

The 15th International Congress of the International Radiation Protection Association

(Radiation Protection Practitioners – Influencing the future)

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Abstract. It is understood that the radiological protection practitioner will be in demand for many years to come, but there is the awareness of a challenge in recruitment across many of the radiation specialisms. It is agreed that communication to the rising generations and others, needs to modernise.

KEYWORDS: *radiation protection practitioner; influence; rising generations; future.*

1 INTRODUCTION

It is understood that radiation protection practitioners will be in demand for many years to come, but there is the awareness of a challenge in recruitment across many of the radiation specialisms. We need to work out how to inspire more people into the profession, help them develop and encourage them to stay. This paper explores the range of influences we can make on potential recruits and current practitioners. Such interactions will often be mutually beneficial. We will see how best to engage with various groups and how Covid-19 has shaped the future for many of us.

2 WHO WILL BE A RADIATION PROTECTION PRACTITIONER?

The term radiation protection practitioner covers many disciplines. There is a wide choice now within modern radiation safety – from medical technicians, to regulatory inspectors, radioactive waste advisers, nuclear engineers and so on. But all of the disciplines require people who are scientifically literate, meaning that radiation protection has to compete with many other professions for a limited pool of highly valued talent. Additionally, the wide range of radiation protection disciplines can cause its own recruitment challenges, with some naturally becoming more popular than others.

2.1 Young children

For young children, we can easily interest them in science. Children have an enormous capacity to absorb and learn new things. Science is now ‘cool’ and is being actively encouraged to all. We can promote Science, Technology, Engineering and Mathematics (STEM) subjects and as an industry we can help. Offer outreach activities to schools, by sending employees to run workshops, ‘experiment days’ and science competitions. Or individually – encourage science in your community through participation in public lectures or museum and science trips.

2.2 Students

In the UK, the number of children taking examinations in science is healthy and those leaving school at 18 years with science qualifications is increasing, although getting sufficient diverse interest in the physical sciences is still challenging and most will have very limited understanding of careers in radiation protection. Many such school leavers will go on to further education or apprentice schemes, which is an opportunity for us to influence. As an industry, we can engage with degree course providers to ensure that certain subjects are covered within the degree course material. This is especially true for post graduate courses. This is important for niche fields such as dosimetry and criticality physics where it is important to get such topics included. The relationship will be mutually beneficial with the college gaining direct links with industry, assistance with course delivery and project placements for their students.

Benefits to the employer will include access to course material, having key project work undertaken and possibly the recruitment of knowledgeable graduates. Furthermore, employers should aim to be more visible to students who will be looking to out-turn. Such activities include stands at career fairs, open days and work experience projects. This is all in addition to having a strong on-line presence.

In addition, professional societies can reach out to students by offering free membership and outreach events. This will engage the student at an early stage and allow them to become familiar with the diverse roles available within radiation protection.

We need to visualise the future – the ‘new normal’ following Covid-19. The workplace has changed and many now work from home. For those attending a large industrial site, ask yourself, would today’s new recruits really be content working in such an environment? It is difficult for those industries developed in the latter half of the 20th century whose buildings might be old and uninspiring. We can’t all expect to work in state-of-the-art hospitals or laboratories, but modern recruits would expect modern facilities – warm, dry, bright and welcoming with good connectivity, comfortable seats and plenty of coffee!

2.3 Mature recruits

‘Mature recruits’ can be those who find themselves changing direction later in life, in addition to ‘experienced’ hires. Both types are to be valued and embraced as they can bring other skills to the workforce such as sound work ethics, alternative good safety behaviours and new ideas. The mature hires, in particular, should be knowledgeable and will become effective quickly. It is important to ensure that learning opportunities for this group are suitable. The learning process is often different in adult life and so self-paced learning is key. Remote streaming or self-launched training packages might be more effective - rather than large classroom sessions. Each workplace has a duty to ensure diversity is managed and so alternative, flexible arrangements need to be embraced.

3 PROFESSIONAL DEVELOPMENT

It is important to talk about Professional Development. Line managers will ensure that an individual develops skills and will mature with experience. Part of this process would include the encouragement to seek professional registration such as Chartership and the maintaining of continued professional development (CPD). Development Managers or Heads of Profession will help manage this process and can maintain a list of those chartered. Professional registrations are useful levels or benchmarks that would be widely recognised within an industry.

In 2019, the Society for Radiological Protection (SRP) gained a licence to award professional registrations under the Radiation Protection Council. From 2020, members have been able to apply for the awards of Chartered Radiation Protection Professional (CRadP), Incorporated Radiation Protection Professional (IRadP) or Technical Radiation Protection Professional (TechRadP). For the first time, SRP has been able to offer these additional levels of registration.

In 2018, I joint founded the SRP’s Heads of Profession (HoP) group which provided a forum for the UK’s radiation protection industries to discuss recruitment, retention and training of radiation protection practitioners. During the Covid-19 months of 2020, the heads of profession network ensured that communications were maintained and shared ideas and alternative opportunities for those who couldn’t do their normal tasking. Recent feedback has shown that the community was split roughly in two halves. Two different experiences. The first group included those who were dealing with crisis management levels of work ensuring large facilities were closed down carefully and then restarted once the lockdowns had been lifted. This group also included those within the health service who found themselves and colleagues diverted to new duties in departments that had become stretched. The other group tended to have a general experience of a downturn of work as travel was barred and facilities were closed. For those with a bit of extra time, opportunities were highlighted - to look at professional development activities – such as applications for membership of societies and applications for professional registration. Furthermore, the alternative training opportunities were highlighted - as many

institutions were offering free on-line courses; such as IAEA, the UK's National Physical Laboratory and in the UK, the SRP/AURPO (Association of University Radiation Protection Officers) webinars.

4 CONCLUSION

There are many opportunities to influence the future, directly in your own home community, workplace or through your professional society. Remember, the future radiation protection practitioners will be guaranteed a career as the nuclear legacy will be with us for many generations to come. From engagement in school outreach activities to assisting with graduate courses – these are all opportunities for the industry to ensure science-literate future recruits are available. Diversity and inclusion issues are easily managed but employers need to embrace modern technology and modern thinking, as we have seen throughout 2020. The more industries give of their time and resources through outreach and partnerships, the better the outcome for the industry, and radiation protection practitioners of whichever type can look forward to an interesting future.

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