CSci Chartered Scientist

Science Council

A: APPLICATION OF KNOWLEDGE AND UNDERSTANDING

A1: Demonstrate how you use knowledge, experience, skills and broader scientific understanding to optimise the application of existing and emerging science and technology. *You should provide sufficient detail here to show your deep understanding of your specialist scientific subject and how you have applied it. Further to this, include any examples of where your broader scientific understanding is applied to your area of practice. Examples could include but are not limited to:* *• Writing and presenting internal papers, reports or standards;* *• Conducting appropriate research to facilitate design and development of scientific processes;* *• Writing primary journal articles and patents.*	I am the Departmental Laboratory Manager for [redacted] School of Pharmacy, being promoted to this job in March 2015, I have worked for the same department from 2005 to 2015 as a Senior Technician. In my job, I manage the instrumental research labs, providing training to department members at various levels of seniority, i.e. from MPharm undergraduate students, MSc students, PhDs, Postdocs, and members of staff, technical and academics. I work mainly with particle sizers (mastersizer and zetasizers nano and ultra), rheology, and viscometry (Bohlin Gemini, m-VROC, and Anton Paar AmVn viscometer). I also work with Pharmaceutical Technology Techniques, such as operating tablet machines and capsule filling machines as well as teaching the manufacturing process and the quality control techniques related to it. During my stay at the School of Pharmacy, I work giving my professional opinion regarding purchasing for the equipment mentioned above, and once the equipment is on-site, I write the Standard Operating Procedures and Risk Assessments before opening the equipment for general use. The correct use of the equipment and the full understanding of its limitations and health and safety rules are extremely important for the appropriate use of those instruments, impacting directly on my customers' research output. With this in

	mind, I have written the Standard Operating Procedures (SOP's) carefully, making sure they are accessible for the wide variety of customers in the lab, with pictures and detailing best practices for the use, maintenance, and calibration of the equipment. The end result is that the members of the research department of pharmaceutics have the suitable structure and support to produce consistently high-quality research. From time to time, I am requested to offer my professional expertise to external customers. A recent example is the analysis of a sample that I have done for a UK-based probiotic company. I have been asked to analyse the transmittance of their media sample and produce a report about the suitability of this sample for UV sterilisation. The job I have done in this particular situation involved receiving and analysing the sample, generating a report for the company in question, and answering further questions about the suitability of using UV sterilisation technique, until the customer was satisfied that all the technical questions were answered by me. My input has impacted their decision about modifying or not their production process.
A2: Exercise sound judgement and understand principles of uncertainty in complex and unpredictable situations. *This competence is asking you to identify and be aware of the limit of your own knowledge and*	In November 2020, I had to prepare the practical classes for solutions, suspensions, and emulsions, for our undergraduate MPharm students (also known as liquid dosage forms in pharmaceutics). Although I have been preparing for those classes since 2005, at this instance, circumstances were very different and challenging. The teaching team (academic and I) have been presented with the challenge of delivering practical classes in a socially distancing environment. Although many

professional competence, to demonstrate an ability to manage your own strengths and weaknesses and to recognise the level of risk attached to your actions. Examples could include but are not limited to: *• When you have reacted and dealt with an unexpected outcome;* *• When you have approached a piece of work or project flexibly and in a novel or different way, or reacted to an unexpected outcome.*	practical classes at [redacted] have been moved to online, this did not happen to 'liquid dosage forms'. As Pharmacy was an exemption from the lockdown rules for teaching, due to being a course delivering the formation of health professionals (Pharmacists), therefore our classes had to be offered face-to-face. I tackled this situation by suggesting to the academic in charge of 'liquid dosage forms' how to tackle the practical classes challenge. I have suggested reducing the number of practical classes from three (Solutions, Suspensions, and Emulsions) to one (Emulsions). Solutions was a practical class that would involve studying the solubility of Aspirin in water, ethanol and SDS. I have suggested delivering this practical class online and took charge of organising a team of technical staff who would film and edit the class, then the academic would perform the demonstration and voice-over. The lack of student's hands-on experience would be compensated when the students attended the practical classes in the following term when they attended extemporaneous preparation and had to also prepare solutions. So, the learning objectives were not cancelled, just the practical element was postponed and blended with the following term learning. The same has been suggested by me to the academic about suspensions, which consisted in preparing various suspensions and analysing stability according to their composition, observing factors that would improve stability. Those practical classes were produced, filmed, and edited at a high standard. I have personally recruited and instructed the technician doing the film, I have prepared the chemicals needed, the layout, and have reviewed the final edited version before sending it to the academic in charge. In this way the learning objectives were not compromised. I have also led the set-up

