# Wednesday 14 November 2018

Mr Leigh Storey
Associate Director National Marine Facilities (NMF) NOC
leigh.storey@noc.ac.uk

Leigh Storey is the Associate Director, National Marine Facilities at the National Oceanography Centre (NOC). Leigh has a first degree in Marine Engineering and a Master's Degree in Business Administration. He is a Fellow of the IMarEST and a Member of the Honourable Company of Master Mariners. The majority of his career to date was spent in the Royal Navy as a Submariner. He joined the NOC in 2014 and has responsibility for the operation of the Royal Research Ships, the National Marine Equipment Pool and the associated structures that ensure it is available to support the UK Marine Science community.
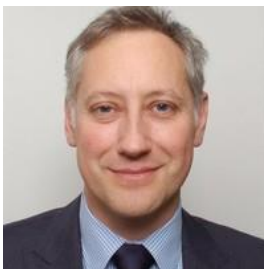
Peter Collinson
Senior Subsea and Environmental Specialist BP
collp5@bp.com

Peter Collinson is the Senior Subsea and Environmental Specialist in BP Upstream Technology. He has specialism (and passion!) for Marine Autonomous Systems (MAS), specifically with a focus on subsea inspection and environmental applications. He leads BP's Subsea strategy for modernisation and transforming the business through MAS. Prior to this role, Peter was BP's Global Environmental Response Expert. Peter has a doctorate in Marine Ecology and specialism in Risk Management, Crisis Management and marine technology. Peter is a fellow of the Institute of Marine Engineering Science and Technology (IMarEST), a member of the UK Marine Autonomous Systems Steering Group and a BP relationship manager with the UK National Oceanography Centre, UK.

Dr Alex Phillips
Head of MARS Development NOC
abp@noc.ac.uk

Dr Alex Phillips is a qualified Naval Architect with 10 years' experience in the unmanned marine industry. Upon graduating from the University of Southampton, Alex spent two years in the offshore industry before returning to Southampton to complete a PhD in hydrodynamics of underwater vehicles. On completion of his PhD, he continued to research in the field of underwater robotics. In 2015 he joined the National Oceanography Centre as Head of Marine Autonomous Systems Development within the Marine Autonomous and Robotic Systems group. In 2018 he became Head of the Marine Autonomous and Robotic Systems Development Group where he is responsible for the development of a range of new Autosub Autonomous Underwater Vehicles

Narcís Palomeras
University of Girona (UdG
npalomer@eia.udg.edu

Narcís Palomeras (MSc 2004, PhD 2011) is a Postdoctoral Fellow at the University of Girona (UdG), he is a member of the Underwater Robotics Laboratory of the Computer Vision and Robotics Group (VICOROB). He has participated in several research projects, both national and European, all of them related to underwater robotics (TRIDENT, PANDORA, MORPH, MERBOTS, LOONDOCK, TWINBOT, ...) as well as in several European networks such as EXCELLABUST or STRONGMAR among others. He has also participated in several European AUV competitions such as SAUC-E '06, '10, '11 and ERL '17. His research activity focuses mainly on underwater robotics in research topics such as planning and exploration, intelligent control architectures and mission control. It is currently the IP of the Spanish 3DAUV project focused on autonomous exploration in complex environments using AUVs and one of the leaders of the COLA2 project: an open source generic control architecture for marine vehicles.

Dr Phil Thompson
Director, Simulation Training BMT
Phil.thompson@bmtglobal.com

Dr Phil Thompson is a PhD Naval Architect. He served as a Professor in Ocean Engineering at Virginia Tech, USA in his early twenties. Phil currently sits on the Lloyds Register Technical Committee and has done so since 2013.

Phil has been employed by BMT Group Ltd for over 27 years and has been MD of several BMT Group companies since 1994. He has led a number of pioneering breakthroughs and has published extensively in the areas of specialist ship data acquisition, blue and brown water navigation simulation and autonomous navigation.

He currently leads the global BMT business lines including REMBRANDT, the world's leading specialist navigation simulator suite. The system his used by blue and brown water pilots and leading ship-owners including Shell (STASCo). It has also been adopted by the world's leading statutory marine accident investigation bodies, including the UK MAIB, the US NTSB, the Dutch DSB and the Australian ATSB, for coastal and inland accident simulation and training. Phil is currently Project Director for SWANS (Shared Waterspace Autonomous Navigation Systems), the £1.2m Innovate UK project looking at simulating future scenarios of navigation risks in water spaces shared by manned, semi-autonomous and fully autonomous vessels
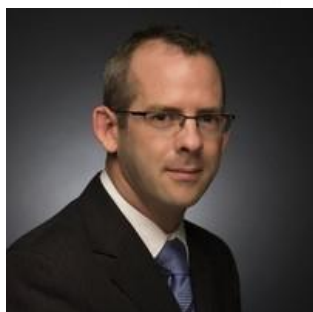
Phil Johnston
Business Development AutoNaut Ltd
phil.johnston@autonautusv.com

Phil leads business development for AutoNaut USV. He has a background working at sea as an offshore environmental consultant. Working mainly in the oil & gas industry, but also defence and marine renewables, he specialised in the effects of underwater man-made noise on sea-life.

