Cover Sheet for Proposals *(All sections must be completed)*		**JISC/Academy Open Educational Resources Programme**				
Name of Initiative:	**Open Educational Resources**					
Programme bid to:	Individual	**X**	**Institutional**		**Subject area**	
Name of Lead Institution:	University of Lincoln					
Name of individual:	Dr. Mark Baron					
Subject area:	*(complete for subject programme only)*					
Name of Proposed Project:	Chemistry.FM					
Name(s) of Project Partner(s):	**N/A**					
Full Contact Details for Primary Contact: **Name: Joss Winn** **Position: Technology Officer** **Email: jwinn@lincoln.ac.uk** **Address: Centre for Educational Research and Development, University of Lincoln, Brayford Pool, Lincoln. LN67TS** **Tel: 01522 886759 / 07789485910** **Fax: 01522 886023**						
Length of Project: 12 months						
Project Start Date: April 2009		**Project End Date:** April 2010				
Total Funding Requested from JISC/Academy:		**£17920.60**				
Total Institutional Contributions:		**£27324.00**				

Outline Project Description

This project will release all educational resources used in Year 1 'Introductory Chemistry for Forensic Science' students (total of 30 credits). The course is designed to cover all the major areas of chemistry (inorganic, organic and physical). Last year, through internal, competitive bidding, the Centre for Educational Research and Development funded the production of high quality, student-produced videos for this course, which help explain difficult concepts using a mixture of animation and live action. Due to interest from other institutions, the videos are now available under a BY-NC-SA licence. With this present bid, we wish to extend this approach to all resources for this course. In addition, by working with Siren.FM a campus-based community radio station, we will use their recording and broadcasting expertise to develop additional multimedia resources with students and apply current online broadcasting methods to the creation and delivery of these materials. All resources will be made available through our JISC-funded Institutional Repository, third-party Web 2.0 services and via a dedicated website powered by Siren.FM. By employing both students and a campus-based enterprise, we will demonstrate a sustainable and innovative approach to the development and dissemination of OERs.

I have looked at the example FOI form at Appendix A and included an FOI form in the attached bid (Tick Box)	**YES**	
I have read the Funding Call and associated Terms and Conditions of Grant at Appendix B (Tick Box)	**YES**	

FOI Withheld Information Form

We have no objection to JISC making any part of this proposal available should the contents be requested under the Freedom of Information Act, or if we are successful in our bid for funding that our project proposal is made available on JISC's website.

1. Appropriateness and Fit to Programme Objectives and Overall Value to the Community

1.1 The University of Lincoln recognises the potential that free and unfettered access to educational resources offers to the local and wider community. We welcome the advantages that technology provides to create, manage and disseminate the collective intellectual endeavours of our staff and students, supported by wider efforts to empower individuals and institutions with a legal framework which promotes creativity and therefore the sustainability of the open educational resources we produce.

1.2 The University of Lincoln's interest in OER is set within a broader framework of debates about pedagogic innovation and the role and nature of universities in the 21st century. There is much written about this matter within the higher educational academic literature (McLean:2006; Barnett:2000; Bell et al:2009) but this rarely extends into practical discussions on curriculum design. One of the intended impacts of our proposed project at Lincoln will be to inject elements from the debate on curriculum design into the OER movement in HE.

1.3 We will show how our provision of OER will influence curriculum design and delivery into the curriculum through the concept of the '**scholarship of teaching and learning**.'

1.3.1 The 'scholarship of teaching and learning' provides an internal focus on pedagogical developments at Lincoln, as well as connecting the University into national and international networks. It enables academics and students to develop teaching as a less private and more public act, making it possible for teaching innovation to build on the work of others while, and at the same time creating communities of mutually supporting 'teacher-scholars'.

1.3.2 This work is made public online and on campus through a 'Teaching in Public: Thinking Aloud' seminar series[1] and an annual 'Teaching and Learning Symposium.'[2]

1.4 Under the scholarship of teaching and learning, the university is committed to embedding and supporting **Teaching in Public** throughout the institution. The notion of Teaching in Public supports and builds on the concept of Open Educational Resources.[3]

1.4.1 At the core of Teaching in Public is the issue of progressive curricula design, with students as an academic's 'first public' (Burawoy, 2002). Teaching in Public extends curricula design to include the design of teaching and learning spaces (Temple, 2007), the promotion of teaching as a 'public good' (Deem et al, 2007) and the role of university lecturers as 'public intellectuals' (Fuller, 2005). Teaching in Public promotes a participatory pedagogy through a commitment to the principle of education as a basic 'human right' (UNDHR, article 26, 1948).

