POSITION DESCRIPTION

Lecturer

<table>
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<tr>
<th>Position Level</th>
<th>B</th>
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<tbody>
<tr>
<td>Faculty/Division</td>
<td>Science</td>
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<tr>
<td>Position Number</td>
<td>00195522</td>
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<td>Original document creation</td>
<td>08/04/2024</td>
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Position Summary

A Lecturer (Level B) in the School of Materials Science & Engineering is integral to the successful prosecution of a collaboration with one of our industry partners and the School’s broader research agenda. The Lecturer will work in an interdisciplinary research environment alongside experts in physical metallurgy of high temperature materials, high temperature corrosion, additive manufacturing, and sustainable materials processing to pursue a world-leading materials engineering research program.

The Lecturer will contribute to teaching and the development of lifelong learning offerings and will play a key role in helping to mentor the next generation of leaders in Materials Science & Engineering through research-student supervision and capacity building with industry and the broader community.

The role of Lecturer reports to the Head of School and has no direct reports.

Accountabilities

Specific accountabilities for this role include:

- Design and conduct research projects to address the technical challenges of our industry partner, a global leader in bauxite, alumina, and aluminium products.
- Have significant scholarly impact related to materials for extreme environments in Australia and globally and develop a nationally recognised research track record.
• Apply existing and develop new research methods to advance structure-property-performance relationships of materials for extreme environments.
• Discuss progress and collaborate with staff at our industry partner on a regular basis, both via online meetings and in person.
• Contribute content to meet the reporting requirements of the industry partner.
• Obtain research income from nationally competitive research grants (and/or research fellowships) and research end-users as a member or leader, at or above the level that is relevant to the discipline in leading universities.
• Contribute to community engagement and public outreach on topics related to Materials Science & Engineering.
• Engage with other industry, business and government on research and lifelong learning activities.
• Mentor and guide students, groups, and colleagues; supervise HDRs to timely completion as joint and primary supervisor; and contribute to HDR review panels.
• Conduct classes, assess student learning achievements and support students in postgraduate and undergraduate courses in line with UNSW policy.
• Design and develop learning activities and resources and provide assessment and feedback using a range of suitable approaches and learning environments.
• Align with and actively demonstrate the UNSW Values in Action: Our Behaviours and the UNSW Code of Conduct.
• Cooperate with all health and safety policies and procedures of the university and take all reasonable care to ensure that your actions or omissions do not impact on the health and safety of yourself or others.

Skills and Experience
• A PhD in Materials Science & Engineering or related discipline and relevant research track record in materials for extreme environments.
• Prior experience in Ni-based superalloys, metal additive manufacturing, and/or materials for hydrogen production and applications are highly desirable.
• Demonstrated high level expertise in processing-structure-property relationships of engineering alloys and other inorganic materials, with focus on their high-temperature mechanical and corrosion performance.
• Demonstrated high level skills in multiscale materials characterization techniques such as SEM, EBSD, EPMA, TEM, XRD, and atom probe.
• Proven commitment to proactively keeping up to date with discipline knowledge and developments.
• Demonstrated track record in research with outcomes of high quality and high impact with clear evidence of the desire and ability to continually achieve research excellence as well as the capacity for research leadership.
• Experience in teaching and learning design, development and delivery at undergraduate and/or postgraduate level.
• Demonstrated experience in outreach.
• Demonstrated ability to work successfully both independently and in a team, to collaborate across disciplines, and to build effective relationships.
• Evidence of highly developed interpersonal and organisational skills, and related ability to work successfully with industry, with an appreciation of the different drivers and timelines of industrial research partners.
• An understanding of and commitment to UNSW’s aims, objectives and values in action, together with relevant policies and guidelines.
• Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training.

Pre-employment checks required for this position
• Verification of qualifications

About this document
This Position Description outlines the objectives, desired outcomes, key responsibilities, accountabilities, required skills, experience and desired behaviours required to successfully perform the role.

This template is not intended to limit the scope or accountabilities of the position. Characteristics of the position may be altered in accordance with the changing requirements of the role.