Adrian Woodroffe, P.Eng.
Business Development Manager Cellula Robotics
awoodroffe@cellula.com

Adrian is a Professional Engineer with 20 years of industrial experience. An Engineering background from space missions to deep sea projects and off shore operations. As the Business Development Manager for Cellula Robotics, Adrian has be heavily involved in the pivot to autonomous underwater systems, identify opportunities and application for the Solus and Imotus family of vehicles."

Chris Carter
Business Manager Frazer-Nash Consultancy Ltd
c.carter@fnc.co.uk

Chris Carter is the Underwater Technology Business Manager at Frazer-Nash and is responsible for a portfolio of projects covering research and technology, future platforms, UUVs and propulsion technology. Chris has ten years of experience in surface ship and submarine applications and a technical background in fluid dynamics, noise and vibration and structural integrity.

Iain Vincent
Business Development & Sales Manager, Planet Ocean Limited
Iain@planet-ocean.co.uk

Iain Vincent is a graduate in Marine Environmental Science from the University of Portsmouth, UK. In his current role with marine science technology supplier, Planet Ocean, he has the privilege of working with key marine science institutions across the UK as well as international manufacturers of sensor technology, and benefits from many productive relationships with members of the science community. Iain has led programs to secure funding for the development of ecoSUB AUVs and has been involved in the concept design, stakeholder engagement, project overview and direction of the ecoSUB program. In 2016 Iain was appointed as a Director of ecoSUB Robotics Limited, the company formed to spin out the low cost AUV technology developed in collaboration between Planet Ocean and the National Oceanography Centre (NOC).

Dr Philipp R. Thies
Senior Lecturer in Renewable Energy in the College of Engineering, Mathematics and Physical Sciences (CEMPS) at the University of Exeter. P.R.Thies@exeter.ac.uk
Holds a Dipl.-Wi.-Ing. degree in Energy- and Environmental Energy from the University of Flensburg (Germany) and a PhD in Renewable Energy from the University of Exeter (UK).

His research interest lies in the reliability engineering of renewable energy technologies with a focus on offshore energy. He has developed novel component reliability testing approaches, Bayesian statistical analysis approaches for situations of data uncertainty and has been deeply involved in several national and international research and industry-led projects seeking to technology demonstration in the field and at large-scale in the lab. His work has aligned computational modelling with application driven design improvements and extensive planning, execution and evaluation of component reliability and testing campaigns.

Malik Chibah
Engineering Manager Sonardyne
Malik.Chibah@sonardyne.com

Malik has over 10 years of experience in the marine technology industry and is the Engineering Manager at Sonardyne International, a leading independent global provider of underwater acoustic, inertial, optical and sonar technology. After working in the software industry for 10 years on various development and systems integration projects he gained a Master's Degree in Hydrographic Surveying from University College London in 2007. He then went on to join Sonardyne, initially working in the system test group. His work also includes offshore installation, support, demonstrations and providing training of Sonardyne acoustic products. He then went on to manage the development of Sonardyne's inertial systems for Subsea vehicles. Following the successful development, launch and roll-out of SPRINT subsea INS into the offshore survey industry he then became overall manager of Inertial Navigation Systems at Sonardyne in 2014. In his current role as Engineering Manager he now oversees the development and delivery of all products and systems, including those for marine autonomy applications.

Kay McGuinness
Business Development Manager, ANB Sensors Ltd
kmcguinness@anbsensors.com
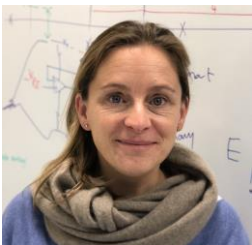
Kay has been a director of ANB Sensors Ltd, since November 2017, prior to this she was a Senior Research Scientist in the Chemical Sensors and Energy Devices group at Schlumberger Gould Research in the UK. In this role she developed and transferred novel sensing technology to engineering centres for operation at elevated temperature and pressures. Kay undertook a Post-Doctoral role with Professor Andrew Holmes at the University of Cambridge and completed her DPhil. at the Polymer Chemistry Laboratory, University of Sussex under the supervision of Professor Steven Armes. In her role at ANB Sensors, she is responsible for guiding the technical direction of the projects whilst also engaging with businesses, putting in place exploitation plans for ANB's technology.

