



# SPHERIC

## SPH rEsearch and engineeRING International Community

List of members – May 2019



### Steering Committee

Member	Type of institution	Representing person	Address	e-mail	Research interest
University of Manchester	Academic	Benedict ROGERS (Chair)	School of Mechanical, Aerospace & Civil Engineering, University of Manchester, Manchester, M13 9PL, U.K.	benedict.rogers@manchester.ac.uk + steven.lind@manchester.ac.uk + p.k.stansby@manchester.ac.uk	Coastal hydrodynamics; Floating bodies; Aerated flows, multi-phase flows, high temperature applications
University of Pavia	Academic	Stefano SIBILLA (secretary)	Dipartimento di Ingegneria Idraulica Ambientale, Università degli Studi di Pavia, Via Ferrata 1, Pavia, 27100, ITALY	stefano.sibilla@unipv.it	
University of Vigo	Academic	Alex CRESPO (webmaster)	EPHYSLAB Environmental Physics Laboratory Edificio de Física Campus As Lagoas s/n Universidad de Vigo 32004 Ourense SPAIN	alexboxe@uvigo.es + mggesteira@uvigo.es	Coastal engineering applications, high performance computing, pre-processing, visualisation
University of Parma	Academic	Renato VACONDIO (newsletter editor)	University of Parma, v.le G.P. Usberti 181/A 43100 Parma, ITALY	renato.vacondio@unipr.it	Free-surface flows
National University of Ireland, Galway	Academic	Nathan QUINLAN	Dept. of Mechanical and Biomedical Eng. NUI Galway IRELAND	nathan.quinlan@nuigalway.ie + mihai.basa@nuigalway.ie + martin.lastiwka@nuigalway.ie	
EDF R&D	Industrial	Damien VIOLEAU	Laboratoire National d'Hydraulique et Environnement, EDF R&D, 6 quai Watier, 78400 Chatou, FRANCE	damien.violeau@edf.fr + agnes.leroy@edf.fr + serguei.potapov@edf.fr	Free surface Flows; Turbulence; Water waves / structure interaction; Multiphase Flow; Waterworks.
Ecole Centrale Nantes	Academic	David LE TOUZÉ	Ecole Centrale Nantes, 1 rue de la Noë, 44300 Nantes, FRANCE	david.letouze@ec-nantes.fr + nicolas.grenier@ec-nantes.fr + guillaume.oger@ec-nantes.fr + daniel.barcarolo@ec-nantes.fr + matthieu.kerhuel@ec-nantes.fr	Free surface and interface flows, Ocean engineering, Fluid- Structure Interactions; Multiphase flows

ANDRITZ Hydro SAS	Industrial	Jean-Christophe MARONGIU	Andritz HYDRO SAS, Bvd Albert Einstein, 69000 Villeurbanne, FRANCE	jean-christophe.marongiu@andritz.com	Hydraulic turbomachinery; Pelton turbines; Water jets; Water sheets; Hydraulic intakes.
Technical University of Madrid (UPM)	Academic	Antonio SOUTO IGLESIAS	Naval Architecture Department (ETSIN), Technical University of Madrid (UPM), Arco de la Victoria s/n., 28040 Madrid, SPAIN	antonio.souto@upm.es	
CNR-INSEAN	Government research	Salvatore MARRONE	CNR-INSEAN, The Italian Ship Model Basin, Via di Vallerano 139, 00128 Rome, ITALY	andrea.colagrossi@cnr.it + salvatore.marrone@cnr.it + matteo.antuono@cnr.it	Ship Dynamic; Sloshing Flows; Impact flows and related loads on ship structures; Numerical methods for free surface flows
Technical University of Munich	Academic	Xiangyu HU	Institute of Aerodynamics, Technical University of Munich, Arcisstrasse 21, GERMANY	xiangyu.hu@tum.de + nikolaos.adams@tum.de	Microfluidic applications; Lagrangian turbulence.
Cranfield University	Academic	Rade VIGNJEVIC	Brunel University, Kingston Lane, Uxbridge, Middlesex UB8 3PH, UK	v.rade@brunel.ac.uk	
NEXTFLOW Software	Industrial	Matthieu DE LEFFE	NEXTFLOW Software, 1 rue de la Noë, CS 32113, 44321 Nantes Cedex 3, France	matthieu.de-leffe@nextflow-software.com + amary.bannier@nextflow-software.com + david.imbert@nextflow-software.com	Free-surface flows, multiphase flows, fluid-structure interactions

