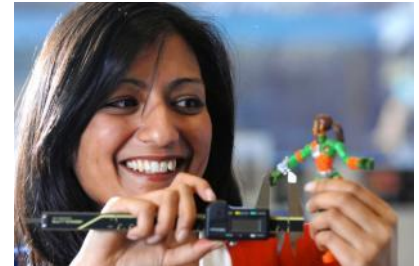

**Proposal for support from
MentorSET of the Women's Engineering Society**

About women in science, engineering and technology

Climate change, a low carbon economy, infrastructure renewal, clean water and population growth are all future global challenges that lay ahead. The UK must be well placed to deal with these if it is to remain sustainable. The real challenge lies in how we meet the resulting demand for skilled technicians and researchers to address and source solutions to these issues. Within this context, women remain one of the country's most under utilised resources. If the UK is to remain competitive we must seek out, develop and use the talents of potential scientists, engineers and technologists from all backgrounds including women. Diverse teams are known to produce better results, where different experiences and ways of thinking often lead to innovative outcomes.

The challenge for women

Science, engineering and technology (SET) are central to our lives, our economy and our futures but in 2010, only 5.3% (or about 1 in 20) of all working women were employed in these occupations. This is compared to 31.3% for all working men (nearly 1 in 3). This means that a man is six times more likely to work in science, engineering or technology than a woman despite the fact that women account for 45.1% of the whole workforce. To achieve parity nearly four times as many women would need to take up work in a SET occupation.



Whilst the number of girls and women studying subjects linked to science, engineering and technology has improved in recent years, many female graduates do not always work in SET occupations. Female SET graduates of working age in the UK (620,000 women) are more likely to take up employment in non-SET than in SET occupations. Only 29.8% of all female SET graduates in the UK are employed in SET occupations compared to half of all male SET graduates. (Source: UKRC 2010)

Also, although some girls and women are entering SET employment, education and training, there is still a pronounced trend whereby the numbers and proportions drop at key stages or over time such as when they take a career break to have children.

Specific issues for women in Science, Engineering and Technology Careers

Women in SET face different issues and barriers at different stages in their careers:

Starting out

Generally in Science, Engineering and Technology careers there is a lack of part-time and flexible working opportunities and sometimes mobility is essential for career development. This, coupled with gender based issues such as the pay gap and the tendency for women to feel they have to work harder than their male counterparts to prove themselves in SET organisations, can have a serious effect on confidence and motivation. In academia, this difficulty can be compounded by short-term contracts with permanent appointments often not made until candidates are in their late twenties or early thirties, just around the time when women may think about starting a family.



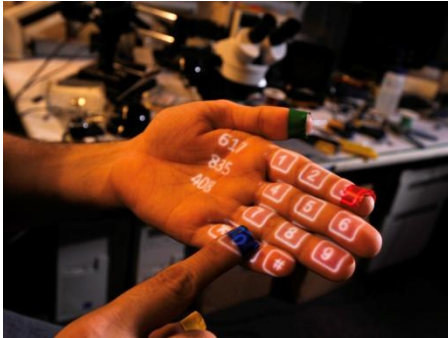
Mid career

Returning to work after a career break, coping with child-care issues, having a skill or knowledge gap in their specialist area and lack of flexible working opportunities can all impact on this stage of a woman's career progress. A lack of women CEOs and Directors acting as positive role models compounds the problem.

The glass ceiling

The barrier to entry into higher management positions also seems to persist. More frequently it is suggested that women are opting out. Much of this is fear of crossing over to a more responsible role given the lack of female role models. Finding a friendly and supportive colleague to offer structured support can offer a push and pull approach to navigating the perceived barriers.

A Solution – MentorSET mentoring programme



The Women's Engineering Society (WES) is a registered charity that has worked for 90 years to inspire and help women in the UK to achieve their potential as engineers, scientists and technologists. MentorSET is an initiative devised by WES and is a unique peer mentoring scheme to give women working in science, technology or engineering at all levels a career and personal boost. We provide independent voluntary mentors who understand the challenges faced by women in these careers who can offer invaluable support, encouragement and advice. The process is equally rewarding for the mentor, who benefits in confidence and

motivation from the experience and help they are able to pass on.

