

INDUSTRY CLASSIFICATION (N) - Water Industry

AGE AT INTERVIEW 31

ELECTION OR TRANSFER TO: Member

FIRST DEGREE 2:2 Hons. from Brighton Polytechnic in Mech. Eng., 1991

SUBSEQUENT DEGREES AND OTHER QUALIFICATIONS - MSc from Cranfield Univ. in Water & Wastewater Engineering, 1993

EXPERIENCE PRIOR TO PRESENT POSITION

Anglian Water Services Ltd., 1993-1995 - Pilot Plant Technician; 1995-1996 - Wastewater Technologist.

PRESENT POSITION

Anglian Water Services Ltd., 1996-present - Innovation Technologist. Duties include:

- Project management of several novel water and wastewater technologies
- Design of pilot-scale and full-scale treatment processes for wastewater, sewage and high-purity water
- Providing process expertise and technical support to the operations part of the business
- Investigating problems relating to processes, valve engineering and new technologies
- Commercial support, analysing customer requirements, designing solutions, obtaining quotations and determining time-scales
- Presenting technical papers internally and at "roadshows" or conferences
- Writing articles for publication and providing assistance to external customers

<u>STAFF REPORTING -</u>	<u>PROFESSIONAL</u>	0
	<u>TECHNICAL</u>	1 to 2
	<u>MANUAL</u>	0
	<u>OTHER</u>	3 to 4

INTERVIEWERS' COMMENTS

A Demonstrate knowledge and understanding of engineering principles

Key elements of competence	Examples of meeting A
maintains a sound theoretical approach to technology	Greywater project, Linacre College & Cranfield
applies a creative approach to problem solving	Greywater membrane process from lab scale to house
introduction/exploitation of emerging technologies	Sales of odour control and "black box" sewage treatment processes
promotes innovation and advances in technology	Roadshows & training for new "Biocell" & Kaldnes/Zenon technologies

B Demonstrate practical application of engineering knowledge and expertise

Key elements of competence	Examples of meeting B
takes initiative to identify potential projects and opportunities	Design manual for greywater & blackwater recycling projects
participates in or specifies research, design and development	Biological iron & manganese removal, E. Ruston; 3-year M.Phil. (Cranfield) on greywater characterisation and treatment.
plans and implements solutions	Installation of prototype odour control plant, commissioning trials & performance evaluation
evaluates solutions	Numerous field trials and bench scale studies

identifies what has been learnt from the activity	Value engineering study on effluent recycling prototype at Blackburn. Workshops to company personnel
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C Leadership and management

Key elements of competence	Examples of meeting C
<p>experience of effective project planning and implementation</p> <p>manages and plans budgets, tasks, people and/or other resources</p> <p>ensures team members have appropriate skills</p> <p>contribution to continuous improvement via quality management</p>	<p>Planning “Biocell”, “Dekoda” & “Zenon” trials</p> <p>Design manual for effluent recycling</p> <p>Numerous projects from £30K to £350K value</p> <p>Recommends courses for team members needing special skills; competitive interviews when assembling teams</p> <p>Regular review meetings; mentoring and help with project and academic work, processes & engineering</p>

D Communication and inter-personal skills

Key elements of competence	Examples of meeting D
<p>demonstrates oral communication skills</p> <p>displays written communication skills</p> <p>has the ability to present and discuss ideas and plans</p> <p>ability in team building and negotiating activities</p>	<p>Conference presentations, TV appearances, PR presentations</p> <p>Articles in industry magazines, conference papers</p> <p>Brainstorming and interdepartmental meetings</p> <p>Mentoring of operational staff</p>

E Professional conduct

Key elements of competence	Examples of meeting E
<p>compliance with codes and rules of conduct of the profession</p> <p>application and management of safe systems of work</p> <p>familiar with relevant legislation especially health, safety, risk and the environment</p> <p>displays a commitment to undertake continuing professional development, including a personal Development Action Plan</p> <p>demonstrates involvement with the IMechE, other professional engineering Institutions, schools, colleges or local other community activities</p>	<p>WEPG and steering committee involvement</p> <p>Risk assessments of individual sites; elimination of confined spaces on pilot sites</p> <p>Water quality, metals, chemical & biological standards; electrical standards & CDM regulations</p> <p>Secondments, business courses, job sharing, writing of technical papers</p> <p>Local school design project; attends IMechE and CIWEM presentations; presentations to schools</p>

COMPETENCES AWARDED

A	B	C	D	E
3	3	3	3	3
3	3	3	3	3

PANEL RECOMMENDATION

Transfer to Member

MEMBERSHIP COMMITTEE DECISION

Transfer to Member