### Other members

Member	Type of institution	Representing person	Address	e-mail	Research interest
ESI-Group Netherlands	Industrial	Paul GROENENBOOM	ESI Group (Engineering Systems International B.V.), Radex Innovation Centre, Rotterdamseweg 183 C, 2629 HD Delft, THE NETHERLANDS	pgr@esi-group.com	
University of Plymouth	Academic	Jason HUGHES	School of Computing and Mathematics, Plymouth University, Drake Circus, Plymouth, PL4 8AA, UK	jhughes@plymouth.ac.uk + dgraham@plymouth.ac.uk	Water wave / structure interactions; Turbulence; Multiphase Flow; Non-Newtonian Flow; Mathematical Analysis.
ANDRITZ Hydro AG	Industrial	Martin RENTSCHLER	Andritz HYDRO, rue des deux gares 6, 1800 Vevey, SWITZERLAND	Martin.Rentshcler@andritz.com	Hydraulic turbomachinery; Pelton turbines; Water jets; Water sheets; Hydraulic intakes.

University of Nottingham	Academic	Herve MORVAN	School of Civil Engineering, University of Nottingham, Nottingham NG7 2RD, UK	Herve.Morvan@nottingham.ac.uk	
University of Sheffield	Academic	Songdong SHAO	Department of Civil and Structural Engineering Sir Frederick Mappin Building Mappin Street, Sheffield, S1 3JD, UK	s.shao@sheffield.ac.uk	Incompressible SPH; Free Surface Flow; Wave Breaking; Overtopping; Fluid-Structure Interactions.
University of Stuttgart	Academic	Peter EBERHARD	Institute of Engineering and Computational Mechanics, University of Stuttgart, Pfaffenwaldring 9, 70569 Stuttgart, Germany	peter.eberhard@itm.uni-stuttgart.de	Sloshing fluids, adaptivity, boundary treatment, abrasive damage and cutting processes
CSIRO Mathematical and Information Sciences	Academic	Paul CLEARY	CSIRO Mathematical and Information Sciences, Private Bag 33, Clayton South, VIC, 3169, AUSTRALIA	paul.cleary@csiro.au	Turbulence; Water waves; Fluid-structure interaction; Ship hydrodynamics.
Ecole Polytechnique Fédérale de Lausanne	Academic	François AVELLAN	EPFL-STI-LMH, Avenue de Cour 33 bis, CH-1007 Lausanne, SWITZERLAND	francois.avellan@epfl.ch	Hydraulic machinery; Cavitation; Flow surfaces.
Université du Havre	Academic	Louis BLONCE	Université du Havre, 25, rue Philippe Lebon, BP 540, 76058 Le Havre cedex, France	louis.blonce@univ-lehavre.fr + gregory-pinon@univ-lehavre.fr	
Swiss Federal Institute of Technology	Academic	Petros KOUMOUTSAKOS	ETH Zurich, Universitatstrasse 6, ETHZ - CAB H69.2, Zurich, CH-8092, SWITZERLAND	petros@inf.ethz.ch	Multiscale simulation; Bluff body flows; Biophysics; Growth and pattern formation; Vortex dynamics.
Ricerca sul Sistema Energetico – RSE SpA	Government research	Andrea AMICARELLI	Ricerca Sistema Energetico - RSE Spa, Environment and Sustainable Development Department, via Rubattino, 54, 20134 Milano, ITALY	andrea.amicarelli@rse-web.it	Floods, landslides, sediment removal from water reservoirs, wave motion, sloshing fuel tanks
University of Genova	Academic	Michele VIVIANI	University of Genova, Dept. of Naval Architecture, Marine Engrg, Electrical Engrg, and Electronical Engrg (DITEN), Via Montallegro, 1, 16145 Genova, ITALY	michele.viviani@unige.it + giuliano.vernengo@unige.it	Sloshing phenomena inside ship tanks; Green water on deck (violent water embarquement).
University of West Bohemia	Academic	Libor Lobovský	Department of Mechanics University of West Bohemia in Pilsen, Univerzitní 22, 30614 Plzeň, Czech Republic	lobo@kme.zcu.cz	
UNISA CUGRI (University Consortium for Research on Major Hazards)	Academic	Giacomo VICCIONE	CUGRI, Piazza Vittorio Emanuele 84080 Penta di Fisciano ITALY	epc@unisa.it, + cugri@unisa.it	
City University London	Academic	Qingwei MA	School of Engineering and Mathematical Sciences, City University, Northampton Square, London EC1V 0HB, UK	q.ma@city.ac.uk	
HydrOcean	Industrial	Erwan JACQUIN	HydrOcean, 8 boulevard Einstein CS 32327 44323 Nantes cedex 3, FRANCE	erwan.jacquin@hydrocean.fr + yoann.jus@hydrocean.fr + daniel.barcarolo@hydrocean.fr + nicolas.couty@hydrocean.fr	Free surface flows, green water, sloshing

