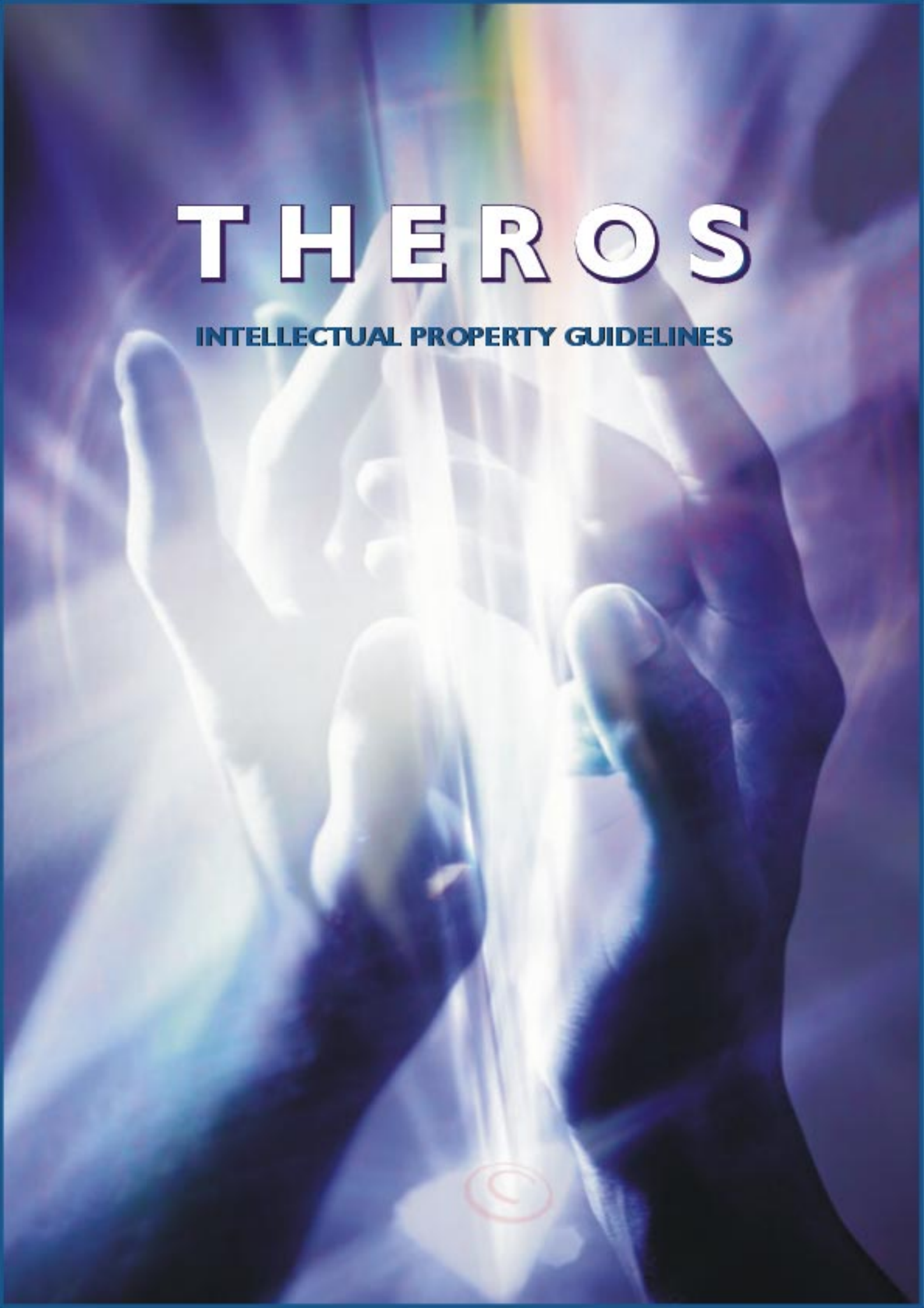
THEROS
INTELLECTUAL PROPERTY GUIDELINES

FOREWORD

Universities and other Higher Education Institutions (HEIs), being involved in fundamental and applied research in a number of disciplines, generate numerous innovative ideas which may have significant commercial applications. These ideas may prove to be important assets both of the institutions in which they are developed and of individual staff who work on them.

This manual is intended to assist in the effective management of such assets, whether the assets are developed by the HEI alone or in association with other research groups or with funding authorities or with commercial companies. It provides guidelines for the identification of Intellectual Property Rights (IPR) and is intended to indicate situations in which professional advice in the management of IPR may be required.

How these Guidelines can assist

The purpose of these Guidelines is not to baffle you with technical definitions, but to provide a practical introduction to the subject of IPR and to assist in identifying the IPR you may generate.

The aim is to:

- clear up some common misconceptions about IPR; and
- draw your attention to the importance and relevance of IPR in your work and indicate the areas where professional advice is required.

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WHAT ARE INTELLECTUAL PROPERTY RIGHTS (IPR) & WHY ARE THEY IMPORTANT?

The term **Intellectual Property Rights (IPR)** is commonly associated with Patents when, in fact, the term encompasses the **expression of all ideas and information.**

IPR are generated on a daily basis. Their careful management is critical particularly where personnel external to the organisation, such as other researchers, companies, government departments or local authorities, have access to the information.

IPR issues arise in projects such as collaborative research, contract research, consultancy, and specialist and other services provided by the University or other Higher Education Institution (HEI).

Types of IPR

There are five main types of IPR:

- **Patents**
- **Confidential information and know-how**
- **Copyright**
- **Trade Marks**
- **Design rights**

A single project may generate more than one type of IPR. While certain IPR can arise almost automatically, other types of IPR only arise through a formal registration procedure.

A general outline of the types of IPR and to what they relate is as follows:

Type of IPR	Subject Matter
Patents	New Technical Concepts, Inventions
Confidential information and know-how	Ideas, Information
Copyright	Text, Graphics, Software, Data Compilations, Art, Music
Trade Marks	Brands (Product or Service), Image and Reputation
Design rights	Form and Appearance, Decoration

See Also Appendix 5

The following matrix identifies activities typical in the academic environment and the sections of these Guidelines which are relevant to these activities.

