**SGUNITED TRAINEESHIP JOB DESCRIPTION**

**SECTION 1: POSITION DETAILS**

<table>
<thead>
<tr>
<th>Job Title for Posting</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D Engineer Trainee</td>
<td>School of Materials Science and Engineering</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appointment Grade &amp; Job Profile Name (Job Family)</th>
<th>Cost Centre / WBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.A.</td>
<td>[Redacted]</td>
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<thead>
<tr>
<th>Name and Job Title of Reporting Manager</th>
<th>Reason for Recruitment (New / Replacement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assoc Prof Ng Kee Woei</td>
<td>New</td>
</tr>
</tbody>
</table>

**SECTION 2: KEY JOB & TRAINEESHIP PURPOSE**

*Provide a summarized statement on the job and traineeship.*

This R&D Engineer Trainee position is being advertised as a part of SGUnited Traineeship Programme (STP) to train our graduating students in the research environment. The current project aims to study the risk potential of nanoparticle and nanomaterial consumption, following oral exposure to environmentally contaminated foods and water and/or exposure to nanomaterials arising from novel food ingredients, packing and manufacturing technologies. This study will involve initial characterization, dosage and uptake studies of different test nanoparticles and their application to 3D-tissues.

**SECTION 3: KEY RESPONSIBILITIES**

*List the key responsibilities and accountabilities that must be achieved.*

- Handling of nanomaterials like Ag, TiO$_2$ and ZnO nanoparticles
- Characterization of nanomaterial transformation, uptake and translocation
- Basic biochemical and toxicological assays
- Basic laboratory maintenance duties
- Analysis and interpretation of research data

**SECTION 4: COMPETENCIES AND QUALIFICATION REQUIREMENTS**

*List Knowledge, Experience, Skills, Competencies and Qualifications*

- Bachelors of Engineering (preferable in Materials Science and Engineering)
- Recently graduated or will soon be graduating from NTU, in Dec 2019 or Jun 2020 respectively.
- Experience in handling nanomaterials.
- Ability to interpret and analyze scientific data
- Good communication skills, especially in English
- Ability to work as a team.
- Singaporean (SG) or Singaporean Permanent Resident (SPR)

**SECTION 5: ABRIDGED VERSION OF JOB DESCRIPTION AND REQUIREMENTS**

*For job posting and attachment to offer letter*

There is a R&D Engineer Trainee position as a part of the SGUnited Traineeship Programme (STP) to be carried out under the supervision of A/Prof Ng Kee Woei. This position requires sufficient knowledge in handling nanomaterials and will involve characterization, dosage and uptake studies of different test nanoparticles and their application to 3D-tissues.
Responsibilities:
- Handling of nanomaterials like Ag, TiO₂ and ZnO nanoparticles
- Characterization of nanomaterial transformation, uptake and translocation
- Basic biochemical and toxicological assays
- Basic laboratory maintenance duties
- Analysis and interpretation of research data

Requirements:
- Bachelor’s of Engineering (preferably in Materials Science and Engineering)
- Recently graduated or will soon be graduating from NTU, in Dec 2019 or Jun 2020 respectively.
- Experience in handling nanomaterials.
- Ability to interpret and analyze scientific data
- Good communication skills, especially in English
- Ability to work as a team
- Singaporean (SG) and Singaporean Permanent Resident (SPR)

SECTION 7: STATUTORY MEDICAL EXAMINATION REQUIREMENT
Indicate if the role will be exposed to any of the hazards as listed, which requires the incumbent to undergo the statutory medical examinations.

1. No Exposure  (Please click “No Exposure” for the drop down list)
2. No Exposure  (Please click “No Exposure” for the drop down list)

Please indicate if there are more than 2, out of the 16 hazards stated in the dropdown list: