



# Queen Mary

## University of London

Dr Michal Filus

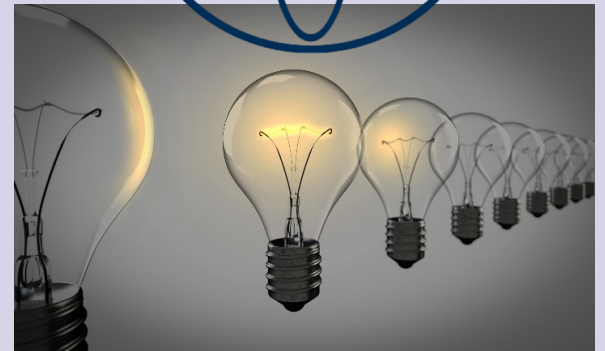
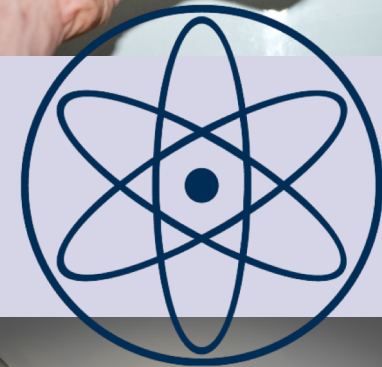
Impact Acceleration Account Officer,  
Impact team

Faculty of Science & Engineering

# UKRI STFC IAAs



- Funding scheme to help facilitate knowledge exchange (KE)
- “Encourage industry engagement and proof of concept funding“
- Flexible funding to ROs to support STFC academics to take their ideas towards KE / commercialisation



# STFC IAA at QMUL

- *“Providing world-class support for our researchers” & “Creating a world-class research environment focused on our strengths that allow staff and students to flourish”*  
**QMUL Strategy 2030**
- STFC IAA 2014-2019    £70k per year
- Operational management
  - Business Development    2014 – 2019
  - Impact team                    2019 - now
- <https://www.qmul.ac.uk/research/research-impact/iaa/>

# STFC IAA at QMUL

- **Funding**
  - “**Flexible Innovation**”  
for small-scope short-term projects
  - “**Innovation Acceleration Fund**”  
for substantial impact generating / KE projects
- **Impact support**
  - Training: KE and Impact themes
- **User engagement**
  - Industry Engagement Events
  - Impact Sandpit Workshops



# STFC IAA at QMUL

- **Funding**
  - 14 STFC IAA funded projects
  - Total allocation: **£225k**
- **Impact support**
  - ~20 training sessions held
- **User engagement**
  - ~12 events and workshops



# Case study: Organic Neutron Detectors

*PI: Dr Adrian Bevan and Dr Theo Kreouzis*

## AIMS

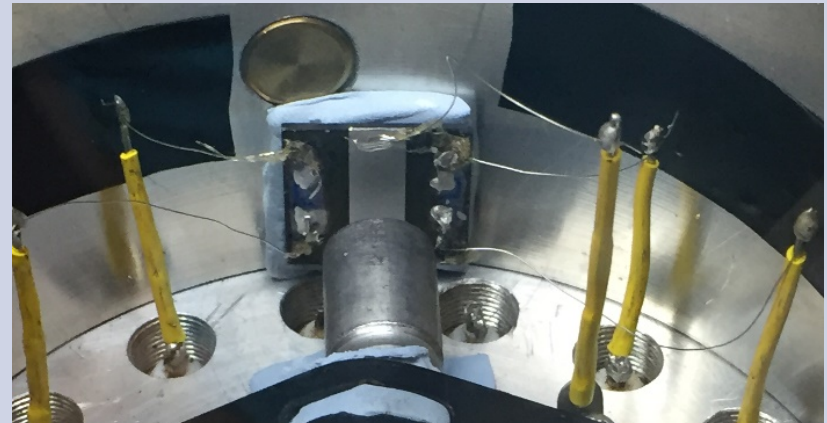
Develop organic neutron detectors that are cheaper and more efficient than the solid-state alternatives

## OUTPUTS

Prototypes and software were developed

## OUTCOMES

Industry partnership was established to further develop this technology and explore its applications



