SUNDAY June 19, 2016

"Musée National de la Marine"
Place Monsenergue, Toulon
18:30 to 21:00
Registration & Welcome Reception

MONDAY June 20, 2016

"Palais Neptune", Level 1

8:00 - 8:30
Registration

Auditorium Vauban (Entrance: Level 2 & Level 3)
8:30 - 9:20
Opening

9:20 - 10:00 Plenary lecture 1 - **Auditorium Vauban**
Fouling in times of global change
Pr. Martin WAHL, GEOMAR Helmholtz Centre for Ocean Research, Germany

10:00 - 10:30
Coffee break

Auditorium Vauban: Biofilms & Microbial fouling Chairs: Pr. Peter STEINBERG and Pr. Claire HELLIO	**Room Colbert: Cathodic protection in marine environment** Chairs: Anne-Marie GROLLEAU and Dr. Emmanuel ARAGON
10:30 - 11:00 Keynote 1A **Understanding the microbiome of the seaweed holobiont** Pr. Peter STEINBERG, Sydney Institute of Marine Science, Australia	10:30 - 11:00 Keynote 1B **Cathodic protection and marine organisms: what are the interactions?** Anne-Marie GROLLEAU, DCNS Research, France
11:00 - 11:20 Oral 1A **Metagenomic analyses of ship hull biofouling communities** Gary J. VORA, Naval Research Laboratory, USA	11:00 - 11:20 Oral 1B **Harbour of Calais – Cathodic protection monitoring of marines structures** Jérôme CROUZILLAC, BAC Corrosion Control, France
11:20 - 11:40 Oral 2A **Responses of marine microbial biofilm communities to contrasted antifouling coatings in two French Mediterranean sites** Thomas POLLET, MAPIEM, France	11:20 - 11:40 Oral 2B **Compositional, environmental and accelerated testing considerations for the development of new cathodic delamination-resistant coatings for marine hardware** Thomas RAMOTOWSKI, U.S. Navy/NUWC Division Newport, USA
11:40 - 12:00 Oral 3A **Biofilm community structure and associated drag penalties on groomed ship hull coatings** Kelli HUNSUCKER, Florida Institute of Technology, USA	11:40 - 12:00 Oral 3B **Ensure effectiveness of marine applications of cathodic protection by using standardization and certification of competence** Marcel ROCHE, CEFRACOR, France
12:00 - 12:20 Oral 4A **Bubbles vs biofilms: a new method for biofilm removal** Maria SALTA, University of Portsmouth, UK	12:00 - 12:20 Oral 4B **Oil and gas subsea equipment - CP challenges in Australia** Paul GEORGESON, Wood Group, Australia

12:30 - 14:00
Lunch (*offered*)

