SIMHYDRO 2012
New trends in simulation
12- 14 September
Nice - Sophia Antipolis (France)

Time		
9h 10h 11h 12h 13h 14h 15h 16h 17h 18h 19h 20h		

11 September : Side events

Free TELEMAC/MASCARET workshop

12 September: New trends in modelling for marine, river & urban hydraulics

Opening/Keynote lectures — Coffee break — S1: Coupling of models / S2: Data ass. & uncert. — Lunch — S3: Coupling of models / S4: Data assimilation and uncertainties — Coffee break — S5: Urban flooding / S6: Data and uncert. in hydraulic modelling — Cocktail

Free XPSWMM workshop

13 September: The stakeholders and practitionners of simulation

Introduction — Round table 1: New requirements for hydroinformatics — Coffee break — Round table 2: From simulation towards decision — Lunch — S7: Model efficiency and real situations / S8: New methods for numerical models — Coffee break — S9: Model efficiency and real situations / S10: New methods for numerical models — Dinner

Free ISIS workshop

14 September : 3D CFD and application

Keynote lecture — Coffee break — S11: Hydraulic machinery / S12: 3D flows in the near field of structure — Lunch — S13: Hydraulic machinery / S14: Models for complex phenomena

Free MIKE by DHI worshop

A banquet is planned on the evening of September 13th. Registration form on the conference site: www.simhydro.org or www.shf-hydro.org

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Exhibition

Apart from the scientific conference, exhibitors are welcome to present their latest products. They can also sponsor the organization of the conference. It would be a perfect opportunity to present their competence and products to participants from all over the world. See Simhydro website for further information.

The **SimHydro 2012 conference** is jointly organized by the Société Hydrotechnique de France (SHF), the University of Nice-Sophia Antipolis (UNS), Electricité de France, the International Association for Hydraulic Research (AIHR), the Association Française de Mécanique (AFM), Cie Nationale du Rhone (CNR) & ARTELIA Group.

Day 1: September 12th
New trends in modelling for marine, river & urban hydraulics
Session Chair: Ph. Gourbesville

9:00-9:30: Opening speech

Pierre-Louis Viollet, Chairman of SHF's Scientific Comittee, Daniel Loudière, Chairman of SHF, Philippe Gourbesville, Polytech Nice-Sophia-Antipolis University - LOC Chairman

9:30-11:00: Keynotes
- **Latest trends in water modeling: perspective & future*,*
  Poul Kronborg, DHI (Spain)
- ***3-dimensional modeling of free surface flows: applications and current developments,***
  Jean-Michel Hervouet, Emile Razafindrakoto and Chi-Tuân Pham , EDF, (France)

11:00-11:30: Coffee break

11:30-12:30: Session 1: Coupling of models (part 1)
Session Chair: P.L. Viollet

- **Flood Modelling – What Next?,**
  Jon Wicks, Halcrow –CH2M HILL,(UK)
- **Coupling 1-D and 2-D models for simulating floods: definition of the exchange terms,**
  André Paquier and Pierre - Henri Bazin, IRSTEA,(France)
- **Multiphysics and Multiscale Coupling for Wave Height Modeling in Le Havre Harbor,**
  Nicolas Guillou and Georges Chapalain, CETMEF, Technopôle Brest-Iroise, (France)

11:30-12:30: Session 2: Data assimilation & uncertainties (part 1)
Session Chair: N. Goutal

- **Information handling in interdisciplinary hydro-environment engineering projects,**
  Frank Molkenthin, So ChiYu Li, K. Vikram Notay, BTU Cottbus, (Germany)
- **Towards SWOT data assimilation for hydrology: automatic calibration of global flow routing model parameters in the Amazon basin,**
  Mélodie Mouffe, Augusto Getirana, Sophie Ricci, Christine Lion, Sylvain Biancamaria, Aaron Boone, Nelly Mognard and Philippe Rogel, CNES CERFACS, LEGOS, (France)
- **Hydrological data assimilation using the Kalman Filter algorithm for the correction of rainfall forcing: case study of the Lez catchment in Southern France,**
  Elizabeth Harader, Valérie Estupina-Borrell, Sophie Ricci, Mathieu Coustau, Olivier Thual, Christophe Bouvier and Andrea Piacentini, URA CERFACS-CNRS, HydroSciences Montpellier, (France)