Dr Peter Staelens
Technical Director dotOcean NV **peter@dotocean.eu**
Dr. Peter Staelens is a full stack developer, since the age of 12. Dr. Staelens graduated from the University of Ghent in 2000 with a BSc in Geology, in 2002 with an MSc in Geology, in 2008 with a BSc in Electronic and ICT engineering and in 2009 with a PhD in Geology. His PhD was funded by the Belgian Navy, where he was active till 2009. In this period Dr. Staelens also contributed to collaborative NATO research. The main research topic of Dr. Staelens, during his PhD and MSc, was underwater acoustics, initially his research field was 3D seismic data processing, but he deviated to 3D acoustic modelling. Dr. Staelens developed 4D time-space acoustic models based upon 3D computer gaming technology. Dr. Staelens was also active in creating artificial multi-dimensional environments, such as propagating sand ripples based on cellular automata, in support of his 3D acoustic simulators. In 2008 Dr. Staelens co-founded dotOcean, a company active in the maritime industry. Initially dotOcean was active in shock, vibration and X-ray technology, in 2012 autonomous systems became the core of the company. In 2017, Dr. Staelens co-founded Qweriu, a company active designing ultra-low-cost artificial intelligent IoT air quality sensors.

Wayne Sherry
Chartered Mechanical Engineer, I-Tech Service
Wayne.Sherry@Subsea7.com

Wayne Sherry is a Chartered Mechanical Engineer working at I-Tech Service, currently working on the Autonomous Inspection Vehicle (AIV) project and general I-Tech vehicle developments. Wayne's involvement with the AIV project for the last 4years has involved testing and developing the prototype AIV and undertaking multiple trials in the UK sector of the North Sea.

Wayne graduated with a Masters degree in mechanical engineering from the University of Aberdeen, Scotland in 2009 before joining Subsea 7.

Claire Cardy
Director, UK Nortek
claire.cardy@nortekgroup.com

Claire studied Physical Oceanography at the National Oceanography Centre, Southampton prior to commencing a career in metocean data analysis at Fugro, BMT and ABPmer. Claire has been involved in feasibility studies, front end engineering design and hydrodynamic modelling primarily for offshore oil and gas and UK marine renewables. At Nortek, Claire is responsible for managing the provision of acoustic Doppler instrumentation throughout the UK and Ireland. Nortek's advanced state-of-the-art instruments are used to measure currents and waves in a variety of applications ranging from detailed lab based studies to highly accurate subsea navigation.

Sara Rayburn
Software Systems Manager Oceaneering Intl
srayburn@oceaneering.com

Sara Rayburn is the software systems development manager for new product development at Oceaneering, Intl. Her responsibilities include the development of the command and control software for a variety of robotic systems. Rayburn advises product development teams on autonomy, control, and data science. She has worked for Oceaneering (previously C&C Technologies) since 2012, working on subsea vehicle autonomy. Rayburn received her M.S. degree in Computer science in 2009 from the University of Louisiana at Lafayette. She is currently working on a Ph.D in Computer Science at the same university, with a focus in neural networks for computer vision

Paul Wanis
Director Innovation and Systems, Teledyne RD Instruments
Paul.Wanis@teledyne.com

Paul Wanis is the Director of Innovation and Systems for Teledyne RD Instruments, a member of Teledyne Marine. In this role, he is responsible for systems engineering of acoustic Doppler measurement devices used for oceanographic measurement, subsea navigation, and water resource monitoring, as well as the investigation of new and promising future technologies for the company. He is a member of the Marine Technology Society (MTS) and the National Defense Industrial Organization (NDIA) in the United States, and a past board member of the San Diego chapter of the International Council on Systems Engineering (INCOSE). He holds a degree in electrical and computer engineering from the Illinois Institute of Technology in Chicago.

MARINE AUTONOMY & TECHNOLOGY SHOWCASE

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Mark Burnett
Chief Operating Officer Seiche Water Technology Group

Mark Burnett is Seiche Water Technology Group's (SWTG) Chief Operating Officer, having joined the company November 2017. Immediately prior to this Mark was the Chief Executive Officer of WGP Group Ltd.

Mark is a graduate of Liverpool John Moores University and has over twenty years' experience in the marine sector, having commenced his career working offshore with Western Geophysical (now part of Schlumberger). Shorebased roles followed thereafter within GeoMarine and then WGP (Westland GeoProjects Ltd) during which the initial focus was the acquisition of niche and frontier marine geophysical surveys. During this time, Mark established and operated a regional office based in Houston, Texas and operated on secondment to client offices in Sakhalin, Russia.

During the latter years with WGP, Mark focused on the Permanent Reservoir Monitoring sector, performing repeat geophysical surveys over permanent or temporarily deployed seabed hydrophone receivers to enhance and optimise the recovery of hydrocarbons from producing reservoirs. The prime geographical areas of focus being offshore Norway, Azerbaijan and Brazil for key champions in this sector BP, Statoil, ConocoPhillips and Shell. This program of work drove the development of containerised source systems for the use on vessels of opportunity.

Seeing both the increase in capability and applications for autonomous vehicles in the offshore sector, Mark was instrumental in championing the acquisition by WGP's parent company (Thalassa Holdings Ltd) of Go Science Ltd which had developed through industry funding a ring-wing designed Autonomous Underwater Vehicle, which was subsequently re-branded as Autonomous Robotics Ltd.

Now with SWTG, one of Mark's key challenges is to support and develop the AutoNaut USV business unit with applications and opportunities in growth markets, within the oil and gas, defence and marine science sectors for its pioneering wave powered unmanned surface vehicle.