The following are examples of situations in which IPR can arise in academic work:

ACTIVITY	PATENTS	CONFIDENTIAL INFORMATION	COPYRIGHT	DESIGN RIGHTS	TRADE MARKS
Using others' research papers, publications etc		x	x		
Research information. Preparing and collating research or experimental results		x	x		
Publishing or presenting research, academic or technical papers	x	x	x	x	
Industrial design projects	x	x	x	x	
Contract research	x	x	x	x	
Consultancy projects	x	x	x	x	x
Starting discussions on a collaborative project or contract research	x	x			
Receiving important confidential information		x			
Giving out confidential information	x	x			
Using computer software		x	x		x
Developing computer software	x	x	x		x
Revising or providing a manual or computer assisted drawings		x	x	x	
Preparing notes for lectures		x	x		
Responding to telephone queries of a technical nature		x			

TYPES OF INTELLECTUAL PROPERTY RIGHTS (IPR)

(1) Patents

General

Patents are the best known form of IPR. Formal steps are required to obtain protection. You should seek guidance on this.

What is a Patent?

Since mediaeval times, Letters Patent have been used to protect an inventor's monopoly. This idea of monopoly underpins the conception of today's Patents, which are available in most countries worldwide. In the United Kingdom, the Patents Act 1977 is the current principal statute.

In return for a complete disclosure to the State (Patent authority) of a technical invention, the Patent holder normally receives a twenty year monopoly over the use of the invention.
The commercial exploitation of a patented invention may be undertaken by licensees who purchase rights to the invention from the Patent holder.

What is patentable?

In the United Kingdom, in order to be patentable, the idea or invention must have certain qualifying conditions:-

- It must be industrially applicable.
- It requires to be new, ie different from what has gone before and not previously disclosed in any form and **not** in the public domain. This is a very important point as very often by the time Patent protection is considered, it is too late, ie there has been prior disclosure.
- There must be an inventive step. This step does not need to be a quantum leap since the majority of Patents are granted for incremental improvements to existing technology which are not obvious routine developments.
- The invention must not be of a type excluded by law. (see below).

There have been many cases to settle the exact scope of novelty, industrial application and inventive step and all such decisions are best guided by the Patent Attorney, with whom the HEI works closely.

Essentially, a commercial analysis of the potential value of the technology is carried out. In view of the scale of Patent costs, identifying licensees is generally done as early as possible. Consideration of confidentiality and further development work may dictate some delay in submitting an Application for a Patent.

It is important to understand that the Patent process has a long timescale associated with it. The chart in Appendix 1 demonstrates the various stages and associated timescales.

What is excluded?

The following types of innovation are specifically excluded from Patent protection:

- a discovery, scientific theory or mathematical method;
- a literary, dramatic, musical or artistic work;
- a scheme, rule or method for performing a mental act, playing a game or doing business;
- inventions encouraging offensive, antisocial or immoral behaviour;
- certain animal, plant or biological processes (although microbiology can be protected);
- methods of treatment or therapy of the human or animal body; and
- computer programs as such.

It should be noted, however, that these exclusions are not so sweeping as they appear at first sight. For example, it is possible to patent a manufacturing process where the novelty lies in the computer program controlling it. It is also possible to patent business methods in the form of specialised information systems, and in the USA business methods of any form are patentable. Professional advice should be sought before concluding that any particular innovation is excluded.

How is a Patent obtained?

The first port of call with any Patent queries should be the Industrial Liaison Office (ILO) where questions such as whether a Patent can be obtained and whether it would be commercially advantageous to do so can be dealt with.

When should a Patent Application be filed?

The timing of the first filing is important - file an Application too quickly and there is a risk of early disclosure to competitors, but file too slowly and there is a risk of other similar or overlapping Patents being sought by competitors or other businesses.

You must think carefully about Patent protection for new "technology" and consult the ILO well before it is shown to anyone not subject to a Confidentiality Agreement or outwith your research group. You may be asked to provide full details of the new invention to the ILO on a Technical Disclosure Form.
See Appendix 3.

When should patenting be considered?

This issue is a key feature of Patent Applications.

- Patents are **only** valid if **no prior disclosures** have been made concerning the invention.
  Note that this includes any published papers, conference papers, speeches and even general discussions with anyone who is not bound by a Confidentiality Agreement.

  Therefore if you think something might be worth patenting, consult the ILO before, say, heading off to give a paper to an audience. A simple initial Application can be filed quickly at a relatively low cost.

- A Patent Application once filed establishes a "priority date" and allows the invention to be disclosed to third parties. It provides an initial period of twelve months in which the technical and commercial prospects can be explored. By the end of the initial twelve months, the applicant must decide whether to proceed with the full Patent Application procedure and whether to seek Patent protection abroad.

Therefore, generally speaking, the sooner patenting is considered the more likely the HEI is to secure a strong Patent which gives a commercial return for the inventive work.

What protection and other benefits does a Patent give?

A Patent holder can prevent anyone from making, importing, using or selling the invention protected by the Patent in a given territory. Permission is granted in the form of licences, which generally produce royalty payments and, usually, also initial licence fees to the HEI.

Patents are effective on a national basis, but there are various international arrangements to simplify the procedure for patenting the same invention in more than one country.

The duration of a Patent, in most countries, is a maximum of twenty years from the filing date subject to the payment of annual renewal fees during this period. After a Patent has lapsed or expired, the technical information falls into the public domain and is then freely available for use by anyone.

In the first year, the filing of a Patent Application allows you to publish technical information while retaining the right to obtain Patents in almost all territories of interest.

Patent classification and its importance

Patents and Applications are classified in a comprehensive system. This can be used as a reference source of new ideas. It can also be used to check whether an apparently new idea is in fact infringing an existing Patent.

Patent collections contain 36 million Patents, no more than 15% of which are still in force. Patents are the sole source of over 80% of the world's published technical data. They thus provide an invaluable research library, accessible relatively easily through HEI or other libraries and on-line database and search services.

