

The Solar Energy Research Institute of Singapore (SERIS) is Singapore's national institute for applied solar energy research. SERIS has the stature of a National University of Singapore (NUS) university - level Research Institute. SERIS conducts industry - oriented research and development as well as use - inspired basic research in the field of solar energy conversion. The institute collaborates closely with industry.

Open Position : **Research Fellow / Research Associate (Façade Expert)**

SERIS Department : SES Cluster

Group : Centre of Excellence for BIPV

JOB ID : JOB-2019-0230098

Job Scope:

The Research Fellow / Associate will be actively involved in the development of innovative building-integrated photovoltaics (BIPV) facades, predominately for the retrofit of existing buildings. This includes the selection of suitable PV technologies, as well as the development of reliable and durable mounting methods that comply with all relevant building and fire safety rules. The RF/RA is also expected to build mock-ups and/or testbeds in a real-world environment to demonstrate the feasibility of the proposed solutions.

The RF/RA shall compile the findings and innovations in an interactive database for BIPV in Singapore and share them in outreach activities with the wider community of stakeholders, including industry, government agencies, architects, developers, building professionals and façade consultants. In addition, the RF/RA will be engaged in R&D and service activities with other research groups and/or industry partners, including (but not limited to) building-integrated photovoltaics façade and PE/ZE/SLE buildings (positive energy / zero energy / super-low energy).

Activities also include:

- Review current publications, and apply them to the specific case of Singapore to evaluate the BIPV potential ;
- Conduct simulation with BEST (building energy simulation tools) and carry out building energy simulations (with and without BIPV facades);
- Other duties as they evolve.

Requirements:

Essential:

- Master / PhD degree in Building Physics, Civil Engineering or Architecture;
- Minimum 3 years' relevant experience with facades and building envelopes;
- Detailed knowledge of building science, facades, passive technologies;
- Familiarity with relevant building codes and standards (civil, mechanical, electrical, fire safety, etc.);
- Building simulation experiences (BIM, Rhino, IES, or other building energy simulations);
- Proven track record with industry projects;
- Relevant publications in international peer-reviewed journals;
- High level of communication and interpersonal skills;
- Demonstrated, outstanding project management experience;
- Ability to work collaboratively with colleagues.

Desirable

- Demonstrated expert knowledge on experimental/theoretical research related to building physics / civil engineering / architecture;
- Ability to present work to other scientists and industry partners in the field in a clear and concise manner;

Interested candidates please submit your application (with CV) via JobsBank at:

<https://www.mycareersfuture.sg/job/others/research-fellow-research-associate-national-university-singapore-26904a5485b02f8b2241e891bc4878d1>

Or Mail your CV to:

Solar Energy Research Institute of Singapore
National University of Singapore
7 Engineering Drive 1, Block E3A, #06-01,
Singapore 117574
Email: serishr@nus.edu.sg
Tel: (+65) 6516 4119

We regret that only shortlisted candidates will be notified.

For more information on SERIS, please visit www.seris.sg