1.4.2 The concept of Teaching in Public is set out in the University of Lincoln's *Teaching and Learning Implementation Strategy, 2007 -2012* and is seen as a core value that underpins its delivery of teaching and learning.[4] It is made

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[1] http://learninglab.lincoln.ac.uk/2009/01/16/teaching-in-public-thinking-aloud

[2] http://learninglab.lincoln.ac.uk/2008/06/20/fifth-teaching-learning-symposium

[3] The concept of **Teaching in Public** first appeared in a UK HE context as a theme for a HEA subject centre in Sociology, Anthropology and Politics at the University of Cardiff in 2007. The theme was based on the work of Prof. Mike Neary, who was, at the time, seconded to the subject centre from his post as Reader in Sociology at the University of Warwick. Prof. Neary is now the Dean of Teaching and Learning at the University of Lincoln and the Director of the University's Centre for Educational Research and Development.

[4] The university's Teaching and Learning Strategy Implementation Plan 2007-2012 outlines a number of ways in which the scholarship of teaching and learning are being promoted as

real in a number of concrete ways:

1.5 Students as 'first public': The Student as Producer

1.5.1 Key to the notion of students as the lecturers' 'first public' is the engagement with students as part of the academic mission of the university. At the University of Lincoln, undergraduate students are seen as collaborators in the research culture of their departments. This is promoted through student peer-reviewed journals[5], the development of an undergraduate degree by research and an undergraduate research bursary programme.[6]

1.5.2 For our proposed project, students will be employed to work with teachers to develop learning materials for their course. This has already begun through an internal, competitive 'Fund for Educational Development' project.[7]

1.6 Teaching as Public Space: Learning Landscapes

1.6.1 The university is taking a proactive role in debates across the sector about innovative design in teaching and learning environments, based around the idea of 'learning landscapes'.

1.6.2 Learning landscapes is the conceptual framework which the university is using to promote the progressive development of its physical and online teaching, learning and research environment.[8]

1.6.3 Key to this process is that staff and students have the opportunity to contribute to the ongoing dialogue about how the learning landscape might be developed. An on-going dialogue about the design of the teaching and learning environment at Lincoln is an annual conference in which voices from all parts of the university can be heard.[9] The conference in autumn 2009 will be open to participation by other universities and we would include our proposed OER project in the conference agenda.

1.6.4 The University of Lincoln is leading a project, funded by HEFCE, SFC and HEFCW, involving twelve universities, to research innovation in the design of teaching and learning spaces[10].

1.6.5 We consider the provision of OER to the public as a way to extend the online learning landscape beyond the physical institutional boundaries, designing virtual spaces that serve learners in innovative ways, such as through links with community broadcasting.

1.7 Teaching as a Public Good: The Lincoln Academic Commons

1.7.1 The university is promoting teaching and research as a public good through the Lincoln Academic Commons.[11] A web site provides information for staff on Open Access, Open Educational Resources and Creative Commons licensing as well as related news. It highlights key provisions within the university for contributing to the growing Open Access and OER movements within HE. Currently, those are:

1.7.2 *Open Access Institutional Repository*: This JISC-funded EPrints repository

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'Teaching in Public'. http://visit.lincoln.ac.uk/C4/C2/CERD/Document%20Library/Documents/T_Lpart2B.pdf

[5] http://ojs.lincoln.ac.uk

[6] http://www.lincoln.ac.uk/cerd/Uros.htm

[7] http://lincoln.ac.uk/cerd/FED08.htm Mark Baron was funded in 2008 for 'The use of student-produced video clips in teaching Chemistry to Level 1 Forensic Science students'. He has recently won further internal funding to continue this for Level 2 Forensic Science students. The Level 1 videos will form part of the proposed OER project. We further anticipate the Level 2 videos being released as part of a second 30 credit OER course in 2010.