Why is the priority date important?

The priority date refers to the date of the first Application for the invention. Foreign Applications can be filed within the twelve month period following the first filing, claiming the benefit of the priority date, which means that the foreign Applications will be effectively backdated to the date of filing of the original case. This twelve month period cannot be extended. Modifications and developments of the original disclosure can be incorporated during the twelve month period, but not subsequently.

Once the priority date has been established,the technical information contained in the Application can be published. The novelty and inventive step are judged in the light of information in the public domain at the priority date.

International Patent protection

Virtually all countries are parties to the Paris Convention, which gives mutual recognition of priority dates. The Patent Cooperation Treaty, which has been adopted by a large number of countries, simplifies the initial stages of protecting one invention in a number of countries. In Europe, the European Patent Office (EPO) exists in parallel with national Patent Offices.

The EPO provides an optional route by which a single Application results in Patents being granted in up to twenty European countries.

Patents - An Overview
Patents protect technical innovation and require a formal Application process.
The innovation must be novel and have an inventive step.
Novelty is judged at the priority date, ie the date of first filing at a Patent Office.
To be patentable the innovation must not have had prior public disclosure, ie you must file a Patent Application before any non-confidential disclosure.
Patents provide basic rights to prevent other people using that technology, on a territorial basis.
Patentees have generally up to twelve months from the priority date to decide on whether to apply for protection in other countries.
Patents and the publication of technical information regarding the innovation are not incompatible IF HANDLED CORRECTLY.
An alternative to patenting may be keeping the innovation confidential.
A Patent Application requires full technical disclosure and the eventual publication of information.
Some items are excluded, such as scientific theories, mental acts and certain medical and surgical techniques.
Patentability is a complex area - good advice is essential.

TYPES OF INTELLECTUAL PROPERTY RIGHTS (IPR)

(2) Confidential information and know-how

What is confidential information?

Confidential information or know-how includes any information owned by someone which they wish to be regarded as confidential or secret. This includes commercially or technically valuable information. The management of confidential information must be tailored to protect the following:

- Information created by you.
- Information disclosed to you.

Where information is being disclosed, an obligation of confidentiality can only be created where all parties are **aware** of the obligation and agree to it. In all cases, disclosure should be controlled by parties first entering into a written Confidentiality or Non-Disclosure Agreement. For advice on dealing with external organisations, see the following pages.

Confidential information may be patentable. However it may be appropriate for the information to remain confidential.
Be aware that retaining confidential information entails taking practical measures to ensure that confidentiality obligations are accepted by all parties.

Confidentiality - a pre-requisite for patentability

The principle of prior disclosure is at the very cornerstone of the Patent system. Basically, prior disclosure to anyone who is not subject to an obligation of confidentiality could lead to the failure of an Application for Patent protection. Unintentionally and unwisely, however, know-how or confidential information is often freely given out and care should be taken not to do so.

How to manage confidential information

Virtually all links with external organisations (funding or otherwise) will result in an exchange of information. If the full potential of Intellectual Property is to be realised it is essential that confidentiality be maintained until such time as adequate protection is in place.

Questions as to ownership of IPR feature prominently in many negotiations whether in respect of R & D Agreements, Service Agreements, Clinical Trials or Consultancy Agreements. Before IPR can be of value, however, it is essential that internal housekeeping rules are observed by all involved in the relevant project. At the simplest level, mere disclosure of the existence or content of a Research Programme may well amount to a breach of confidentiality. Careless disclosure of the results of a piece of research, however, may have much more far-reaching consequences.

Indeed, it may mean the difference between exploitation and non-exploitation of the IPR involved. In order to counter these dangers, it is recommended that the HEI, or indeed individual departments or researchers, adopt a set of guidelines designed effectively to manage or control the flow of confidential information (see following pages).

In practice, an obligation to keep information confidential entails:

- **not disclosing or using the information without permission of the person to whom the obligation is owed.**

There are three ways that someone can become subject to an obligation of confidentiality, namely:

- **expressly by a contractual obligation;**
- **implied by a contractual obligation;**
- **from the nature of the relationship between discloser and recipient.**

In light of the foregoing, it is recommended that the following guidelines be observed:

- Be aware of the risk of "casual" visitors to laboratories or other such premises.
- Before discussing work with visitors to the laboratory or with third parties, have a Confidentiality Agreement signed.
- Consider security arrangements for entry to research laboratories and for the secure filing of laboratory books, results, equipment, etc.
- Have a policy for a "confidentiality" review of draft papers before publication.
- Ascertain your obligations under any contracts entered into, such as publication restrictions.
- Ensure that any confidentiality undertaking is mutual.
- Establish a system to monitor results periodically in order to assess patentability, etc.

REMEMBER that if an idea has been disclosed to third parties, it may not be capable of receiving the full protection of the law. Effective management of confidential information requires that there be practical steps in place. It is not enough that the contract or research agreement specifies the obligations of confidentiality in great detail. The terms of the contract or research agreement must be put into practice.
If in doubt, consult the ILO.

Guidance on dealing with external organisations or individuals

What IPR issues should you consider when initially in contact with third parties? In virtually all cases, if you have external links (funding or otherwise), then you will be in a situation where exchanges of information will take place. Most information will be the subject of at least one kind of IPR. What steps therefore should you take:

1. If receiving confidential information:
   Go to Checklist No 1.
2. If giving out confidential information:
   Go to Checklist No 2.
3. If publishing or presenting research, academic or technical papers:
   Go to Checklist No 3.
4. If starting discussions on a collaborative project/contract research:
   Go to Checklist No 4.

Confidential information: Checklist No 1

What to do if receiving confidential information:

- **Have you been asked to sign a Confidentiality Undertaking? If so, please check that it is only a confidentiality restriction and not a transfer of IPR in addition.**
- **Obtain express confirmation from the discloser that the information is not confidential, where possible, before disclosure.**
- **Make a written record of what was disclosed,by whom and when.**

REMEMBER that an obligation to keep information confidential entails:

- Not disclosing or using the information without permission of the person to whom the obligation is owed.

