

**JOB DESCRIPTION**

|  |  |
| --- | --- |
| **Job Title:** Senior Research Associate in Inorganic & Biophysical Chemistry | **Present Grade:** 7P |
| **Department/College:** Department of Chemistry  |
| **Directly responsible to:** Dr John Fielden  |
| **Supervisory responsibility for:** Undergraduate and postgraduate students and visitors, as requested by the line manager. |
| **Other contacts** |
| **Internal:** Academic, research and support staff colleagues in the Department of Chemistry,  Colleagues across departments of the University and central administration (for example purchasing). |
| **External:**  Representatives of funders; stakeholders from partner institutions and external agencies.  |
| **Major Duties:**1. Design, synthesise and characterize (NMR, mass spectrometry, IR spectroscopy, X-ray diffraction) a range of ruthenium complexes, mostly based on the *bis*-quinolinyl pyridine (bqp) ligand and its analogues and derivatives.
2. Investigate their photophysical properties in various media, and their interaction with DNA through techniques including UV-vis absorption spectroscopy, fluorescence/phosphorescence spectroscopy (both steady-state and lifetime), circular dichroism spectroscopy. This will include short (<1 week) secondments to UCL for training and/or to use additional techniques.
3. Participate in other parts of the research project, for example computational studies, or other areas of research, as agreed with the line manager.
4. To make a significant contribution to project reports to the funder, and presentations to collaborators and stakeholders where appropriate.
5. Contribute to the running of the line manager’s research group, by providing technical training to other group members, contributing to resource management (ordering, generating health and safety documentation, etc.) and general organisation, and helping maintain and enforce safe laboratory practices, according to University and local guidelines and regulations.
6. Participate in the normal activities of the research group, including meetings and presentations
7. Contribute to supervision of undergraduate and postgraduate student research projects, as requested by the line manager.
8. To prepare manuscripts for publication, and make a significant contribution to the dissemination of the research through other activities, including conference presentations
9. To identify and engage in any necessary training and development opportunities to fulfil the role, as well as personal development opportunities to support your career development.
10. You may also be required to carry out any other duties, commensurate with the grade of the post, as directed by your line manager or their nominee.
 |