MONDAY June 20, 2016	
Room Colbert: Biofilms & Microbial fouling Chairs: Pr. Peter STEINBERG and Pr. Claire HELLIO	**Room Bonaparte: Novel methods to evaluate antifouling efficacy and detect biofouling** Chairs: Pr. Iwona BEECH and Dominique THIERRY
14:10 - 14:30 Oral 5A **Regulation of the epibiotic bacterial community by the surface metabolome of the brown alga *Taonia atomaria*** Ahlem OTHMANI, MAPIEM, France	14:00 - 14:30 Keynote 2B **Metabolomic and genomic imaging of marine biofilms as tools for the study and control of marine biofouling** Pr. Iwona BEECH, University of Oklahoma, USA
14:30 - 14:50 Oral 6A **Fluctuating defence with fluctuating time: Temporal variation in the antifouling defence of the brown alga *Fucus vesiculosus*** Mahasweta SAHA, Helmholtz Center for Ocean Research, GEOMAR, Germany	14:30 - 14:50 Oral 5B **3D scanning to capture configuration and arrangement of fouling roughness** Scott STORMS, Naval Surface Warfare Center, USA
14:50 - 15:10 Oral 7A **Deep-sea bacterial biofilm communities growing on oceanographic instruments** Nikoleta BELLOU, Hellenic Centre for Marine Research, Greece	14:50 - 15:10 Oral 6B **Rapid performance testing of commercially available hull coatings for navy ships** Job KLIJNSTRA, ENDURES BV, The Netherlands
15:10 - 15:30 Oral 8A **Biofilm ecology of antifouling surfaces in tropical marine environments** Siti Zarina Zainul RAHIM, National University of Singapore, Singapore	15:10 - 15:30 Oral 7B **LimnoMar's RotoMarin® - A new opportunity for dynamic field testing** Bernd DAEHNE, LimnoMar, Germany
15:30 - 15:50 Oral 9A **Structure of bacterial and diatoms communities on artificial substrata** Sergey DOBRETSOV, Sultan Qaboos University, Oman	15:30 - 15:50 Oral 8B **How clean is this surface? Rapid and quantitative methods to assess biofouling** R. Shane ADDLEMAN, Pacific Northwest National Laboratory, USA
15:50 - 16:20 **Coffee break**	
Room Colbert: Advances in fouling release technologies Chair: Pr. Christopher K. OBER	**Room Bonaparte: Novel methods to evaluate antifouling efficacy and detect biofouling** Chair: Pr. Iwona BEECH
16:20 - 16:50 Keynote 2A **The future of fouling release: performance, practicality and new opportunities** Dr. Kevin REYNOLDS, AkzoNobel Performance Coatings, UK	16:20 - 16:40 Oral 9B **Probing diatom adhesion by microfluidics** Kim Alexander NOLTE, Ruhr-Universität-Bochum, Germany
16:50 - 17:10 Oral 10A **Antifouling properties of surface-active borate glasses** Kenan FEARS, Naval Research Laboratory, USA	16:50 - 17:10 Oral 10B **Screen-printed 96 well-microplates for screening electroactive coatings** Hugues BRISSET, MAPIEM, France
17:10 - 17:30 Oral 11A **Amphiphilic copolymers for fouling-release coatings** Albert CAMÓS-NOGUER, Technical University of Denmark (DTU), Denmark	17:10 - 17:30 Oral 11B **Short- and long-term efficacy mesocosm tests: a novel approach** Eldad GUTNER-HOCH, Tel-Aviv University, Israel
17:30 - 17:50 Oral 12A **Tough and durable amphiphilic fouling-release coatings** Dean WEBSTER, North Dakota State University, USA	17:30 - 17:50 Oral 12B **An evaluation method of antifouling efficacy in the laboratory using *Mytilus galloprovincialis* with flow-through systems** Ryuji KOJIMA, National Maritime Research Institute, Japan
17:50 - 18:10 Oral 13A **Preventing bacterial adherence utilising reorienting foul-release coatings** Stephen KENNY, University of Nottingham, UK	17:50 - 18:10 Oral 13B **Laboratory disc rotors for measuring drag and observing the release of attached organisms from fouling release coatings** Simon DENNINGTON, University of Southampton, UK
18:10 - 18:30 Oral 14A **FOULPROTECT: development of new coating concepts for achieving a long-lasting protection against marine fouling and biocorrosion** Thorsten FELDER, Momentive Performance Materials GmbH, Germany	18:10 - 18:30 Oral 14B **Development of experimental hydrodynamic facilities to evaluate the "long-term" performance of marine coatings** Irma YEGINBAYEVA, Newcastle University, UK
17:40 - 19:00 **Poster hanging time**	
19:00 **Special event for students and young researchers**	

