

# **Assistant or Associate Professor**

Materials Science & Engineering and Chemical Engineering

Search Number: AA9493



The Departments of Materials Science & Engineering (MSE) and Chemical Engineering (ChemE) at the University of Washington invite applications for one full-time tenure-track faculty position (9-month service periods) that will be jointly appointed in the two departments. The successful candidate will have an outstanding record of high impact research that is advancing the battery chemistry and materials fields, as well as an outstanding scholarly vision for innovative research and education as a faculty member. We are primarily focused on hires at the rank of Assistant Professor although individuals at more senior ranks with exceptional credentials may be considered. Applications received by February 15, 2015 will receive full consideration, though the position will remain open until filled.

Applicants must have a PhD or foreign equivalent doctorate degree in Materials Science Engineering, Chemical Engineering, or a related discipline by the date of appointment. This position is part of a multi-year Clean Energy Institute (CEI) hiring campaign to build excellence that spans the scales of a clean energy economy, from molecular discovery to grid systems and operations. The candidate we seek here will be an interdisciplinary scholar with expertise in one or more areas of advanced battery chemistry and materials. Areas of particular interest include, but are not limited to, new and innovative battery electrodes, electrolytes, and separators; unique electrode and device architecture and processing; testing, degradation, and life modeling; and in-situ and ex-situ characterization for novel applications in consumer electronic, stationary, and transportation fields. They will be expected to teach both undergraduate and graduate courses within the two departments, to develop high quality interdisciplinary research programs, and to position the departments to better serve the needs of society for advanced energy storage solutions. All University of Washington faculty engage in teaching, research, and service.

#### INFORMATION ABOUT THE DEPARTMENTS:

- The MSE department currently has 18 faculty, 137 undergraduates, 100 graduate students, and 25 postdoctoral researchers. The Department's research portfolio covers all classes of materials and state-of-the-art facilities are available in the Department and in interdisciplinary research centers on the campus. More information about the department is available at http://depts.washington.edu/mse.
- The ChemE department has 22 faculty, 171 undergraduates, 101 grad students, and 25 postdocs. The department engages in interdisciplinary research and covers all facets of chemical engineering including bio-based systems, interfacial engineering, devices, and energy systems. Learn more about the Department of Chemical Engineering at http://www.cheme.washington.edu.
- · CEI, the UW Clean Energy Institute, is accelerating the creation of a clean energy economy and will grow the state of Washington's capacity to sustain our economy and the environment. We are accomplishing this by recruiting top faculty and students, investing in state-of-the-art research equipment, and partnering with other research institutions, educational program, and industry partners. Please explore the links to learn more about the Clean Energy Institute at http://www.cei.washington.edu.

#### **HOW TO APPLY:**

Please apply online at https://www.engr.washington.edu/facsearch/apply.phtml?pos\_id=168 with a letter of application; a detailed curriculum vitae; a list of publications; a statement of research and teaching interests; and the name and contact information of at least three references.

Applicant review will begin immediately and continue until the position is filled, so early applications are encouraged. Additional questions may be addressed to Jay Montague at montague@uw.edu.

University of Washington is an affirmative action and equal opportunity employer. All qualified applicants will receive consideration for employment without regard to, among other things, race, religion, color, national origin, sex, age, status as protected veterans, or status as qualified individuals with disabilities.



# RESEARCH **ASSISTANT PROFESSOR**

**Electron Microscopy** 

## The University of North **Carolina at Charlotte**

UNC Charlotte is seeking a research assistant professor whose primary role is to lead the operation and the user program of the scanning electron microscope, transmission electron microscope, and their peripheral facilities on the campus, to teach, and to conduct original research with advanced electron microscopy (EM)-based techniques. Major responsibilities include teaching of EM-related courses and labs, user training and service, and on/off campus collaborations on research projects.

The candidate must have earned (1) a PhD degree in one of the following areas: Materials Science, Physics, Chemistry, Engineering as of the offer date of employment; (2) solid theoretical and practical understanding and skills in the various aspects of EM, especially Transmission Electron Microscopy (TEM); (3) at least three years of operation and maintenance experience in TEM and sample preparation; and (4) strong oral and written communication skills.