	and the practical organisation of the practical class we have decided to deliver face-to-face, Emulsions. Emulsions have been chosen to be delivered face to face after I have suggested that this was the one of the three that involved the higher number of different techniques to be learned, such as emulsion preparation, viscosity measurements, homogenisation, and use of microscopes. All the class layouts had to be reviewed by me, so it would assure student and staff safety by social distancing and reduced class sizes, as well as an effective redistribution of the tasks that students had to perform in class. So, again, the subject was delivered without compromising the learning objectives. The changes were very well received by students, academics, and teaching assistants involved. The learning objectives were reached and the safety of students and staff was maintained. Feedback from the various stakeholders was very positive.
A3: Demonstrate critical evaluation of relevant scientific information and concepts to propose solutions to problems. *You should think of this competence in terms of selecting the best methodology, the subsequent data analysis, evaluations and conclusions you*	For my job in the Rheology and Viscosity lab, I am requested frequently to advise on which of the equipment will be suitable for the lab users' particular sample. I am also requested to provide training and give my professional opinion on the correct approach to experimental conditions such as choosing the correct geometry for our rotational rheometer, or the correct capillary for or viscometer, or the suitability or not of their sample for our rheosense (m-VROC) rheometer, which is a piece of equipment that although very efficient and easy to use, can destroy the sample or the capillary if the sample is not appropriate for the technique. In fact, the choice of

draw and how you overcome any barriers or issues. Examples could include but are not limited to: • *Engaging in experimental design and testing;* • *Reviewing relevant literature, databases, manuals or designs;* • *Statistical analysis and numerical modelling.*	the correct technique, equipment, and parameters is extremely important when studying rheology and viscometry in practice. Due to the reasons mentioned above, I have developed a quick easy to use guide, that would help the researchers and their supervisors to choose the equipment that would be more appropriate for the samples and their required outcome. The guidance consisted in asking some key questions about their sample, such as quantity available, the reason why rheology is being analysed (just to see if viscosity changes or more intricated rheology questions), shear conditions that would be applied, temperature variations that would be used, would filtering the sample be possible without destroying it, does this sample precipitates or cross-link when temperature changes, etc. Based on the answers supplied back to me, I could take into consideration the sample limitations, the equipment precision, and technique, and the desired output, to advise in each technique is more appropriate for each case. After the first 'hurdle' is passed (which is choosing the appropriate technique/equipment), I provide training and advise on what should be input. I also provide advice based on the results obtained and on any adjustments needed, such as changing parameters, technique, equipment, etc if needed. Since I have implemented this quick guide in choosing the appropriate rheology kit, less experienced PhDs, MScs, and members of staff, were able to choose their

	equipment and techniques in a more confident manner, therefore improving the workflow (regarding rheology experiments) in their research labs.

B: PERSONAL RESPONSIBILITY

B1: Work autonomously and take responsibility for the work of self and others. *It is important for this competence to ensure you describe your contribution, responsibility and impact on a certain task or project and make it clear what you personally have achieved i.e. "I" not "we". In formulating your answers and giving relevant examples, you should consider the following:* *• You will be expected to undertake your work without day-to-day supervision and so you should demonstrate that you are able to achieve this;*	In my job, amongst other things, I organise the technical aspects of a practical class called 'Pharmaceutical Technology'. This class consists of teaching about the processes involved in the formulation, manufacturing, and quality control tests for tablets and capsules. This is part of the module: 'Making medicines from bench to clinic' and it is taught to Mpharm students in their second year as well as MSc students and PGDip students. For this class, we utilise the help of 'Post Graduate Teaching Assistants (PGTA)' which are PhD students that have been trained to demonstrate techniques and give instructions to students in class. Teaching in this class involves a series of specialised equipment, therefore, I must rely on well-trained PGTAs in order to deliver good quality teaching to all students. Every year, I provide training to the PGTAs, making sure they have academic and practical knowledge. The training that I deliver focuses on assuring that the PGTAs have the knowledge to explain the practical and theory behind the processes involved in manufacturing and testing a tablet or a capsule.

• *You should demonstrate your understanding of when you may need to seek guidance from others and how you would obtain this guidance;* • *If you are responsible for managing the work of others, you should clearly describe how you discharge those responsibilities.*	Routinely, every year, I am in charge to select the PGTAs and give them appropriate training. Lately, since the beginning of 2020, I have decided to design a training program directed to the PGTAs. I decided to take into consideration that the selection of my PGTAs cannot only be based on their scientific knowledge, but they need to receive training in a way that all the classes are delivered in a standardised way, so all the students taking the class will have the opportunity to the same learning experience regardless of who has delivered the class. The program I have designed consists of selecting competent PGTA's, distributing to them a training manual, which I have designed and written, and a practical demonstration, covering how the machine works and the processes and techniques involved. During this training, I provide the opportunity for a hands-on session. After I deliver this first session, the PGTA's have an opportunity to take some time to reflect and prepare for a competence test. I allow them some time until they book their competency test. The PGTAs are only successful and ready to teach, once they have passed their competence test marked by me. Since this program has been established, student feedback, which was already good, has improved. PGTAs have also given positive feedback, particularly because my program has improved their confidence as teachers for this particular discipline.