12:30-14:00: Lunch

14:00-16:00: Session 3: Coupling of models (part 2)
Session Chair: A. Paquier

- **The effect of tidal boundary condition in the river mouth,**
  Lian Guey Ler, Gye Woon Choi, Hyoseon Park and Philippe Gourbesville, University of Incheon, (Korea) , Polytech' Nice,(France)
- **Multivariable model predictive control of water levels on a laboratory canal,**
  Klaudia Horváth, Galvis Eduard, Manuel Gómez Valentín, Technical University of Catalonia, (Spain)
- **Coastal current prediction using differential Evolution,**
  Andrea G. B. Tettamanzi, Milan University, (Italy), Philippe Gourbesville, Polytech, Nice, (France)
- **The Panama locks-Numerical simulations & experimental models: the experience of the new Panama model**,
  Sébastien Roux, Nicolas Badano, Compagnie Nationale de Rhône, (France)
- **ProActive Parallel Suite: Open Source for Flooding Simulations in the CLOUDs*,*
  Denis Caromel, INRIA/Univ. Nice Sophia Antipolis/I3S-CNRS, ActiveEon SAS, (France)

14:00-16:00: Session 4: Data Assimilation & uncertainties (part 2)

Session Chair: S. Erpicum

- **Data assimilation on a flood wave propagation model : Emulation of a Kalman filter algorithm,**
  Sophie Ricci, Olivier Thual, Olivier Pannekouche, Sébastien Barthélémy, Floriane Ninove and P.O. Malaterre, CERFACS, Météo France, IRSTEA, (France)
- **Estimation of lateral inflows using data assimilation in the contact of realtime flood forecasting for the Marne catchment in France**
  Johan Habert, Sophie Ricci, Etienne Le Pape, Andrea Piacentini, Olivier Thual, Gabriel Joinville, Nicole Goutal, Fabrice Zaoui and Riadh Ata, DREAL Champagne-Ardenne, CERFACS, EDF - R &D, (France)
- **Flood warning systems and ubiquitous computing,**
  Philippe Gourbesville, Jelena Batica, Jean Yves Tigli, Stephane Lavirotte, Gaetan Rey and Durairaju Kumaran Raju, Université Nice Sophia Antipolis, (France)
- **Local sensitivity for uncertainty analysis in one-dimensional open channel flow modelling,**
  Carole Delenne, Vincent Guinot and Bernard Cappelaere, Hydrosciences Montpellier, (France)
- **Detection of Contamination in Water Distribution Network,**
  Francis Campan and Lionel Fillatre, Blaise- Kevin Guepie, Pierre Antoine Jarrige, Université de Technologie de Troyes, SAFEGE, ONDEO Systems,(France)
- **Data assimilation for hydraulics state estimation of a development project,**
  Nelly Jean-Baptiste, Pierre-Olivier Malaterre, Christophe Doree and Jacques Sau, CNR, IRSTEA, (France)

16:00-16:30: Coffee break

16:30-18:10 : Session 5 : Urban flooding

Session Chair: P. Sauvaget

- **Upscaled shallow water equations for urban flood modelling: Multiple porosity models,**
  Vincent Guinot and Carole Delenne, Université Montpellier 2 - HSM, (France)
- **Modeling flood in an urban area: Validation of numerical tools against experimental data,**
  Quentin Araud, Pascal Finaud-Guyot, Robert Mosé, José Vazquez, Fabrice Lawniczak, IMFS, (France)
- **Three-way coupled models for a better representation and understanding of the phenomena of flooding in the city of Bolbec,**
  Valérie Banneville and Sandrine Vidal, DHI, (France)
- **Study of flow in a staircase at Subway station,**
  Walid Bouchenafa, Nassima Mouhous-Voyneau and Philippe Sergent, CETMEF, (France)
- **GIS application for the assessment of low impact development effects on storm water runoff,**
  Seyyed Mohmmad Reza Eslami and Asiye Mehraban, EUROAQUAE, (France)