# Case study: FIRED-Up19

*PI: Dr Eram Rizvi*

## Faculty Industrial Research Engagement Day – 6 Nov 2019

### AIMS

- Showcase QMUL FS&E research excellence
- How QMUL works with businesses
- Facilitate industry engagement

Presentations, Thematic Sessions,  
Showcase: Demonstrations and Posters,  
Networking

~300 attendees, ~100 companies



**#FIREDUp19**

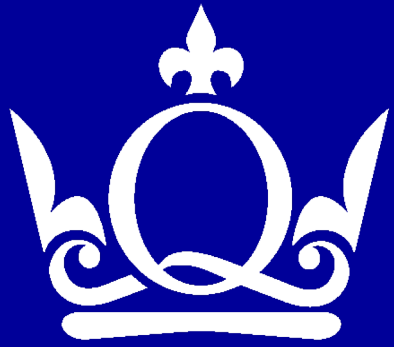


# Success of the STFC IAA at QMUL

- A solid mechanism for supporting industry engagement and accelerating impact / innovation from STFC research at QMUL
- Raised profile of STFC funded research at QMUL
- Increased # of collaborative projects → new collaborations and partnerships were established → more investment £££
- Enhanced potential of commercialising STFC funded research at QMUL
- Increased # of researchers trained in identifying the commercial value of their research







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Thank you!

# Questions

- Does it have to be the STFC scientist exploiting the STFC science? We have the possibility that we can translate STFC science to colleagues who are more industry focused and who might be able to generate impact more effectively than the traditionally STFC funded people (in collaboration). Would that be permissible under the IAA rule?
- Are STFC funded people able to take new ideas generated, not necessarily through STFC funding, and apply to the STFC IAA pot for this?
- Are STFC facilities users able to use this funding?



# Questions



# Extra Slides



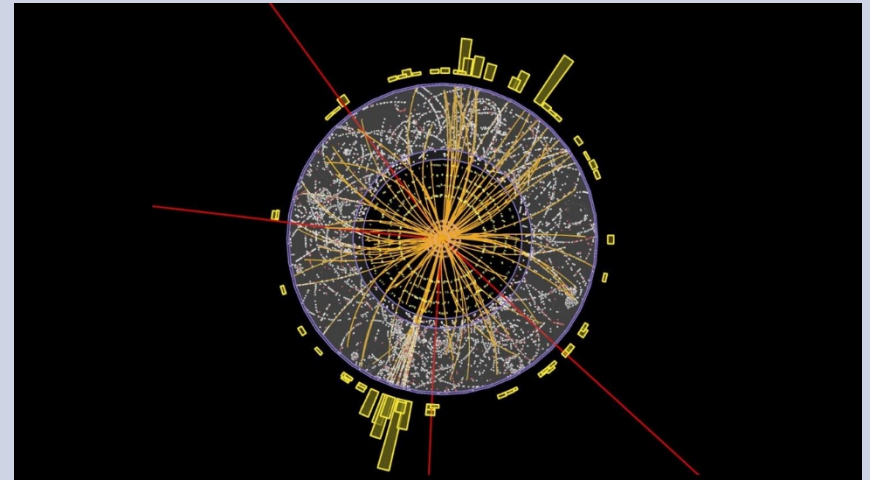
# STFC IAA Case Studies



# Case Study: Applying Particle Physics expertise in big data to Next Generation Proteomics

*PI: Dr Jon Hays*

- Developed collaborations with academics in both SBCS and SMD at QMUL
- Collaborators helped inform the way particle physics analysis techniques could be applied to liquid-chromatography mass spectrometry (LC-MS) based proteomics
- The prototype software developed during this project suggests huge gains can be made in analysis run times.
- Lead to an application of the STFC CLASP Healthcare competition 2018
- Opportunity to engage with companies in this sector



