



ATWARM

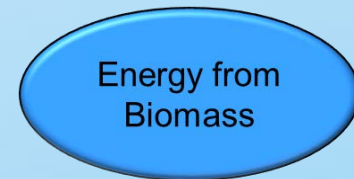
Advanced Technologies for Water Resource Management

EC Contract Number 238273
FP7-PEOPLE-ITN-2008

Patricia McCrory, QUESTOR Centre QUB

The QUESTOR Centre

- Industry-driven Cooperative Research Network for multi-disciplinary environmental research



- Established in 1989 at Queen's University; International Network since 2005
- Industry members + Academic partners = Industrially relevant projects
- Focus on applied research, exploitation and commercialisation

Developing ATWARM

- 2007: ITN projects noted by QUESTOR management
- Water & wastewater cluster = most active research cluster in QUESTOR at that time
- Reviewed research drivers of the cluster
- Develop an ITN proposal to:
 - progress environmental technologies available for water resource management
 - provide scientific training in biological, chemical and physical processes for treating water and wastewater

ATWARM – Main objectives

- To develop advanced technologies for enhancing
 1. the performance and/or sustainability of water and wastewater treatment plants.
 2. water quality, including advanced technologies for analysis and monitoring
- Provide excellent opportunities for training and exchange of knowledge
 - Scientific training
 - Complementary skills

Developing ATWARM

- Parties invited to submit research proposals for the project:
 - Title
 - Short description
 - Project benefits/ novelty & state of the art
 - Relevance to EC policy
 - Deliverables/ outputs
 - Skills Set young researchers would have the opportunity to develop
- Research proposals reviewed internally

ATWARM network

- 7 Partners (5 academic; 2 industry) from 3 EC Member States will recruit 16 young researchers

UK



Coordinator, 3 PhD



2 PhD



1 post-doc

Ireland



5 PhD



1 post-doc

Germany



2 PhD



2 PhD



ATWARM Marie Curie ITN

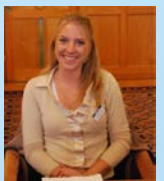
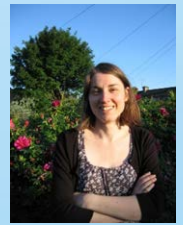
- ATWARM proposal submitted on 2nd Sept 2008
 - Aim: provide research training and broad skills development to young researchers in the field of water management
- Evaluation results received December 2008
 - 900 proposals submitted
 - 520 passed threshold
 - **92 funded, including ATWARM**
- Contract negotiations period Mar-Nov'09
- ATWARM: 1st December 2009 – 30th November 2013

First steps post-award

- Kick-off meeting – before research projects started
 - Rules of recruitment (mobility)
 - Project logo & website
 - Project management: Supervisory Board, Scientists in Charge
- Advertise the posts
 - First fellows in place in August 2009
 - All fellows recruited by November 2009



ATWARM network

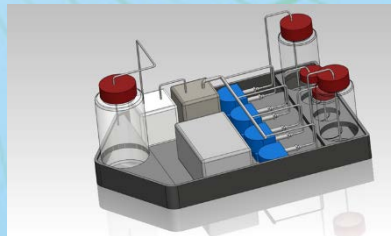
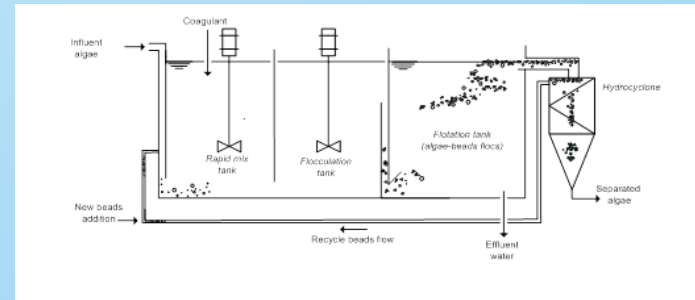
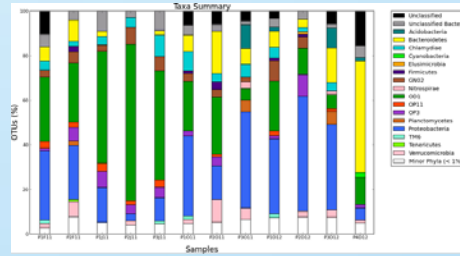
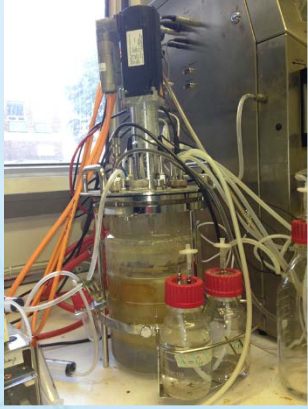


