IAHR Cardiff
Young Professionals Network

Young Professionals Network

CARDIFF

Who we are

- Subsection of International Association of Hydro-environment Engineering and Research (IAHR)
- Collaboration between Cardiff School of Engineering's Hydro-environmental Research Centre (HRC) and local companies who specialise in hydro-environmental engineering

ARUP

HRC Hydro-environmental Research Centre

CH2MHILL

History

Previous incarnation: IAHR Student Chapter, Cardiff

- PhD students only
- Set up to encourage students to become active in the international hydro-environmental community

September 2013

- Transformed to YPN to include Research Associates
- Cardiff first to include local companies who specialise in hydro-environmental engineering

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Objectives

- Strengthen the crossover between industry and academia
- Develop key professional skills for young professionals
- Encourage other YPNs to follow our example

Strategy

- Invite local companies to join, one-by-one
- Approach government agencies and organisations who work with industry
- Create an inclusive, collaborative ethos
- Future collaboration with CIWEM?

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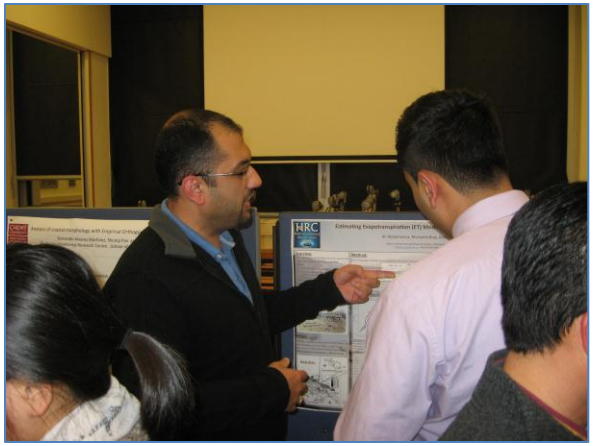
Membership & benefits

- PhD students, RAs, and industry professionals under 30 years of age
- Networking opportunities
- Increased understanding of how industry/academia works
- Friendly environment
- Shared expertise



Shared expertise

Cardiff University:

- Modelling water quality effects of Severn Barrage
- Water quality assessment in rivers, bathing waters
- Novel turbine design (physical/numerical modelling)
- SUDS and stormwater treatment
- Biofouling in pipes
- River losses in semi-arid basins (hydrological modelling)
- Multiphase flow modelling – applicable to deep ocean oil blowouts
- Modelling effects of coastal structures on morphodynamics

Shared expertise

Arup:

- Implementing Welsh Water's AMP5 Framework, focus on improvement of sewer networks across the country SUDS/green infrastructure (Llanelli & Gowerton, Greener Grangetown)
- Clean water distribution
- Trunk main rehabilitation/diversions
- Sewage treatment works improvement
- Sewer and outfall rehabilitation
- Dam/reservoir assessments
- Hydraulic modelling/analysis; civil, mechanical and electrical design

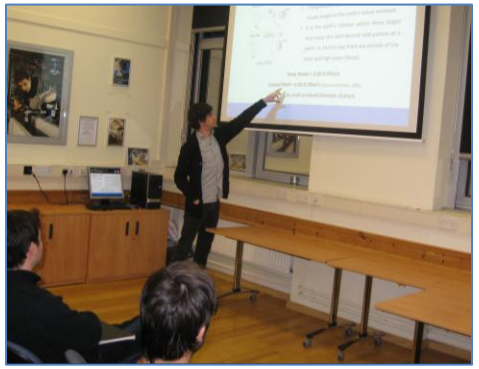
Shared expertise

CH2M HILL:

- "Salmon for tomorrow" - design and implementation of salmon, elver and eel passes
- Flood risk management – design of flood walls, non-return valves, flood resistant doors, automatic air bricks and in some cases glazed panels
- Surface water flood risk management – use of SUDS to reduce peak flows

