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Inorganic Chemistry Laboratory Conservation Plan **Oxford University**

Estates Services

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THE INORGANIC CHEMISTRY LABORATORY, OXFORD

CONSERVATION PLAN

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INTRODUCTION

1 INTRODUCTION

The Inorganic Chemistry Laboratory was constructed in 1860 as part of the adjacent University Museum to a design by Deane and Woodward of Dublin. It was constructed by Lucas Brothers of London. The striking design of the original building is borrowed directly from the fourteenth-century Abbot's Kitchen at Glastonbury. The original building was extended to the south in 1878 and the Radcliffe Science Library was constructed as an extension to the Abbot's Kitchen in 1901. The squared-rubble extension which now forms the majority of the laboratory was constructed by Lanchester and Lodge in 1954-57. The Abbot's Kitchen was constructed as one of the first purpose-built chemistry laboratories in the world and, following horizontal subdivision in 1901, now forms an annexe to the Radcliffe Science Library on the ground floor whilst the upper floor remains part of the Inorganic Chemistry Laboratory

1.1 Purpose of the Conservation Plan

The University has an unrivalled portfolio of historic buildings, of which it is rightly proud. It has traditionally taken a thorough, holistic approach to building conservation, seeking to understand all the varied factors that make historic buildings significant to their diverse stakeholders, and using this to inform necessary change. It has become clear that this approach is vital to the conservation culture of an institution where so many of its historic buildings that are valued for their function also have extensive historical or architectural significance. This Conservation Plan represents the continuation of this tradition of seeking to understand what makes the University's buildings cherished assets, and of seeking ways to conserve these most important features for the enjoyment of future generations.

The success of this approach is such that it has now become codified in government policy: First in March 2010's *Planning Policy Statement* 5: *Planning for the Historical Environment* then in its replacement, March 2012's *National Planning Policy Framework* (hereafter: NPPF). NPPF provides useful guidance on approaching the conservation of heritage assets, and postdates the University's existing literature. NPPF defines a heritage asset as:

'A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing).'

This designation clearly applies to the Inorganic Chemistry Laboratory.

The purpose of this Conservation Plan is to update the Inorganic Chemistry Laboratory's conservation policy to take into account the new guidance provided by NPPF. It will be of use both for informing responsible regular maintenance and in the preparation of future planning applications, as specified in NPPF paragraph 128.

The Conservation Plan should form the basis for the Inorganic Chemistry Laboratory's Conservation Policy and exists as part of an ongoing process. It will be renewed and updated at least every five years or following any major alterations or legislative changes.



Figure 1. Map showing the Inorganic Chemistry Laboratory (highlighted in red) and the surrounding area, orientated with North at the top of the image

1.2 Scope of the Conservation Plan

The Conservation Plan will cover the exterior and interior of the Grade II-listed portion of the Inorganic Chemistry Laboratory. This includes the original 1860 structure and the 1878 extension but neither the 1950s extension to the east nor the 1949 arcaded link to the University Museum (see **Figure 6**). The ground floor of the most significant element of the building, the Abbot's Kitchen, is now administratively part of the Radcliffe Science Library but was constructed as the Chemistry Laboratory and features in the original listing, so will be covered by this document.

The plan is not a catalogue and to facilitate its practical use will concentrate only on the most vulnerable aspects of significance, suggesting how they should be approached and conserved in the future. A brief list of the most significant architectural features can be found in **Appendix 4** and should be referred to when planning any repair or alteration work.

1.3 Existing Information

A Conservation Plan has not previously been produced for the Inorganic Chemistry Laboratory; however, there are various forms of existing information available:

The original listed building description (**Appendix 1**) is the logical starting point for this plan. Its brevity is typical of a listing of its age but it does outline the main features of the building, giving some indication of the features that were thought to make up the particular character for which the building was listed. The building is also referenced in the more detailed list description for the University Museum.

Various planning application have been made throughout the building's history, providing a fragmentary indication of the changes that have occurred over time.

There are several published books and articles that examine the development of Gothic architecture in Oxford and the history of the city and University, as well as the work of Deane and Woodward. These publications provide an important resource for studying this building and works of this period in Oxford.

The Oxford University Archives and the University Museum's archives contain a number of useful plans and documents and these have kindly been made available for the composition of this document.

The plan draws on statutory guidance from NPPF prepared by HM's Department for Communities and Local Government in March 2012.

1.4 Methodology

The Conservation Plan is a document that assesses the current and predicted conservation needs of the Inorganic Chemistry Laboratory and attempts to address them with a view towards maintaining or increasing the significance of the heritage asset. Its formulation to supersede any existing literature is a response to the requirements of NPPF, and it is prepared in accordance with the policies contained therein.

1.5 Constraints

The Inorganic Chemistry Laboratory and its environs are subject to various constraints imposed by Oxford City Council:

- CP.3 Limiting the Need to Travel: New development will be limited to accessible locations on previously developed sites.
- HE.9 High Building Areas: Planning permission will not be granted for any development within a 1,200 metre radius of Carfax which exceeds 18.2m in height, except for minor elements of no bulk.
- TR.3, TR.11, TR.12 Car Parking Standards: The City Council will not allow any significant increase in the overall number of car-parking spaces in the Transport Central

Inorganic Chemistry Laboratory, Oxford Conservation Plan, April 2012 Area or development that provides an inappropriate level of car-parking spaces. It will attempt to reduce the level of non-residential parking.

- The City of Oxford Smoke Control Order No.2: It is an offence to emit smoke from the chimney of a building, from a furnace, or from any fixed boiler if located in a designated smoke control area.
- HE.7 Conservation Areas: The Central (City and University) Conservation Area covers the western portion of the site (the original sections of the building): All trees in Conservation Areas with stem diameters greater than 75mm at 1.5m off the ground are protected.

UNDERSTANDING THE SITE

2 UNDERSTANDING THE SITE

2.1 History of the Site and University

The site of Oxford has had sporadic settlement since the Neolithic period. Bronze Age barrows have been found in the University Parks (linear barrow cemetery) and in the Science Area (double-ditched barrow). Oxford has had a continuous history of occupation since at least the 8th Century AD. The University of Oxford itself has a long-standing tradition of exceptional education. Able to trace its roots to the 11th Century, it is known to be the oldest university in the English-speaking world.

The site upon which Inorganic Chemistry now stands is situated in the northeast of the city of Oxford. This area was developed in the 19th Century, notably with the construction of the University Museum in 1855-60 and Keble College on the western side of Parks Road in 1868-70.