TUESDAY June 21, 2016	
8:30 - 9:10 Plenary lecture 2 - **Auditorium Vauban** **Ambiguous surfaces: Antifouling and fouling release coatings based on self-assembly** Pr. Christopher K. OBER, Cornell University, USA	
Auditorium Vauban: Biocidal antifouling technologies Chairs: Pr. Prof. Guangzhao ZHANG and Dr. Marlène LEJARS	**Room Colbert: Microbiologically induced corrosion - Biocorrosion** Chairs: Pr. Robert MELCHERS and Dr. Brenda LITTLE
9:20 - 9:50 Keynote 3A **Inhibition of marine biofouling by self-renewal surface consisting of biodegradable polymers** Pr. Prof. Guangzhao ZHANG, South China University of Technology, China	9:20 - 9:50 Keynote 3B **Effect of nutrient pollution on long-term microbiologically influenced corrosion of steel and cast iron infrastructure** Pr. Robert MELCHERS, The University of Newcastle, Australia
9:50 - 10:10 Oral 15A **Development of new hybrid antifouling coatings ecofriendly** Fabrice AZEMAR, Laboratoire de biotechnologie et chimie marines (LBCM), France	9:50 - 10:10 Oral 15B **Formation mechanisms for iron-rich accretions from World War II shipwrecks in the Gulf of Mexico** Brenda LITTLE, Naval Research Laboratory, USA
10:10 - 10:30 Oral 16A **Degradable silyl acrylate copolymer: a novel design for self-polishing antifouling coatings** Chunfeng MA, South China University of Technology, China	10:10 - 10:30 Oral 16B ***S. loihica* PV-4: model organism to study biocorrosion and antifouling coating materials** Monica EPIFANIO, Dublin City University, Ireland
10:30 - 11:00 **Coffee break**	
11:00 - 11:20 Oral 17A **Antifouling coatings containing modified nanoparticles with dual antimicrobial effect** Marios MICHAILIDIS, University of Liverpool, UK	11:00 - 11:20 Oral 17B **Electrochemical study of epoxy coated mild steel in different aqueous environment** Umadevi Vadamadurai RATHINAVELU, Delft University of Technology, The Netherlands
11:20 - 11:40 Oral 18A **Chitosan-ZnO nanocomposite coatings for the prevention of marine biofouling** Laili AL-NAAMANI, Sultan Qaboos University, Oman	11:20 - 11:40 Oral 18B **Potential ennoblement of stainless steel in seawater: influence of dissolved oxygen content and pressure** Charles LEBALLEUR, Institut de la Corrosion, France
11:40 - 12:00 Oral 19A **The efficacy of grooming on antifouling coatings** Emily RALSTON, Florida Institute of Technology, USA	11:40 - 12:00 Oral 19B **SRB induced accelerated corrosion attack of high strength steel under - 0.85V vs SCE cathodic polarization potential** Jizhou DUAN, Institute of Oceanology, Chinese Academy of sciences, China
12:00 - 12:20 Oral 20A **Anti-fouling paint based on gel encapsulated biocide technology for large vessels and ships** Eva WALLSTRÖM, EnCoat ApS, Denmark	12:00 - 12:20 Oral 20B **Local mooring chain corrosion-microbial analysis of *in-situ* samples** Nanni NOËL, Endures B.V., The Netherlands
12:30 - 14:00 **Lunch** (not provided)	

TUESDAY June 21, 2016	
Room Colbert: Macrofouling Chair: Dr. Nick ALDRED and Pr. Claire HELLIO	**Room Bonaparte: Regulation of AF/Corrosion products & Environmental issues** Chair: Dr. Andrew TURNER
14:00 - 14:30 Keynote 4A **Progress in the study of adhesion by marine invertebrate larvae** Dr. Nick ALDRED, Newcastle University, UK	14:00 - 14:30 Keynote 4B **Environmental issues associated with antifouling waste** Dr. Andrew TURNER, University of Plymouth, UK
14:30 - 14:50 Oral 21A **Stereoscopic tracking reveals responses of barnacle larvae to surface cues** Axel ROSENHAHN, Ruhr-University Bochum, Germany	14:30 - 14:50 Oral 21B **Risk assessment – Regional assessments of copper based antifouling paints** Kevin LONG, Regulatory Compliance Ltd., UK
14:50 - 15:10 Oral 22A **Developing a sensory architecture for response of larval barnacles *Amphibalanus amphitrite* to surface properties** Eric HOLM, Naval Surface Warfare Center, USA	14:50 - 15:10 Oral 22B **Efficiency and toxicity of antifouling sealer coats** João FERREIRA, Stockholm University, Sweden
15:10 - 15:30 Oral 23A **Colorful side of fouling: environmental benefit for coral reefs and beyond** Yehuda BENAYAHU, Tel Aviv University, Israel	15:10 - 15:30 Oral 23B ***In situ* studies of antifouling paint toxicity on snails** Maria BIGHIU, Stockholm University, Sweden
15:30 - 15:50 Oral 24A **Importance of roughness for marine fouling- laboratory and field tests of algae and barnacles** Lena GRANHAG, Department of Shipping and Marine Technology, Sweden	15:30 - 15:50 Oral 24B **Evidencing the impact of trace metals release from antifouling paints into coastal Mediterranean environments: insights from Krka Estuary (Croatia) and Toulon Bay (France)** Cédric GARNIER, Université de Toulon, laboratoire PROTEE, France
15:50 - 16:20 **Coffee break**	
16:20 - 16:40 Oral 25A **Using environmental data to describe trends in fouling recruitment: an eastern Florida example** Kody LIEBERMAN, Florida Institute of Technology, USA	16:20 - 16:40 Oral 25B **Antifouling innovation in a highly regulated environment: thinking outside the box or ticking boxes? The here and now of EU-BPR** Linda JONES, Annex3 Consulting, The Netherlands
16:40 - 17:00 Oral 26A **Cement proteomics: shared traits and conserved chemistries in barnacle cement proteins from *Balanus amphitrite*** Christopher SO, US Naval Research Laboratory, USA	16:40 - 17:00 Oral 26B **Organotin speciation in historic layers of antifouling paint on leisure boat hulls** Maria LAGERSTRÖM, Stockholm University, Sweden
17:00 - 17:20 Oral 27A **Spatial - biochemical organization of barnacle adhesive plaques following initial reattachment** Daniel BARLOW, US Naval Research Laboratory, USA	17:00 - 17:20 Oral 27B **New analytical method to measure release rates of copper under field conditions** Erik YTREBERG, Chalmers University of Technology, Sweden
17:20 - 17:40 Oral 28A **Crack propagation in barnacle interfaces** Kathryn WAHL, US Naval Research Laboratory, USA	17:20 - 17:40 Oral 28B **A novel XRF application for boat inspection - Fast quantification of tin, copper and zinc** Britta EKLUND, Stockholm University, Sweden
18:00 - 20:30 **Poster night**	