	In conclusion, I have written the program, delivered the training, assessed and evaluate the feedback from the stakeholders involved and it has been noted a considerable improvement to the student's learning experience.
B2: Promote, implement and take responsibility for robust policies and protocols relating to health, safety and sustainability. *You should demonstrate that you understand the policies and protocols related to health, safety and sustainability that apply to the work you are undertaking giving examples where you have implemented and promoted them and describe any responsibilities that you have related to this. In formulating your answers, you should consider the following:* • *Demonstrate that you know where these policies and protocols are documented, and that you are able to apply them in your practice;*	In my current position at [redacted] School of Pharmacy, I am Deputy Divisional Safety Officer (research). In this job, I advise Academics, Post Graduate Students, and Staff regarding Health and Safety regulations, policies, good practices, and the management of health and safety. I will also support my colleagues, the Safety officers for each of the three lab-based research departments in my division. I am an advocate for good quality training being delivered in a uniform way across all three research departments in my division making use of my position of leadership to influence and enable good practices. I make sure I am always up to date with current codes of practices and compulsory training courses for laboratory users. Not only taking training opportunities to myself as well as signposting training needs and opportunities to my colleagues and students. I have an active role delivering training regarding risk assessment writing, as this is generally a weak point for newcomers to the department. I make a point of delivery personally the safety talk to 4th years MPharm students who join the labs for their research project which is part of their last year's degree.

• *How your work contributes to the update and development of your departments/organisations policies and procedures;* • *How you "promote" the awareness and application of these policies and protocols with others, especially peers and more junior colleagues.*	Those students are very inexperienced in a research lab environment and I make sure they have the right support that is needed, from the beginning and throughout the duration of their research project. I sit and serve at the Divisional Safety Committee, contributing to the discussions and with the writing and reviews for codes of practice. I have a level 3 award 'Safety for Managers' and a level 6 certificate in 'Applied Health and safety' both awarded by NCRQ (National Compliance and Risk Qualifications), those qualifications have been awarded in 2020 and 2021 respectively. Those qualifications gave me extra skills regarding Health and Safety legislation and management of safety leading me to always make sure I always personally write the lab rules for the Instrumental labs in pharmaceutics. The labs that I manage in pharmaceutics are run at very high Health and Safety standards. Regarding sustainability, during the academic year of 2019/20, I led the 'Carbon accountability Pilot' in my division, which consisted in creating a working group to achieve certain fuel and electricity consumption targets over the nine months duration of the pilot. We were successful in the challenge. In addition, last year, the labs that I manage (Instrumental shared labs in Pharmaceutics) got the LEAF (an initiative to help improve the sustainability and efficiency of our laboratories) accreditation Bronze and I have put the labs on the route to achieve Silver for next year.

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B3: Promote and ensure compliance with all relevant regulatory requirements and quality standards. *You should demonstrate that you understand which regulatory requirements and quality standards apply to your area of work including data integrity and privacy. In formulating your answers and giving examples, you should consider the following:* • *Describe what you do to ensure that these requirements and standards are being followed for those activities for which you are responsible;* • *Describe how you "promote" the awareness of regulatory requirements and quality standards amongst peers and more junior colleagues;* • *Describe how you safely store and handle data in line with national and international data protection and cyber security regulations.*	Regarding my teaching duties, I have two teaching qualifications: Level 3 Award in Education and Training, delivered by City & Guilds and regulated by Ofqual; and a Fellowship of the Higher Education Academy, which demonstrate my commitment to professionalism in learning and teaching in higher education, Awarded by [redacted] Arena and Advance HE. I am committed to the quality of my teaching and I have my practices peer-reviewed periodically. Every term, I invite a colleague, also a senior technical staff in order to peer-review my teaching when delivering my practical classes. In this way, there is a continuous improvement in my practice. Conversely, I peer-review my colleagues. Regarding Health and Safety, I make sure the academics and students in my Division, follow the Health and Safety guidelines, keep records of training, induction, and Risk assessments appropriately, and follow GDPR guidelines. By the way periodical, GDPR training is compulsory at [redacted], and as a manager, I make sure that the staff I manage and myself are always up-to-date with our compulsory training. As part of our [redacted] Health and Safety procedures, I participate often in Safety inspections for labs across the division, acting in points for improvement or directing the actions to the relevant academic. I am also a FEM (Fire and evacuation Marshal). Regarding the training that I deliver on techniques in Pharmaceutics, I always make sure training and teaching are delivered at a high standard always referring to