The applicant should submit electronically a current curriculum vitae, a summary of expertise and accomplishments and the contact information of three references to: Dr. Terry Xu at ttxu@uncc.edu. Review of candidates will begin immediately, and will continue until the position is filled. The candidate is expected to start the work in late spring 2015.

The University of North Carolina at Charlotte is an Affirmative Action/Equal Opportunity employer.

# ETHzürich

# Professor of Materials Engineering / Active Materials

- → The Department of Materials (www.mat.ethz.ch) at ETH Zurich invites applications for a faculty position on all professorial levels in the area of Materials Engineering / Active Materials. Such Active Materials may be engineered by enhancing fundamental materials properties within diverse materials classes (polymers, metals, functional ceramics) or by combining multiple material types in hybrid systems. The properties and responsiveness of these active materials may result from their improved functionality, from their structuring into hierarchically organized entities, and/or from the assembly of individual parts with different properties into larger structures or devices. Fields of particular interest include adaptive materials and structures, integrated electrochemical systems, metamaterials, artificial sense organs, and polymer processing technology to develop novel electronic and optical devices.
- ightarrow The candidate should strengthen the engineering aspects in the Materials Department and is thus expected to perform research and teaching in the area of Materials Engineering. The new professor will be expected to teach undergraduate level courses (German or English) and graduate level courses (English). The successful candidate must have a strong experimental background in active materials and should be interested in understanding their fundamental interaction mechanisms across nanoscopic to macroscopic length scales. Candidates working in industry are also encouraged to apply.
- → Please apply online at www.facultyaffairs.ethz.ch
- → Applications should include a curriculum vitae, a list of publications, and a statement of future research and teaching interests (both of maximum five pages). The letter of application should be addressed to the President of ETH Zurich. The closing date for applications is 30 April 2015. ETH Zurich is an equal opportunity and family friendly employer and is further responsive to the needs of dual career couples. We specifically encourage women to apply.





# ASSISTANT/ASSOCIATE/ **FULL PROFESSOR**

#### **Experimental/Theoretical Materials Research**

The Colleges of Engineering and Science at the University of Utah invite applications for a tenure-track faculty position in the general areas of Plasmonics, Energy harvesting, and/or Organic optics/electronics/ spintronics. Candidates who have an exceptional track record in synthesis/ fabrication, experimental studies, and/or modeling of functional materials are especially invited to apply. The tenure-track appointment is likely to be made at the junior level in any department(s) within the two Colleges; however, candidates at higher rank will be also considered. Synergy with local NSF/MRSEC research groups interested in Plasmonics and/or Organic spintronics is highly desirable. Faculty responsibilities include developing and maintaining an internationally recognized research program, effective classroom teaching at the undergraduate and graduate levels, and professional service. We especially welcome applications from members of under-represented groups. Information about the University, MRSEC, and the Engineering and Science Colleges may be found at http://www.mrsec.utah.edu, http://www.coe.utah.edu, and http://science.utah.edu.

Applicants should apply online at https://utah.peopleadmin.com/ postings/38156. A letter of interest, vitae containing a publications list, statements of research and teaching plans, and contact information for at least three references should be included with the online application. Review of applications will begin by January 15, 2015, and will be accepted until the position is filled. Applicants must hold a PhD degree or equivalent by the time of appointment. Questions regarding the position can be addressed to Alice Bishop at alice.bishop@utah.edu.

The University of Utah is an Affirmative Action/Equal Opportunity employer and does not discriminate based upon race, national origin, color, religion, sex, age, sexual orientation, gender identity/expression, status as a person with a disability, genetic information, or Protected  $Veteran\,status.\,Individuals\,from\,historically\,underrepresented\,groups, such$ as minorities, women, qualified persons with disabilities, and protected veterans are encouraged to apply. Veterans' preference is extended to qualified applicants, upon request and consistent with University policy and Utah state law. Upon request, reasonable accommodations in the application process will be provided to individuals with disabilities. To inquire about the University's nondiscrimination or affirmative action policies or to request disability accommodation, please contact: Director, Office of Equal Opportunity and Affirmative Action, 201 S. Presidents Circle, Rm 135, 801-581-8365.

The University of Utah values candidates who have experience working in settings with students from diverse backgrounds, and possess a strong commitment to improving access to higher education for historically underrepresented students.