WEDNESDAY June 22, 2016	
8:30 - 9:10 Plenary lecture 3 - **Room Colbert** **Innovative methods to approach microbial corrosion and its prevention** Dr. Pierangela CRISTIANI, RSE SpA, Italy	
Room Colbert: Microbiologically induced corrosion - Biocorrosion Chairs: Pr. Robert MELCHERS and Dr. Brenda LITTLE	**Room Bonaparte: Climate changes, invasive species and biofouling** Chair: Pr. Martin WAHL
9:30 - 9:50 Oral 29A ***Halomonas titanicae* - How corrosive is that microorganism actually compared to a sulfate reducer such as *Desulfovibrio indonesiensis*?** Nanni NOËL, Endures B.V., The Netherlands	9:20 - 9:50 Keynote 5B **Increased defenses against fouling in non-native populations of an invasive seaweed** Dr. Florian WEINBERGER, GEOMAR Helmholtz-Zentrum für Ozeanforschung, Germany
9:50 - 10:10 Oral 30A **Influence of environmental seasonality on biocorrosion development over stainless steel AISI316L exposed to natural seawater** Leslie DAILLE, Pontificia Universidad Católica de Chile, Chile	9:50 - 10:10 Oral 29B **LC-MS based metabolomics in integrated field and laboratory approaches towards unravelling the impact of metal contamination on marine biofilms** Laurie FAVRE, MAPIEM, France
10:10 - 10:30 Oral 31A **Marine electroactive biofilms responsible for stainless steel ennoblement - An EcoGenomic approach** Florian TRIGODET, Laboratory of Microbiology of Extreme Environments LM2E, France	10:10 - 10:30 Oral 30B **The transport of marine biofilms through freshwater via the Okeechobee Waterway ('Florida's Panama Canal') and their effects on subsequent macrofouling recruitment** L. Holly SWEAT, Florida Institute of Technology, USA
10:30 - 11:00 **Coffee break**	
11:00 - 11:20 Oral 32A **Microbial influenced corrosion in mixed microbial consortia from equatorial environment** Enrico MARSILI, Nanyang Technological University, Singapore	11:00 - 11:20 Oral 31B **Barnacle adhesion and biomineralization in a changing ocean: assessing the effects of seawater salinity and pH** Gary H. DICKINSON, The College of New Jersey, USA
11:20 - 11:40 Oral 33A **Effect of *Bacillus* sp. biofilm on corrosion of Al thermal sprayed coatings and cathodic protection of SS 316L in marine environment** Leila ABDOLI, Ningbo Institute of Industrial Technology, China	11:20 - 11:40 Oral 32B **New life, new challenge: antifouling defence patterns of native and non-native populations of an invasive seaweed suggest a potential for rapid defence adaptation to new microbial foulers** Mahasweta SAHA, Helmholtz center for Ocean Research, Germany
11:40 - 12:00 Oral 34A **Self-assembled and dip-coated nanolayers as anti-biofouling protective coatings on copper, copper alloys, and stainless steel** Lorand ROMÁNSZKI, Hungarian Academy of Sciences, Hungary	11:40 - 12:00 Oral 32B **Project Helm: big data and multivariate modeling for fouling risk mitigation** Richard RAMSDEN, AkzoNobel Coatings, UK
13:00 - 18:00 **Social events** (lunch not provided)	
19:15 - Bus departure time **Congress dinner**	