Events

- First meeting held recently
- Presentation from HRC on novel turbine design
- Presentation from Arup on sustainable urban drainage in Llanelli and Gowerton area
- Poster display from PhD students
- Cardiff Bay Barrage Tour and further events in the pipeline

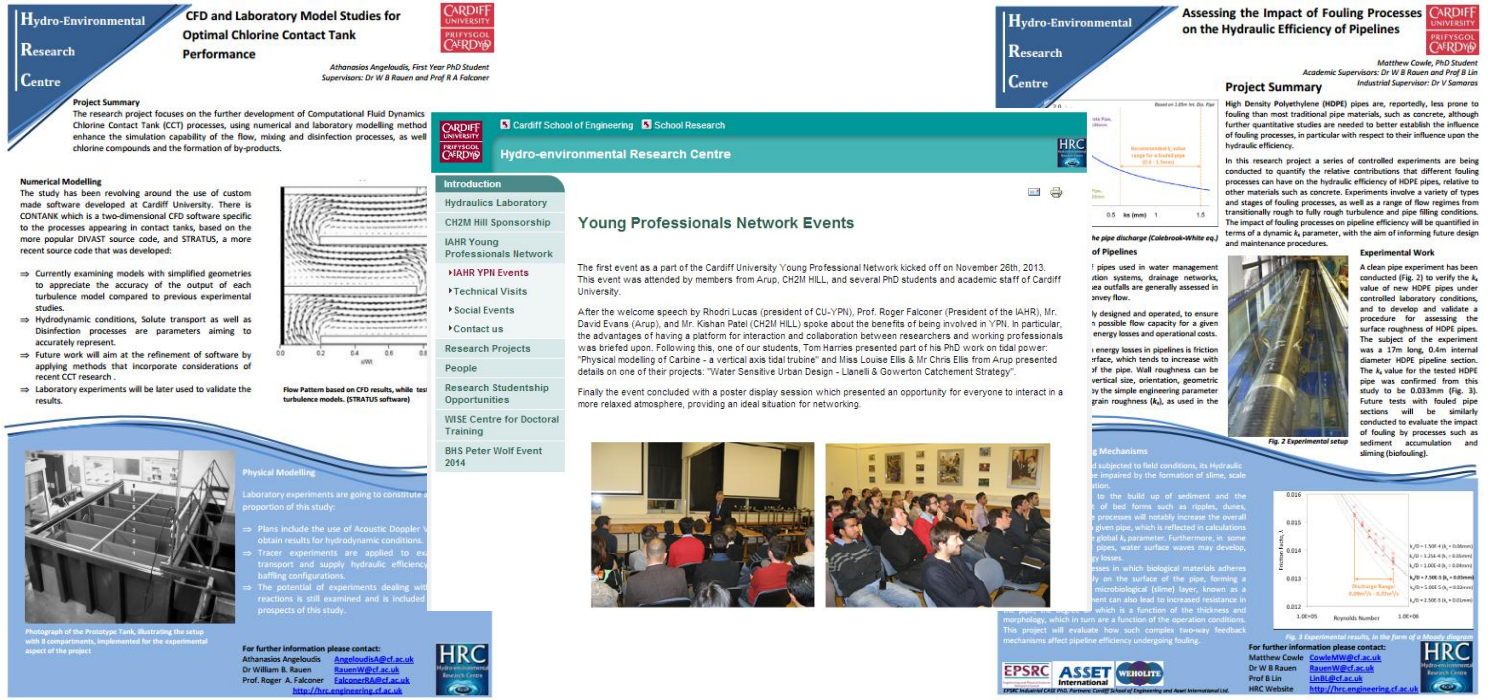


The Future

- Expand and include more local businesses, government agencies
- Guest speakers with expertise on relevant and current topics
- Tours
- Social events
- Liaise with other YPNs to help them make the transition

Website

http://hrc.engineering.cf.ac.uk/iahr-young-professionals-network



THANK YOU