Confidential information: Checklist No 2

What to do if giving out confidential information:

- **Put it in writing or some other permanent form.**
- **Keep a copy of what is disclosed, and a record of when and to whom.**
- **If an oral disclosure is made in confidence, confirm in writing what was disclosed and that it was given in confidence.**

And, most importantly:

- **Have the recipient sign a Confidentiality Undertaking in advance of the disclosure.**

Confidential information: Checklist No 3

If publishing or presenting technical papers:

- **Does anything in the paper describe a new device, chemical compound or manufacturing process or a significant improvement or modification to any such matters? If in doubt contact the ILO in advance of any disclosure.**
- **Do NOT disclose anything without first considering the possibility of the content of the papers being patentable in whole or in part. Consult the ILO IN ADVANCE of any disclosure.**
- **What restraints on publication are there in any Research & Development or other such Agreements which provided funding for the research?**
- **What is the publisher's timetable for confirming publication?**
- **Request that the publisher confirms confidentiality on receipt of paper pending decision on publication. See Appendix 4. Documents should be clearly marked as being confidential.**

Confidential information: Checklist No 4

If starting discussions on a collaborative project/contract research:

- **Consider what background IPR, if any, are free from obligations of confidentiality and may be introduced to the project.**

- **Prior to disclosing any information to third parties, have a Confidentiality Agreement signed.**
  For a style see Appendix 2. Such agreements may take many forms and the terms should be adjusted with the ILO so that it fits individual circumstances.
  The agreement must however deal with the following essential matters:
  (a) Identification of parties.
  (b) What information is to be kept secret?
  (c) For how long?

- **Consult the ILO.**

Management of confidential information - An Overview
Key information should be kept confidential until such time as it is protected
Non-confidential disclosure can be reduced by: (a) relatively simple internal housekeeping and discipline; and (b) the use of Confidentiality Agreements where appropriate.
Beware of "casual" visitors and ensure that security arrangements for key information are appropriate.
Check for obligations placed on you by a third party.
Consider confidentiality before publishing information and starting discussions on collaborative projects or contract research.

TYPES OF INTELLECTUAL PROPERTY RIGHTS (IPR)

(3) Copyright

What is Copyright?

Copyright is an automatic right which arises whenever a literary, dramatic, musical or artistic work is expressed in a tangible form. Where possible the ownership should be indicated by the legend © with name and date. Unlike Patents, Copyright requires no formal registration and in most cases lasts for the lifetime of the author plus 70 years.

Ownership

It is important to secure ownership of Copyright in any work which you would like to prevent anyone else copying. The first owner of Copyright is the author, but if the author creates the work in the course of employment duties, then the first owner is the employer. The Copyright in commissioned works will not normally belong to the commissioner unless there is a written agreement to that effect. It should be remembered that various items habitually in use within the Institution may not be the Copyright property of the HEI. Such items may include photographs, transparencies, computer programs and advertising material, as well as publications and lecture notes.

What does Copyright mean?

Copyright, as the name suggests, gives the right to act to prevent others from copying without permission from the Copyright holder and protects works including text, drawings (eg architectural, engineering), parts lists, graphic design in packaging, corporate logos, publicity material, computer programs, etc. The creation of identical works through independent effort is however acceptable: for example, if two separate teams of graphic designers produce the same design each will have Copyright in their own design.

Copyright is a vast and complicated subject. If you are tempted to copy - think again - as you may well be infringing Copyright and perhaps Unregistered Design Rights and other IPR. Consult the ILO.

Copyright and YOU!

Do you or your Department originate or commission any of the following:

(a) Text (copy)	Go to (1) below
(b) Computer programs	Go to (2) below
(c) New product designs	Go to (3) below
(d) Drawings	Go to (4) below
(e) Photographs	Go to (5) below

(1) Any form of text, even a letter, is a "literary work" and the Copyright in it can be used to prevent unauthorised reproduction.

(2) Original computer programs are treated as though they are literary works for Copyright purposes. A computer program, as such, is not patentable in the UK, but it may be possible to patent a machine or manufacturing process which has been improved by incorporation of a new program.

(3) Any decorative features in new products are usually protected by Copyright. Features of shape may be protected by Unregistered Design Right. Both may be protectable by a Registered Design. See the section on Design rights.

(4) Drawings may be saleable purely as aesthetic works, or may contain commercially useful information. In the aesthetic field, Copyright can be used to prevent unauthorised sales. In the technical field, unauthorised copying of engineering drawings or computer-aided design (CAD) data is an infringement of Copyright, but copying of the products is not. See the section on Design rights.

(5) Photographs can be commercially important as posters or postcards, or as background to other business material, eg in advertisements or instruction manuals. Again, you can only enforce the Copyright if you own it.

Do you ever copy materials produced by other people?

YES: Whilst some material is in the public domain and can be copied freely, it is best to assume that any product sold commercially is protected by Copyright (or some other IPR) and not to copy until you are satisfied that there is no infringement. The Copyright, Designs and Patents Act 1988 (Sections 32-36) regulates the use of Copyright material for educational purposes. Most HEIs also have arrangements with the Copyright Licensing Agency to make additional copies on payment of licence fees. If in doubt, consult the ILO or other HEI office responsible for administering Copyright matters.

NO: Are you sure? Eg, a growing problem is the copying of computer software. When you "buy" a package such as WORDSTAR or LOTUS 1-2-3 you may be only acquiring a licence to use one package. Making a copy to use on a second machine is a Copyright infringement unless a multiple or site licence has been agreed. Review your internal procedures on copying generally in consultation with the ILO.

What happens to works commissioned from others?

If you commission a work, you should take care to make the IPR position clear at the outset.

For example, Copyright in graphic design or artwork will belong to the designer who created it **unless** it has been assigned to the party that commissioned it. Typically, a written assignation does not take place and this can create problems.

Your contract with the third party should clearly spell out the ownership of Copyright and prior advice should be obtained from the ILO.