Laboratório Nacional de Engenharia Civil	Government research	Eric DIDIER	Laboratório Nacional de Engenharia Civil, LNEC / NPE / DHA, Av. Do Brasil, 101, 1700-066 Lisboa, PORTUGAL	edidier@lneec.pt	Free surface flow; Wave-structure interaction; Wave breaking; Wave overtopping.
Catholic University Leuven	Academic	Paul Van LIEDEKERKE	Catholic University Leuven, Kasteelpark Arenberg 30, 3001 Heverlee, BELGIUM	Paul.VanLiedekerke@biw.kuleuven.be	
University of Calabria	Academic	Francesco ARISTODEMO	University of Calabria, via P. Bucci 1, cubo 42 B, Arcavacata di Rende (CS), ITALY	aristodemo@dds.unical.it + aristotool@gmail.com	Free surface flows; Bottom roughness; Multiphase flows.
University of Ljubljana	Academic	Dusan ZAGAR	University of Ljubljana, Jamova 2, SI-1000 Ljubljana, SLOVENIA	dzagar@fgg.uni-lj.si	
Monash University	Academic	Ha H. BUI	Monash University, Clayton, Vic 3800, Melbourne, AUSTRALIA	buihongha@gmail.com + daniel.price@monash.edu + joe.monaghan@monash.edu	
Karlsruhe Institute of Technology	Academic	H.-J. BAUER	Thermische Stroemungsmaschinen Kaiserstr. 12, 76131 Karlsruhe GERMANY	hans-joerg.bauer@kit.edu + corina.hoefler@kit.edu + rainer.koch@kit.edu + samuel.braun@kit.edu	
Amir Kabir University of Technology	Academic	Shariar ABTAHI	Amir Kabir University of Technology, Hafez Street, Tehran, IRAN	sh.abtahi@aut.ac.ir + a.dashtimanesh@aut.ac.ir + hasepyani@gmail.com	Wave-structures interaction; Wave group generation and breaking
Istituto Nazionale di Geophisica e Vulcanologia	Government research	Ciro DEL NEGRO	Istituto Nazionale di Geophisica e Vulcanologia, Sezione di Catania, Piazza Roma 2, 95123 Catania, ITALY	delnegro@ct.ingv.it	
University of Exeter	Academic	Matthew BATE	School of Physics, University of Exeter, Stocker Road, Exeter EX4 4QL, UK	mbate@astro.ex.ac.uk	Astrophysics
Kyoto University	Academic	Hitoshi GOTOH	Dept. of Civil and Earth Resources Eng., Kyoto University, Katsura Campus, Nishikyo-ku, Kyoto 615-8540, JAPAN	gotoh@particle.kuciv.kyoto-u.ac.jp + khayyer@particle.kuciv.kyoto-u.ac.jp	
University of Regina	Academic	Ahmad SHAKIBAEINIA	Faculty of Engineering and Applied Science, University of Regina, 3737 Wascana Parkway, Regina, Saskatchewan, S4S 0A2, CANADA	shakibaa@uregina.ca + jabbaria@uregina.ca + mossafam@uregina.ca	Multiphase flow, free surface flow, SPH like mesh-free particle methods such as MPS
University of Auckland	Academic	Raj DAS	20 Symonds Street, Auckland 1010, NEW ZEALAND	r.das@auckland.ac.nz	Solid deformation, impact , Fracture
Alstom Hydro	Industrial	Pierre LEROY	82, av Leon Blum, 38041 Grenoble Cedex 9, FRANCE	Pierre.leroy@power.alstom.com + farid.mazzouji@power.alstom.com + emmanuel.flores@power.alstom.com	Turbomachine / Free surface flow
Instituto Superior Tecnico	Academic	João M. MELO DE SOUSA	Av. Rovisco Pais, 1049, 001 Lisboa, PORTUGAL	msousa@ist.utl.pt + shahab.khorasanizade@ist.utl.pt	fluid dynamics, multiphase flow, turbulent flow, ISPH, boundary treatment, GPU implementation
Australian Nuclear Science and Technology Organisation (ANSTO)	Government Research	Michael SALEH	Building 3, Locked bag 2001 Kirrawee DC NSW 2232, AUSTRALIA	michael.saleh@ansto.gov.au + lyndon.edwards@ansto.gov.au	continuum dynamics, fluid structure interaction, high velocity impact

