Position Description

School of Chemistry/Faculty of Science
The University of Melbourne

RESEARCH FELLOW GRADE 1 (SPECTROSCOPY AND KINETICS OF CHARGE-TRANSPORT BEHAVIOUR)

<table>
<thead>
<tr>
<th>Position No:</th>
<th>0018058</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisation Unit:</td>
<td>School of Chemistry</td>
</tr>
<tr>
<td>Budget Division:</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td>Classification:</td>
<td>Research Fellow Grade 1 (Level A)</td>
</tr>
<tr>
<td>Superannuation:</td>
<td>Employer superannuation contributions of 9 %</td>
</tr>
<tr>
<td>Employment Type:</td>
<td>Full-time, fixed term position for 2 years</td>
</tr>
<tr>
<td>Other Benefits:</td>
<td>Salary packaging and staff training and development opportunities are available.</td>
</tr>
<tr>
<td>Current Occupant:</td>
<td>Vacant</td>
</tr>
<tr>
<td>Advice to applicants:</td>
<td>Apply online at <a href="http://jobs.unimelb.edu.au">http://jobs.unimelb.edu.au</a> using the above position number or title as keyword.</td>
</tr>
<tr>
<td>For enquiries contact:</td>
<td>Assoc. Prof. Trevor Smith, ph: 8344 6272, fax: 9347 5180, email: <a href="mailto:trevoras@unimelb.edu.au">trevoras@unimelb.edu.au</a> or Prof. Ken Ghiggino, ph: 8344 7137, fax: 9347 5180, email: <a href="mailto:ghiggino@unimelb.edu.au">ghiggino@unimelb.edu.au</a></td>
</tr>
<tr>
<td>Closing Date:</td>
<td>31 October 2007</td>
</tr>
</tbody>
</table>
1 Position Summary
This position forms part of the newly formed Victorian Organic Solar Cell Consortium that is funded by the Victorian Government through the Energy Technology Innovation Strategy (ETIS) Sustainable Energy Research and Development (SERD) Grants Program. Information on the Consortium is available at http://www.vicosc.unimelb.edu.au/.

The position is for a motivated post-doctoral researcher with demonstrated skills in the design and conduct of spectroscopic and kinetic measurements. The appointee will undertake steady-state and time resolved transient absorption and luminescence measurements (on a range of time scales) to assess materials for use in solar energy conversion, under a range of conditions. The appointee will report to academic staff members of the School of Chemistry, and be closely involved in collaborative projects with other members of the Consortium.

The position requires a scientist with a strong experimental Ph.D. who is interested in applying and further developing their skills in the areas of laser spectroscopy and photoluminescence of materials. The appointee will require excellent interpersonal skills and be able to liaise effectively with other academic and industry groups. A strong publication record is essential.

The appointee will have an experimental background in photophysical methods and particularly time-resolved absorption and fluorescence spectroscopy.

The School of Chemistry at the University of Melbourne has expertise in the application of time-resolved (nanosecond, picosecond and femtosecond) absorption and fluorescence techniques. Further information on facilities available for the project is available at http://www.chemistry.unimelb.edu.au/.

2 Selection Criteria
2.1 Essential

- A PhD in experimental physical chemistry, materials science, or a related experimental discipline
- Experience and a successful track record of research, innovation and publication in both steady-state and time-resolved absorption and fluorescence spectroscopy
- A strong publication record
- Excellent communication skills, both oral and written
- Highly developed interpersonal skills
- Demonstrated ability to work co-operatively in a team environment.
- High level of computer literacy and experience
• A demonstrated problem solving ability.

2.2 Desirable

• Experience in materials photochemistry relevant to solar energy conversion
• Experience in postgraduate student supervision.
• Experience in spectroscopic data analysis.

3 Special Requirements
The position requires knowledge of the requirements and responsibilities under the Occupational Health and Safety Act as they apply to the position, and the incumbent will contribute to safe working conditions in the School of Chemistry and other departments by following all safety procedures and practices as required.

4 Key Responsibilities
The appointee is expected to show initiative and application and to become independent in day-to-day operations.

In their duties the Research Fellow will be required to:

• Undertake internationally competitive research leading to journal publications.
• Oversee all aspects of the experimental work.
• To contribute ideas and play a leadership role in sample preparation and absorption/fluorescence measurements of the program.
• To pursue independent research activities in the above areas.
• Provide active support to the activities of the group.
• Liaise closely with other members of the project.
• Assist in the supervision and training of research students
• Other duties and tasks as required.

Occupational Health and Safety (OHS) and Environmental Health and Safety (EHS) Responsibilities
All staff are responsible for the following safe work procedures and instructions:

Employees must:
• cooperate with the University in relation to activities taken by the University to comply with OHS and EHS legislation.
• comply with the OHS and EHS manuals
• adopt work practices that support OHS and EHS programs
• take reasonable care for their own health and safety and the health and safety of other people who may be affected by their conduct in the workplace
• seek guidance for all new or modified work procedures
• ensure that any hazardous conditions, near misses and injuries are reported immediately to the supervisor
• participate in meetings, training and other environment, health and safety activities
• not wilfully place at risk the health or safety of any person in the workplace
• not wilfully or recklessly interfere with or misuse anything provided in the interest of environment health and safety or welfare

In addition, Academic Staff are responsible for ensuring that an equivalent standard of OHS and EHS is afforded to their students as is afforded to University staff generally. Academic staff are deemed to have principal supervisory duty for undergraduate and postgraduate student activities.