[8] See Thody, Angela (2008) *Learning Landscapes for Universities: Mapping the Field*. (Unpublished). http://eprints.lincoln.ac.uk/1597/

[9] Videos of the conferences can be seen on YouTube: http://www.youtube.com/user/UniversityofLincoln

[10] http://www.learninglandscapes.lincoln.ac.uk

[11] http://commons.lincoln.ac.uk

was specifically designed to manage and disseminate multimedia teaching materials.[12]

1.7.3 *Open Access Journal publishing*: We use the Open Journal System (OJS) to support a FED-funded 'Occasional Working Paper Series' (OWPS), a series of peer-reviewed papers by staff and students. By July 2009, we will also be launching 'Neo: A Journal of Student Research', a publication specifically for peer-reviewed student research. Both publications are managed and published by students in collaboration with academics.[13]

1.7.4 *Community Radio – Siren FM*: Starting with our proposed project, we intend to extend the notion of Teaching in Public to Lincoln's Siren FM, the UK's only university-based community radio, broadcasting on FM and online. Both live broadcasting time and online broadcast space will be given to disseminating our OER project.

1.8 Teachers as Public Intellectuals: Lincoln Academy

1.8.1 The Lincoln Academy is the collective name given to the cultural outreach activities of the University, providing a range of intellectual events that are provided freely to the city and beyond. These events include professorial inaugural lectures as well as lectures by and interviews with distinguished individuals.[14]

1.8.2 Prof. Neary recently gave his inaugural lecture on the subject, *Teaching in Public: Remaking the University in an Era of Academic Capitalism*. In this lecture, he argued that the modern university has become one of the most successful global institutions; yet, in spite of this success, academics maintain that the intellectual mission of the university is being undermined by the increasing trend towards the marketisation and commercialisation of higher education. In this lecture Prof. Neary discussed this process, defined as Academic Capitalism, and ways in which academics can critically engage with the debates about the marketisation of higher education through their teaching practice. It is this critical engagement which he described as 'Teaching in Public'

1.9 Teaching in Public - education as basic human right

1.9.1 The University of Lincoln maintains its commitment to the widening participation agenda. In 2007, the University of Lincoln was awarded the THES prize for its widening participation activities.[15] Mark Baron, the lead individual for this OER proposal, was a member of the team that won the award. We are committed to maintaining this recognition, partly through the development of Open Educational Resources. Over time, the general public and prospective students will benefit from our open course materials and we will consider how they may be used for formal distance learning and accreditation.

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[12] http://eprints.lincoln.ac.uk

[13] http://ojs.lincoln.ac.uk/

[14] http://www.lincoln.ac.uk/home/lincolnacademy/index.htm

[15] The prize was for a course, *The Certificate in Health Science*, which helps people from non-traditional backgrounds enter medical school. The course is run in partnership with Nottingham University. The one-year course aims to help students who would normally have little or no hope of gaining a university place in oversubscribed subjects such as medicine. Places are available primarily to students who have either come from a school with a poor academic record, received government financial aid, are in care, or would be the first person in their family to attend university. Students who complete the one-year certificate at the University of Lincoln can proceed to the first year of Medicine, Veterinary Surgery, Diatetics, Pharmacy, Genetics, Physiotherapy, Nursing or Midwifery at the University of Nottingham.

2. Workplan

2.1 *Project Plan*

A full project plan will be developed in the first two-weeks of the project. Team meetings will be held at least once a month where quality, issue and risk checks will be made. Note that all outcomes of each work package will be reported on the Project blog when complete. The wiki will show the development of work packages wherever appropriate. An outline Project Plan follows:

2.2 *Work Packages*

2.2.1   *Project Initiation:* Establish Project team and agree responsibilities. Initiate Project documentation and set up Project blog and public wiki. *April-May 2009*.

2.2.2   *Promoting Awareness:* Meet with relevant Faculty members to discuss project objectives. Discuss project objectives with students. Appeal for student involvement and notify them of summer bursary opportunity. Recruit students. *May – June 2009*.

2.2.3   *IPR Policy:* The existing university IPR policy will be reviewed and changes proposed based on wider discussions about the use of Creative Commons licensing at the university. Institutional policy and guidance on 'open licenses' will be written. *May – September 2009*.

