## THE UNIVERSITY OF MANCHESTER

 PARTICULARS OF APPOINTMENTFACULTY OF SCIENCE \& ENGINEERING SCHOOL OF NATURAL SCIENCES DEPARTMENT OF MATHEMATICS

## RESEARCH ASSOCIATE IN APPLIED MATHEMATICS

VACANCY REF: SAE-017915

| Salary: | $£ 33,309$ to £40,927 per annum depending on relevant experience |
| :--- | :--- |
| Hours: | 1 FTE |
| Duration: | Fixed term from 1 February 2022 until 31 January 2024 |
| Location: | Oxford Road, Manchester |

## Enquiries about vacancy shortlisting and interviews:

Name: Joel Daou.
Email: joel.daou@manchester.ac.uk

## BACKGROUND

You are expected to undertake research activities in the Department of Mathematics at the University of Manchester related to EPSRC grant EP/V004840/1 entitled "Taylor dispersion, Turing instability and a lubrication theory for flames"

## Overall Purpose of the Job

The main purpose of the role is to tackle the research problems pertaining to EPSRC grant EP/V004840/1 which involve pioneering investigations addressing the propagation and stability of flames (or similar reaction-diffusion travelling-waves) and their interactions with simple flow fields.

## Key Responsibilities, Accountabilities or Duties

The range of duties will include:

- Conduct individual and collaborative research projects.
- Write up research work for publication.
- Collaborate with academic colleagues on areas of shared research interest.


## PERSON SPECIFICATION

## Essential;

- Have, or be about to obtain, a relevant PhD (or equivalent).
- Specialist knowledge in Combustion theory and/or fluid mechanics.
- Experience in asymptotic methods and numerical techniques for solving reactive flow problems.
- Excellent communication and interpersonal skills.
- Excellent time management and organisational skills.
- Ability to work independently and as part of a team.
- Ability to present in both written and oral publications.
- Strong journal publication record.

