Riadh ATA Ph.D. Ing.

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Education

2007 Ph.D. Computational Fluid Dynamics

- Development of particle methods for the simulation of free surface flows.
- Ecole de Technologie Supérieure (ETS)- Montreal - Canada

2002 M.Sc. Computational Fluid Dynamics

- Free surface flows using SPH (Smoothed Particle Hydrodynamics) method.
- Ecole de Technologie Supérieure (ETS)- Montreal - Canada

1999 B.Sc. Mechanical engineering

- National School of Engineering of Tunis (ENIT) - Tunis - Tunisia

Work Experience

Expert researcher (2009 – Present) : (LNHE) – Electricité de France (R&D department).

- Contribution to the development of the Telemac-Mascaret system
- Responsible of the codes Telemac-2D (hydrodynamics), WAQTEL (Water quality), BIEF (Finite elements library) and Khione (Ice dynamics)
- Contributions to Telemac-3D (hydrodynamics), Sisyphe (Sediment transport) and Tomawac (waves)
- Achievement of flood risk management and resilience studies applied to nuclear power-plants and hydraulic facilities.
- Assistance of the intern (EDF) and international Telemac users
- Contribution to R&D projects about UQ, data assimilation, tsunamis, floods simulation, natural hazards, flash floods, water quality, sediment transport, meandering and morphodynamics.

Post-doctoral fellow (2008) : ONERA- The French aerospace lab. Chatillon (France)

- Development of a reduced order model and coupling with Comsol Multiphysics for the simulation of thermo-kinetic composite flows.

Junior researcher (2005) Hydro-Quebec : Dams and civil works department – Montreal (Canada).

- Development of 1D-2D coupling of hydraulic models and application to La Romaine river (Canada).

Project manager (2000) Engineering Procurement and Project Management (EPPM) – Tunis (Tunisia).

- Management of the project of drinking water pumping station of Bembla (Tunisia).

Software

- Telemac-Mascaret system: free surface and environmental set of codes (hydrodynamics, waves, sediments, water quality, underground flow,…)
- Pre and post-processors for environmental modelling: Blue Kenue, Qgis, Fudaa, Paraview, Janet.

- Fluent, Comsol
- Fortran, Python, Matlab

Publications

- Pier reviewed journal papers: 13 published papers and 2 submitted.
- Conference papers: 18 published papers.

Awards and distinctions

- 2015 R&D award about the development of a new module for the simulation of meandering and bank erosion in river. (EDF internal award)
- Invited plenary speaker of the 2nd ASCETE tsunamis workshop (2018) Sudelfeld (Gernamy): "Tsunamis from generation to coastal flooding"
- Invited plenary speaker – Tandem Summer school of tsunamis (2016):"Tsunamis coastal modeling and Urban floods "
- Expert researcher at R&D department of Electricité de France (EDF)
- Graduate studies excellence award for the years 2003-2004 and 2005 (ETS Montreal).
- International mobility scholarship from ETS Montreal.
- Recipient of the academic board honour of the Canadian Interuniversity sport (2005).
- Member of the Engineers Board of Quebec (Ordre des Ingénieurs du Québec) (inactive membership)

Langages

- English – French – Arabic
- German and Italian (basic)