Eindhoven University of Technology	Academic	Martijn ANTHONISSEN	Centre for Analysis, Scientific computing and Applications , P.O. Box 513, 5600 MB Eindhoven, THE NETHERLANDS	m.j.h.thonissen@tue.nl + w.h.a.schilders@tue.nl + a.s.tijsseling@tue.nl + linden@win.tue.nl + m.e.hochstenbach@tue.nl + i.zisis@tue.nl + a.muntean@tue.nl + s.p.korzilius@tue.nl + j.h.m.evers@tue.nl	Numerics and fundamentals of SPH
National Taiwan University (NTU)	Academic	Tsang-Jung CHANG	1, Section 4, Roosevelt Road, Taipei, Taiwan, China	tjchang@ntu.edu.tw + hmkao@ntu.edu.tw + f94622026@ntu.edu.tw + apefish.tw@yahoo.com.tw + sheng_einstein@hotmail.com	Shallow water equations
New Jersey Institute of Technology	Academic	Angelo TAFUNI	School of Applied Engineering and Technology, Department of Mechanical and Industrial Engineering, New Jersey Institute of Technology, University Heights, Newark, NJ 07103, USA	atafuni@njit.edu	Boundary Conditions, Fluid-Structure Interaction, Sloshing, Ocean and Aerospace Engineering Applications
Université du Luxembourg	Academic	Bernhard PETERS	Université du Luxembourg, Faculté des Sciences, de la Technologie et de la Communication, Campus Kirchberg, 6, rue Coudenhove-Kalergi, L-1359 Luxembourg	bernhard.peters@uni.lu + yuchung.liao@uni.lu	Interaction fluid - objects
University of Central Lancashire	Academic	Dimitris STAMATELLOS	Jeremiah Horrocks Institute, University of Central Lancashire, UK	dstamatellos@uclan.ac.uk + BMacfarlane@uclan.ac.uk + APMercer@uclan.ac.uk	Astrophysics, star formation, planet formation, protostellar disc physics
University of Innsbruck	Academic	Wolfgang RAUCH	University of Innsbruck, A-6020 Innsbruck, Austria	Wolfgang.Rauch@uibk.ac.at + daniel.winkler@uibk.ac.at + michael.meister@uibk.ac.at	Environmental Engineering
Flanders Hydraulics Research	Research institute	Tomohiro SUZUKI	Berchemlei 115, 2140 Antwerpen, Belgium	tomohiro.suzuki@mow.vlaanderen.be + Corrado.Altomare@mow.vlaanderen.be	Wave structure interaction
EPHYTECH (Environmental Physics Technologies S.L)	Industrial	Ángel ÁLVAREZ Fernández	EPHYTECH, Sta. Cruz de Arrabaldo, Sistis 4. Ourense 32593, Spain	angel@ephytech.com + orlando@ephytech.com	Advanced visualisation for SPH models, urban flooding and debris flows
Bournemouth University	Academic	Richard SOUTHERN	National Centre for Computer Animation, Bournemouth University, Poole, BH12 5BB, UK	rsouthern@bournemouth.ac.uk + mjjiang@bournemouth.ac.uk	Boundary conditions, Visual Effects, Real-time applications, Rendering