THURSDAY June 23, 2016	
8:30 - 9:10 Plenary lecture 4 - **Room Colbert** **Bio-inspired anti-fouling compounds** Pr. Peter PROKSCH, Heinrich-Heine University, Germany	
Room Colbert: Impact & Applications of marine fouling and corrosion research and technologies Chairs: Christine VALENTIN and Anne-Marie GROLLEAU	**Room Bonaparte: New antifouling responsive and textured surfaces** Chairs: Pr. Fiona REGAN and Pr. André MARGAILLAN
9:20 - 9:50 Keynote 5A **Global ocean industry collaboration to address the economic and environmental impacts of marine fouling** Christine VALENTIN, World Ocean Council, USA	9:20 - 9:50 Keynote 6B **Bio-inspired marine antifouling strategies for improved deployment performance** Pr. Fiona REGAN, DCU Water Institute, Dublin City University, Ireland
9:50 - 10:10 Oral 35A **Antifouling coatings for marine energy applications: criteria, challenges, and analysis** George BONHEYO, Pacific Northwest National Laboratory, USA	9:50 - 10:10 Oral 34B **Electroactive polymers based on ferrocenyl methacrylates for antifouling applications** Marlène LEJARS, MAPIEM, France
10:10 - 10:30 Oral 36A **Corrosion and biofouling of offshore wind monopile foundations** Claire CANNING, EDF Energy R&D UK Centre, UK	10:10 - 10:30 Oral 35B **TRAP Triggered Antifouling Protection** Mattias BERGLIN, SP Technical Research Institute, Sweden
10:30 - 11:00 **Coffee break**	
11:00 - 11:20 Oral 37A **13 years experience with fouling release coating on a RNLN frigate** Job KLIJNSTRA, ENDURES BV, The Netherlands	11:00 - 11:20 Oral 36B **Polymers supported electroactive species for antifouling applications** Frédéric GOHIER, MOLTECH-Anjou, UMR CNRS 6200, France
11:20 - 11:40 Oral 38A **Effects of biofouling on performance, as measured during a series of ship trials conducted on the high-speed, jet-powered catamaran, USNS Choctaw County (EPF 2)** Dominic CUSANELLI, Naval Surface Warfare Center, USA	11:20 - 11:40 Oral 37B **Patterned photo-crosslinking of thermo-responsive hydrogels for dynamic surface structures** Sander KOMMEREN, Eindhoven University of Technology, The Netherlands
11:40 - 12:00 Oral 39A **Propeller roughness condition and its impact on vessel fuel efficiency – A case study on US Navy CG- and DDG-class vessels** Elizabeth HASLBECK, Naval Surface Warfare Center, USA	11:40 - 12:00 Oral 38B **Progress in Phillips Runwell UV-based antifouling technology** Bart SALTERS, Philips Research, Eindhoven, The Netherlands
12:00 - 12:20 Oral 40A **Influence of hydrodynamic stress on frictional drag and fouling community structure** J. Travis HUNSUCKER, Florida Institute of Technology & SHIPWRIGHT LLC, USA	12:00 - 12:20 Oral 39B **Development of an inexpensive nontoxic biomimetic composite antifouling coating** R. Shane ADDLEMAN, Pacific Northwest National Laboratory, USA
12:30 - 14:00 **Lunch** (not provided)	