16:30-18:10: Session 6: Data & uncertainties in hydraulic modelling

Session Chair: O. Thual

- **Dam break flow modelling with uncertainty analysis,**
  Benjamin Dewals, Pierre Archambeau, Sébastien Erpicum and Michel Pirotton, Université de Liège, (Belgium)
- **Coupling TOMAWAC and EUROTOP for wave overtopping predictions,**
  Nicolas Chini and Peter K. Stansby, University of Manchester,(UK)
- **Composite modeling to enhance hydraulic structures studies,**
  Sebastien Erpicum, Benjamin Dewals, Pierre Archambeau and Michel Pirotton, Université de Liège, (Belgium)
- **Data Mining and Automatic Quality Assurance of Field Survey Data,**
  Ledian Selimaj and Chengzi Chew, DHI GROUP, (Denmark)
- ***SWASHES: a library for benchmarking in hydraulics,***
  Stéphane Cordier, Frédéric Darboux, Olivier Delestre, François James, Pierre-Antoine Ksinant, Christian Laguerre and Carine Lucas, Université de Nice, (France)

Cocktail

Day 2: Septembre 13th
The stakeholders and practitioners of simulation

9:00-9:30 : Introduction:

- **What do we model, what results do we get? - Anatomy of modelling systems foundations**
  Jean A. Cunge , Expert SHF, (France)

9:30-10:45 : Round table 1: New requirements for hydroinformatics:
Project owners expressions   *Paul Scherrer*

10:45-11:15: Coffee break

11:15-12:30 : Round table 2 : From simulation towards decision:
Communication of information to stakeholders   *Ph. Queveuvilier*

EUROAQUAE PRIZE AWARD CEREMONY

12:30-14:00: Lunch

14:00-16:00: Session 7: Model efficiency & real situations (Part 1)
Session Chair: P. Stansby

- **Numerical modelling: A tool for the decision-making process,**
  Cédric Bernardi, Claire Auriault, Monique Bourrilhon and Pierre Maruzewski, EDF,(France)
- **Hydraulic modelling for Rhone river operation,**
  Laetitia Grimaldi, Guilaume Bontron and Pierre Baylan, Cie Nationale du Rhône, (France)
- **Floods of June 2010 in the department of the Var - Comparison between flooded areas and flood-risk areas,**
  Christophe Esposito and Adeline Agostini, CETE Meditérranée,(France)
- **Coastal flooding, La Tranche-sur-Mer,**
  Mathieu Hellegouarch , Etienne Jaouen, DHI, (France)
- **Rainfall-runoff modeling in a catchment area (*Schoeckelbach*) in Styria using ArcGIS and Hec-HMS,**
  Majid Galoie and Gerald Zenz, Graz University of Technology, (Austria)
- **Cartino Project: A French automatized hazard floodmap,**
  Frédéric Pons, Bruno Bader, Antony Caruso, Patrick Arnaud and Etienne Leblois, MEDDTL, CETE Méditerranée, IRSTEA, (France)

14:00-16:00: Session 8: New methods for numerical models (part 1)
Session Chair: J. Cunge

- **A non-hydrostatic non-dispersive shallow water model,**
  Didier Clamond and Denys Dutykh, Université de Nice, Université de Savoie, (France)
- **Finite-Volume implementation of non-hydrostatic shallow water equations,**
  Vincent Guinot, Didier Clamond and Denys Dutykh, Hydrosciences, Uniersité de Nice, Université de Savoie, (France)
- **FullSWOF a software for overland flow simulation,**
  Olivier Delestre, Stéphane Cordier, Frédéric Darboux, François James, Christian Laguerre, Carine Lucas and Olivier Planchon, Polytech Nice, UMR CNRS, INRA, (France)
- **Correct Boundary conditions for turbulent SPH,**
  Damien Violeau, Martin Ferrand and Arno Mayrhoffer, EDF R&D, Manchester University (UK), ENPC, (France)
- **Numerical verification of industrial numerical codes to simulate accurately and efficiently large scale events,**
  Christophe Denis, EDF R&D, (France)