Escuela Superior Politécnica del Litoral (ESPOL)	Academic	Ruben J. PAREDES	Km 30., Vía Perimetral 5, Guayaquil, Ecuador	rparedes@espol.edu.ec	Free surface flows, naval architecture applications, sedimentation
Beuth Hochschule für Technik Berlin	Academic	Joachim VILLWOCK	Beuth HS, Fachbereich VIII, Luxemburger Str. 10, 13353 Berlin	villwock@beuth-hochschule.de + coertel@beuth-hochschule.de + Pierre.Sabrowski@fsd.tu-berlin.de	Simulation of Sedimentation in Waste Water and Simulation of the Washing Process in a rotating drum
Seoul National University	Academic	Jihoe KWON	38(Bldg)-305(Room), Seoul National University, 1 Gwanakro Gwanakgu Seoul, Korea; 151-744	iori96@snu.ac.kr + myidjejy@snu.ac.kr + hccho@snu.ac.kr	liquid-dust multiphase flow / surface tension dominant flow / mineral processing
Auburn University	Academic	Stephen NICHOLS	Auburn University Aerospace Engineering Department, 331 Davis Hall, Auburn University, Auburn, AL 36849	Stephen.Nichols@auburn.edu	Fluid Dynamics, High Performance Supercomputing
Peking University	Academic	Moubin LIU	# 5 Yi He Yuan Lu, Haidian District, Beijing 100871, China	mbliu@pku.edu.cn + mbliu_pku@foxmail.com + weng-xi@foxmail.com + 280065886@qq.com	Approximation techniques with applications in free-surface and interfacial flows, explosion and impact
Ecole des Mines of Saint-Etienne France	Academic	Olivier BONNEFOY	158 cours Fauriel, 42100 Saint-Etienne, France	bonnefoy@emse.fr + sandra.geara@emse.fr + sylvain.martin@emse.fr	Free-surface flows, laser-matter interaction, solid-liquid phase transition
Shiraz University	Academic	A. DANESHVAR	Shiraz University, Department of civil and environmental engineering Zand Blvd., Shiraz, Fars Province, Iran	fdaneshvar@shirazu.ac.ir + taleb@shirazu.ac.ir + rakhshan@shirazu.ac.ir	Convergence, consistency and stability in Incompressible SPH, Adaptivity, Coupling to other models, and modelling free surface fluid flow and waves
National University of Singapore (NUS)	Academic	Erwan BERTEVAS	Faculty of Engineering, National University of Singapore, 9 Engineering Drive 1, 117575, Singapore	mpeelb@nus.edu.sg + nhan@nus.edu.sg + mpekbc@nus.edu.sg + mpettd@nus.edu.sg + mpeleck@nus.edu.sg + mpe dtan@nus.edu.sg	Non-Newtonian fluids, Multiphase flows, Large-scale simulations of deep sea sediment transport, Fibre-suspension, 3D printing, Porous media
Research Center Pharmaceutical Engineering GmbH	Industrial	István Kondor	Research Center Pharmaceutical Engineering GmbH A-8010 Graz, Inffeldgasse 13/II, Austria	istvan.kondor@rcpe.at	TBU
AySA	Industrial	Diego N. BOTTELLI	AySA, Tucumán 752, Piso 18, Ciudad de Buenos Aires, 1049AAP, Argentina	diego_n_bottelli@aysa.com.ar + Sebastian_H_martijena@aysa.com.ar + guillermo_nociari@aysa.com.ar + sebastian_santisi@aysa.com.ar	Hydraulics, modelling process in water treatment plants (water and wastewater), Near Field pollutants dispersion in wastewater submarine outfalls
Nazarbayev University	Academic	Desmond ADAIR	Nazarbayev University, 53 Kabanbay Batyr str., Astana, Kazakhstan	dadair@nu.edu.kz + alima.tazabekova@nu.edu.kz	transport in porous medium, convective heat transfer