2.2.4   *Ensuring Quality:* Develop guidelines for measuring and ensuring the quality of the course resources. Examine the existing course design and current learning materials against these guidelines. Survey and evaluate UK and international OER community guidance on this area. *June – July 2009*.

2.2.5   *Course (re)Design:* Based on the quality guidelines, carefully critique, plan and redesign the course. Document the design and design decisions as a project outcome. *July- August 2009*.

2.2.6   *Dissemination (1)*: Plan the storage, delivery and marketing of the course. Choose a metadata standard and evaluate third-party storage hosts such as Flickr, Slideshare and YouTube as well as JORUM and the IR. *July 2009*.

2.2.7   *Develop course resources (1):* Pre-record audio lectures at Siren.FM radio. Begin student bursaries to develop multimedia course materials (flash animations, audio, video). *August-September 2009*.

2.2.8   *Develop course resources (2):* Re-write and re-format written course materials. Consider their use in classrooms as well as compatibility with and delivery via third-party hosts such as Flickr, Slideshare and YouTube as well as JORUM and the IR. *October-November 2009*.

2.2.9   *Dissemination (2):* Include discussion of the project in the annual Learning Landscapes conference. Test dissemination of course resources produced so far. Invite critique of OER and of project outcomes so far. Revise project where necessary. *December 2009*.

2.3.0   *Completion of Course Resources:* Finish the production of all course resources and supplemental materials (guidelines, policy, training materials, etc.). Present these materials to Editorial Team for final review and acceptance. Revise if required. *January-February 2010*.

2.3.1   *Dissemination (3):* Complete Siren.FM website and associated marketing for public dissemination of course resources. *March 2010*.

2.3.2   *Sustainability:* Complete Business Case for sustaining and developing OER at the University of Lincoln. Present to SMT for feedback. Propose the immediate development of a further OER for 30 credit second-year follow on Chemistry course. *February - March 2010*.

2.3.3   *Project Closure:* Deliver final project report to JISC. Ensure blog is up-to-date with full documentation, including Lessons Learned. *April 2010*.

2.3 *Timetable*

WORKPACKAGES	MONTH	A	M	J	J	A	S	O	N	D	J	F	M	A
1: Project Initiation	X	X											
2: Promote Awareness		X	X										
3: IPR Policy		X	X	X	X	X							
3: Ensuring Quality			X	X									
4: Course (re)Design				X	X								
5: Dissemination (1)				X									
6: Develop Course Resources (1)					X	X							
7: Develop Course Resources (2)							X	X					
8: Dissemination (2)									X				
9: Completion of Course Resources										X	X		
10: Dissemination (3)												X	
11. Sustainability										X	X		
12. Project Closure													X

2.4 *Project Management*

Project management will follow JISC's Project Management Guidelines. The Project Manager has experience of working on a previous JISC-funded project (LIROLEM) and has previously run a successful PRINCE2 managed project. The Project Manager will report to the Project Director and lead the Project Team.

2.5 *Risks*

The project team are all currently full-time staff at the university so we do not anticipate the risk of having to hire or losing staff on the project. However, we are proposing that students help with the development of learning materials through a bursary scheme and there is a risk that the students may not contribute as much as anticipated. However, given our experience with the related FED project mentioned above, we feel this risk is low.

There is a risk that the proposals made to university IPR policy will not be accepted. The project will aim to show that there are a number of institutional benefits to the development of OERs at the university and that this is not fundamentally in conflict with the university enterprise and fund-raising.

There is a general risk of staff absences and a lack of engagement by staff outside the Project Team. Both CERD and Forensic Science staff are committed to the project and have the support of a wide number of colleagues, who will assist on the project where necessary. In other words, there is a reserve capacity of staff who are keen to work on the project and could continue and complete the project if necessary.

There is a general risk when relying largely on a technological approach to the creation and dissemination of OERs. However, technically, out proposals for resource creation are not cutting edge and we intend to use several methods of dissemination to mitigate the risk of one service failing.

There is a risk when working with partners such as Siren.FM. However, Siren.FM is embedded in the university community and based on campus. Their remit is very

much in line with the project proposal and will provide services to the project under their usual commercial services contract.