16:00-16:30: Coffee break

16:30-18:00 : Session 9 : Model efficiency and real situations (Part 2)

Session Chair: D. Roult

- **Use of standard 2D numerical modelling tools to simulate surface runoff over an industrial site – Feasibility and comparative performance survey over a test case,**
  Morgan Abily, Claire-Marie Duluc and Phillipe Gourbesville, Université de Nice, Sophia-Antipolis, (France)
- **3D computational modeling and optimization of the Petite-Rhue Dam spillway,**
  Jeremy Savatier, Adrien Gellibert and Nicolas Fallati, ISL, (France)
- **Open MI Based Flow and Water Quality Modelling of the River Zenne,**
  Olkeba Tolessa Leta, Narayan Kumar Shrestha, Bruno De Fraine, Ann Van Griensven and Willy Bauwens, VUB, (Belgium)
- **BOUBYAN ISLAND SEAPORT: Hydrodynamics and Environmental impacts investigations**,
  Ali Muhammad Khuraibet, College of Health Sciences, (State of Kuwait)

16:50-18:00 : Session 10 : New methods for numerical models (part 2)

Session Chair: D. Violeau

- **A new dynamic Approach using the Soil and Water Assessment Tool, SWAT, model to predict runoff from variable source area,**
  Florent Pezt, Michel Lafforgue, Dominique Trevisan, Philippe Quetin, and J.M. Dorioz, SAFEGE, INRA, (France)
- **Democratization of 3D CFD hydraulic models: several examples performed with ANSYS CFX,**
  Gwenael Chevallet, Moez Jellouli and Luc Deroo, ISL, (France)
- **Water planning and management, real-time pump scheduling,**
  Louise Brac de La Perrière, Antoine Jouglet, Alexandre Nace and Dritan Nace, ONDEO Systems,(France)

Gala dinner

For further information visit : www.shf-hydro.org

Note the 4 workshops which will be held during the 3 day conference.
For further information: **www.simhydro.org**

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Day 3: September 14th
3D CFD and applications

Chair: Ph. Gourbesville

9:00-9:45 : Keynote
- **3D CFD Methods in Hydraulics: What to choose?**
  Dominique Laurence & Damien Violeau, EDF R&D, (France)

9:45-10:15: Coffee break

10h15-12h35 : Session 11 : Hydraulic machinery (part 1)

Session Chair: T. Maître

- **Numerical optimization of the guide vane axis location of a Francis turbine including flow uncertainties,**
  Olivier Brugiere, Guillaume Balarac, Olivier Metais and Christophe Corre, LEGI, CNRS, (France)
- **CFD based mathematical optimization of hydro turbine components using Cloud Computing,**
  Albert Ruprecht, Jakob Simader and Andreas Ruopp, Stuttgart University (Germany)
- **Numerical simulation of pressure pulsations in Francis Turbines,**
  Marcelo.V. Magnoli, Rudolf Schilling, VOITH HYDRO, TU Munchen, (Germany)
- **Simulations of rotor-stator interactions with SPH-ALE,**
  Magdalena Neuhauser, Jean-Christophe Marongiu, Francis Leboeuf, Alexandre Dodier, Etienne Parkinson and Martin Rentschler, EC Lyon, ANDRITZ Hydro, Switzerland, MC Gill University, (Canada)
- **Numerical Investigation of the Flow Field in a Banki Turbine,**
  Giorgio Pavesi and Antonio Rossetti, University of Padova,(Italy)
- **Hydrodynamics of a Pump-Turbine Operation at Off-Design Conditions in Generating Model,**
  Vlad Hasmatuchi and François Avellan, EPFL, (Switzerland)
- **Numerical simulations of a counter rotating micro turbine,**
  Cecile Alligne, Sylvain Richard, Bastien Meier, Vlad Hasmatuchi and François Avellan, EPFL, (Switzerland)