	British Pharmacopeia (BP) quality control tests. For the training that I deliver to members of the research groups, I make sure I produce manuals and SOPs so my trainees have support materials for further reference.
B4: Oversee the implementation of solutions and demonstrate an understanding of potential and actual impacts of your work on your organisation, on the profession and on the wider community. *You should demonstrate an understanding of the potential and actual impacts of your work on your organisation, on the profession, on the general public and on the physical environment. Examples could include but are not limited to:* • *Indicating that you are aware of the sensitivity of your work and show how this understanding translates into the ways in which you carry out your work;* • *Showing an awareness of how your profession is portrayed and viewed by the public at large, and*	I am involved with [redacted] technician commitment since [redacted] became a signatory, late in 2018. Since then, I am part of the TMG (Technical Managers Group). At TMG, I have led some initiatives regarding the four pillars of the Technician Commitment: Visibility, Recognition, Career Development, and Sustainability. One example of one of the projects that I have led is to get [redacted] as an 'Employer Champion' with the Science council. To date, I have worked (successfully) representing [redacted] to get the correct people at [redacted], i.e. our People's chief Officer at [redacted], to sign Employer Champion Agreement. The agreement is now at the hands of the Science Council to be signed. This is an important step for our 'Technician Commitment' at [redacted]. Currently, I am leading a pilot project, in order to evaluate the effect of financial and mentoring support on the number of technical staff applying for professional registration. I am expecting to publish my findings late in March and I have already started a working group, formed by technical managers in order to influence current policies stimulating the technical staff at [redacted] to apply for their professional registration with the Science Council.

how you take responsibility for recognising this in the work you do; *• Describing how you seek to avoid reputational damage related to the work you carry out;* *• Explaining how you set a good example to others in the way you discharge the responsibilities related to the work you undertake and the benefits to the organisation.*	I also have written a 'Fair Attributions Guideline' paper which aims to provide clear guidelines to get the technical staff work recognised in publications and set expectations for all the stakeholders. I have managed to have my document endorsed by the TMG and this paper is now at the office of the [redacted] Vice-Provost for Research, Innovation, and Global engagement for their comments and hopefully, approval. I am currently the technical manager in charge of the 'Mechanical Engineer Apprentice' who is in their 4th and last year of his apprenticeship. I have been involved in this project since it started in 2018. I have written the business case in order to have financial approval from my Division, I have sat on the procurement panel when choosing the education provider, I have sat in the selection panel when choosing the apprentices for mine and the three other divisions within [redacted]. For the last four years, I have been line managing the apprentice for the School of Pharmacy, doing his yearly appraisals. I have been working closely with the local trainer and with the College (education supplier) as well as I have had regular decision-making meetings with my peers in the other three [redacted] Departments. We are working together at the moment in order to create job opportunities for our apprentices once they finish their training. My role, in this case, is to write a business case in order to create an entry-level Mechanical Engineer position, which I am doing at the moment. Once this cycle is finished, I have already a draft about mid-career apprenticeships which I intend to implement in my Division, pending managerial approval.

C: INTERPERSONAL SKILLS

C1: Demonstrate the ability to communicate effectively with specialist and non-specialist audiences. *A non-specialist audience is anyone working outside of your particular area of expertise, so it would not necessarily be a non-scientist. Your example(s) should indicate how you have communicated in a way that is effective to each type of audience. In formulating your answers, you should consider the following:* *• Not just the content of the message but also the mode or style of delivery that is adapted according to the audience;* *• The feedback loop to gauge the understanding and improve future communications.*	I communicate effectively in a work setting with Students, Technical Staff, Academics, Professional service staff em general, such HR, finance, estates, and maintenance. Is also part of my routine, to communicate with suppliers, salespeople, maintenance engineers, colleagues at the registry/teaching and learning team, executive assistants, directors, equity, diversity and inclusion (EDI) leaders, organizational development, and faculty leaders. I also communicate with professional bodies and peers in other Higher education through various networks. I am a member of [redacted] network, a [redacted] network for women in professional services, I am also a member of WHEN, Woman in Higher Education Network (UK-wide). It is part of my job to deliver Health and Safety inductions and various Health and Safety related training for newcomers to the department. The inductions that I deliver are both in-person and online, generally to mid-sized groups (30-50 people at a time). I review and update my training materials periodically. It is also part of my job to teach and demonstrate during practical classes, I teach during the practical class and I teach the teaching assistants (PGTAs) how to deliver

	the class, regarding academic content, correct use of the equipment, and how to access student's learning. Recently I had the experience to be a facilitator in an EDI/Organisation development initiative online session regarding offering executive coaching for Black, Asian or Minority Ethnic (BAME) members of staff. In this instance, I had to facilitate sensitive discussions regarding race bias in the working environment. This session was delivered to BAME academics and professional services at [redacted]. Another opportunity that I has as a facilitator was to give a testimony of my experience as a Technical staff in preparing my application for the Fellowship of the Higher Education Academy. The public was various [redacted] technical and professional services staff who were planning to start their application for the fellowship for the first time. The platform was a structured training course designed by a member of [redacted] professional services staff to encourage applications from professional services. I gave my brief talk in an energetic and positive way and answered questions at the end. My contribution to the workshop has helped the attendees understand the application process and has helped them to manage their expectations during the process. In September 2021, I have been invited to give an interview for the session 'Spotilight on' in [redacted] weekly staff news. The session is a session where a member of staff is invited to talk about their films and books preferences as well as to talk about current projects at [redacted]. I have chosen to talk about the