2.6 *Quality*

An Editorial Team will be established consisting of students and highly experienced staff with recognised teaching, editorial and broadcasting experience. The Editorial Team will review existing guidance on the quality of OERs, examine course materials at all stages and develop guidelines to ensure course resources are of sufficient quality for use by the university and general public in our chosen forms of delivery. A quality plan will be agreed and designed according to JISC Project Management Guidelines. Feedback will be encouraged at all stages of the project via a public blog and wiki. Quality will also be assured through a commitment to public transparency and regular dissemination of project news via the blog.

2.7 *IPR*

All project outputs will be Creative Commons licensed. A work package will examine existing IPR policy, choose a specific CC licence and deliver recommended changes to institutional policy.

2.8 *Dissemination*

- Dissemination will take place throughout the project via the blog and wiki.
- The project will be included in the annual Learning Landscapes conference, to which other universities are invited to participate. A video is also produced of the conference each year and available on YouTube.
- The Lincoln Academic Commons website will be used to produce formal guidance for staff and students based on project work package outcomes (i.e. IPR, Course Design, Business Case).
- The project will be part of all 'Teaching in Public' events and discussions at the university.
- Marketing colleagues will liaise with the local press to inform them of the project and potential for the local community.
- Local school leaders will be invited to a workshop on OER and the benefits of sharing resources in this way.
- Siren.FM will showcase the project activities and provide airtime for discussion of the project.
- Each resource produced by the project will be given a library catalogue record so it can be found by staff and students searching on this subject area.
- Our institutional repository provides RSS feeds of all content, as does many of the third-party hosting services we intend to use. We will look for ways to maximise the dissemination of project OERs through the use of feeds, leveraging other services where appropriate. i.e. eBooks can be produced from a feed on www.feedbooks.com; www.netvibes.com can produce a 'Dashboard' of course content; feeds of course content can be embedded in our VLE and elsewhere.

2.9 *Sustainability*

- The project will seek to demonstrate that the development of OERs offers benefits to the institution, its teachers and learners as well as the wider community.
- An evaluation of the recommendations and business models provided by the

'Good Intentions' report will be key to advising university senior managers on the possible methods of sustaining project outcomes. At this early stage, it is likely that an 'open' approach using the institutional repository for management, supplemented by use of JORUM and third-party Web 2.0 services for increased dissemination of our OERs, underwritten by Creative Commons licensing, will be our preferred approach.

- Colleagues in Marketing will help embed project outcomes into the online marketing of the course and overall award and help evaluate any impact this might have.
- The project will attempt to show the value of awarding student summer bursaries to help create OERs for their peers and the benefits of employing Siren.FM, an on-campus enterprise with wide community impact, to help produce and disseminate the OERs.
- The advocacy of developing OERs will be developed as a key component of the 'Teaching in Public' agenda already established as central to the university's teaching and learning strategy.

3. Impact and Engagement with the Community

As noted in detail throughout this proposal, the project will engage with the university, local and JISC communities through the established 'Scholarship of Teaching and Learning' and 'Teaching in Public' agendas of the university. The university's annual Learning Landscapes Conference and Teaching and Learning Symposium will highlight the work of the project through workshops. OERs produced by the project will be disseminated as widely as possible through the use of the Institutional Repository, Library catalogue records, JORUM and third-party web 2.0 services. Siren FM is central to this project proposal and will help to impact the work and outcomes of the project on local communities through its broadcasting and outreach programmes. A workshop will be held for local school leaders on the benefits and development of OERs. The continuing work of the project itself will take place on a public blog and wiki.

3.1 Stakeholders

- **Existing Forensic Science students**, who will be using the OERs from 2010.
- **Potential students**, interested in studying at the university.
- **The university**, by part-funding the project and exposing course materials to the public.
- **Academic staff**, who must be shown real, practical benefits to creating and using OERs.
- **Centre for Educational Research and Development**, already committed to Teaching in Public and the Lincoln Academic Commons.
- **HE Subject area: Chemistry and Forensic Science**, which has shown an interest in the approach taken under the university's FED project.
- **JISC**, our funders, who require value for money and evidence of a successful and productive project.
- **Siren.FM,** which will help with outreach and publicity throughout the project and therefore require quality deliverables to promote to their stakeholders.