10:15-12:35 Session 12 : 3D flows in the near field of structure

Session Chair: D. Laurence

- **Numerical modelling of two- and three-dimensional flow patterns in shallow rectangular basins,**
  Matthieu Secher, Jean-Michel Hervouet, Pablo Tassi, Eric Valette and Catherine Villaret, EDF R&D, EDF DPIH, Lab. St. Venant, (France)
- **RANS simulations of flow over dune with low lee and sharp lee angle,**
  Artemis Motamedi, Hossein Afzalimehr, Gerald Zenz and Majid Galoie, University of Technology, (Iran), TU Graz, (Austria)
- **3D numerical modelling of a side channel spillway,**
  Géraldine Milési, Stéphane Causse, TRACTEBEL ENG. (France)
- **Particle Image Velocimetry measurement and Numerical Modeling of flow over gravel dune,**
  Artemis Motamedi, Hossein Afzalimehr, Gabriele Harb and Majid Galoie, University of Technology, (Iran), TU Graz, (Austria)
- ***Application of OPENFOAM® to the study of wave loads on offshore structures in shallow water***
  Aurélien Thinat, CFD Numerics, Stéphane Cordier, STXEUROPE, (France)
- ***Flow and waves in a common tailrace channel of two pumped-storage plants - physical and numerical simulation,***
  Giovanni de Cesare, Sylvain Candolfi, Martin Wickenhäuser and Gaël Micoulet, EPFL, (Switzerland)

12:35-13:45: Lunch

13:45-16:00 : Session 13: Hydraulic machinery (part 2)

- **3D RANS modelling of a cross flow water turbine,**
  Christian Pellone, Thierry Maître and Ervin Amet, LEGI, (France)
- **Determination of surge tank diaphragm head losses by CFD simulations,**
  Sébastien Alligne, Primoz Rodic, Jorge Arpe, Jurij Mlacnik and Christophe Nicolet, Power Vision Eng, A.F Consult, Switzerland, Hidroinstitute, (Slovenia)
- **Double butterfly bypass valve,**
  Jerome Fouque, Julien Large and David Reungoat, KSB France, CETIM, Lab. I2M, (France)
- **The use of numerical modelling to optimise the placement of data-gathering equipment,**
  Julien Schaguene, Olivier Bertrand, Eric David, Pierre Roumieu, Gilles Pierrefeu, Karine Pobanz, Xavier Cornut and Laurent Tomas, ARTELIA group, CNR, ALSTOM POWER HYDRO, (France)
- **Non linear stability analysis of a mixed islanded power network,**
  Christian Landry, Christophe Nicolet and François Avellan, Power Vision Eng., EPFL, (Switzerland)
- **FPM simulations of a 3D impinging jet on a flat plate,**
  Christian Vessaz and Ebrahim Jahanbakhsh, LMH, EPFL, (Switzerland)

13:45-16:00 : Session 14 : Models for complex phenomena

- **Bubble-stirred melts in nuclear waste vitrification,**
  Delphine Gautheron, Armand Bonnetier, Emilien Sauvage, Jean-François Hollebecque, Patrice Brun, Yves Du Terrail and Roland Riva, CEA-DEN, SIMaP, (France)
- **Modeling Vortex with 3D CFD,**
  Grégory Guyot, Hela Maaloul and Antoine Archer, EDF-CIH, EDF R&D, (France)
- **Modelling combined wave-current flows using a RANS CFD solver with emphasis on the effect of the turbulent closure model,**
  Maria João Teles, Michel Benoit and António A. Pires-Silva,TU Lisbon, Portugal, Lab.St. Venant, (France)
- **3-D oil spill model: Application to the "Happy Bride" accident,**
  Cédric Goeury, Jean-Michel Hervouet and Olivier Bertrand, EDF, (France)
- **Modelling Sediment Resuspension in Industrial Tanks using SPH,**
  Georgios Fourtakas, Benedict D. Rogers and Dominique Laurence, University of Manchester, (UK)
- **A 3-Dimensional Numerical Simulation of Flow over a broad Crested Side Weir,** *Mohammad, R. Namaee, Toosi University of Technology, Mohammad Rostami, S. Jalaledini and Mahdi Habibi, Soil Conversation & Watershed Management Research Institute, (Iran)*