Copyright - An Overview
Copyright applies to literary, musical or artistic works in their very widest sense.
Written text, graphics, artwork, drawings and sketches, data compilations and software are Copyright works.
Copyright protection exists automatically.
Protects against actual copying of works. Will not protect against independent creation of identical or closely similar works.
Protection usually exists for life of author plus 70 years.* * (The former 50 year period still applies for some works.)
If not established by a legally-binding written contract, Copyright ownership may end up with someone who was never intended to own it.

TYPES OF INTELLECTUAL PROPERTY RIGHTS (IPR)

(4) Trade Marks

What are Trade Marks?

Trade Marks are any "sign", eg word, device, logo, legend, label, container, etc that usually identifies goods, or services, as coming from a particular source. They therefore serve to distinguish between different sources.

Why are Trade Marks valuable?

It should also be emphasised that as Trade Marks are associated with image and reputation, they can be expensive to develop and a very expensive loss if devalued by counterfeiters or the competition. It is useful to use the symbol ® if the Mark is Registered and ™ if you wish to indicate merely proprietary rights. These have little legal importance, but are very useful as deterrents (although ® should not be used if the Mark is not registered).

How are Trade Mark rights obtained?

In the UK since the introduction of a new law in October 1994, the rights to a Trade Mark are largely determined on a "first-to-register" basis.

If you have used the Trade Mark very extensively and to such an extent that it becomes known as yours, then you may be able to prevent anyone else using it or a closely similar Trade Mark on similar or identical goods or services by means of a "passing-off" action.

In a passing-off dispute where the Trade Mark has not been registered, the onus is on the user of the Trade Mark to prove that the Mark is associated with their product or service and that they have a reputation in the Trade Mark - this can be both time-consuming and expensive, perhaps involving extensive market research. Furthermore, if another party has already achieved registration, your prior use rights may be limited and indeed you may be open to an infringement action by the owner of the registration.

It is therefore strongly recommended that you make an early Application to register the Trade Mark to achieve protection.

What does registration involve?

There is a formal registration procedure conducted in the UK by the Trade Marks Registry (a branch of the Patent Office) which results in a registration which can last indefinitely provided renewal fees are paid - for the UK every ten years.

Not all Trade Marks are inherently distinctive enough to be registrable (eg many geographic Trade Marks and surnames are not easily registrable unless they have been used for a number of years and have acquired distinctiveness). It is important to check first with an expert before adopting your Trade Mark to receive advice on its registrability. Consult the ILO.

Trade Marks are registered for specific goods or services. A registration is infringed by someone else using the same Trade Mark (or a confusingly similar one) in relation to the same or similar goods or services. It is possible for identical Trade Marks to be used by different persons quite legitimately if the goods or services concerned are quite different, and/or with consent by the proprietors, eg PENGUIN books and PENGUIN biscuits.

What to do before adopting a Trade Mark?

Before you adopt a Trade Mark, it is also extremely desirable to carry out a clearance search to ensure that you are not infringing someone else's Registered Trade Mark rights. Trade Mark Attorneys can very quickly carry out searches of Registered Trade Marks and pending Applications to clear the Trade Mark for use.

Trade Marks - An Overview
A Trade Mark is a brand identifying feature.
A Trade Mark can be any form of distinctive "sign", such as a word, a logo, a type of artwork, a particular colour combination, or a container of unusual shape.
In the UK, rights are primarily acquired through registration.
Trade Marks are registered for specific classes of goods or services. Similar Trade Marks may therefore be used by different proprietors for different applications.
Trade Marks are very valuable means of differentiating products and services from those of competitors, eg software, laboratory testing services, etc.
When developing new Trade Marks, a clearance search should be carried out to avoid possible infringement of the Trade Mark rights of others.

TYPES OF INTELLECTUAL PROPERTY RIGHTS (IPR)

(5) Design rights

What types of rights relate to designs?

The area of Design rights is complex and expert advice is essential. In essence, Design rights relate to the visual appearance of an industrially produced article. There are two types of Design rights in the UK - Registered and Unregistered.

Registered Designs

Registered Designs relate (as the name suggests) to designs which are determined to be registrable by a formal Application procedure to the State; the design must be material to the customer in its shape, pattern or ornament. Registered rights give a monopoly right, as with Patents and Registered Trade Marks. A Registered Design, however, lasts for 25 years, providing renewal fees are paid at five yearly periods.

Unregistered Design Rights

Unregistered Design Rights are a less formal right; as the name suggests there is no formal Application procedure.
The right only gives protection against copying of features of shape, and is not a monopoly right. Furthermore, it lasts for a shorter period - ten years from first marketing, and during the last five years anyone is entitled to obtain a licence to use the protected design on payment of royalties (Licences of Right).

Unregistered Design Rights do not apply to two-dimensional surface decoration of articles, but such decoration will frequently be protected by Copyright.

Note that many countries have protection equivalent to Registered Designs, but Unregistered Design Rights are unique to the UK.

Semiconductor Topographies

In the UK, Unregistered Design Rights are also used as a means of protecting semiconductor topographies, ie the physical design of circuit chips, and related drawings and masks. In other countries, protection of these usually requires some form of registration.

CONSULTANCY AGREEMENTS

What is a consultant?

As employees of the HEI, academic staff are usually permitted to act as consultants for external organisations. The definition of "consultant" is dependent on an advisory role being undertaken which does not require the support of any HEI facilities. Payment provisions and periods of appointment will be detailed in HEI guidelines or employment contracts.

What IPR issues should be considered?

A consultant is appointed to give expert advice on activities or ideas of the company. Therefore the company will usually be entitled to ownership of any IPR which may be produced during the consultancy.

Great care must be taken in the following areas:

- **Confidentiality** will most likely be demanded and it may be that consultants will also wish to preserve confidentiality of his/her ideas. Consider a mutual confidentiality agreement.
- **Define the field** of activity and advice very carefully in order to avoid possible conflict with other work/consultancy activities. Clearly stating the field also means that IPR can be easily identified.