# **Nanotechnology Faculty Position**

The Department of Engineering Science and Mechanics (ESM) at Penn State invites applications for a faculty position at any rank in the crosscutting area of nanotechnology. Nanotechnology is one of the strategic research thrusts of the Department, involving faculty with active interests in: materials; electronics and photonics; mechanics; bio-systems; and electromechanical systems.

The Department is seeking outstanding candidates who have demonstrated research expertise in applying nanoscience and nanotechnology in several of these topical areas: a) Materials, electronics and magnetics, photonics and plasmonics, mechanics; b) Methods and tools of nanotechnology for synthesis, processing, metrology and characterization, modeling and simulation; c) System integration and manufacturing; d) Nonequilibrium science and quantum engineering; and e) Applications in electromechanical systems, energy, bio-systems and medicine, and environment. Applicants with the ability to work across disciplines and develop nano-education are especially encouraged to apply.

The ESM Department was founded in 1906, and in 1956 introduced the Engineering Science undergraduate degree as the Honors Program for the College of Engineering. The ESM Department comprises 29 tenure and tenure-track faculty, 2 fixed-term graduate faculty, 18 affiliated graduate faculty (Applied Research Laboratory, Electro-Optics Center, Materials Research Laboratory, and other departments), and 15 staff. There are around 130 undergraduate and 130 graduate students in the Department. The ESM Department is inherently interdisciplinary and transdisciplinary and has a highly research active faculty with annual research expenditure of \$9-16 million. All ESM faculty are members of the Materials Research Institute, a university-wide body. Several are affiliated with the Institute for Cyberscience, and approximately 50% are members of the Huck Institute of the Life Sciences, the Penn State Institute of Energy and the Environment, and have collaborations with the College of Medicine. Information about the department can be found at http://www.esm.psu.edu

Required qualifications include a Ph.D. in an engineering related discipline, and evidence of excellent potential or accomplishments in research and teaching. The position begins August 2015. Screening of applicants will begin on February 1, 2015. Nominations and applications will be considered until the position is filled. Applicants should submit: (1) a cover letter, (2) curriculum vitae, (3) a statement of professional interests, (4) two relevant publications, and (5) names and addresses of four references.

Please submitthese five items in one pdf file at **apptrkr.com/567123**. Inquiries should be addressed to ESM NANO-Search@esm.psu.edu. Two additional faculty positions, one in Health Monitoring (Job #53722) and one in Additive Manufacturing (Job #53711) are also posted. Exceptional candidates should also submit a separate application to be considered for one of 6 Dean's Frontier Faculty positions, Job #53460.

CAMPUS SECURITY CRIME STATISTICS: For more about safety at Penn State, and to review the Annual Security Report which contains information about crime statistics and other safety and security matters, please go to http://www.police.psu.edu/clery/, which will also provide you with detail on how to request a hard copy of the Annual Security Report.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to minorities, women, veterans, disabled individuals, and other protected groups.



## Senior Research Associate

Permanent Scientific Staff Position

NORTHWESTERN

Northwestern University's Atomic and Nanoscale Characterization Experimental (NUANCE) Center

The NUANCE Center invites applications for a Senior Research Associate to oversee research, collaboration and training related to the Scanning Transmission and Transmission Electron Microscopy (S/TEM)

The preferred candidate will have obtained a PhD in Materials Science. Physics or related physical science/engineering field and at least 3 years of experience in advanced S/TEM analysis, related analytical techniques and sample preparation methods for physical science/engineering materials. Proven publication record utilizing advanced S/TEM techniques and applications is essential.

The selected candidate will be responsible for training and assisting users on conventional and advanced S/TEM, including aberrationcorrected S/TEM, facilitating laboratory sessions for microscopy courses, and conducting analysis and characterization using electron microscopes. There are ample opportunities for independent and collaborative research utilizing advanced S/TEMs. Selected candidate will regularly operate conventional and advanced S/TEM analysis. consult and collaborate with users on experiment design & research in electron microscopy, sample preparation and general lab equipment.

Applications should include: 1. Introduction letter; 2. Curriculum Vitae; 3. Statement of plans for research; 4. Contact information for three

For more information and to apply, visit: http://bit.ly/SeniorRA

Northwestern University is an Equal Opportunity, Affirmative Action Employer of all protected classes including veterans and individuals with disabilities.