End of Conferences

With Sponsorships of:

SIMHYDRO 2012
Round Tables Sessions

Motivation and rationale of Round Tables

The SIMHYDRO initiative to set up Round Tables discussion is motivated by the existing situation in water sector: simulation models are used by all groups of the stakeholders in the business and administration but specific groups often do not dialog with others. Thus in many cases and situations the use of models and their results are not as efficient as they should be. And even, sometimes, this use (for engineering purposes or for decision processes as well as for public communication) is detrimental to the purpose because of lack of sufficient knowledge of limitations of the models and uncertainties in their results. But simulation modelling is only a small part of hydroinformatics. What do we call "Hydroinformatics" ? What is its content? The following definition is taken from elsewhere where it is developed in detail : "the **HydroInformatics** can be defined as **collection** (including data surveys, etc.), **creation** (including modelling), **interpretation** (including integration of various domains inputs), **communication** (including projection of the results and impacts towards large public) **and management** (including aid in participation of decision makers) **of information concerning water sector activities"**

Hydroinformatics technologies are used on every day basis by all stakeholders of water sector: when the decisions are taken, when communication between stakeholders or with the public is carried out, when the dialog with non-engineering circles is promoted. It is clear that hydroinformatics technologies are essential to these problems. Now, how much these technologies are used? Are they understood and how do the stakeholders evaluate their usefulness? What are the requirements for future developments of these technologies? SIMHYDRO wants to put on the table two questions that address specifically two groups of stakeholders. One group is composed of the users of the results of modelling: decisionmakers such as elected representatives, NGOs, investors, governments, local and central, and in general, citizens. Another group are those who run the models themselves, e.g. consultants carrying out feasibility studies, businesses, water-related service and utilities managers.

First question concerns hydroinformatics technologies (not specifically modelling) used by both groups. How do they evaluate existing hydroinformatics technology? What are their needs, desires, requirements (including knowledge of people involved and education). How do they dialog directly or indirectly with the model developers-what is needed from hydroinformatics technology to facilitate such dialog?

Second question is more related to the simulation and modelling but in context of decision making engineering, social and economic processes. With special attention to two important points : reliability of model results in view of their uncertainty (To what degree? How uncertainty is taken into account in decision making? And is it in communication with the public? How to use and improve the data acquisition in order to decrease the uncertainties?

How to improve the transfer of research results from Academia to engineering world?).These two questions correspond to two Round Tables. With a common bridge over their limits: With the help of models and the way the results are presented, can all the stakeholders understand each other? Do the developers and researchers on the one hand, and the stakeholders on the other, know each other well enough to exchange information and clearly express concerns about the limits and the potential of the models? How should the technical and scientific meetings be organized and carried out in order to be efficient way leading to better understanding between the different players? And, specifically, to improve the communication between industrial-decision making stakeholders and researchers?

Organisation of discussions
It is intended to have the Round Tables exchanges of opinions not limited to the people sitting around the table but to involve as much as possible the floor where we expect the participants who would be able to share their own experience of the subjects discussed. The Round Table sessions will be chaired by a moderator who, in few minutes, will remind the points to discuss and will insist on the participation of the floor in discussion.

Expected participation in this Round Tables session concerns the persons involved in the decision processes coming from Ministries of Environment and Development, Competitivity Poles, Management of Harbours, Basin Agencies, Town Technical Services, Local Governments, Civil Protection Services, Insurance Companies and software developers.

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9:00 - 10:30 Round Table 1
New requirements for hydroinformatics. Project owners expressions

Themes for discussion:
This round table will be focused on the role of hydroinformatics technologies in the development and implementation of ambitious projects dealing with infrastructures – coastal & continental infrastructure – and water services – smart metering, environment monitoring, etc.

How hydroinformatics is currently used to provide relevant information to the project developers in order to improve quality of the planned infrastructure, satisfaction of users and public, financial investment? What do the developers expect and require from the hydroinformatics technologies?