5. Project Team

Siren FM: Siren FM has strong links with schools and colleges in Lincoln and students regularly appear on radio programmes as well as working on radio internships. Some volunteers go onto apply for University courses in the Faculty of Media, Humanities and Technology and Siren FM will be embedded in the forthcoming MA in Community Radio. Its ethos is about making radio accessible so there are no hurdles put in the way of anyone walking in and offering to help. Siren FM aims to be deeply involved with identifiable local communities rather than necessarily achieving a widespread general listening audience.

Mark Baron: Dr Mark Baron is a Principal Lecturer in Analytical Chemistry in the Department of Forensic and Biomedical Sciences at the University of Lincoln. He is the departmental representative on the Faculty Teaching and Learning Committee and has been the University representative on the Higher Education Academy Physical Sciences Group for a number of years. He has teaching and learning interests in problem and context based learning and has been able to develop these through forensic science contexts in teaching chemical science on the popular BSc Forensic Science at the University of Lincoln. He teaches chemical science to students at all three levels of the BSc programme. He led a University FED funded project in 2008 to produce, with students, a series of short videos to address specific skills and concepts that had been identified as difficult by the students. A further project to develop more video resources in 2009 has received funding. Mark is the lead individual for this project proposal.

Richard Keeble: Richard Lance Keeble has been Professor of Journalism at the University of Lincoln since 2003. Before that he was a lecturer in the Department of Journalism, City University, for 19 years. He will bring to the project a knowledge of the practical skills of reporting and the use of multi-platform journalism for communicating texts of various kinds (print, audio and visual) to a range of specific audiences. He has written and edited 13 books. His *Newspapers Handbook* (Routledge), now in its fourth edition, is the standard textbook on reporting skills in the country. His *Ethics for Journalists* (Routledge) is now in its second edition. Richard brings valuable editorial skills and experience in public engagement to this project proposal.

Mike Neary: Mike Neary began his career in community education in South London where he worked on programmes to make education accessible to young people who had not succeeded in mainstream schooling, e.g., the young unemployed. Mike continued this work as an academic at Warwick University, where he ran schemes, in conjunction with the local Probation Service, which provided learning opportunities for young offenders. Mike has been using the concept of Teaching in Public to provide a framework to write about and discuss his work. In 2007, Teaching in Public was used as a theme for a conference organised by the HEA Subject Centre in Sociology, Anthropology and Politics at the University of Cardiff in 2007. Professor Neary is now the Dean of Teaching and Learning at the University of Lincoln and the Director of the University's Centre for Educational Research and Development. He recently gave his inaugural professorial lecture, which was entitled, 'Teaching in Public: remaking the university in an era of academic capitalism.' Mike will be Project Director for the proposed project.

Joss Winn: Joss joined CERD in 2007 to work as Project Officer on the University's JISC funded Institutional Repository project. He now works as Technology Officer,

looking at ways that technology can enhance research, teaching and learning.[16] In addition, Joss maintains the Lincoln Academic Commons[17] website and co-manages the Institutional Repository. Previously, he held posts as Audiovisual Archivist at Amnesty International, Project Manager for Amnesty's Digital Asset Management system and worked in Collections Management as Moving Image Archivist at the BFI National Film and Television Archive. He has recently co-authored a book chapter entitled 'The Student as Producer'[18], where he advocates the use of Creative Commons licences as an enabling, collaborative tool for teachers and learners to construct a mass intellect in commons. Joss will be Project Manager for the proposed project.

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[16] i.e. http://learninglab.lincoln.ac.uk/2008/11/12/six-month-round-up-of-learning-lab-activity/
[17] http://commons.lincoln.ac.uk
[18] http://eprints.lincoln.ac.uk/1675/

3 March 2009

To whom it may concern:

Letter of support for
HEFCE/JISC/Academy Open Educational Resources Grant Funding

The Centre for Educational Research and Development plays a central role in the development of the University's progressive agenda in Teaching and Learning. I welcome the opportunity this Programme offers to examine critically the design and delivery of course materials and the processes by which they are created and made openly available for re-use. I fully support our existing Teaching in Public initiative and am pleased that a related, internally funded project, is now being proposed to grow into a larger project with far-reaching impact.

I trust that this letter of support is helpful.

Yours faithfully

Professor Mike Saks
Senior Pro Vice Chancellor