# Liane B. Russell Fellowship

The Department of Energy's (DOE) Oak Ridge National Laboratory (ORNL) has recently established a new distinguished research position—The Liane B. Russell Fellowship. An integral part of ORNL's diversity recruiting effort, this prestigious position is designed to attract a world-class workforce of early career researchers in all fields of science and engineering that relate to the DOE mission. Fellows will conduct high-quality research with intentions of pursuing long-term careers at ORNL, elevating the reputation of the laboratory, and becoming scientific leaders in their field. Candidates must have received their PhD within the past seven years. Further information regarding this fellowship can be found at http://www.ornl.gov/ ornl/careers/fellowships.

To apply for the Liane Russell Fellowship position, please contact Lauren Wurth at wurthla@ornl.gov.

ORNL is an equal opportunity employer. All qualified applicants, including individuals with disabilities and protected veterans, are encouraged to apply.

#### TENURED AND TENURE-TRACK FACULTY POSITIONS

School of Materials Science and Engineering | Xi'an Jiaotong University

The School of Materials Science and Engineering (SMSE), Xi'an Jiaotong University (XJTU), invites applications for multiple new faculty positions (assistant professor, associate professor, and professor). As a "211" and "985" school, XJTU is a one of the top universities in China, with a dynamic research atmosphere. The university is planning to make unprecedented investments, emphasizing cutting-edge research and innovations, to attract world-class researchers to its ranks.

SMSE has 103 full-time faculty and staff, and over 700 full-time and part-time graduate students in three academic departments—the Department of Materials Science, the Department of Materials Physics and Chemistry, and the Department of Materials Processing Engineering. It is experiencing very rapid growth in new programs, faculty, research funding, and space.

All the successful candidates must have a doctorate degree in Materials Science and Engineering or closely related fields. They will hold tenured (or tenure-track, for assistant professors) appointments at SMSE and receive sizable start-up research grants from XJTU. Salary and compensation will be commensurate with experience and at a level competitive with similar positions in the US.

Review of applications will begin immediately, and will continue until the positions are filled. The application package should include a CV, a list of publications, and a short summary of previous and planned research activities. Three (3) Letters of Reference should be arranged to be sent directly to: Ms. Xiaohua Cheng

School of Materials Science and Engineering, Xi'an Jiaotong University 28 West Xianning Road, Xi'an, Shaanxi 710049, P.R. China xiaohuacheng@mail.xjtu.edu.cn

Further information is available at http://mse.xjtu.edu.cn/en.

No special consideration will be given based on gender, nationality, or ethnic background.





# **Rochester Institute** of Technology

# Senior Materials Engineer

The Golisano Institute for Sustainability is an applied research organization at RIT whose mission is to undertake world-class education and research programs in sustainability with major foci on sustainable production, sustainable energy, sustainable mobility and ecologically friendly information technology systems. More information on the Institute can be found at www.rit.edu/gis.

GIS is seeking an engineer or scientist with a strong experimental and analytical materials background and a passion for solving real-world problems. In our environment, researchers work on a wide variety of products and technologies, work with undergraduate and graduate students, and are engaged in collaborative research with leading companies on projects in a variety of technical areas.

RIT is an equal opportunity employer that promotes and values diversity, pluralism, and inclusion. For more information or inquiries, please visit http:// www.rit.edu/diversity/ or the U.S. Department of Education at ED.Gov.

For the complete job description, and to apply to this position, go to: http://apptrkr.com/565424





# LECTURER | Department of Materials Science and Engineering University of Illinois at Urbana—Champaign

The Department of Materials Science and Engineering (www.matse.illinois.edu) invites applications for a full-time, untenured position at the rank of Lecturer. We are looking for a dynamic, motivated individual who will contribute to the educational mission of the department. The Lecturer will develop and teach courses in Materials Science and Engineering that will be targeted to undergraduate students. In addition, successful applicants will be expected to be involved in undergraduate and master's research programs, capstone design projects, and student advising.

The position requires a PhD degree in Materials Science and Engineering or a relevant engineering/scientific field. Prior experience with teaching at the college or university level is preferred.