The new emerging technical resources, mainly in the ICT domain, offer the possibility to improve strongly the management processes in the water domain (among others, e.g., data acquisition and assimilation for flood forecasting) . How such evolution is integrated into the hydroinformatics environment and how far is it requesting a shift of paradigm in the on-going approaches?

The public awareness is a major challenge for many water related issues such as disaster prevention. The information flow towards the public has to be permanently adapted to an evolving society requesting a more and more accurate and reliable data. How hydroinformatics can integrate such expectation and provide efficient tools to the project developers ensuring both technical and public information?

In this context, how well the modellers understand decision makers' problems, and vice-versa? How and which new requirements have to be integrated in the new hydroinformatics environments in order to improve efficiency?

11:00 - 12:30 Round Table 2
From simulation towards decision. Communication of information to stakeholders

Themes for discussion
Results of the models (of simulations) are most often used for three domains concerning water sector:
-Policy of developments and projects, decisions of investments.
-Crisis management (floods).
-Management of the systems such as urban networks, energy or irrigation systems.
-Flood forecasting
-Etc.

The Round table discussion will focus on the decision taking processes in these domains:
how the decisions taken are stemming from, are being supported by, take into account, simulation results. Simulation models represent only partially and imperfectly the complex reality, this representation being limited by our knowledge of physics and terrain, by available software, by the budgets available for development and applications of the software.

Consequently the results cannot be considered as certain and accurate. Suggested specific subjects for the discussion would be:
- How the decision makers adapt their reasoning to the simulation results. How do they evaluate the validity of the results they are supplied with?
- What is the role of quantification of uncertainty in results? How are the results uncertainties taken into account? How can the uncertainties be reduced (improving models, networks of data collection, data assimilation)?
- How, on one hand, software developers and, on the other hand, software users (e.g. consultants) communicate with decision makers (i.e. their clients)? How do they deal in this communication process with the problems of uncertainties or the degree of approximation of the results supplied to the clients? Are the problems related to engineering ethics considered?
- How the decision makers use the simulation results in their dialogue with citizens and public opinion? Through which means? And how do they deal with uncertainties of the results? Quantification and reduction of uncertainties.
- And media? What is the state of forwarding to the media and then to the public of information stemming from simulations? And how uncertainties of the results are dealt with in this context?

Training & Workshop

A special free Telemac & Mascaret workshop will be organized on the 11th September 2012 form 2:00 PM to 5:00 PM. More details also available on Telemac at: www.opentelemac.org

XP Sofware company will deliver a free workshop : *Modelling stormwater and wastewater and 1D/2D flood mapping using XPSWMM* on the 12th September, from 2:00 PM to 5:00 PM.

Halcrow will offer a free workshop on ISIS on the 13th September, from 2:00 PM to 5:00 PM.

A special free Mike by DHI workshop will be organized on the 14th September 2012 AM

SOCIETE HYDROTECHNIQUE DE FRANCE a non-profit association founded in 1912, working at the forefront and crossroad of research and industrial processes, carrying out its activities in the following areas:
Agriculture, industry and transport, including environmental impact and the study of natural phenomena related to hydrology, transport sediments, meteorology, flood, hydro-technologies and Fluid mechanics…

ACTIONS: The association's purpose is the dissemination of research achievements relating to water resources and hydrotechnical sciences. It is a meeting point for scientific exchanges between researchers, engineers, government services and local communities, industrials, students …

The results of the SHF's work are reflected in the great variety of events organized by the association. Proceedings and papers are printed on transactions, guides and other topics published occasionally in the water journal "La Houille Blanche"

La Houille Blanche (International journal of water) proposes detailed analysis of the most up-to-date developments in all branches of hydraulics. Its theme files, peer reviewed by renowned specialists, make "La Houille Blanche" a reference for water engineers and researchers not only in France but all over the world.

ANNUAL AWARDS: The Henri MILON award is granted to the author of a scientific publication or thesis related to hydrology. Whilst The Jean VALEMBOIS's prize is awarded to one related to the field of fluid mechanics. The winner of the "Grand prix Hydrotechnique" is distinguished for his overall contribution to the fields related to SHF's actual preoccupations.