ROLE PROFILE

Job Title: Research Associate/Fellow

School/Department: School of Mathematical Sciences

Job Family and Level: Research & Teaching Level 4
(Appointment will be Level 4 Career training grade where an appointment is made before PhD has been completed)

Contract Status: Fixed-term post is available from 1 September 2019 for a period of 7 months

Hours of Work: Full-time (36.25 hours)

Location: School of Mathematical Sciences, University of Nottingham, University Park, Nottingham, NG7 2RD

Reporting to: Professor Gregor Tanner (Grant holder)

Purpose of the New Role

The person appointed will:

- Have specific responsibility for research, for developing research objectives and proposals with Prof Gregor Tanner and Mr Satoshi Morita (Yanmar Co Ltd) on the industry funded project "Sound radiation simulations from DEA-ATPA computations"
- Plan and conduct work using approaches or methodologies and techniques appropriate to the type of research.
- Be responsible for writing up their work for publication and for reports to the sponsor and have the opportunity to use their initiative and creativity to identify areas for research, develop research methods and extend their research portfolio.

Main Duties and Responsibilities

1. Undertake original research of international excellence.
2. Develop research objectives and proposals for own and/or collaborative research area.
3. Plan and conduct research using recognised approaches, methodologies and techniques within the research area.
4. Analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights to research area.
5. Prepare papers for publication in leading journals and/or contribute to the dissemination at national/international conferences, workshops and meetings resulting in successful research outputs. Prepare reports for the industrial sponsor Yanmar Co Ltd.
6. Identify opportunities and assist in writing bids for research grant applications. Prepare proposals and applications to both external and/or internal bodies for funding, contractual or accreditation purposes.
7. Co-ordinate the operational aspect of research networks, for example, arranging meetings and updating web sites etc. and contribute to collaborative decision making with colleagues in area of research.
8. Provide support, guidance and supervision to other staff, where appropriate in own area of expertise.
Collaborate with academic colleagues on areas of shared interest for example, collaborative or joint research projects.

Plan and manage own research activity and resolve problems, if required, in meeting own/team research objectives and deadlines in collaboration with others.

Utilise and contribute to organising research resources and facilities and workshops as appropriate.

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<tr>
<th>Knowledge, Skills, Qualifications &amp; Experience</th>
<th>Essential</th>
<th>Desirable</th>
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<tbody>
<tr>
<td><strong>Qualifications/Education</strong></td>
<td>PhD or equivalent, in a relevant branch of mathematics or a closely related discipline OR near to completion of a PhD.</td>
<td>Background knowledge in wave chaos and vibroacoustics.</td>
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<td><strong>Skills/Training</strong></td>
<td>Expert knowledge of high frequency asymptotics. Excellent oral and written communication skills, including the ability to communicate with clarity on complex information. High analytical ability to analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights. Ability to creatively apply relevant research approaches, models, techniques and methods. Ability to assess and organise resource requirements and deploy effectively. Ability to build relationships and collaborate with others, both internally and externally.</td>
<td>Ability to foster a research culture and commitment to learn in others.</td>
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<tr>
<td><strong>Experience</strong></td>
<td>Proven ability to produce research of high quality in applied mathematics or closely related discipline. Some practical experience of applying the specialist skills and approaches and techniques required for the role.</td>
<td>Published papers in relevant academic journals. Previous success in gaining support for externally funded research projects. Experience of developing new approaches, models, techniques or methods in research area.</td>
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<td><strong>Personal Attributes</strong></td>
<td>Flexibility. Ability to work independently and as part of a multidisciplinary and multicultural team. Ability to network, actively engaging with and valuing other areas and diverse groups.</td>
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**Additional Information**
The School of Mathematical Sciences is in the top ten mathematics departments nationally, and was recognised for the quality of its research in the most recent national Research Excellence Framework (REF). The REF assesses UK higher education institutions in all subject areas and is based on submissions provided by each university detailing their research and the wider societal impact that it has had. In the School, 32% of our research was recognised as world-leading and a further 56% as internationally excellent. Its research environment was classified as 75% world-leading in vitality and sustainability, with the remaining 25% internationally excellent - reflecting the outstanding setting the School provides for its 80 academic staff as well as its postdoctoral and postgraduate researchers.
The School has a substantial student population which includes 850 undergraduate students, 80 postgraduate MSc students and 120 postgraduate PhD students.

Informal enquiries may be addressed to Professor Gregor Tanner, email: gregor.tanner@nottingham.ac.uk. Please note that applications sent directly to this email address will not be accepted.

The School is committed to promoting Equality and Diversity. This has been recognised in the awarding of an Athena SWAN Bronze Award, and the School is working hard towards further progress. Athena SWAN http://www.athenaswan.org.uk/ recognises and celebrates good employment practice for women working in STEM subjects.