

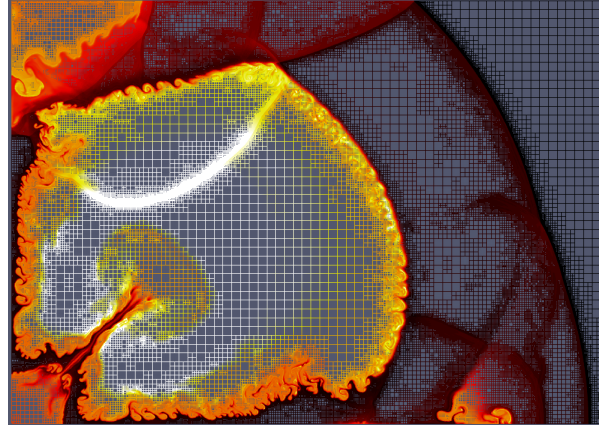
Research Scientist/Postdoctoral and PhD Positions in Multi-Scale/Multi-Physics Modeling and Simulation of Complex Flows

Research Scientist/Postdoctoral Researchers

The Skoltech Center for Design, Manufacturing and Materials (CDMM) Moscow, Russia has an open full time Research Scientist/Postdoctoral position in the research group of Professor Oleg V. Vasilyev, in the area of

Multi-Scale/Multi-Physics Modeling and Simulation of Complex Flows

The initial appointment is for a period of 1 year with possibilities for further prolongation and promotion based on the results of performance evaluation.



Research areas and research duties

We are seeking a Research Scientist with PhD or equivalent degree in Applied Mathematics, Computer Science, Physics, Mechanical Engineering, Aeronautics, or the related field with expertise in computational fluid mechanics and/or high performance scientific computing and excellent analytical skills. The successful candidate will work with the team of research scientists and PhD students on development novel computationally efficient predictive computational approaches with tight integration of numerics and physics-based modeling capable of performing spatio-temporally adaptive variable fidelity numerical simulation of transitional and turbulent flows for different flow conditions and across all speed regimes including inert and reactive, single and multi-phase flows.

Candidates are expected to have a strong background in computational fluid mechanics and/or applied mathematics. Solid knowledge of C/C++ and/or Fortran is also required. The balance of work between theoretical and computational as well as flow physics to be modeled will depend on the candidate's strengths and preferences. Good communication skills (evidenced by papers, conference presentations and/or classes taught) in English are also a must. Previous experience working with parallel research codes is essential.

Selected applicants will receive a highly competitive compensation package (salary commensurate with experience, housing allowance in case relocation will be needed, medical insurance). The position is available immediately and the starting date is negotiable.

The application file should contain a CV, a list of publications, a research statement, and names with contact information of minimum three references. The research statement should be no more than two pages and should summarize the candidate's technical strengths, past research accomplishments, research interests, and long term career objectives. The application should be emailed to Prof. Oleg V. Vasilyev (O.Vasilyev@skoltech.ru). The candidate's e-mail message should contain "Postdoc position in multi-scale/multi-physics modeling" in the subject.

Graduate Students

Students interested in pursuing Ph.D. studies in the above topics are advised to first contact Prof. Oleg V. Vasilyev (O.Vasilyev@skoltech.ru). The standard procedure is to apply via Skoltech Admissions for Doctoral Programs (<http://www.skoltech.ru/en/apply>).

Successful candidates are expected to have masters or equivalent degree in Applied Mathematics, Computer Science, Physics, Mechanical Engineering, Aeronautics, or the related field. Applicants should have a strong theoretical background and a desire to use mathematical and computational tools in their research. A good knowledge of C/C++ and/or Fortran is highly desirable.

<http://faculty.skoltech.ru/people/olegvasilyev>