The 91-acre site now occupied by Inorganic Chemistry, the University Museum, the Science Area, and the University Parks was purchased by the University from Merton College in stages between 1853 and 1864. The first plans for the University Parks were presented to the University in June 1863, but these were rejected, and it was not until 1865 that £500 was allocated for the purchase of trees and shrubberies. Even before this point the space allocated to the Parks was diminished by the allocation in 1853 of 4 acres in its southern portion (followed by another 4 acres in 1854) for the University Museum (1855-60), and this southern expanse underwent near-continuous development throughout the second half of the 19th Century.

Soon after its construction the University Museum (with its attached Inorganic Chemistry and Comparative Anatomy laboratories) was extended with: the construction of the original Clarendon Physics Laboratory (now embedded within the Robert Hooke (Old Earth Sciences) Building) on its northwest side in 1867-69 (extended in 1946-58); the construction of the Pitt River's Museum on the east in 1885-86; the addition of Jackson's Radcliffe Science Library to the south in 1898-1900 (extended in 1933-34); and the extension of the Department of Zoology (now housing Atmospheric Physics) and Stevenson and Redfern's Morphology Laboratory to the north in 1898-1901.

Further science buildings were constructed in this precinct from the last quarter of the 19th Century. Many of these were originally free-standing, but continued development has created an increasingly interconnected science precinct in the area. The near-continuous history of development in the area has created a crowded space at the south of the Park precinct. It is the main centre for the study of sciences within the University, and is now known as the University Science Area.

2.2 History of the Inorganic Chemistry Laboratory

The mid-19th Century was a period of flux and expansion for the city and University, as highlighted by the 1852 Royal Commission on the State, Discipline, Study, and Revenues of the University and Colleges of Oxford. A manifestation of this *zeitgeist* was the hosting of the 1847 Conference of the British Association for the Advancement of Science in Oxford and the subsequent 1849 decision of Convocation to establish a School of Natural Sciences and the related formation of the Museum Committee. Chemistry became a separate honours school in 1850.¹ Henry Acland, Reader in Anatomy (later Regius Professor of Medicine), was the main proponent of a natural history museum for the exhibition of 'all the materials explanatory of the structure of the earth, and of the organic beings placed upon it.² The construction of Science as not only a distinct but a respectable discipline.



Figure 2.1 Photograph by H.W. Taunt of the University Museum and Inorganic Chemistry Laboratory at some point prior to the construction of the Clarendon Laboratory in 1867-69

The construction of the Inorganic Chemistry Laboratory was linked directly to that of the adjacent University Museum, although it retained a distinct function as a particularly early example of a purpose-built chemistry laboratory.³ The laboratory, including the Abbot's Kitchen, was incorporated into Deane and Woodward's design by February 1855. The thorough imitation of the 14th-century Abbot's Kitchen at Glastonbury was in keeping with

¹ Williams, R.J.P., Rowlinson, J.S., and Chapman, A., (eds.), *Chemistry at Oxford: A History from* 1600 to 2005 (Cambridge, 2009) 7.

² Tyack, G., Oxford: An Architectural Guide (Oxford, 1998) 217.

³ Please refer to *The University Museum: Conservation Plan* for further information on the construction and history of the University Museum.

the Gothic-inspired design of the University Museum and it is conceivable that it may have been incorporated at the urging of Acland:

'In 1838 the doctor's father had commissioned C.R. Cockerell to design a private chapel at Killerton based on the 'Norman transitional' St. Mary's Chapel at Glastonbury Abbey. It was the Aclands who had suggested the model. Young Henry took great interest in the new chapel, which was built in 1840-41. Could it be that it was he who suggested the Abbot's Kitchen to Woodward as a suitable prototype for the laboratory?'⁴

The link between the two buildings was originally single storeyed with a steep-pitched roof (**Figure 2.1**), akin to that which connected Comparative Anatomy to the northern side of the Museum. The original building was arranged as three linear wings forming an enclosed courtyard against the southern wall of the University Museum, with the Abbot's Kitchen forming the south-western corner. It was anticipated in the earliest plans that some extension



Figure 2.2. Abbot's Kitchen at Glastonbury Abbey



Figure 3. Left, 1860 floor plan (black) superimposed over modern floor plan (red). Right, 1896 floor plan (black) superimposed over modern floor plan (red). Both orientated with North at the left of the image

⁴ O'Dwyer, F., The Architecture of Deane and Woodward (Cork, 1997) 165.

to the south would be required and in 1878 the southern portion of the building was reconfigured and a linear extension was added stretching southwards from the easternmost corner of the original building. The long, well-lit rooms of the extension were more suited to the study of chemistry than the original structure and they largely remain in use in some form to this day.

In 1901 the Radcliffe Science Library was constructed as a long wing extending eastwards from a connecting corridor to the Abbot's Kitchen and creating a firm southern boundary to the University Museum site. The Radcliffe Science Library was extended northwards from its western tip in 1933-4 creating something of an open, π -shaped courtyard to the southwest of the University Museum with the Abbot's Kitchen defining the north-eastern corner. In 1901-2 four iron pillars were inserted into the Abbot's Kitchen to support a new upper floor which the chemists moved to, with the ground floor forming the new entrance hall to the Radcliffe Science Library.⁵

In 1949, the current cloister connecting the Abbot's Kitchen to the University Museum was constructed as a two-storey structure, substantially altering the appearance of the building's primary western elevation (compare **Cover** or **Figure 6** and **Figure 2.1**). This alteration also



Figure 4. The eastern elevation of the 1878 extension enclosed within the courtyard created by the 1950s extension

⁵ Williams, R.J.P., Rowlinson, J.S., and Chapman, A., (eds.), *Chemistry at Oxford: A History from* 1600 to 2005 (Cambridge, 2009) 105.

involved expanding the glass-blowing laboratories to the east of the connecting corridor into what had originally been the building's courtyard, leaving only a small open area.

In 1951 planning permission was granted for extension work in the area between the building and the University Museum and further permission was granted in 1953 for a new building to the east. This new building was constructed 1954-7 and is π shaped, with its southern wing running along South Parks Road and both its northern and southern wings attaching to the 1878 portion of the building to form an enclosed courtyard (it can be seen in red in the top half of **Figure 3**). This new building was described by Pevsner as:

[•]A symmetrical façade, three- and four-storeyed, squared rubble and ashlar. Georgian proportions, though not Georgian windows.[•]



Figure 5. The space between Inorganic Chemistry and the University Museum looking westwards

The result of these various extensions is that the Abbot's Kitchen is the only original portion of the building that is visible from the exterior. Even the 1878 extension is only visible as: a portion of its eastern wall within the courtyard of the 1950s building (**Figure 4**); some exposed scraps along the narrow alley between the new building and the University Museum (**Figure 5**); and at its roofline. The 1950s building is not unpleasant but is of no particular

⁶ Pevsner, N., and Sherwood, J., *Buildings of England: Oxfordshire* (Harmondsworth, 1974) 277.

architectural merit and does not contribute to the special character of the building or its significance as a heritage asset: 'The squared-rubble, squared-up Georgian brigade will never be a credit to Oxford.'⁷

Since its addition to the site, the new building has been the focus for subsequent development, though in 1988 listed building consent was granted for the installation of a fire escape doorway through a wall into the Abbot's Kitchen and some internal alterations to provide offices and a seminar space within the building.