The position is a full-time, 9-month academic year (9-month service basis paid over 12 months) appointment. Salary is competitive and based on experience. The desired starting date is August 16, 2015. The initial appointment will be for one year with the possibility for renewal on an annual basis thereafter based on funding and performance reviews. The University of Illinois has a codified promotion system for non-tenure track teaching faculty as described at http://provost.illinois.edu/Communication/26/Communication\_26.pdf.

The closing date is February 28, 2015. Interviews may be conducted before the closing date but no decision will be made until after the closing date.

To apply, please create a candidate profile at https://jobs.illinois.edu and upload a Curriculum Vitae with the names and contact information for three professional references and a letter of interest which includes teaching interests and evidence of innovative teaching in a university setting.

For further information about the application process, please contact the department by e-mail at mse@illinois.edu or by telephone at 217-333-1440.

Illinois is an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, religion, color, national origin, sex, age, status as a protected veteran, or status as a qualified individual with a disability. Illinois welcomes individuals with diverse backgrounds, experiences, and ideas who embrace and value diversity and inclusivity (www.inclusiveillinois.illinois.edu). We have an active and successful dual-career partner placement program and a strong commitment to work-life balance and family-friendly programs for faculty and staff (http://provost.illinois.edu/worklife/index.html).



The Department of Materials Science and Engineering at Northwestern University seeks an outstanding individual for a Lecturer position who would teach and develop undergraduate and graduate classes including, but not necessarily limited to: mechanical properties, materials selection and design, computational modeling, introduction to materials science, and engineering. A PhD degree in MSE or related discipline is required.

Any applicant who is interested in this position may apply by sending a letter of application, CV, teaching statement, and contact information for three references to the following link: https://facultysearch.mccormick. northwestern.edu/apply/index/NzA=

Northwestern University is an equal opportunity, affirmative action employer. Qualified women and minorities are encouraged to apply. It is the policy of Northwestern University not to discriminate against any individual on the basis of race, color, religion, national origin, gender, sexual orientation, marital status, age, disability, citizenship, veteran status, or other protected group status. Hiring is contingent upon eligibility to work in the United States.

# UCI University of California, Irvine

#### SURFACE SCIENCE FACILITY MANAGER

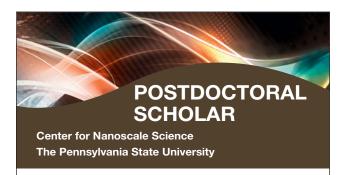
Laboratory for Electron and X-ray Instrumentation (LEXI)

Manage the operations and help guide the strategic build-out of the new Surface Science Facility in the Laboratory for Electron and X-ray Instrumentation (LEXI), UC Irvine's materials characterization user facility (http://lexi.eng.uci.edu/). LEXI has a large and growing user community of over 250 academic and industry users, two PhD staff scientists, and a state-of-the-art instrument set. LEXI has just installed a Kratos AXIS Supra X-ray and ultraviolet photoelectron spectrometer and scanning Auger microscope (XPS/UPS/SAM). The Supra is envisioned as the first in a full suite of surface science instruments in LEXI.

The successful applicant will be an XPS/UPS expert with at least five years of indepth, hands-on experience with XPS, UPS, SAM, ISS, UHV sample preparation, and maintenance of UHV equipment. Candidates with experience operating user facilities and expertise with synchrotron XPS and complementary techniques (e.g., Auger, SIMS, ion scattering, EPMA, atom probe, etc.) are of particular interest. Primary duties include: manage the Supra XPS/UPS/SAM system; work directly with users to carry out and publish research; assist in a phased build-out of the Surface Science Facility; and lead associated teaching and outreach activities.

For more information and to apply, visit https://recruit.ap.uci.edu/apply/ JPF02643.

The University of California, Irvine is an Equal Opportunity/Affirmative Action Employer advancing inclusive excellence. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, age, protected veteran status, or other protected categories covered by the UC nondiscrimination policy



The Center for Nanoscale Science is seeking a postdoctoral scholar to join a team that is developing, presenting, reporting, and evaluating a broad program of education and outreach including nanoscience curriculum for K-12 students and teachers, demonstrations for nationally distributed science museum shows, summer science camps, summer research experiences, and programs targeted at increasing the diversity of Center participants. Additional career development opportunities include interdisciplinary materials research with Center faculty, team teaching, grant proposal writing, and continued publication of scientific and/or science education research. The candidate should have a PhD degree in science or science education, possess excellent interpersonal, organizational, verbal and written communication skills, and have a strong interest in science and technology education. The successful candidate will combine personal initiative and nascent leadership ability with an ability to take direction from others and work as an integrated team. Previous science outreach experience is desired but not required.