	technician commitment and the then-upcoming 'Technical Staff Skills Survey'. The interview was very welcome with my peers across [redacted] and also inside my division. It was the first time that a member of the technical staff was featured at the Institution's weekly newsletter. Since my interview, a second member of technical staff has been invited to feature in the same newsletter. I believe that my example has opened doors to other colleagues, helping improve Technical Staff visibility, one of the pillars of Technician Commitment. I have to communicate periodically with senior management, which is all formed of academic staff at the moment, about staff development, retention, succession plan, and workload distribution. In addition, I communicate with reportees and staff that I have a dotted line managing responsibility, about their professional development, workload, and continuous improvement of the service the team delivers. I believe all those opportunities mentioned above are extremely valuable to my career development as well this might inspire others on getting involved in the vast variety of projects that I am involved in currently
C2: Demonstrate effective leadership through the ability to guide, influence, inspire and empathise with others. *This competence is about understanding your leadership skills and is not reserved for those in*	I have been involved in a [redacted] initiative called B-MEntor, in this initiative, I have volunteered to mentor BAME technical staff. During our mentoring relationship, we have managed to set objectives and my mentee felt empowered and encouraged to apply to jobs a grade above. It felt very fulfilling that I could make a positive difference in someone's career. Recently, she has contacted me in order to meet and advise a young six former who was interested in applying for

management roles, it is applicable to all. Examples could include but are not limited to: • *Experiences of mentoring or coaching you have had; you should consider how effective this was and the overall impact;* • *Considering when you have managed change within your organisation or overseen the implementation of any new processes; you should consider how effective this was and the overall impact.*	Pharmacy at university. I have accepted to talk to this person, received her in my division, introduced her to some key members of staff, and gave her a tour and an idea of what kind of lab work would be expected during the undergraduate course. I was glad to hear that she had decided to apply. Another example of implementing impactful changes is the 'super-users' system that I have in place for the shared instrumental labs that I manage. The system consists in getting a pool of very able PhD students to get very well trained, by me or by specialised equipment users chosen by me. After training and after being exposed to a number of samples and situations, they are nominated, the designated super-users for the equipment. They will act by training new users and helping with advice about experiments and troubleshooting. This has reduced the number of equipment breakages and misuse, saving money for the department. This has also contributed to the PhD professional development, enhancing their confidence and knowledge, as well as raising their profile within the Division. Another example that I would like to mention is my 'Professional Registration Pilot'. In 2021, I have presented a business case to the [redacted] Vice-president, seeking financial support in order to run a pilot to understand the factors that motivate or demotivate technical staff to apply for professional registration with the Science Council. I have had my project approved and I am now in the final phase of the project. I started doing a survey to check interest from technical staff in my Division. I used the survey to find out the reasons technical staff was not applying for professional registration before the pilot that I run. The results were varied,

	such need for financial support, need for a peer group to support and mentor during the process. With this in mind, I found an experienced member of staff, who is already professionally registered and asked her to mentor the group, I have planned for regular meetings to discuss the phases of the application since the choice of category and professional body through reviewing the final draft. I have also talked to line managers to allow staff to allocate working hours to fill their application and of course, I have assured that all the costs related to their application would be covered by the pilot for the first year. The project has been a success and we have now managed to invite members of another division to join our group. I intend to write my report by the end of March 2022 and I plan to raise funds for a second round of the pilot, however, this time opening to the wide-[redacted], i.e. all the divisions who might be interested.
C3: Demonstrate the ability to mediate, develop and maintain positive working relationships. *You should describe or define the "working relationship" and provide at least one example which focuses on your handling of a challenging interpersonal situation and demonstrates your ability to mediate and achieve a positive outcome. You should consider how through your approach you have changed or modified the behaviour or*	It would be an understatement to mention that 2020, 2021, and even 2022 have been challenging to technical staff in general, particularly to technical staff working in health care or health-related HE courses. Since the first lockdown, although there were times that our division was closed, a skeleton team of technical staff had to continue coming to work to check essential equipment, refrigeration units, keeping cell banks in liquid nitrogen, etc. During this time, I was part of a team formed by the four most senior technical managers in my Division, I would work together with my peers, sorting out shifts for attending the labs and I took turns between us to come onsite in person. I made sure to assist with staff morale not only for my peers but also for the staff that was home-bound, making sure they would make their contribution and always feel part of the active team. I have contributed to