# Case study: Organic Neutron Detectors

*PI: Dr Adrian Bevan and Dr Theo Kreouzis*

## AIMS

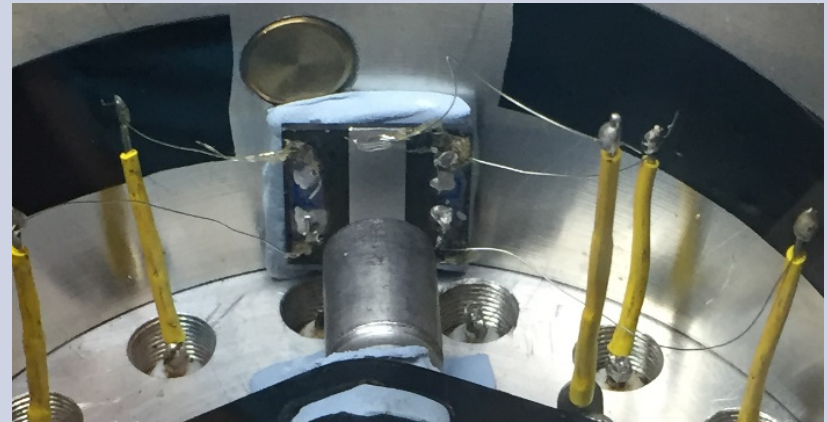
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**Faculty Industrial Research  
Engagement Day – 6 Nov 2019**

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**#FIREDUp19**





# STFC IAA – Background Information



# STFC IAA account

- First awarded STFC IAA funds in 2014
- Aims to facilitate the acceleration of STFC research along the pathway to impact or knowledge exchange particularly towards commercialisation and/or industrial application
- Established Innovation Fund and Pump Prime Fund competitions (now: Innovation Acceleration Fund)
- Awarded over £200K for internal projects



# IAA Funding Process



Announcement for STFC/EPSRC IAA 'Large Grants Competition'

Projects must show a clear link to STFC funded research



IAA team to help develop proposals



Review and Shortlisting Process → Interview Stage



Discussion and Decision-Making



Outcomes announced

# Previously Funded Projects

Project Title	Academic	Funding awarded
From Higgs bosons to high throughput Proteomics	Dr J Hays	£10k (IF)
Commercialisation of Microbial Quality Testing Biosensor for Drinking Water	Dr A Zarbakhsh	£10k (IF)
High Throughput Proteomics	Dr J Hays	£20k (PPF)
Organic Neutron Detectors (OND 2)	Dr A Bevan	£10k (IF)
Resolution in total scattering measurements	Dr M Dove	£20k (PPF)
Applications of thin silicon detectors (ATS)	Dr A Bevan	£20k (PPF)
Compact Neutron Generator Development	Prof F Di Lodovico	£10k (IF)
DL-POLY software improvements	Dr K Trachenko	£22.8k (PPF)
		<b>£122.8K</b>



# Previously & Currently Funded Projects

Project Title	Academic	Funding awarded
Faculty Industry Research Engagement Day 2019	Dr E Rizvi	£8k (IAF)
Predicting Criminality on Online Forums with the National Crime Agency	Dr E Rizvi	£14k (IAF)
Pilot scheme to demonstrate technology for commercially relevant applications	Dr Joe Briscoe	£25k (IAF)
Constructing a prototype high-precision flow cell for performing in-situ neutron scattering measurements of real time magnesite formation from solution	Dr Di Tommaso	£25k (IAF)
		<b>£75k</b>



# Challenges for STFC IAA

- STFC research may be at a basic research level which does not lend itself well to commercialisation and / or industrial application
- Academics may not fully appreciate the value and opportunity these calls afford
- Concerns raised by some academics that a budget of £5/25K is relatively small to develop a project to make an impact in a short space of time.
- Internal challenges: IAA Officer support / SPA support
- Academics unsure how to reach out to companies
- IP and licensing - challenges



# Success of the STFC IAA

- At Faculty level: The award has impacted on a Faculty level **raising awareness** of the excellent research conducted by STFC funded researchers to senior management level;
- At School level: Established a **good working relationship** with the Head of School (Physics and Astronomy) and Heads of institutes and research groups associated with STFC funded research; and
- At the Academic Level: Enabled us to raise awareness of our academics of the various routes they can take to develop their research towards commercialisation including developing their own internal funding streams.



# Outcomes

- STFC IAA has enabled the Business and Partnerships team to engage with academics
- Increased business/stakeholder engagement
- Development of collaborations with partner companies such as Micron Semiconductor, AWE, Specialised Imaging etc
- Raised awareness of STFC research through case studies