THURSDAY June 23, 2016	
Room Colbert: Impact & Applications of marine fouling and corrosion research and technologies Chair: Pr. Michael SCHULTZ	**Room Bonaparte: Novel environmentally friendly antifoulants** Chairs: Pr. Peter PROKSCH and Dr. Johan SVENSON
14:10 - 14:30 Oral 41A **Design of pressure drop section to measure frictional drag of fouling control surfaces** Serkan TURKMEN, School of Marine Science and Technology, Newcastle University, UK	14:00 - 14:30 Keynote 7B **Evaluation of novel natural and synthetic antifoulants derived from Arctic terrestrial and marine sources** Dr. Johan SVENSON, SP Technical Research Institute, Sweden
14:30 - 14:50 Oral 42A **Validation of computational model for predicting frictional resistance by using typical profile data for fouled surfaces** Bercelay NIEBLES ATENCIO, Chalmers University of Technology OCAS NV, Sweden/Belgium	14:30 - 14:50 Oral 40B **From marine natural products (MNPs) to synthetic leads: A new wave of green antifouling solutions?** Sofyane ANDJOUH, MAPIEM, France
14:50 - 15:10 Oral 43A **A new approach to predicting the impact of fouling control coatings on ship efficiency** Barry KIDD, International Paint Ltd, UK	14:50 - 15:10 Oral 41B **Bursting the iodine vapor bubble: iodine infused aeration for biofouling prevention** Natasha C. DICKENSON, Naval Undersea Warfare Center Division Newport, USA
15:10 - 15:30 Oral 44A **A practical approach for predicting fouling impact on ship resistance** Yigit Kemal DEMIREL, University of Strathclyde, UK	15:10 - 15:30 Oral 42B **A new material with low surface energy yielded by reaction of peptide and stainless steel** Pan CAO, Wuhan University of Technology, China
15:30 - 16:00 **Coffee break**	
Room Colbert: Adhesion, signaling & biofilm formation Chair: Dr. Ana OTERO	**Room Bonaparte: Novel environmentally friendly antifoulants** Chairs: Pr. Peter PROKSCH and Dr. Johan SVENSON
16:00 - 16:30 Keynote 6A **Quorum sensing, biofilms and biofouling: A complex relationship** Dr. Ana OTERO, Universidade de Santiago de Compostela, Spain	16:10 - 16:30 Oral 43B **Impact of a hemibastadin derivative on microfouling settlement** Tiffany LE NORCY, Laboratoire de biotechnologie et chimie marines (LBCM), France
16:30 - 16:50 Oral 45A **Inhibition of violacein production in marine bacteria *Pseudoalteromonas ulvae* TC14 by quorum sensing inhibitors** Mireille AYE, MAPIEM, France	16:30 - 16:50 Oral 44B **Progress in antifouling compounds from marine-derived fungi** Shu-Hua QI, South China Sea Institute of Oceanology, China
16:50 - 17:10 Oral 46A **Adsorption of alginate and albumin affects colonization behaviors of bacteria and diatoms in artificial seawater** Xiaoyan HE, Ningbo Institute of Materials Technology and Engineering, China	16:50 - 17:10 Oral 45B **Strategic advantages of functionalized POSS derivatives applied to anti-fouling concepts** Monika PILZ, SINTEF Materials and Chemistry, Norway
17:10 - 17:30 Oral 47A **A sticky situation: understanding the mechanism of diatom adhesion** Nicole POULSEN, B CUBE/ TU Dresden, Germany	17:10 - 17:30 Oral 46B **Photocatalytic zinc oxide nanocoatings: a green alternative to biocidal antifouling coatings** Priyanka SATHE, Sultan Qaboos University, Oman
17:30 - 17:50 Oral 48A **Analysis of marine adhesives of diatoms with X-Ray nanoprobe fluorescence** Susan STUHR, Ruhr-Universität Bochum, Germany	17:30 - 17:50 Oral 47B **Antifouling strategy compounds from Red Sea organisms** Julie PETITBOIS, Hokkaido University, Japan
17:50 - 18:10 Oral 49A **The effect of surface chemistry on diatom movement and aggregation** John FINLAY, Newcastle University, UK	17:50 - 18:10 Oral 48B **Low voltage UV-light emitting miniature LEDs for marine biofouling control: laboratory and field testing** Richard PIOLA, Defence Science and Technology Group, Australia
18:10 - 18:30 Oral 50A **Evaluation of quorum quenching and anti-biofilm activity in temperature resistant marine bacteria isolated from marine macroalgae** Andrea MURAS, Universidade de Santiago de Compostela, Spain	18:10 - 18:30 Oral 49B **Seaweed assisted synthesis of Ag/Ti, Ag/Zn and Ti/Zn NPs and their potent antifouling property** Sri Ramkumar VIJAYAN, Bharathidasan University, India