5 Other Information

5.1 Organisation Unit
The School of Chemistry has 24 teaching/research staff, 30 professional staff and around 30 research only staff. It is one of the largest budgeting departments in the University. The School teaches 1600 first year students, 260 second year students and 100 third year students. The Honours class (4th year) is about 40 students and 105 MSc and PhD students are enrolled in research degrees and carry out research projects in one of the many advanced laboratories. The research in the School is supported by skilled technical staff who operate, maintain and develop complex instrumentation and equipment. Further information about the School is available at http://www.chemistry.unimelb.edu.au

5.2 Budget Division
The Faculty of Science was established in 1887, although the first record of graduates in Science at the University dates back to 1863. It is one of the University’s largest faculties with some 7,000 undergraduate and postgraduate students, with an annual budget in the order of $95m.
The Faculty of Science has a deserved reputation for the delivery of high quality teaching and research programs across a breadth of disciplines. The subjects and courses offered are integral to the quality of a significant number of the educational programs in other faculties. The Faculty has a long-standing and distinguished record of providing postgraduate education at the Masters and Doctoral levels and it has established strong international research and research education linkages within the USA, Europe and throughout the Asian region.

The Faculty is made up of four Schools and five Departments as follows: Schools of Botany, Chemistry, Earth Sciences and Physics; and the Departments of Genetics, Information Systems, Mathematics and Statistics, Optometry and Vision Sciences and Zoology. The Faculty is a partner in the newly established Bio21 Institute.

The Faculty, through its Departments and Centres, is active in professional development, continuing education nationally and internationally, and in links to schools and the community. The Faculty is currently a partner in 20 externally funded research centres. There are five Federation Fellows, two Laureate Professors, 33 Professors and 7 Professorial Fellows in the Faculty.

Information on the Faculty of Science can be found at:
http://www.science.unimelb.edu.au/departments

5.3 Bio21 Institute

The Bio21 Molecular Science and Biotechnology Institute (Bio21 Institute) is a multidisciplinary research centre officially opened in June 2005.

The Bio21 Institute, including its Research Transfer / Business Incubator Facility, is the major new physical development within the Bio21 Project of which the University is a Founding Partner. The Institute is being developed as a multidisciplinary biotechnology research and development centre of excellence with a commitment to industry interaction and commercialisation of research.

The major focus of the Institute is research programs and the provision of platform technologies in frontier areas of health-related biotechnology where there are opportunities to develop critical mass, international competitiveness and commercial outcomes.

Principle objectives of the Bio21 Institute are:

- Research and development innovation in biotechnology through multidisciplinary programs;
- Provision of major state-of-the-art platform technologies to the University and wider Bio21 biotechnology community;
- Commercialisation of Intellectual Property;
Business incubation and technology transfer through the development of a financially sustainable research transfer facility and associated business incubator;

Industry-targeted postgraduate training, technology transfer programs and internships;

Industry partnerships including participation as anchor tenants in the research transfer facility;

Strategic alliances and networks with other major biotechnology precincts in Australia;

Strategic alliances with international research organisations and biotechnology precincts.

Many of the scientists located in the new Bio21 Institute come from the University of Melbourne’s biomedical sciences and chemistry departments, along with researchers from Genetics, Medicine, Pathology, Physics, Engineering and the School of Veterinary Science. The total number of research staff, students and industry participants is in excess of 450. For further information on the Bio21 Institute refer to our website <http://www.bio21.unimelb.edu.au/>

5.3 The University of Melbourne

The University of Melbourne is a leading international university with a tradition of excellence in teaching and research. Melbourne’s outstanding performance in international rankings puts it at the forefront of higher education in the Asia-Pacific region and the world. The University of Melbourne is consistently ranked by the THES among the world’s top 25 universities.

Established in 1853, shortly after the founding of Melbourne, the University is located just a few minutes from the centre of this global city. The main Parkville campus is recognised as the hub of Australia’s premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide range of knowledge-based industries.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded. Further information about working at The University of Melbourne is available at www.hr.unimelb.edu.au/careers.

5.4 Growing Esteem and the Melbourne Model

The Growing Esteem strategy, adopted by the University in December 2005, lays out a ten-year plan to fulfil Melbourne's aspiration to be a public-spirited and internationally-engaged institution, highly regarded for making distinctive contributions to society in research and research training, learning and teaching, and knowledge transfer. See http://growingesteem.unimelb.edu.au/
From 2008, as the cornerstone of Growing Esteem, the University will introduce landmark educational reforms known collectively as the Melbourne Model. These reforms are designed to create an outstanding and distinctive Melbourne Experience for all students. The Model is based on six broad undergraduate programs followed by a graduate professional degree, research higher degree or entry directly into employment. The emphasis on academic breadth as well as disciplinary depth in the new degrees ensures that graduates will have the capacity to succeed in a world where knowledge boundaries are shifting and reforming to create new frontiers and challenges. In moving to the new model, the University is also as aligning itself with the best of emerging European and Asian practice and well-established North American traditions.

5.5 Equity and Diversity

Another key priority for the University is access and equity. The University of Melbourne is strongly committed to an admissions policy that takes the best students, regardless of financial and other disadvantage. An Access, Equity and Diversity Policy Statement, included in the University Plan, reflects this priority.

The University is committed to equal opportunity in education, employment and welfare for staff and students. Students are selected on merit and staff are selected and promoted on merit.

5.6 Governance

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at www.unimelb.edu.au

This position description is approved by:

Occupant: ...........................................................................................................Date: .............
Supervisor: .............................................................................................................Date: .............
Head of Organisation Unit: ....................................................................................Date: .............
Head of Budget Division: .......................................................................................Date: .............