attitudes of others to positive effect. Examples could include but are not limited to: • *How you have managed the merger or integration of different teams;* • *Managing working relationships across different departments or organisations;* • *Interactions with committees, working groups or other professional body activities;* • *How you have managed and resolved a difficult relationship situation between members of a team for which you are responsible.*	distributing tasks that could be done from home but were nevertheless important for the business continuity. This has brought an extra strength to our sense of team within the technical staff, at the moment we have a technical team stronger and more proactive than ever, knowing that I lead by example. I am a very active member of [redacted] TMG (the technical managers' group for [redacted]). I always attend the meetings and make my voice and opinion/contribution heard. I have taken personally the project of getting [redacted] to sign the Employer Champion Agreement with the Science council and I have very recently proposed to lead a working group that aims to make the process for [redacted] technical staff application more straightforward and with clear guidelines about [redacted]'s support to staff. In my working group, I have proposed to include, in all new technical job adverts, compulsory mention of professional registration at least as desirable, regarding appraisals meeting, I have proposed that a discussion about professional registration is compulsory. I have also used the TMG meetings to try to implement the document I have written on 'Fair attribution guidelines', the document that I have written has been reviewed and recommended by TMG and has been passed to the relevant Vice-Provost office, for comments and hopefully approval. This document, if and when approved will be a milestone in the [redacted] technician commitment project. For clarification, the 'Fair attribution Guidelines' aim to give clear guidance in expectation regarding

	technical and professional services staff contribution to research and acknowledgment in scientific publications produced at [redacted].

D: PROFESSIONAL PRACTICE

D1: Demonstrate how you scope and plan and manage projects. *Describe an example where you have developed a project scope with clearly defined boundaries and project plans. Any problem solving techniques used should be highlighted along with potential benefits of the project to the business. You should make it clear the level of autonomy you had while working on the project, especially when the project is large covering multiple areas and a significant time span. You should show how you contributed to determining the resulting courses of action. Examples could include but are not limited to:*	For the academic year 2019/20, my division was invited by the Dean of the Faculty of Life Sciences, to participate in a sustainability pilot called, 'Carbon Accountability Pilot'. The Director of my division has nominated me to lead the project in our Division. It was very important however challenging to achieve our reduction in fuel and electricity consumption targets. I have chosen a number of stakeholders from different levels of seniority involved and formed a team/working group. Academics, students, professional services, and technical staff. I started to manage this project by creating a working group with a wide representation of the stakeholders mentioned above. I have created a poster to explain our objectives, therefore getting buying in from the Division's community. I have arranged with the Sustainability Department at [redacted] for receiving monthly reports of our electricity and fuel consumption with comparative data from the previous year. The report was publicised to the working group timely, so the group was always in the loop. I have also run a survey Division-wide to seek suggestions for reducing our carbon footprint, this has raised awareness of the project and got more interest from the students and staff to contribute. At the end of the project, the target was achieved

• *Lead an operational project utilising resources across several disciplines;* • *A change management project aligning processes across sites;* • *An industry-wide project establishing guidance on technical standards and requirements.*	and I have supplied the data to [redacted] Sustainability, so they could use the data in their plan to extend targets to other divisions. My report supplied feedback to [redacted] sustainability department about the hurdles and positive points that were raised from my project. Regarding the day-to-day running of the Instrumental Departmental labs, managing projects related to lab refurbishment, equipment upgrading, maintenance strategic planning, and staff training is part of my routine job. I have an organized and strategic approach to managing that kind of project routinely, by getting the customer's needs, equipment quality, and financial feasibility as my top priorities. I frequently run customer satisfaction surveys with my stakeholders and act on suggestions/feedback.
D2: Demonstrate the achievement of desired outcomes with the effective management of resources and risks. *Using projects with which you have been involved as examples you should describe your roles and responsibilities in managing the activities to achieve the desired outcomes. Examples could include but are not limited to:*	The [redacted] School of Pharmacy is currently rated [redacted] in the world by QS Rankings (Pharmacy and Pharmacology 2021) as well as [redacted] in the Shanghai Ranking (Pharmacy and Pharmaceutical Science) being recognised for being world-leading in the field. The backbone of the structure of my labs is offering a service that supports our research groups, offering good quality lab facilities, with reliable, modern facilities that are periodically maintained and replaced when needed. It is part of my daily job, to make sure the instrumental lab facilities are running at their best to support our research groups. Routinely I do:

• *Identifying the resources (people and/or money) needed to undertake the activities;* • *Monitoring and surveillance of the progress of the activities;* • *Identification, evaluation and implementation of changes that may be needed to ensure the activities are successfully completed;* • *Identification and management of risks that could impact on the successful completion of the activities.*	- Keep records and arrange preventative maintenance for the lab equipment. - Keep updated with new developments in the area and keep in touch with the lab users, i.e. research groups about their equipment and techniques needs. - To produce, twice a year, a forecast of equipment that is reaching the end of useful life and plan together with the Head of Research Department for replacement. - Get quotations for grant applications, equipment funding calls from the faculty, or produce a wishlist for future purchases. - Interact with other research departments in order to purchase equipment together, so both departments will benefit and the purchase can be more financially viable. - Source for ex-demo equipment throughout contacting and having a good relationship with suppliers. - Attend conferences and exhibitions in the Pharmaceutics subject area, so I am aware of the cutting-edge developments in the area. - Keep up to date with Health and Safety regulations, making sure the compliance is included in my top priorities. As a consequence, I personally write and review lab rules in the instrumental labs that I manage.