In 1963 planning permission was granted for the extension of the new building with the progression of its staircase from the second to the third floor and the provision of an Isotopes Room and laboratory at this level. In 1985 planning permission was again granted for a third-floor extension including a staircase, office, and computer room.



Figure 6. The Inorganic Chemistry Laboratory, orientated with east at the top of the image. The Grade II listed portion of the building is highlighted in red and the unlisted portions in blue. Connected buildings covered by separate listings are highlighted in green

Throughout the 1980s and 1990s a series of planning applications were made relating to the installation of equipment related to essential services to the exterior of the new building. Listed building consent and planning permission was granted in 2006 for the installation of an air-handling unit (to replace existing) running along the corner of the new building where

⁷ Ibid, 279.

it meets the south-eastern corner of the 1878 extension (left-hand-side of **Figure 4**) though this has since been replaced.

In 2007, planning permission was granted for a disabled access ramp to the main entrance on the eastern wing of the new building but this was never executed.

The later buildings and continue to fulfil their function as chemistry laboratories whilst the ground floor of the Abbot's Kitchen now forms an annexe of the Radcliffe Science Library. There are currently plans to for minor alterations to the 1949 link with the University Museum in order to create a visitors' centre in the buildings of the original courtyard area. Current plans to improve the landscape setting directly in front of the University Museum can be expected to have a positive impact on the immediate setting of the Inorganic Chemistry Laboratory.

SIGNIFICANCE

3 SIGNIFICANCE

NPPF paragraph 128 specifies that in assessing planning applications:

'Local planning authorities should require an applicant to provide a description of the significance of any heritage assets affected including any contribution made by their setting.'

The significance of the Inorganic Chemistry Laboratory has been publically recognised by its designation as a Grade II listed building in 1954 (see **Appendix 1**). The listed sections of the building (the older, western portions) were included in Oxford City Council's designation of its Central (City and University) Conservation Area in 1971, and its subsequent revisions in 1974, 1981, 1985, and 1998 (see **Appendix 2**). The boundary of the conservation area at this point outlines the edge of the University Museum and the older sections of the Inorganic Chemistry Laboratory, suggesting that the Conservation Area extends into this area merely to include them, highlighting their perceived importance to the historical character of the city centre.

3.1 Significance as part of Parks Road, Holywell Ward, and the Central (City and University) Conservation Area

Architecturally the Inorganic Chemistry Laboratory is subservient to the adjacent University Museum: The impact of the Inorganic Chemistry Laboratory on the character of its setting comes entirely from the contribution made by the western elevation of the Abbot's Kitchen to the setting of the University Museum. As mentioned above, in most other respects the heritage asset is now obscured from exterior viewing by subsequent construction (this is highlighted in **Figure 6**).

Whilst the Abbot's Kitchen borrows heavily from the 14th-century structure at Glastonbury, its design and construction is contemporary with that of the University Museum and the two form part of a contiguous façade, now broken by the somewhat incongruous 1949 link corridor. The visual dissection of the two buildings by the distinct 1949 link creates an illusion of the Abbot's Kitchen standing as a foil to the colossus of the University Museum. In reality the two complement each other well, though from the road the Abbot's Kitchen is obscured from any angle but the north and northwest by the walls of the Radcliffe Science Library.

The University Museum and Keble College are the defining buildings in the character of Parks Road, a pleasant, tree-shadowed precinct whose character is elevated by its grand 19th-cenury buildings to one of serious academic rigour, venerable rather than pompous. The impact of the Inorganic Chemistry Laboratory on the façade and setting of the University Museum is by no means definitive to the larger building's character but it is certainly a pleasant contribution.

As a comparison of **Figure 2.1** and **Figure 6** reveals, the landscape setting of the Inorganic Chemistry Laboratory has unfortunately diminished since its original construction. It was initially situated within an open parkland setting where it actually imparted a substantial impact (perhaps as great as that of the University Museum) when viewed from the south (Figure 2.1). It has subsequently been crowded by later construction, losing its wide approaches and its monumental impact. The only side on which it is now open is on the west and even here it is partly enclosed by the three-sided courtyard formed by the Radcliffe Science Library. Moreover, the open space of this courtyard is an uninspiring car park which, whilst providing obvious practical utility, in its visual character does not compare favourably with the pleasant grassed area directly in front of the University Museum.

3.2 Architectural Significance

Tied to the University Museum, the heritage asset possesses substantial illustrative value. As a constituent element of the construction of the University Museum, the Inorganic Chemistry Laboratory forms part of Oxford's first major 19th-century building in the Gothic style: a style which would come to dominate construction within the city for the following 20 years; initially a manifestation of radicalism, it would soon become tied to conservatism within the University's political structure. In 1974 Pevsner described Deane and Woodward's work as Oxford's first '…High Victorian attack on large-scale building…'⁸ The Abbot's Kitchen is somewhat distinct in being directly borrowed from a 14th-century English monastic model, as opposed to the 13th- and 15th-century Flemish cloth hall designs which inspired the main façade of the University Museum.

It is unfortunate that the majority of the 19th-century portions of the Inorganic Chemistry Laboratory are obscured by later construction, which limits the illustrative and aesthetic value of the heritage asset; although the visible portion, the Abbot's Kitchen, is objectively the most significant element.

The aesthetically-distinguished design of the first phase of the Inorganic Chemistry Laboratory was not eminently practical and was not repeated (being abandoned in favour of long, well-lit rooms) when the building was extended in 1878. Despite this, its influence was felt to some extent elsewhere:

'The Chemical Laboratory at Oxford was to inspire further adaptations of the Glastonbury Kitchen theme. Prichard and Seddon employed such a design at Christ's College, Brecon (1859, built 1861-64). A slightly earlier example was the Chemistry Laboratory of University College, Toronto, designed in 1856 by Frederick William Cumberland and built in 1857-58. Cumberland's college buildings, while in a Norman style, drew on the plan and other details of the Oxford Museum. Cumberland had consulted Deane while on a visit to Europe and freely acknowledged his assistance. It was in Canada also that the Oxford Museum's most important offspring was built – the Parliament Buildings at Ottawa – designed in 1859, begun in 1861 and formally opened six years later. The Library, the only part of the building to survive a fire in 1916, is an enormous Glastonbury Kitchen/ Chemical Laboratory derivative, which was much higher than the adjoining ranges at the time of its construction. The Parliament Buildings were the work of Messrs Fuller and Jones and were executed in conjunction with Messrs. Stent and Laver. Thomas Fuller (1822-98), the designer, was a native of Bath, who had emigrated to Canada in 1856. The six corner towers were based on