FRIDAY June 24, 2016	
8:30 - 9:10 Plenary lecture 5 - **Room Colbert** **Assessing the ship hull fouling penalty – Current knowledge & Outstanding questions** Pr. Michael SCHULTZ, U.S. Naval Academy, USA	
Room Colbert: Biosecurity, risk management & Prediction in marine protection Chairs: Dr. Ashley COUTTS and John LEWIS	**Room Bonaparte: Marine corrosion: Materials & Coatings** Chairs: Pr. Mikhail L. ZHELUDKEVICH and Pr. François Xavier PERRIN
9:20 - 9:50 Keynote 7A **The importance of adopting pragmatic vessel biofouling management measures for mitigating the dispersal of aquatic invasive species – An Australian perspective** Dr. Ashley COUTTS, Biofouling Solutions Pty Ltd, Australia	9:20 - 9:50 Keynote 8B **Active protective multi-functional coatings on basis of "smart" nanocontainers** Pr. Mikhail L. ZHELUDKEVICH, Helmholtz-Zentrum Geesthacht, Germany
9:50 - 10:10 Oral 51A **Minimising marine biosecurity risks of vessels' biofouling in Australia** Sonia GORGULA, Australian Government Department of Agriculture and Water Resources, Australia	9:50 - 10:10 Oral 50B **Corrosion study of copper-based antifouling coatings on 5083 aluminum** Geoffrey SWAIN, Florida Institute of Technology, USA
10:10 - 10:30 Oral 52A **Biofouling management: flash info de Nouvelle-Zélande!** Eugène GEORGIADES, Ministry for Primary Industries, New Zealand	10:10 - 10:30 Oral 51B **A comparison between corrosion protection properties of polyaniline nanofibers and polyaniline nanotubes prepared via self-organization** François-Xavier PERRIN, MAPIEM, France
10:30-11:00 **Coffee break**	
11:00 - 11:20 Oral 53A **Ship biofouling management to minimise species translocation: what works best?** John A. LEWIS, IMarEST, Australia	11:00 - 11:20 Oral 52B **Implementation of advanced technologies for application of protective coatings in Russian shipbuilding** Olga FEDOROVA, JSC Shipbuilding & Shiprepair Technology Center (JSC SSTC), Russia
11:20 - 11:40 Oral 54A **Testing for effective prevention and removal of biofouling from ships – Lessons learnt from testing of ballast water management and the fouling removal chain** Cato C. TEN HALLERS-TJABBES, MEA-nl, The Netherlands	11:20 - 11:40 Oral 53B **Electrochemical studies and numerical modelling of laser alloyed Al-Sn-Ti coating in saline environment** Olawale FATOBA, Tshwane University of technology, Pretoria, South Africa
11:40 - 12:00 Oral 55A **A mathematical model to predict wild life population affected by chemicals released from AF/AC paint** Kiyoshi SHIBATA, Chiba Institute of Technology, Japan	11:40 - 12:00 Oral 54B **Electrochemical assessment of ammonium benzoate as corrosion inhibitor of mild steel in 0.5M HCl solution: *Solanum tuberosum* extract as surfactant** Olaitan AKANJI, Tshwane University of Technology, Pretoria, South Africa
12:00 - 12:20 Oral 56A **How conservative is the regulatory human health risk assessment? Comparisons between calculated and analytical data using Selektope® as an example** Lena LINDBLAD, I-Tech AB, Sweden	
12:30 **Closing remarks** **Announcing Oral and Poster winners** **Poster removal time**	