ATWARM - Benefits to society

ATWARM outputs - Environmentally friendly innovations for water & wastewater treatment

- alternative options to strong oxidising agents
- novel materials that have superior adsorptive properties and are easily regenerated
- more efficient on-site energy generation systems
- systems to promote in-house energy and carbon savings
- mechanisms to recover valuable components (N, P) from the wastewater stream
- new tools for monitoring water pollution and pin-pointing pollution sources.

ATWARM research



ATWARM Training

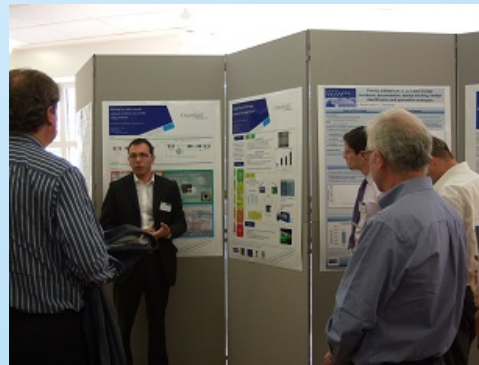
- Individual scientific/ technical training & soft skills training of research fellows at the host site
- Network training of fellows - involving industrial sector
 - Secondment to another ATWARM host
 - 3 summer schools
 - ATWARM conference



Dissemination & outreach

Poster/ Oral

ATWARM & QUESTOR meetings
Seminars & conferences around the world



Outreach

‘Working with Water’ Magazine
AWE International
WAZ Wirtschaft
Postgraduate talks/ Periodicals
ATWARM blog

Scientific Journals

- Plasma Chemistry Plasma Processing
- Environmental Pollution
- Chemical Engineering Journal
- Soft Matter
- Chemical Communications
- Water Research
- Environmental Science & Technology



Benefits of ITN projects

- Improves collaboration between sectors (academic/ business) across European countries
- Exceptional method of delivering training
 - Gain excellent communication skills
 - Opportunity to travel & sample new cultures
 - Cross-sector training & focus on development of personal/ professional development skills
 - Secondments strengthen collaboration between groups
- ATWARM: close network of young researchers who have developed a strong bond for the duration of their professional careers

Hints & Tips

Developing the application/ managing the project

- Set strict internal deadlines
- Effective communication strategy: identify the key people at a partner organisation, and keep them informed (email is fine)
- Communicate with the Project Officer
- Don't stray from original objectives – but if changes are required, inform the Project Officer as early as possible

North-South collaboration

- Ease of travelling to meetings/ events at the cross-border partner site
- Communication
- Common contacts, or benefitting from introductions to potential new business contacts
- Events and secondments across the border counts as mobility for ITN

Working beyond UK/ Ireland

- Cultural
 - Learn about different cultures/ traditions
- Cross-sectors
 - Timescales & different types of activities
 - Support at EC reporting periods
- Language
 - English, main language of communication
 - Huge improvement with communication skills (dipping into other languages; fellows/ language of host country)
- Other - Social aspect; getting to know people

Summary

- **Helpful:** Previous experience of EC projects
- **Crucial:** QUESTOR network
 - 3 MS, academic & industrial links, common interests
- **Required:** commitment to collaborate in a team
 - individual research projects are linked by a common theme: importance of ‘the network’ & training
- **Important:** involvement of different sectors
 - PhD training delivered by universities
 - on-site/ applied training & site visits delivered by industry
- **Important:** effective project management (deliverables, milestones)

And finally....

Thank you for your interest!

Any questions?



p.mccrory@qub.ac.uk
www.atwarm.com

<http://questor.qub.ac.uk>