⁸ Pevsner, N., and Sherwood, J., *Buildings of England: Oxfordshire* (Harmondsworth, 1974) 56.

the towers of 'Nisi Dominus.' The windows and dormers were also derived from those at Oxford.'9

Whilst the design did see some emulation, as a laboratory design the Abbot's Kitchen was something of an architectural dead end and was saw little further evolution. With this in mind, the Inorganic Chemistry Laboratory possesses illustrative value as an example of High Victorian Oxford's values regarding the Sciences. Devout Christians both, Acland and Ruskin viewed Nature as a manifestation of God's word in the same manner as the Scriptures and in this way the rise of Science as the study of Nature was a continuation of the traditions already inherent in the Arts.¹⁰ With this in mind, the mediaeval revivalism of the Gothic was not at odds with the function of the building as a laboratory. It was in this tradition that Deane and Woodward (with input of Acland and later Ruskin) looked backwards to the mediaeval rather than to the contemporary laboratory designs of the few early examples emerging in London and on the Continent.¹¹

The 1878 extension has some illustrative value as it is indicative of the development of Chemistry as a discipline in Oxford as the needs of the department were better expressed in the extension than in the more aesthetically-focused original building. The Abbot's Kitchen was a small, centralised space more suited to individual research than teaching or demonstration. The long, well-lit expanse of the first-floor teaching laboratory is far better suited to teaching and demonstration and is indicative of the shift of focus towards undergraduate teaching within the University in last quarter of the 19th century, as emphasised by the competition to design the Examination Schools in 1876.

3.3 Archaeological Significance

The University Parks and the Science Area have a rich and relatively-continuous history of occupation as indicated by: Bronze Age barrows (late third millennium BC), with evidence for Iron Age infilling of the double-ditched barrow in the Science Area; ring ditches suggesting Iron Age settlement; Roman earthworks; a Roman burial and several ditches near the Lindemann Building; mediaeval (post-1066) ridge and furrow, suggesting an intensive agricultural use in this period; Civil War earthworks; and post-mediaeval field boundaries. The Clarendon Laboratory's foundation trenches occupy some 4 m-deep trenches which formed part of Oxford's Civil War defences.

Prehistoric ditches and 2nd-century burials were discovered close to the University Museum and the Radcliffe Science Library in 1970-1. Considering the wealth of nearby archaeological material, it is likely that there is some significant material, with potential evidential value, preserved on the site.

⁹O'Dwyer, F., *The Architecture of Deane and Woodward* (Cork, 1997) 409-10.

¹⁰ Acland, H.W., Lecture before a meeting of Architectural Societies of Oxford, 1858.

¹¹ Williams, R.J.P., Rowlinson, J.S., and Chapman, A., (eds.), *Chemistry at Oxford: A History from* 1600 to 2005 (Cambridge, 2009) 95.

3.4 Historical Significance

As mentioned above, the building possesses substantial illustrative value regarding High Victorian Oxford's attitude towards the establishment of Science as a distinct discipline. It was constructed as part of the University Museum and, like the museum, it encapsulates an epoch when the sciences were studied within a wider framework of religious fervour.

The original laboratory is associated with various chemists of world-wide renown including William Oddling (1829-1921, professor 1855-1912) who was instrumental in the formulation of the Periodic Table and Frederick Soddy (1877-1956, professor 1919-36) who won the Nobel Prize for Chemistry in 1921. The newer buildings are also associated with a plethora of eminent chemists, especially since the formation of the Chair in Inorganic Chemistry in 1963.¹²

3.5 Significance as a research and teaching space

The heritage asset and its setting have undergone extensive change since their initial construction. The interior of the Abbot's Kitchen has changed drastically since its construction due to the 1901 horizontal subdivision: Its ground floor has since functioned as part of the Radcliffe Science Library. The westernmost portions of the ground floor of the original building are now occupied by the Pitt Rivers Museum. Otherwise (and despite dramatic alteration and extension which almost entirely encases the 19th-century building) the utility of the building remains broadly in line with its original function as a Chemistry Laboratory.

The Inorganic Chemistry department is the largest in the country and one of the largest in the world. The success of the department is not tied to the buildings: The 19th-century portions are well suited to laboratory use but their original design, combined with the compact nature of the site, is relatively constraining. The dynamic nature of chemistry as a discipline means that its needs, as regards equipment and laboratory space, change and develop over time meaning that its setting must be readily able to absorb change. The symbolic relationship between the building and the University Museum (between Science and Nature) remains significant and the retention of scientific study on this site is of note.

¹² <u>http://www.chem.ox.ac.uk/icl/iclhistory.html</u>, accessed 18th January 2012.

VULNERABILITIES

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III

4 VULNERABILITIES

The ability of the Inorganic Chemistry Laboratory to fulfil a contemporary function

The Inorganic Chemistry Laboratory's design makes it not well suited to its current usage. In particular the chemistry teaching laboratories, although attractive, are unsuitable for modern undergraduate teaching. It seems probable that teaching will move from these spaces in the future for reasons of practicality, although there no immediate plans. The interior of the Abbot's Kitchen has been altered greatly since its initial construction and the floor plan throughout has been modified (though the long corridors of the 19th-century sections remain). Chemistry is a dynamic discipline and periodic alteration should be expected in a building designed for this usage. The historic expansion of the Chemistry Department has resulted in the loss of most of the 19th-cenutry façades as the voids around the building have been infilled. Any further alteration should only be undertaken within a context of a full understanding of the historic character of the building. The continued use of the building in a manner that respects its historic character is important to its ongoing maintenance and conservation; this may not necessarily always be a laboratory usage but its continued use in some sympathetic manner is central to its continued significance. The parts of the building that have retained their historic character, primarily limited elements of the external elevations, have done so because the heritage asset has remained in use, and has been maintained and cared for.

The building's listed status ensures that any further alterations operate within the constraints of an accepted understanding of the building's significance as a heritage asset. It is important that the building retains a contemporary and relevant use into the future. Whilst some change is inevitable in order to retain the relevance of the space, the historical character of the building should be respected in any future plans.

4.1 Accessibility

The ability of the building to be accessed and enjoyed by as a wide an audience as possible is central to its significance. The significance of the heritage asset is lessened if any person who wishes to legitimately use and enjoy the buildings is hampered in doing so by inadequate access. Staff work hard to accommodate the needs of all users but the building and its extensions were not designed with disabled access in consideration and this has limited its accessibility. There is no disabled access from the courtyard on South Parks Road, which otherwise forms the main entrance to the building and is stepped externally and internally to reach the main corridor and lift level. There is disabled access by arrangement in the main courtyard but ramp access is only available at the rear (north) of the building, and this is particularly steep. There was a successful planning application to fit a disabled access ramp in the main courtyard in 2007 but this has not been constructed.