Ocean University of China	Academic	Domenico Davide MERINGOLO	Ocean University of China, n° 238 Song-Ling Road, Laoshan District, Qingdao, 266100, China	davide.m86@gmail.com + liuyong@ouc.edu.cn + panchi@stu.ouc.edu.cn + ouccyk@gmail.com	Applications to Coastal and Ocean Engineering field
Institute of Applied Physics and Computational Mathematics, China	Academic	Zhibo MA	Institute of Applied Physics and Computational Mathematics, No.2 Feng Hao Dong Lu, Hai Dian District, Beijing, 100094, China	mazhibo@iapcm.ac.cn + asiabuaasa@163.com + lvguixia@126.com + zhang_mingyu@iapcm.ac.cn	Multi-scale and multi-physics of complex flow, fluid-structure interactions, plasma, engineering of nuclear power plant
BECKER 3D GmbH	Industrial	Alexander BECKER	BECKER 3D GmbH, Auenweg 8, 9521 Treffen, Austria	a.becker@becker3d.com	Free surface flow, Multiphase flow, SPH-DEM coupling
Harbin Engineering University	Academic	Aman ZHANG	Harbin Engineering University, Room 1001, Chuanhai Building, Nantong Street, Harbin 150001, China	zhangaman@hrbeu.edu.cn + sunpengnan@hrbeu.edu.cn + mingfuren@hrbeu.edu.cn + chenghan_hrbeu@163.com	Numerical and application studies with the SPH (Smoothed Particle Hydrodynamics) method on fluid-structure interactions
Institut de recherche d'Hydro-Québec (IREQ)	Industrial (Crown Corporation)	Roubtsova VARVARA	Institut de recherche d'Hydro-Québec (IREQ), 1740, boul. Lionel-Boulet, Varennes (Quebec), J3X 1S1, Canada	roubtsova.varvara@ireq.ca + chekired.mohamed@ireq.ca	Coupling to other models, Applicability to industry
University of Basel	Academic	Rubén CABEZÓN	University of Basel, Klingelbergstrasse 50/70, 4056 Basel, Switzerland	ruben.cabazon@unibas.ch + florina.ciorba@unibas.ch + aurelien.cavelan@unibas.ch + daniilo.guerrera@unibas.ch + ali.mohammed@unibas.ch	Astrophysics. Type Ia and core-collapse Supernovas. Stellar Collisions. High-performance Computing. Massive Parallelization. Numerics and Fundamentals of SPH.
Gate Pathshala Educational Services LLP	Academic	Mohd Abrar NIZAMI	Gate Pathshala Educational Services LLP, #153, 2ND Floor, Karuneeagar Street, Adambakkam, Chennai, 600088, India	abrarn17@gmail.com + abhiyan3@gmail.com	Fluid-structure Interactions, flow around 2D bodies, Applications of SPH in Aerospace Engineering
Hamburg University of Technology (TUHH)	Academic	Thomas RUNG	Hamburg University of Technology, Institute for Fluid Dynamics and Ship Theory, Schwarzenbergstrasse 95c, 21073 Hamburg, GERMANY	thomas.rung@tu-harburg.de	
E8IGHT Co., Ltd	Industrial	Jin Hyun Kim	The JS Tower 5F, 249, Unjung-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea	jhkim@e8-korea.com + myungjun.won@e8-korea.com + sjlee3149@e8-korea.com + kufjang@e8-korea.com	Free-surface flows, Multiphase flows, Fluid-structure interactions, GPGPU