	- Organise periodical training/workshops together with suppliers and manufacturers, making sure the lab users are aware of best practices in the area. As an outcome of the system of work mentioned above, the services are always running satisfactorily and uninterrupted within the Division. Our Division is even approached by other divisions such as Chemistry, Mechanical Engineering, and Ophthalmology to mention a few in order for their research groups to use our facilities/equipment. My work ethic and approach to managing the labs have won the appreciation and recognition of the stakeholders in my Division and I am proud of my technical team and my contribution to the research groups to achieve their objectives.
D3: Take responsibility for continuous improvement within a scientific or technical environment. *Your examples should indicate what actions you take to make improvements to your organisation as a whole. This could be through encouraging the continuous development of junior staff or through improvements to processes within the organisation. Examples could include but are not limited to:*	In my role at [redacted] School of Pharmacy as a Deputy Divisional Safety Officer, I take extremely seriously that we need to obey and comply with Health and Safety regulations. I do so by: - Keeping up-to-date with my CPD - Reviewing periodically current codes of practice and taking any issues arising to the Safety Committee for action - Having an active role in the delivery and creation of training strategies and training materials related to Health and Safety

• *Evaluation of the performance of specialists methods and tools used;* • *Development of recommendations for future enhancements or modifications to procedures or working practices in order to achieve performance improvements;* • *Description of examples where your actions have led to performance improvement by yourself or others;* • *Identification of lessons learned from activities undertaken by yourself or by others for whom you are responsible, such as what went well, went badly or was lacking.*	- Stopping people's work and reporting if the risk assessment in place is not suitable and/or sufficient - No access to the equipment booking system before a safety induction is given Having an advisory role to the research groups in my Division. This positive attitude and procedures have impacted our records for safety management and presented virtually an absence of incidents/accidents currently. Regarding my role as lab manager for the department, I make sure: - There are clear records of Standard Operating Procedures for equipment, which are reviewed by super-users. I personally write a number of SOPs in my Division, for equipment within my subject area, Pharmaceutics. - I budget yearly for the periodical maintenance of scientific equipment - I stimulate technical staff to take relevant training (remote and in-person). I have recently written a recommendation to a technical staff that I manage, for the Hershel's Programme and I am delighted to say that she had her application approved. - There are periodical spot-checks about the correct booking of equipment

	- A satisfaction survey about technical services is offered periodically. Any finds that lead to an issue is forwarded by me to the relevant team. I personally write and distribute the surveys. Due to this proactive approach results in satisfaction surveys are very positive. Dialogue between the research groups and my Team is very open and approachable, so any issues are always dealt with timely. Regarding my teaching duties, I make sure: - I have a good dialogue with the academic staff in charge. - I have an active voice regarding any review and/or change on the practical classes that I am involved with. - I am in charge of recruiting and training post-graduate teaching assistants (PGTA) which standardise the quality of the teaching delivered. - I keep up-to-date with the current good practices in HE learning and teaching, by attending conferences and interacting with the [redacted] ARENA center. - I am also an assessor for fellowships of the higher education academy applications at [redacted]. I have assessed two applications in November 2021.

	The items mentioned above, enable me to constantly improve the quality of the teaching that my team and I deliver. Student and staff feedback has been very positive over the years of practice. In my Team, I also make sure we cater to the diversity of learners that we have, making our teaching inclusive.

E: PROFESSIONAL STANDARDS

E1: Comply with and promote relevant codes of conduct and practice. *You should provide comprehensive examples of how you have applied and promoted the codes of conduct under which you practice and the outcome.* *Examples you may wish to include but are not limited to equality, diversity and inclusion, reliability and integrity and ethical practices.*	[redacted] has 'The Fair Recruitment Specialist (FRS) Scheme' since 2018. The Specialists are volunteers drawn from [redacted] staff who identify as Black, Asian or Minority Ethnic (BAME). The Scheme is part of [redacted]'s work on the Race Equality Charter. The scheme aims to assure that best practice is followed, avoiding all-White recruitment panels. Since the launch of this program, I have volunteered to be an FRS. I have received the relevant training, and since then I am part of a pool of FRS who participate in shortlisting and selection panels across [redacted]. I have participated in selections panels for 'The Faculty of Arts and Humanities' and for 'The [redacted] Faculty of Engineering Sciences', selecting for a variety of very senior posts. As an FRS, we have the commitment of participating in one panel per term, which I make sure that I do, by having a personal target of 3 panels a year at a minimum. In my capacity of FRS, I make sure I am up-to-date with the current EDI good practices and that I have a voice and a positive influence in the panel. The experience has been fantastic for me and my professional development. I can list the advantages for my career as follows: - I am playing an important role in decision-making at the University - I have received high-level specialist training, which is a transferable skill and boosts my CV and profile