In order to meet accepted standards of accessibility all users should be able to enter the building through the same points and move freely around the building without disadvantage.

4.2 Maintenance

4.2.1 Exterior Elevations and Setting

The extant exterior elevations are the most significant elements of the heritage asset. The exposed western elevation and distinctive roofline of the Abbot's Kitchen is of particular aesthetic and historical value. The portion of the eastern elevation of the 1878 extension retained in the courtyard of the new building is of some moderate significance. The other elevations are objectively less significant than the elevations of the Abbot's Kitchen, but they do contain significant material; however, they have all suffered badly from later infilling which has marred and obscured the elevations.

The western elevation of the Abbot's Kitchen (and to a lesser extent the eastern elevation of the 1878 extension) contributes extensively to the setting. For the most part it has aged well but it is open to weathering, erosion, potential vandalism, and pollution; damage which could detract from the significance of the heritage asset. The octagonal conical roof and associated chimneys of the Abbot's Kitchen are distinctive features and central to the character of the building, being its most recognisable features (see **Cover**).

Consideration could be given to the cleaning of the exposed elevations (**Figure 7**), which have also undergone some damage notably damage to banding on the Abbot's Kitchen and cracks above the windows on the eastern elevation of the 1878 extension.

The landscape setting of the building has changed substantially during its existence. The original setting was adjacent to the University Museum and in open parkland. The mass of the Abbot's Kitchen

Inorganic Chemistry Laboratory, Oxford Conservation Plan, April 2012



Figure 7. Staining to the exterior of the Abbot's Kitchen



Figure 8. Damage to banding on the exterior of the Abbot's Kitchen

was an important feature of the impact of the University Museum went approached from across the open space to the south. This setting has been completely lost due to the development of the University Science Area. The construction of the Radcliffe Science Library in 1901, the construction of the 1949 link corridor, and the construction of the 1954-7 extension to the east have blocked the approaches from all sides except for the Abbot's Kitchen from the west.

4.2.2 Interior Spaces

The interiors of the 19th-century portions of the building have changed dramatically since their construction. Parts of the original layout can be traced, for instance the primary east-west corridor of the 1860s building is largely still in place. Original features are present throughout, notably stonework in the form of arches and windows, though most spaces have modern decorations and floor coverings. The interior of the building is less significant than the exterior but there are two



Figure 9. Cracking above windows on western elevation of 1878 extension

spaces of particular character: the Abbot's Kitchen and the first-floor teaching laboratory.

As the interior features are in regular use and for the most part experience greater human interaction than the external structure of the building, as a general rule they are vulnerable to vandalism, accidents, and general wear and tear. This is especially true of the working laboratories. Some of these issues should be mitigated assuming adequate security and maintenance regimes are in place, but ultimately these significant elements will have limited lifespans. These lives can be lengthened as much as possible through regular, adequate monitoring and maintenance.

As a Grade II listed building any alteration, or repairs made with non-original materials, will require listed building consent.

4.2.2.1 The Abbot's Kitchen

The Abbot's Kitchen was originally a double-height space but was horizontally subdivided in 1901 when the ground floor was occupied by the Radcliffe Science Library whilst the upper portion was retained by the Inorganic Chemistry Laboratory. The lower floor retains little of significance; however, the upper portion remains an eminently impressive space, dominated by the exceptional exposed timber frame. The verticality of the space is emphasised by the rise of the conical dome, the eye drawn upwards by the run of the beams along the wall. The quatrefoil design of the windows is striking and references the façade of the University Museum.

Interestingly, the dormer windows appear in Woodward's original design but are not present in the earliest photographs of the building (e.g. **Figure 2.1**). The windows of the primary façade (originally a pair of gothic arches with a small quatrefoil window between the two apexes, mirroring the configuration at Glastonbury) were replaced with the current configuration (a pair of shorter windows, formed from the bases of the original windows, with 7 trefoil-arched windows above, see **Section 4 Chapter Cover**) presumably in 1901 when the building was subdivided (the subdivision would have cut across the middle of the original windows). The dormers may have been inserted then to provide additional light to the upper floor following the loss of the larger windows. They were certainly in place before 1915, when they appear in photographs. The 4 skylights are a later (post war) addition.

The space was never well suited to laboratory use, becoming even less so since its subdivision in 1901. The room is used as meeting and hospitality space, taking advantage of its strikingly-attractive design.



Figure 10. The interior of the Abbot's Kitchen

4.2.2.2 The first-floor teaching laboratory

This is the most significant space in the 1878 extension. It runs the full length of the extension (though it now has a half-height partition, holding fume cupboards, at the southern end). Unlike the Abbot's Kitchen, this space was designed whilst the building was occupied by chemists and it took into account contemporary laboratory design. The long, well-lit space facilitated demonstration, emphasising the shift of focus towards undergraduate teaching that the University had undergone in the third quarter of the 19th century, highlighted by the competition to design the Examination Schools in 1876. The character of the space is dominated by the striking hammer beam ceiling. Since its construction it has operated as a teaching laboratory and the current benches and furniture date from the 1950s. At the time of its construction the space was well suited to the needs of chemistry teaching, but it is increasingly difficult to keep it concurrent with these requirements: for instance, it is difficult to provide the necessary numbers of fume cupboards (and associated air ducts) to meet teaching requirements whilst maintaining the integrity of the character of the space.

Figure 11. The first-floor teaching laboratory looking north

CONSERVATION POLICY

5 CONSERVATION POLICY

Having established the significance of the Inorganic Chemistry Laboratory as a heritage asset, and having identified ways in which the significance of the Inorganic Chemistry Laboratory is vulnerable to harm, it is necessary to recommend policies to reduce the probability of such harm occurring, and thereby conserve the significance of the site. In essence, these policies set parameters for managing the fabric of the site.

The Conservation Plan is intended to be an active tool for the regular maintenance and longterm management of the Inorganic Chemistry Laboratory. It needs to be reviewed regularly and revised as appropriate to take account of additional knowledge and changing priorities.