Applications must be submitted at <a href="https://app2.ohr">https://app2.ohr</a>. psu.edu/Jobs/External/EVMS2\_External/currentap1. cfm#55069 and include a cover letter and CV. Please send three reference letters to Denise Patton at dah182@ psu.edu. Applications will be reviewed on an ongoing basis-those received before February 15, 2015 will be assured of full consideration, but the applicant review will continue until a suitable candidate is found.

CAMPUS SECURITY CRIME STATISTICS: For more about safety at Penn State, and to review the Annual Security Report which contains information about crime statistics and other safety and security matters, please go to http:// www.police.psu.edu/clery/, which will also provide you with detail on how to request a hard copy of the Annual Security Report.

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#### Worldwide Search for Talent

City University of Hong Kong is a dynamic, fast-growing university that is pursuing excellence in research and professional education. As a publicly-funded institution, the University is committed to nurturing and developing students' talents and creating applicable knowledge to support social and economic advancement. The University has seven Colleges/Schools. As part of its pursuit of excellence, the University aims to recruit outstanding scholars from all over the world in various disciplines, including business, creative media, energy, engineering, environment, humanities, law, science, social sciences, veterinary sciences and other strategic growth areas.

Applications and nominations are invited for:

#### Chair Professor/Professor/ Associate Professor/Assistant Professor [Ref. A/163/23] Department of Physics and Materials Science

The Department of Physics and Materials Science was formed in 1993 as the first of its kind in Hong Kong. The Department currently employs 30 faculty members, and has internationally recognized expertise in several areas of applied physics and materials science, including nanostructured materials, thin film and coatings, materials theory, and advanced characterizations. Further information about the Department can be found at http://www.ap.cityu.edu.hk.

Duties: Teach undergraduate and postgraduate courses, conduct cutting edge research, and develop new research directions and courses.

Requirements: A PhD in Physics/Materials Science or related disciplines with a strong research record and promising teaching ability. Applications are sought in the broad areas of applied physics and materials science. The appointment will normally be made at the Associate Professor or Assistant Professor level, while higher level appointments will also be considered depending on the qualifications and experience of the candidates. Candidates with expertise in the following areas are strongly encouraged to apply:

- Computational materials physics or computational materials science Neutron or synchrotron scattering
- Polymer and soft matter

### Salary and Conditions of Service

Remuneration package will be driven by market competitiveness and individual performance. Excellent fringe benefits include gratuity, leave, medical and dental schemes, and relocation assistance (where applicable). Initial appointment will be made on a fixed-term contract.

Information and Application

Further information on the posts and the University is available at http://www.cityu.edu.hk, or from the Human Resources Office, City University of Hong Kong, Tat Chee Avenue, Kowloon Tong, Hong Kong [Email:hrojob@cityu.edu.hk/Fax: (852) 2788 1154 or (852) 3442 0311].

To apply, please submit an online application at http://jobs.cityu.edu.hk, and include a current curriculum vitae with evidence of teaching ability in English, and a concise statement of research interests and teaching philosophy (up to 2 pages each). Nominations can be sent directly to the Human Resources Office. Applications and nominations will receive full consideration until the positions are filled. Only shortlisted applicants will be contacted; and those shortlisted candidates for the post of Assistant Professor will be requested to arrange for at least 3 reference reports sent directly by the referees to the Department, specifying the position applied for. The University's privacy policy is available on the homepage.

The University also offers a number of visiting positions for current graduate students, postdoctoral scholars, and for early-stage and established scholars, as described at http://www.cityu.edu.hk/provost/CityU\_Visiting\_Positions.htm.

City University of Hong Kong is an equal opportunity employer and we are committed to the principle of diversity. We encourage applications from all qualified candidates, especially those who will enhance the diversity of our staff.

City University of Hong Kong was ranked 5th among the world's top 50 universities under the age of 50 in the Quacquarelli Symonds 2014 survey http://www.cityu.edu.hk