- **Beware** of abuse of consultancies to entrap the unwary into doing "backdoor research" where research is effectively carried out without true consideration being given to either the costs involved or the restrictive nature of publication, or to IPR.
- **Ensure** that adequate Professional Indemnity Insurance is in place either personally or under the HEI's policy. If the latter, the consultant may be expected to contribute towards a share of the premium.

THE ROLE OF THE INDUSTRIAL LIAISON OFFICE (ILO), COMMERCIALISATION MANAGER OR EQUIVALENT

The ILO has two key objectives:-

- to assist members of staff in applying for research grants and contracts; and
- to protect and exploit IPR arising from research at the HEI to the benefit of individual inventors and the HEI overall.

Structure of the ILO

The composition and structure of each ILO will vary from HEI to HEI. It will however provide, or at least have access to, advice on general aspects of IPR law, and will give assistance on the application or negotiation of research grants, etc. The ILO has an integral role in the HEI's interaction with government bodies and external sponsors:

Applications for funding

Research at most HEI's is funded from three main sectors:

- Charitable bodies.
- Research Councils.
- Contract research.

Applications to Charitable bodies and Research Councils are essentially evaluated on scientific merit by peer review. For these applications, the ILO will generally cost the project and sign on behalf of the HEI.

Advice on contract terms

Contract research or service work is a more complex area, and in this the ILO can provide assistance in the identification of sponsors, programme preparation, costing and contract negotiations.

The ILO will also advise on the terms of personal consultancy so as to ensure that the suggested terms and conditions are in keeping with the HEI's policy, and are not disadvantageous to either the consultant or the HEI.

Exploitation

The exploitation of IPR through licensing or assignments (ie sale) is likely to be of benefit to the HEI. Accordingly, the ILO should be involved in the negotiation of licence agreements and assignments. Indeed, it is recommended that the ILO be advised at an early stage in order that an exploitation strategy may be identified in conjunction with the HEI's Patent Attorneys and other business advisers, if required.

Licensing is a powerful way of allowing someone to use your IPR while you retain ownership of it; for example, authors of computer software can license companies or individuals to use their programs for a defined purpose, for a fixed period of time, or in a certain location, all in return for royalty payments.
The same terms and conditions can be found in any licence of any right and these licences can continue for as long as an owner holds the right in question.

In this way, an owner may receive income from royalty payments for many years. The licence fee can consist of an upfront payment and/or following annual instalments based generally on the number of copies of an article sold or the number of times a new process is used.

Assignment is the sale of the IPR to another party, generally for an agreed sum, which may be paid up front in a lump sum or in instalments. It is also possible to include continuing royalty payments as part of the price for the IPR being assigned.

The ILO can advise on the best package to suit the technology involved.

Contract administration

Post-award administration of research, service and other agreements will either be carried out by the ILO or the HEI's finance or research grants office.

What is the cost of protection?

Some IPR have little or no costs associated with them, eg Copyright or Confidentiality.

In general, protection of IPR on an international scale is complex and costly. Various approaches can be adopted to reduce costs. Whatever the approach however, it has to be consistent with the long-term development plans for the technology involved. Consult the ILO at an early stage and certainly before any public disclosure.

However, once the importance of the IPR is recognised and understood, the costs can be put in context. Ideally, an IPR policy for the project should be developed - again this should not only take into account the current activities but also longer term research and development plans and ensure that the most cost-effective approach is taken. Consult the ILO at an early stage.

When should you consult the ILO?

Agreements between the HEI and industrial sponsors for work must be beneficial for both parties. It is essential, however, that key issues such as the restriction on the right to publish, ownership of IPR, payment of royalties and payment of the full cost for carrying out the research initially, are considered at the earliest possible opportunity.

Where members of staff are intending to seek industrial sponsorship, it is essential that they contact the ILO at an early stage to ensure that the contract negotiations are given adequate time. It is often the case that agreements made in haste can seriously affect the HEI's academic and financial health as well as the long term relationship with sponsors.

Remember that the basic role of ILOs or other such organisations within the HEI is to facilitate members of staff in their research submissions and the exploitation of inventions. It is never too early to call the ILO!

General Stages in a Patent Application

TIMESCALE	ACTIVITY
0	Patent Application filed in the UK
1 year	Updated Application filed in the UK (New technical material can be added up to this stage, but no later) Plus any overseas Applications required
1 year 6 months	Application published with Search Report (at this stage anyone can obtain copies of the Patent specification)
2 to 4 years (depending on country)	Examination report received, Patent Attorney and Examiner correspond and negotiate on wording of Patent claims
3 to 5 years (typically)	Patent granted (or refused)
4 to 20 years	Annual renewal fees due

The precise timescale depends on the country and on whether the European Patent Office, Patent Co-Operation Treaty, or national patenting routes have been used. Some countries' national routes differ from the above general outline.

Sample Confidentiality Agreement (1)

CONSIDERING THAT I _____ of _____("the Recipient") am to visit the Department of _____ at the Higher Education Institution of _____ ("the HEI") AND FURTHER CONSIDERING THAT as a result of my said visit I may obtain or have access to Confidential Information (whether written, oral or otherwise)
NOW THEREFORE I DO HEREBY UNDERTAKE AND CONFIRM that I shall at all times preserve complete confidentiality in relation to any such information acquired by me and that subject to the following conditions:

1 Interpretation

(1) For the purposes of this Undertaking, the term "Information" means any and all information which is now or at any time herein after the possession of the HEI and which the Recipient may have access thereto, including without limitation data, know-how, formulae, processes, designs, photographs, drawings, specifications, software programs and samples and any other such material whether disclosed in writing or verbally.

(2) For the purposes of this Undertaking, the term "associate" shall have the following meaning:

(a) in relation to any individual, any issue, spouse, sibling, parent or employee and any company which is or may be directly or indirectly controlled within the meaning of the Income and Corporation Taxes Act, 1988, by any of the foregoing or by any two or more of them; and

(b) in relation to a company, a Director, Shareholder or employee and any subsidiary or holding company of a company and any subsidiary or any holding company of such company.