5.1 The Inorganic Chemistry Laboratory's continued use in a contemporary and relevant function is important to its continued significance. Permit, in line with NPPF paragraphs 131, 132, 133, and 134, alterations intended to facilitate its continued use in this way

The continued use of the Inorganic Chemistry Laboratory in a relevant function represents an important aspect of its overall significance. The building was designed to be used and enjoyed and not to stand as a static monument. Limited alterations will inevitably be required to allow it to retain this significance in line with modern standards and requirements. If alteration is require in the future it should be permitted with the following provisos:

- Any alterations must be sympathetic to the Inorganic Chemistry Laboratory's significance as a heritage asset and, in line with NPPF paragraph 134, any proposals that involve 'less than substantial harm to the significance' should deliver 'substantial public benefits.' In line with NPPF paragraph 132, any proposals that involve 'substantial harm or loss' should be 'exceptional.'
- Any changes should: '...preserve those elements of the setting that make a positive contribution to or better reveal the significance of the asset' (NPPF paragraph 137).

5.1.1 In order to ensure that the Inorganic Chemistry Laboratory can operate to modern standards, and that its significance can be maintained by making access as wide as possible, special concern should be applied to ensuring that disabled access is adequate

Ensuring that the heritage asset can be enjoyed as widely as possible will have a major positive impact on its significance. As noted in **Section 4.1**, access to the building is below modern standards and this has been limited by the original designs of the building and extensions. Access will remain a major concern in any plans developed for the site; a vigorous effort should be made to improve access to the site, with the University seeking to exceed its statutory obligations and always viewing this as part of any ongoing process.

5.2 Note that the Inorganic Chemistry Laboratory is a Grade II listed building and ensuring that appropriate consents are obtained for works to the interior and exterior of the building

In order to ensure the heritage asset's significance, alterations may be required in the future, and due to the listed status of the building, even minor routine repairs in the significant spaces may need consent. Caution should be applied in order to ensure that any statutory duties are fulfilled. In cases of doubt **Estates Services should be contacted in the first instance,** and if necessary they will refer queries on to Oxford City Council.

5.3 Ensure proper consultation in advance of any work to the building with the Local Authority Conservation Officer (through Estates Services) and any other interested parties

It is important to guarantee that the best advice is obtained at an early stage of any proposal to alter any part of the building in order to ensure that the significance of the building is respected.

5.4 Refer to this Conservation Plan when considering repairs or alterations in any space

The Conservation Plan gives an overview of which aspects of the building are significant or vulnerable. Where original or significant material is extant, repairs should be carried out using the same materials and techniques and should not affect the significance of the asset without providing substantial public benefits in line with NPPF paragraph 134.

5.5 Any redevelopment needs to respect the character of the surrounding area and the Inorganic Chemistry Laboratory's setting adjacent to listed building, most notably the University Museum

The Inorganic Chemistry Laboratory is significant to the character of the Grade-I-listed western façade of the University Museum, itself central to the character of Parks Road and the north-eastern portion of the Central (City and University) Conservation Area (Section 3.1). Any future alteration should be sympathetic to this fact, and should not diminish its rôle in the character of the area.

5.6 Items of particular concern

5.6.1 Landscape Setting

The setting of the Inorganic Chemistry Laboratory has been diminished by the development of the Science Area and particularly the infilling around the Abbot's Kitchen and the 1950s extension to the rear. There are current plans to reconfigure the immediate setting to the west of the Abbot's Kitchen and further consideration should be given to the improvement of these areas.

5.7 Conservation of specific factors contributing to overall significance

The Inorganic Chemistry Laboratory possesses external and internal features of special significance (Section 3.1, 3.2, and 4.2). An effort should be made to identify and conserve original and significant architectural features, and keep these in use where possible in line with Section 5.1; however, it is accepted that all materials have a natural lifespans and some degree of change must be permitted in order to keep the building safe, usable, and generally fit for purpose. Some materials will have a very long life expectancy if given routine maintenance; others are impermanent and may need periodic replacement. Within the framework of understanding and valuing what is present in the building a degree of ongoing change is inevitable.

5.7.1 Any alterations to be made to the exposed elevations or rooflines of the original and 1878 sections of the building will respect their significance and contribution to the character of the surrounding area

The exposed elevations, most notably the western elevation of the Abbot's Kitchen, are central to the significance of the Inorganic Chemistry Laboratory. The rooflines of these sections are also notable features, particularly the octagonal, conical roof of the Abbot's Kitchen. Any alterations that affect the western elevation of the Abbot's Kitchen or the exposed portion of the eastern elevation of the 1878 extension could significantly affect the character of the building and its impact on the surrounding area. Any alterations that do affect the elevations will only be undertaken with a full understanding of and respect for this significance in line with **Section 5.1** and **5.1.1**.

5.7.2 Any alterations to the interior of the Abbot's Kitchen will respect the significant character of the space

The Abbot's Kitchen is important to the character of the building and possesses extensive aesthetic and illustrative value. Any alterations planned in this area will only be undertaken with a full understanding of and respect for its significance and character in line with **Section 5.1** and **5.1.1**.

5.7.3 Any alterations to the interior of the first-floor teaching laboratory will respect the significant character of the space

The first-floor teaching laboratory is significant to the character of the building and possesses aesthetic and illustrative value. Any alterations planned in this area will only be undertaken with a full understanding of and respect for its significance and character in line with **Section 5.1** and **5.1.1**.

5.8 In the vein of NPPF paragraph 110, efforts should be made to ensure that the Inorganic Chemistry Laboratory's contribution to climate change is as minimal as is feasible for a building of its age, size, materials, and use. Any proposals for alterations should assess the feasibility of incorporating low and zero carbon technologies

Ensuring that the building is sustainable will be crucial to its long-term survival and significance. As stated in NPPF paragraph 110, development should seek to 'minimise pollution and other adverse effects on the local and natural environment.'

5.9 If during subsequent renovations or alterations any excavation work is carried out beneath the Inorganic Chemistry Laboratory, an archaeological assessment will be made of the potential for significant finds or features, and if appropriate an archaeologist will be given a watching brief as excavation takes place

There is the potential for significant material across the site (Section 3.3), and should any excavation work be carried out, an assessment of the archaeological potential should be made. This should include at least a desk-based assessment, but possibly geophysics and trial trenching. A watching brief will almost certainly be required for any excavation.

5.10 A good practice of routine recording, investigation, and maintenance will be enacted and sustained. Such an approach will minimise the need for larger repairs or other interventions and will usually represent the most economical way of retaining an asset

5.10.1 Estates Services (or its agents) will ensure that senior member of staff has responsibility for the administration and recording of a routine maintenance programme for the building

All buildings need to be routinely maintained if they are to stay in good condition. This requires a detailed maintenance programme and, critically, someone who is responsible for ensuring that routine operations are carried out. A proper record of the repair and maintenance work in maintenance log is useful management tool. Such information will be recorded in the estates management software package *Planon*.

5.10.2 A detailed routine maintenance programme will be prepared for the building

Maintenance is best carried out as a series of planned operations. A well thought-out and properly-administered maintenance programme may appear to be time consuming but will result in a better-functioning building with less need for emergency repairs.