Set up in 2002, MentorSET currently connects more than 500 female mentors and mentees throughout the UK, encompassing all manner of different careers in science, technology and engineering. It is a person focussed scheme that has helped more than 1000 women wishing to return to work after a career break or maternity leave, as well as those with families wanting to achieve a better work-life balance or women simply wanting to progress their careers. It is free to both mentors and mentees. As a women-only mentoring programme, it provides a safe place to discuss issues in confidence, whilst also providing much-needed female role models.

All of our mentors and mentees are trained and benefit from introductory workshops to prepare for the mentoring relationship. The mentoring process itself is a partnership between two people (mentor and mentee) working in a similar field and sharing similar experiences. The mentor asks questions and challenges, whilst helping to guide and encourage the mentee and develop solutions to career issues.

What makes MentorSET unique

MentorSET is unique in that it is the only portable mentoring programme targeted specifically at women in the fields of science, engineering and technology in the UK, taking into account the specific issues and challenges this gender group can experience. The peer mentoring means objective support, encouragement, advice and guidance from people who have both 'done it before' and who are independent of the mentee's current organisation. This independence is important, as it reduces the possibility of organisational bias.

The difference MentorSET makes

Our evaluation processes tell us that our mentoring has:

- ✓ Increased women's confidence
- ✓ Helped women to balance family life with a career so that they are happier at home *and* at work
- ✓ Encouraged women to push professional boundaries
- ✓ Encouraged women to experience greater job satisfaction and remain in the SET sector

Here are some case studies highlighting the difference MentorSET has had on their lives:

Hannah Woor is a physicist working in the nuclear industry. After returning from her first maternity leave, Hannah was surprised to find out just what an impact it had had on her career in terms of juggling the demands of family life in a male dominated environment. Hannah made the decision to try having a mentor to see if that would help. MentorSET assigned Hannah with a mentor in the nuclear industry who had children herself and had 'been there and done that'. They usually meet up face to face, every two or three months and she has helped Hannah a great deal. Her career is now going from strength to strength and she has become a mentor to someone else. "It's about confidence," she says, "having the opportunity to discuss work with an outside person and so having an different perspective gives you a new way of looking at problems and work in general and increases your confidence."

Jess is a chartered mechanical engineer working for an engineering company which produces manufacturing machinery. After promotion she found herself the manager of a group of six men. Although better qualified than the men in her group, she was younger than some. She had had a good working relationship with them as colleagues but she realised that they resented her as a boss.

She overheard numerous negative remarks about her managerial abilities. "I lost my confidence and I think everyone knew it. It made matters tricky," she said. Morale was low in the group and she did not know how to tackle the situation. She went to her manager to discuss the problem but he told her that she needed to resolve the situation herself as she would lose authority if he intervened. He sent her on a managerial training course but it did not help her confidence. Stressed and despondent, Jess applied to MentorSET which she had heard about through Women's Engineering Society.

MentorSET found Jess an engineer mentor who had held a managerial position for many years. "The meeting with my mentor was a massive, instant breakthrough," recalls Jess. "I realised that my problems were due to the preconceptions of society and not due to any deficiencies with me as an individual or manager. My mentor imparted hot tips regarding team building and morale. I went away from the meeting feeling animated and eager to rectify the situation - I was ready for the challenge!"

How you can help

MentorSET is a programme of the Women's Engineering Society, a registered charity which relies on membership income and donations. In order to continue to deliver the MentorSET programme and help our 500 existing mentors and mentees, as well as to reach out to hundreds more women who need our help each year, we are in real need of funding and/or sponsorship for various aspects of the programme.

Benefits of supporting Women's Engineering Society & MentorSET

- ✓ Opportunities for your staff to become MentorSET mentees themselves
- ✓ Opportunities for employee involvement (your staff can become MentorSET mentors and benefit from the training available)
- ✓ A grassroots involvement in the challenges and solutions of female engineers, scientists and technologists in managing their careers
- ✓ Demonstrating your commitment to inclusion and diversity
- ✓ Acknowledgement on WES conference and event literature reaching more than 15,000 key women working in the fields of SET
- ✓ A sponsor page on either/or the WES or MentorSET websites



For more information please contact Bonnie Clayton on bonnie@bonnieclayton.com or 07970 988636 or visit www.mentorset.org.uk and www.wes.org.uk. Thank you. WES is a registered charity number 1008913.