2 Undertaking of the Recipient

To maintain and procure that any associate will maintain in strict confidence the Confidential Information and that he/she will not and will procure that any associate will not publish or disclose nor in any way directly or indirectly permit or suffer the disclosure of the existence, source, content or substance of the information without the prior written consent of the HEI.

3 Miscellaneous

(1) Information may be revealed to employees of the Recipient but only to the extent that it is necessary to further communications with the HEI or to carry out work for the HEI. The Recipient will bind such employees to keep such information confidential both during and after their current employment and will take all appropriate steps to enforce the obligations for such employees in relation thereto.

(2) This Undertaking shall not apply to information which is:

(a) at the date hereof in the public domain or subsequently comes into the public domain through no fault of the Recipient;

(b) proved to be already known to the Recipient at the date of disclosure; and/or

(c) otherwise properly and publicly available to the Recipient.

4 Indemnity

The Recipient shall indemnify and keep indemnified the HEI, its servants, and agents against all claims, actions, losses, damages, costs and expenses which may be brought against or incurred or suffered by the HEI, its servants or agents in connection with the Confidential Information if the same are directly or indirectly attributable to the acting, omissions, neglect or fault of the Recipient or any person for whom he/she is responsible at law.

5 Governing Law

The construction, validity and performance of this Agreement shall be governed by the Law of Scotland.

Full Name _____

Designation _____

Date _____

Witness

Full Name _____

Address _____

_____

Mutual Confidentiality Undertaking (2)

We, ( ), having a place of business at (

)

CONSIDERING THAT WE have been or may be engaged in discussion with members of staff of ( ) (HEI), AND FURTHER CONSIDERING THAT as a result of the said discussions Confidential Information relating to ( ) may be exchanged;

NOW THEREFORE both parties hereto do hereby undertake and confirm that they shall at all times preserve complete confidentiality in relation to any such information acquired by them and that subject to the Standard Terms and Conditions specified and contained in the Schedule hereto.

SIGNED FOR THE HEI by _____

Witness

Full Name _____ Full Name _____

Designation _____ Address _____

Date _____ _____

SIGNED FOR by _____

Witness

Full Name _____ Full Name _____

Designation _____ Address _____

Date _____ _____

Note:- Parties also to sign at foot of Schedule.

THESE ARE THE STANDARD TERMS AND CONDITIONS
REFERRED TO IN THE FOREGOING CONFIDENTIALITY UNDERTAKING BETWEEN [ ] AND [ ]

1. Interpretation

1.1 For the purposes of this Undertaking, the term "Confidential Information" means any and all information which is now or at any time hereafter in the possession of one party and which the other may have access to, including without limitation, data know-how, formulae, processes, designs, photographs, drawings, specifications, software programs and samples and any other such material whether disclosed in writing or verbally.

1.2 Verbal disclosures shall only be regarded as Confidential Information if reduced to writing within thirty days of disclosure.

1.3 The party to whom Confidential Information is disclosed shall be referred to as "the Obligant".

1.4 For the purposes of this Undertaking the Obligant shall include all associates who are defined as follows:-

1.4.1 In relation to an individual, associate means any issue, spouse, sibling, parent or employee and any company which is or may be directly or indirectly controlled within the meaning of the Income and Corporation Taxes Act 1988, by any of the foregoing or by any two or more of them.

1.4.2 In relation to a company, associate means a Director, Shareholder or employee.

2. Undertakings of the Obligant

2.1 To maintain in strict confidence the Confidential Information and not publish or disclose nor in any way directly or indirectly permit or suffer the disclosure of the existence, source, content or substance of the Confidential Information without the prior written consent of the other.

2.2 Not to use, rely upon or duplicate or in any way profit from or take advantage of in any manner the Confidential Information with out the prior written consent of the other.

3. Exceptions

3.1 Notwithstanding Clause 2 above, the Obligant may disclose any Confidential Information which is:

3.1.1 at the time of disclosure already known to the Obligant;

3.1.2 publicly available in general circulation otherwise than as a result of a breach of this Agreement; or

3.1.3 developed independently by the Obligant, provided that the Obligant can demonstrate the independence of such development.

3.2 Without prejudice to the foregoing, if any of the Confidential Information is received by the Obligant from a third party, then the Obligant shall inform the other party at once.

3.3 Without prejudice to the generality of Clause 3.1.2 above, information shall not be deemed to be publicly available by reason only that is known to only a few of those people to whom it might be of commercial interest, and a combination of one or more portions of the Confidential Information shall not be deemed to be publicly available by reason only of each separate portion being so available.

4. Confidentiality Measures

4.1 To secure the confidentiality attaching to the Confidential Information, the Obligant shall:

4.1.1 keep separate all Confidential Information and all information generated by the Obligant based thereon from all documents and other records of the Obligant;

4.1.2 not use, reproduce, transform or store any of the Confidential Information in an externally accessible computer or electronic information retrieval system or transmit it in any form or by any means whatsoever outside of its usual place of business;

4.1.3 allow access to the Confidential Information exclusively to those employees of the Obligant who have reasonable need to see and use it for the purposes of its evaluation by the Obligant and shall inform each of said employees of the confidential nature of the Confidential Information and of the obligations on the Obligant in respect thereof; and/or

4.1.4 on request of the disclosing party made at any time, deliver up to them all documents and other material in the possession, custody or control of the Obligant that bear or incorporate any part of the Confidential Information.

4.2 All Confidential Information shall remain the property of the disclosing party. In no event shall the Obligant be deemed to have acquired any right, title or interest in or to the Confidential Information, or related information or technology possessed by the other by virtue of this Undertaking and all patentable Inventions and intellectual property rights arising directly from the Confidential Information shall be the sole property of the disclosing party.

5. Indemnity

The Obligant shall indemnify and keep indemnified the disclosing party, its servants and agents against all claims, actions, losses, damages, costs and expenses which may be brought against or incurred or suffered by the disclosing party, its servants or agents in connection with the Confidential Information if the same are directly or indirectly attributable to the actings, omission, neglect or fault of the Obligant.

6. Governing Law

The construction, validity and performance of this Agreement shall be governed by the Law of Scotland and the parties consent to registration hereof for preservation and execution.

