



***taking
responsibility
for our future***



Tony Griffiths & Mark Smith
Joint Managing Directors

The environmental landscape of the UK has been transformed in recent years through the application of good science and engineering. In the decades ahead we will face ever greater challenges, including adopting our infrastructure to climate change and population growth, and managing our water resources more sustainably. We must apply innovation to develop solutions.

WRc, as the only independent research-based consultancy in the water sector, is ready to play its part. We have over 85 years experience of innovating and 135 staff to draw upon. We believe that innovation through collaboration is essential if we are to succeed.

This brochure gives a flavour of the challenges we face on a daily basis and outlines some of the unique skills and facilities we have at Swindon.

Please feel free to call and arrange a visit. We would be delighted to see you.

Regards

Mark . Tony



Facilities

- water and wastewater pilot plant
- organic waste testing laboratory
- instrumentation development laboratory
- 200m flow and meter testing loop
- open channel flume
- low flow sewer test rig
- underground test facility
- pressure and mechanical testing
- trunk mains leak detection

Water



Water Resources

- resource resilience in extreme weather
- quantifying customer water consumption
- managing the growing meter base
- leakage reduction strategy development

Water Treatment

- management of emerging pesticides
- impact of climate change on algal growth
- risk management of disinfection by-products
- removal of lead in drinking water

Asset Management

- moving from outputs to outcomes
- demonstrating efficient spend
- risk management
- real time data management

NCET

- compliance with REACH
- human health risk assessment
- tracing pollution sources
- 24/7 365 days advisory service

Waste

Sewerage

- reducing blockages
- reducing pollution incidents
- long term needs of transferred assets
- local flood risk management
- mandatory adoption of new sewers

Wastewater Treatment

- identifying and assessing emerging technologies
- moving towards chemical-free treatment
- could a sewage works be an energy factory?
- compliance with Water Framework Directive
- sustainable sludge disposal

Waste

- energy from waste
- residue quality prediction
- optimising treatment process using real-time data
- impact of process change on end-of-life products
- waste characterisation



Environmental Evidence and Policy

- sustainable compliance
- co-delivery of environmental obligations
- valuing ecosystem services
- gathering accurate environmental data and evidence
- resilient investment to avoid stranded assets

Environmental Modelling

- impact of climate and demographic changes
- application of real time and integrated modelling tools
- catchment management tools for the big society
- stress tests for catchment plans beyond 2027

Carbon and Economics

- application of robust economic data for decision making
- risks to the future carbon economy
- resilience to future market forces and legislation
- TR61 cost modelling - evolution to meet future needs



Environment

Development and Testing

- understanding the water sector needs
- independent, science based testing
- developing solutions not just technologies
- accessing the water sector

Data and Information

- improving real-time data quality
- turning data into information, knowledge and insight
- communication with customers
- systems integration and interoperability

Sensors and Telemetry

- low cost distributed sensors
- minimal maintenance, high reliability
- robust real-time information
- full implementation of instrument control capabilities

Technology

The image is a composite graphic. On the left, there's a view of the Earth from space, showing Africa and Europe, set against a blue sky with white clouds. Below the horizon is a lush green field. On the right side, a complex, glowing orange circuit board pattern is overlaid, with lines extending across the globe and the field, symbolizing the integration of technology with the environment.

Innovation through Collaboration



- £21m of research delivered in the 21st century
- gearing up to 15:1 per project
- new programmes twice a year



**INVESTORS
IN PEOPLE**

Innovative

Client-driven

Trustworthy

Independent

Transparent

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