Agenda:

8:30-9:00 Coffee
9:00-9:05 Welcome

9:05-9:30 Sabre Kais, Invited Speaker: QEERI modeling and computation group: ongoing and future research projects

9:30-9:45 Ioannis Economou, Molecular simulation of complex fluids for property predictions.

9:45-10:00 Konstantinos Kakosimos Environmental fluid dynamics for meso- and local scale atmospheric dispersion modeling

10:00-10:15 Marcelo Castier, Modeling and applications of the thermodynamic properties of pure substances and mixtures

10:15-10:30 Hazem Nounou, Modeling and control with applications

10:30-10:45 break and posters

10:45-11:00 Tingwen Huang, Computational intelligence: state of the art of neurodynamic optimization

11:00-11:15 Snezana Zaric, Noncovalent interactions of aromatic molecules and metal complexes

11:15-11:30 Mazen Saghir, FPGAs for accelerated and energy-efficient scientific computing

11:30-11:45 Othmane Bouhali, Computing in Medical and High Energy Physics.

11:45-12:00 Loujaine Mehrez, Uncertainty quantification of asphalt mixture behavior: modeling and propagation of viscoelastic properties

12:00-12:15 Milivoj Belic, Activities in advanced computing of the TAMUQ nonlinear optics group

12:15-1:00 PM Lunch, Research Rotunda, Texas A&M at Qatar’s Building
What is TASC?

Texas A&M at Qatar’s Advanced Scientific Computing (TASC) is a multi-disciplinary group bringing together faculty and researchers from a wide variety of engineering and science disciplines and leveraging their expertise to tackle complex computational problems. TASC is guided by needs in engineering and Science in areas that are of high relevance locally and globally. Locally, the group is aiming at an active contribution to the implementation of the Qatar National Research Strategy (QNRS) in the field of computational science and its applications such as: material science, computational chemistry, medical physics, system biology and high performance computing. Internationally, the group is aiming at tight links with international supercomputing and computational centers.

Structure:

TASC is composed of four specialized research groups:

- Computational Physics and Biology
- Computational Materials Science & Engineering
- High Performance Computing
- 3D Technologies

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