5.10.3 The Conservation Plan will be circulated to all senior staff who work in the Inorganic Chemistry Laboratory and to all other members of the University who have responsibility for the building or its contents

The value of the heritage asset needs to be appreciated by all senior staff managing or working in the building. Only in this way will the heritage asset be properly treated, repaired, and maintained.

5.10.4 The Conservation Plan will be made available to Oxford City Council, English Heritage, and any other party with a legitimate interest in the building

The Conservation Plan is intended to be a useful document to inform all parties with a legitimate interest in the building.

5.11 The Conservation Plan will be reviewed and updated from time to time as work is carried out on the building or as circumstances change. The recommendations should be reviewed at least at five-year intervals

Policy changes, building alterations, or other changes of circumstance, will affect the conservation duties and requirements of the building. The policy recommendations in the Conservation Plan will inform the future of the building and should be a useful tool for people carrying out maintenance work or where more significant alterations are being considered. The recommendations need to be kept up to date if they are to remain relevant.

BIBLIOGRAPHY

6 **BIBLIOGRAPHY**

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- Oxford City Council, The Oxford Local Plan 2001-2016 (November 2005).
- Planning (Listed Building and Conservation Areas) Act 1990.
- Town and Country Planning Act 1990.

6.2 Planning Applications and Supporting Documents

• Planning applications available from <u>http://public.oxford.gov.uk/online-applications/propertyDetails.do?activeTab=relatedCases&keyVal=001BXDMFLI000</u>, accessed 20th January 2012.

6.3 Books and Articles

- Acland, H.W., Lecture before a meeting of Architectural Societies of Oxford, 1858.
- Garnham, T., Oxford Museum: Deane and Woodward (London, 1992).
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- Tyack, G., Oxford: An Architectural Guide (Oxford, 1998).
- Williams, R.J.P., Rowlinson, J.S., and Chapman, A., (eds.), *Chemistry at Oxford: A History from* 1600 *to* 2005 (Cambridge, 2009).

6.4 Other Documents

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- Historical plans courtesy of Oxford University Archives (Ref: MU 4).
- Historical plans and photographs courtesy of Oxford University Museum of Natural History.

Inorganic Chemistry Laboratory, Oxford Conservation Plan, April 2012

6.5 Websites

- Bing Maps: <u>http://www.bing.com/maps</u>, accessed 20th January 2012.
- English Heritage Listed Buildings Online: <u>http://list.english-heritage.org.uk/</u>, accessed 20th January 2012.
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- Google Maps: <u>http://maps.google.co.uk/maps?hl=en&tab=wl</u>, accessed 20th January 2012.
- Heritage Gateway (HER Records): <u>http://www.heritagegateway.org.uk/gateway/CHR/</u>, accessed 20th January 2012.
- Inorganic Chemistry Department website: <u>http://www.chem.ox.ac.uk/icl/iclhistory.html</u>, accessed 18th January 2012.

6.6 Image Credits

- Cover and chapter covers: Estates Services photographs.
- Figure 1: Adapted from Google Maps (see Section 6.5).
- Figure 2.1: From English Heritage Viewfinder (see Section 6.5).
- Figure 2.2: Copyright Michael Cobb. This work is licensed under the Creative Commons Attribution-Share Alike 2.0 Generic Licence: <u>http://creativecommons.org/licenses/by-sa/2.0/</u>.
- Figure 3: Adapted from Estates Services site plans and historical plans courtesy of Oxford University Archives and Oxford University Museums Archives.
- Figures 4-5: Estates Services photographs.
- Figure 6: Adapted from Bing Maps (see Section 6.5).
- Figures 7-11: Estates Services photographs.

APPENDICES

7 Appendices

Appendix 1 Listed Building Description

List Entry Summary

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

Name: INORGANIC CHEMISTRY LABORATORY (OLD CHEMISTRY DEPARTMENT)

List Entry Number: 1369432

Location

INORGANIC CHEMISTRY LABORATORY (OLD CHEMISTRY DEPARTMENT), PARKS ROAD

The building may lie within the boundary of more than one authority.

County: Oxfordshire District: Oxford District Type: District Authority Parish:

National Park: Not applicable to this List entry.

Grade: II

Date first listed: 12-Jan-1954

Date of most recent amendment: Not applicable to this List entry.

Legacy System Information

The contents of this record have been generated from a legacy data system.

Legacy System: LBS

UID: 245724

Asset Groupings

This List entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

List Entry Description

Summary of Building

Legacy Record - This information may be included in the List Entry Details.

Reasons for Designation

Legacy Record - This information may be included in the List Entry Details.

History

Legacy Record - This information may be included in the List Entry Details.