Signed _____ Full name _____ Date _____

Signed _____ Full name _____ Date _____

Technical Disclosure Form **SAMPLE**

Contact: _____

Technical Title: _____

Date: _____

Reference: _____

ILO Staff:

Possible IPR:

Patents	( )
Trade Marks	( )
Designs	( )
Copyright	( )
Confidential Information	( )

Technical Description: Note: This should be comprehensive and include any drawings, photos or prototypes.

Perceived Novelty: Note: To include description of complete technology, and what is currently done.

Potential Commercial Applicants and Market: Note: To include known uses or applications, manufacturers, and existing licence agreements.

Source of background IPR (if any): Note: Who owns or controls background IPR, if any.

Inventors/Authors: Note: Specify name, title, employment status (ie staff/research) and funding route. List more than one member of staff if required.

Letter (enclosing paper for publication) **SAMPLE**

[Date]

[Address]

Dear Sirs

[Title]

[Authors]

I/We have pleasure in sending the enclosed papers in draft form for consideration for publication in [ ].
Please note that the paper is to be considered a confidential document and, as such, must remain undisclosed to any third party unless prior authorisation to the contrary has been obtained from [name ofthe HEI]. Obviously, for the purposes of peer review and consideration, disclosure in confidence is permitted, provided always that the recipient is aware of the confidential nature of the paper. I am sure that these measures for preserving confidentiality are not new to your company, but in order to protect the [name of the HEI]'s position re patenting etc, these obligations must be expressly laid down. Please confirm your acceptance of these provisions by signing and returning the duplicate of this letter.

Yours faithfully

Signed:

_____

Main Feature of UK Intellectual Property Rights (IPR)

	Subject Matter	Exclusions	Registration	First Owner	Term	Infringement
Patents (Patents Act 1977)	Inventions which are new, involve an inventive step, and capable of industrial application	Discoveries; scientific theories; mathematical methods; Copyright works; schemes, rules & methods for performing mental acts, games or business; computer programs as such; methods of medical treatment & diagnosis; immoral inventions; any variety of animal or plant or biological process (not including micro-biological processes)	Yes (note law relating to confidentiality)	Applicant (usually inventor or inventor's employer)	20 years from date of application	Making, disposing of, altering to dispose of, importing, using or keeping patented product without licence
Copyright (Copyright Designs & Patents Act 1988 Part 1)	Original literary (including computer programs), dramatic, musical, artistic works; records, films, broadcasts, cable programmes	Immoral works; industrial designs	No	Author/ maker; when made in course of employment, the employer	Author's life +70 years The former 50 year period still applies for some works eg sound recordings	Copying, issuing copies to the public, performing, broadcasting,cable transmission, adapting, authorising any of the foregoing, dealing in infringing copies, without licence
Registered Trade Marks (Trade Marks Act 1994)	Any distinctive sign used with goods or services		Yes	Applicant	Indefinite. Renewable every 10 years	Using identical or similar sign on same or similar goods or services
Registered Designs (Registered Designs Act 1949)	New features of shape, configuration, pattern or ornament	Designs dictated solely by functions of article; must-match designs; immoral designs	Yes	Applicant (usually designer or designer's employer)	25 years maximum Renewable every 5 years	Use of design by way of commercial manufacture, import or dealing
Unregistered Design Rights (Copyright Designs & Patents Act 1988 Part 3)	Any original aspect of shape or configuration of the whole or part of an article interior or exterior; topography of semiconductor chips	Must-fit and must-match designs; commonplace designs; surface decoration	No	Designer (unless in course of employment, or commission, or computer generated)	15 years from creation or 10 years from first marketing, whichever is less	Copying the design exactly or substantially for commercial purposes by making an article to the design or by creating a design document for purposes of manufacture

Reference: Dr Hector MacQueen, University of Edinburgh

Guidance on Laboratory Notebooks

Academic and research staff will maintain records of their work in a variety of ways including increasingly in an electronic form such a word processing or other software files.

However, manually updated and corroborated hard copy laboratory workbooks can be essential in determining the date of conception of a particular invention. The need to maintain good records is also influenced by the unusual United States patent practice of 'first to invent' rather than 'first to file' as in most other countries.

As the US can be a key substantial market for many inventions this is an important consideration as in a dispute laboratory notebooks may be required to be presented as legal evidence of conception of an invention and reduction to practice without acquiescence.

It is therefore recommended that:

(i) Permanent bindings are used on notebooks - looseleaf books should be avoided to prevent possible removal or substitution of pages.

(ii) Pages should be numbered and any additional drawings, charts or computer printouts should be permanently attached to the notebook, clearly identified and have reference made to them in the notebook.

(iii) All project related or other activities such as breaks in research due to secondments or holidays etc should be recorded factually.

(iv) The notebook should be reviewed regularly by someone who understands the technology involved. Each page should ideally be signed and dated by a witness. Attached printouts etc. should also be signed and dated, preferably onto the notebook page. The choice of witness is important - it should preferably not be someone who may be nominated as a co-inventor.

(v) The information in the notebooks should be complete enough to enable one skilled in the art to understand and carry out the experimentation.

Well documented notebooks should demonstrate the progress of research and are an important record in the event of a dispute. They should be stored safely. If you have any queries regarding this activity consult your ILO.

THEROS

This publication was developed and written by
the following organisations:

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Murgitroyd & Company, Patent and Trade Mark Attorneys obtain and enforce Intellectual Property rights, including Patents, Trade Marks, Designs and Copyrights, on behalf of U.K. and overseas organisations. The company has a range of scientific and technical expertise from biotechnology and biochemistry to electronics and computer related technology.

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Thorntons WS, solicitors handling all aspects of company commercial and other legal matters including dispute resolution. Particular expertise in Intellectual Property, such as collaboration agreements, R & D contracts and Patent licence, and working with a range of academic and research-based organisations.

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THEROS Intellectual Property Guidelines - website: http://www.theros.co.uk

INTELLECTUAL PROPERTY GUIDELINES

MURGITROYD & COMPANY

THORNTONS WS solicitors

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