

- Probably lower cost technology than MCP
- Big cost for development and scale-up

A vertical bar on the left side of the slide, consisting of a long black rectangle at the top, followed by three smaller squares: red, black, and red.

Thank you for listening