Details

```
PARKS ROAD
1
1485
(East Side)
Inorganic Chemistry
Laboratory (Old
Chemistry Department)
SP 5106 NW 5/114B 12.1.54.
SP 5106 NE 6/114B
Π
2
(1) The 1st building was the Abbot's Kitchen built in 1860 to the South
of the Museum, the octagonal design being a copy of the kitchen at Glastonbury
Abbey. It was extended to join the Radcliffe Library in 1901; it is now
an annexe of the Library, the chimneys of Bath stone.
(2) The present main building was constructed in 1878 in Bath stone; it
was extended and reconstructed in 1929.
(The link between this building and the main block of the Museum was
altered completely by Lauchester & Lodge, 1972).
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Listing NGR: SP5148406870

Selected Sources

Legacy Record - This information may be included in the List Entry Details.

Map

National Grid Reference: SP 51484 06870

The below map is for quick reference purposes only and may not be to scale. For a copy of the full scale map, please see the attached PDF - 1369432.pdf

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Appendix 2 Conservation Area Description

Central Conservation Area, No. 5

The historic centre of Oxford forms one of the masterpieces of European architectural heritage. It is also a major regional commercial centre. Many of its historic buildings still function for the purpose for which they were built, and provide accommodation for the University of Oxford and its colleges.

From small beginnings as a settlement in the Saxon period, Oxford grew by the 11th century into one of the largest towns in England and a major trade centre. The Norman conquest brought the construction of the Castle and the establishment of major religious houses. The infant University arose in the 12th century and gradually grew into a major force in the city's life. The Saxons' rigid street layout and the fixed line of the 13th century defensive walls, together with the floodable river valleys, largely determined the plan of the historic centre as it is today. The gentle curve of the High Street, the great market place of St Giles and the older churches, together with the post-medieval timber-framed houses, belong to the town rather than the gown.

The University as it expanded, colonised the eastern half of the town with colleges and halls, building guadrangles of medieval and post-medieval gothic buildings, both within and without the walled town. The growth of the University's central institutions is well shown by the magnificent group of buildings situated between Broad Street and St Mary's Church. This group began in the 15th century with the building of the Divinity School and the Duke Humphrey's Library, a nucleus which expanded in the 17th century with the addition of the Schools' Quadrangle, Convocation House and Sheldonian Theatre. The group was further extended in the 18th century by the addition of the Old Clarendon Building and Radcliffe Camera to form a sequence of buildings and spaces of the highest architectural and historic interest, that today form the visual heart of the conservation area. Aspects of Oxford's 19th and 20th century change and growth may be illustrated by the considerable additions made to University and College buildings in Victorian and recent times, by the vigorous commercial and shopping centre, and by the welcome fact that the presence of the University ensures that many upper floors of buildings in the conservation area are in use for residential purposes, rather than unoccupied as in some historic towns.

Thomas Sharp, in his report to the City Council, published in 1948 as *Oxford Replanned*, set out and defined Oxford's special physical and architectural character and stressed its virtues and problems in a 20th century context. The Council, in its Review of the Development Plan, approved in 1967, approved much of the central area as an area of great historic value, and since 1962 the Council has protected the prospect of the city's unique skyline with its high buildings policy. The complementary views out of the city to its open country background have been similarly protected by the Green Belt and other policies.

The Council designated a large part of the central area as a conservation area in 1971. An extension taking in the Folly Bridge riverside was designated on 28th May 1974, a second extension covering part of Walton Street, Fisher Row and lower St

Aldate's was designated on 23rd February 1981, while a third covering Cornmarket and Queen Street was designated on 29th April 1985. On 9th December 1998, a fourth extension was made to the conservation area taking in part of the St Thomas' area, the University Observatory adjacent to University Parks and Magdalen College School playing field.

Appendix 3 Chronology of the Inorganic Chemistry Laboratory

1847	Conference of the British Association for the Advancement of Science is held					
	in Oxford and the first moves to form a scientific centre are made					
1849	Convocation decides to establish a School of Natural Sciences and the Oxford					
	Museum Committee is formed					
1850	It is estimated that £50,000 will be required for the construction of the					
	Museum. An appeal for funds from the University Chest is denied					
1850	An honour school of Chemistry is formed					
1851-53	Ruskin's Stones of Venice is released in three volumes					
1852	The University Commissioners recommend the building of a museum					
1853	The University appoints a Delegacy to advance the construction of the					
	Museum					
1853	Four acres of the University Parks is acquired for the site from Merton for					
	£4,000					
1854	A new Delegacy is appointed in February					
1854	£30,000 are made available, from the profits of the University Press					
1854	In May a further four acres are acquired for £3,600					
1854	The competition to design the Museum is held and Deane and Woodward win					
	in December					
1855	Deane and Woodward submit revised plans, which included the incorporation					
	of the Abbot's Kitchen into the design for the Chemistry Laboratory, in					
	February					
1855	A tender of £29,041 is accepted from Lucas Brothers of London in 21 st April					
1855	Work begins in June					
1860	The Museum is made available to Members of the University in October					
1878	Extension to the rear constructed					
1901	The Radcliffe Science Library is constructed to a design by T.G. Jackson and					
	the Abbot's Kitchen horizontally subdivided					
1933-4	The Radcliffe Science Library is extended to the north					
1949	The cloistered connecting corridor between the Museum and the Laboratory					
	is constructed					
1954-7	Extension to the rear (east) is constructed					
1963	Extension to upper floors of new building					
1980s and	Various external alterations relating to the installation of essential services to					
1990s	the new building are made					
2007	Planning permission granted for the construction of a disabled access ramp in					
	the courtyard of the new building, but this is never built					
2011-12	Plans made to alter the 1949 link corridor to facilitate the creation of visitors'					
	centre					

Appendix 4 Checklist of Significant Features

This checklist is intended for the use of those working or planning work on the site or buildings. It highlights features of architectural significance within the Inorganic Chemistry Laboratory; these may be original features or new additions that nevertheless contribute positively to the character of the building. As this is a Grade II listed building any repair or alteration work to factors that contribute to the significance of the building will require listed building consent in order to avoid prosecution under the Planning (Listed Building and Conservation Areas) Act, 1990. If planned work will likely affect any of the aspects featured in the list below advice should immediately be sought from the Building Conservation Team at Estates Services.

The checklist lists both general significant features that affect the building as a whole and which should be held in mind if working in any space, and specific features of particular significance that should receive special regard if working in these particular spaces. The Further Information column refers to the relevant page reference in the Conservation Plan proper.

The Inorganic Chemistry Laboratory, Building # 168					
SIGNIFICANT FEATURE		Further Information			
General:					
External elevations of 19 th -century elements		p.14-17, 23-25, 30-31, 39			
Historic stonework including decorative features		p.14-17, 23-25, 30-33, 39			
19 th -century joinery throughout		p.14-17, 23-25, 30-31, 39			
Roofs of 19 th -century elements		p.14-17, 23-25, 30-31, 39			
19 th -century windows throughout		p.14-17, 23-25, 30-31, 39			
Specific Features:					
External Elevations					
-Stonework in of 19 th -century elements in general		p.14-17, 23-25, 30-31, 39			
-Banded detailing		p.14-17, 23-25, 30-31, 39			
-Triangular dormers		p.14-17, 23-25, 30-31, 39			
-Windows of 19 th -century elements, notably		p.14-17, 23-25, 30-31, 39			
quatrefoil windows of Abbot's Kitchen windows					
-Slate roofs		p.14-17, 23-25, 30-31, 39			
-Chimneys of 19 th -century elements, notably the		p.14-17, 23-25, 30-31, 39			
Abbot's Kitchen					
-Cupola on Abbots Kitchen		p.14-17, 23-25, 30-31, 39			
Abbot's Kitchen					
-Joinery throughout		p.31, 32, 39			
-Windows and stone elements throughout		p.31, 32, 39			

First-floor teaching laboratory		
-Historic joinery throughout, notably hammer beam		p.31, 33, 39
arches		
-Historic stone elements, notably windows and		p.31, 33, 39
arches		
Other areas		
-Original ironmongery		p.31, 39
-Original joinery and stonework, notably window		p.31, 39
surrounds		

PRIOR TO UNDERTAKING <u>ANY</u> REPAIRS OR ALTERATIONS ON THE ABOVE-LISTED ARCHITECTURAL FEATURES, CONTACT THE CONSERVATION TEAM AT ESTATES SERVICES ON (01865) (2)78750

Original constructed plan of University Museum (incorporating Inorganic Chemistry) dating to 1859 (north at top of image)

Appendix 5 Historic Plans

Plan of University Museum (incorporating Inorganic Chemistry) of 1893 (north at top of image)

Plan of the University Museum (incorporating Inorganic Chemistry) of 1909 (north at top of image)

Plan of Inorganic Chemistry 1953 with projected extension (new building, completed in 1957). North at right of image