	- I have networked in other parts of [redacted], particularly in Engineering - My role as an FRS is always praised and acknowledged in my annual appraisals - I know I am helping [redacted] to meet its aspirations on equality, diversity, and inclusion. I have been a member of the 'School of Pharmacy Athena SWAN steering group' in the past when the school gained Bronze Award. Currently, I am a member of the Institute of Leadership and Management. I make sure I follow the Institute code of conduct and that I keep up-to-date with my CPD, participating in training opportunities offered not only by the ILM, but also doing CPD activities offered by [redacted] Organisational Development and the many resources at [redacted] SharePoint 'Lead at [redacted]'. I am also a member of the Institution of Chemical Engineering (IChemE) for a number of years now. As a member, I keep up-to-date with my CPD activities, participating in events organised by the IChemE and observing the professional ethics and service to the community that is expected by its members.

	At the moment, as part of my professional registration application, I am looking into joining the 'Institute of Science and Technology (IST). I am committed to following IST code of conduct and keeping up-to-date with my CPD activities. One example of my commitment to apply and promote the code of conduct is my participation on the Royal Pharmaceutical Society 'Tabletting Technology course', as a presenter of the practical demonstration in 2019. As pandemic rules are eased the course will return in March 2022 as ' Tabletting Technology for the Pharmaceutical Industry' for which I am delivering the practical demonstration at [redacted] School of Pharmacy on the 29th March 2022.
E2: Demonstrate a commitment to professional development through continuing advancement of your own knowledge, understanding and competence. *Your answer should provide specific examples of what you have already done in terms of continuing professional development (CPD) and your plans for the coming year. In your examples you must describe how your engagement in CPD has*	I am very committed to my CPD and very conscientious of the impact that a well-managed CPD portfolio can impact on my practices. I have listed below a number of CPD activities that I have taken lately, describing how those activities have benefited my practice as a Technical Manager, as a Teaching Technical Staff, and as Deputy Divisional Safety Officer. For my Laboratory Managers' responsibilities: Doing the 'Project Management Essentials (by Reddington Consultancy); the 'Fundamentals in Research Funding Management' and joining the '[redacted] Finacial Management Communities of Practice' have given me knowledge and confidence to manage a variety of

benefited your practice and the users of your work and reflect on its impact. *Examples can be taken from any of the five categories of activity (work based learning, professional activity, formal/educational, self-directed learning and other).* *e.g.* • *Application of knowledge acquired on an external course that has benefitted the business – how you acquired the knowledge of a new technology and how you planned, implemented and reviewed its success in your organisation;* • *Your work to promote careers in the STEM area including the design of materials and reflection on success.* *We are not looking for a list of courses here but evidence of how your CPD benefits your practice and benefits others.* *(Note registrants will need to comply with the Science Council CPD Standards)*	challenging projects in my Division. To name a few, I have taken the re-organisation of the instrumental labs, observing social distancing. The project had a tight timeline, as the re-opening of the research facilities was imminent and the pressure was on, in order to continue offering the facilities at the same high standards. The work involved, moving specialised delicate equipment, purchasing extra PPE, and disinfection agents. The job was done timely and efficiently. For my Teaching responsibilities: In February 2021, I have applied successfully for the 'Fellowship of the Higher Education Academy'. The process of application involves a lot of reflection on my teaching practices. The process also impacted my confidence as a teacher in a higher education setting. Since then, I helped to re-design the 'Pharmaceutical Technology' during the pandemic, have organised and delivered the equipment training for the MSc students during their laboratory-based project in 2021. I have also mentored one application for a colleague in my department. At the moment, I am part of the assessor's pool for new applications for fellowships at [redacted]. In conclusion, my activities have contributed to improving my practice and are also helping colleagues to achieve best practices. For my Health and Safety responsibilities: In a space between July 2020 and December 2021, I have achieved two Health and Safety Qualifications: 'Safety for Managers (Level3)' and 'Certificate in Applied Health and Safety (level 6)'. Achieving

	those qualifications has opened my eyes in the way I see the Health and Safety legislation and the role of a Health and Safety practitioner. I have more confidence in my advisory capacity when giving advice to members of my Department. I am also applying the concepts of a good safety culture at the workplace and the management of health and safety in the workplace. As a consequence, this has facilitated for me to work more closely with my peers' safety officers in the department. We have now common guidelines across all the three lab-based research departments (Chemistry, Pharmacology, and Pharmaceutics) regarding local safety induction, risk assessment training, and records-keeping for training.