Research Fellow/Research Assistant positions in 2D material-based applications

Job Purpose
Professor Barbaros Özyilmaz group is opening Research Fellow/Research Assistant positions to support advanced electronics and sensing research based on 2D materials. Prof Barbaros' group is at the forefront of the 2D materials research and is continuously working towards achieving the first bio-application of 2D graphene sheets (PCT/SG2022/050129) targeting in healthcare, biomedical, and clinic environments.

This proposed multilayer composite has not only exhibited its excellent bio-activities, but also revealed its potentially use-cases in electronic sensing platform, healthcare management, and wellness monitoring. This project aims to **upgrade and implement desirable functions** based on the Graphene-based solutions, and **spin-off this technology** into commercialisations. This project offers an opportunity to international collaborations with both academic research groups and industrial collaborators.

We are looking for self-motivated and passionate candidates:

- To explore, support and enrich the Graphene-based solution for next-generation flexible wearables for biomedical and healthcare managements
- To hand-on complete property/concept validation from design of experiments, collaborative research, data analysis to SOP documentation
- To facilitate engagements and partnership between key stakeholders for patent disclosure, academic publication, grant call or funding applications
- To work closely with marketing consultants and industry partners to validate the technology and identify commercialisation potential
- Candidates with relative background/experience of spin-offs and start-ups are welcomed

Qualifications for Research Assistant (RA) positions
• Master's degree or Honours Degree in Material Science, Physics, Nanoscience, Nanotechnology, Chemical Engineering, Biomedical Engineering or related disciplines
• Preferably some experience in scientific/research work (e.g., through final year projects or undergraduate project experiences)
• Effective oral and written communication skills

Qualifications for Research Fellow (RF) positions
• Hold a Ph.D. degree in science or engineering in the area of 2D materials, biomedical or electronics, preferably from a previous postdoctoral position
• Practical experience planning and performing laboratory experiments and troubleshooting, and a strong understanding of the processes related to ultrathin-film, electronics, wearable devices, or sensing platforms in a pilot plant environment
• Experience analysing laboratory and/or field test data to correlate and validate analytical models
• Have excellent communication skills and enjoy solving problems with limited information
• True team player to work as part of a highly collaborative, diverse and highly ethical team

The Research Fellow/Research Assistant positions will be yearly renewable, starting from November 2022. This position reports to the Principal Investigator (Prof. Barbaros Özyilmaz), Head of the Department of Materials Science and Engineering (MSE), Deputy Director and full Professor for the Centre for Advanced 2D Materials (CA2DM), National University of Singapore (NUS). Interested candidates could send the application to Prof. Barbaros Özyilmaz at barbaros@nus.edu.sg