Program of the poster night: TUESDAY June 22, 2016	
18:00 - 20:30 Poster night & Cocktail "Palais Neptune", Level 1	
PT S1-1 **Lanthanum and Yttrium rare earth based conversion to improve the 6061 & 2024 aluminum alloys protection.** Bekhiti DJILLALI, Military Polytechnic School, Algeria	PT S4-3 **Ship biofouling: what are the biosecurity risks?** John A. LEWIS, IMarEST, Australia
PT S1-2 **Advanced ceramic coatings to prevent corrosion and fouling in offshore components** David VÉLEZ, IK4-CIDETEC, Spain	PT S5-1 **An impact of nautical tourism on copper concentrations in the Krka River estuary (Croatia)** Cédric GARNIER, Université de Toulon, PROTEE, France
PT S1-3 **Application of the conducting polymers in the marine anticorrosion paints** Ahcene SAKHRI, DRD/Algerian Navy- Algeria	PT S5-2 **Zinc governs the release rate of copper in a generic antifouling paint** J. Fredrik LINDGREN, SP Technical Research Institute of Sweden, Sweden
PT S1-4 **Study on the performance of different type epoxy resin coatings under hydrostatic pressure seawater environment** Bin LIU, Naval Academy of Armament, P.R.China	PT S6-1 **Role of hydrodynamic condition on biofilm formation of *Bacillus sp*. in a rotating disk system** Leila ABDOLI, Ningbo Institute of Materials Technology and Engineering, China
PT S1-5 **Coatings for corrosion protection of Mg alloys** Aurélie DUPUIS, MAPIEM, France	PT S6-2 **Deep sea biofouling - state of the art and where are we going?** Nikoleta BELLOU, Hellenic Centre for Marine Research, Institute of Oceanography, Greece
PT S2-1 **Dynamics of carbon steel corrosion in an estuarine Amazonian environment (MIC)** Paule SALVIN, L3MA UMR ECOFOG Université des Antilles, France	PT S6-3 **Impacts of a multi-contamination gradient in a North-Western Mediterranean bay (Toulon Bay, France) on biofilm microbial communities analyzed by flow cytometry** Clément COCLET, MAPIEM/PROTEE, France
PT S2-2 **Influence of Desulfovibrio sulphate reducing-bacteria in the corrosion of mild steel coated with self-healing coatings** João TEDIM, Smallmatek - Small Materials and Technologies, Portugal	PT S6-4 **LC-MS based metabolic profiling of marine bacterial strains demonstrates variation between free-living and biofilm lifestyles** Laurie FAVRE, MAPIEM, France
PT S2-3 **Electrochemical aspects of stainless steels corrosion in seawater** Valery KARPOV, Institute of Ecology and Evolution, Russia	PT S6-5 **The effects of long-term grooming on the diatom community structure and biofilm adhesion to ship hull coatings** Kelli HUNSUCKER, Florida Institute of Technology, USA
PT S3-1 **Use and misuse of anodic protection in ballast tanks** Kris DE BAERE, Antwerp Maritime Academy, Belgium	PT S6-6 **Antibacterial activity of green algal extracts against fouling bacteria isolated from bay of Carthage (northern coast of Tunisia)** Leila KTARI, INSTM,National Institute of Marine Sciences and Technologies Tunisia
PT S3-2 **SRB induced accelerated stress corrosion cracking under cathodic protection potential** Jizhou DUAN, Institute of Oceanology, Chinese Academy of Sciences, China	PT S6-7 **A robust quorum quenching enzyme for antifouling applications** Laure PLENER, Gene&GreenTK, France
PT S4-1 **Marine Fouling Species from the Brazilian Coast" database: a web-based system for marine biosecurity management** Ricardo COUTINHO, IEAPM- Instituto de Pesquisas do Mar Almirante Paulo Moreira, Brazil	PT S6-8 **Biofouling, deposition and corrosion in cooling water cycles using brackish seawater** Pauliina RAJALA, VTT Technical Research Centre of Finland, Finland
PT S4-2 **At the border: assessing vessel biofouling risks in an operational context** Daniel KLUZA, Ministry for Primary Industries, New Zealand	PT S6-9 **Dynamic biofilm growth and collection using a strut arrangement on a catamaran vessel** Serkan TURKMEN, Newcastle University School of Marine Science and Technology, UK

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PT S7-1 **Extracellular polymeric substances from a marine biofilm-forming strain *Pseudoalteromonas ulvae* TC14: characterization of exopolysaccharides and antifouling activities** Roberto ABBAMONDI, MAPIEM, France	PT S8-6 **Preparing samples of antifouling systems for successful testing in the marine environment** Abraham STEPHENS, Florida Institute of Technology
PT S7-2 **Inhibition of bacterial quorum sensing by macroalgae: importance of associated microbial communities** Sergey DOBRETSOV, Sultan Qaboos University, Oman	PT S8-7 **The seasonal variation of offshore macrofaunal fouling assemblages in the South China Sea** Min TANG, Hainan University, China
PT S7-3 **Application of green fluorescent protein as a viable marker in a pioneer marine species, *Pseudoalteromonas* sp. D41 for adhesion and biofilm dynamics analysis** Catherine DREANNO, IFREMER, RDT/LDCM, France	PT S8-8 **The primary study on the characteristics of biofouling community in the nearshore aquaculture in the South China Sea** Chaochao WANG, Hainan University, China
PT S7-4 **Hanging on by a thread: the ecomechanics of mussel byssus glue** Matthew GEORGE, University of Washington, USA	PT S8-9 **Varying mussel settlement responses to marine biofilms on polyurethane, epoxy resin and PDMS** Jin-Long YANG, Shanghai Ocean University, China
PT S7-5 **Investigation of different marine bacterial strains behaviors in biofilm** Richard GUILLONEAU, MAPIEM, France	PT S8-10 **Automatic classification of the settlement behaviour of Barnacle cyprids** Ahmad ALSAAB, Newcastle University, UK
PT S7-6 **Biofilm formation and c-di-GMP signaling in marine bacteria** Manar HARB, MAPIEM, FRANCE	PT S9-1 **Development of standard and novel laboratory methods to evaluate anti-macrofouling efficacy** Robert BUNET, Institut Océanographique Paul Ricard, France
PT S7-7 **Quorum Sensing" system characterization of *Shewanella woodyi* and its role in biofilm formation** Mahmoud HAYEK, MAPIEM, FRANCE	PT S9-2 **Assessing the performance of low toxic cost efficient and environment friendly antifouling materials** Séverine LARROZE, AquaBioTech Group, Malta
PT S7-8 **Marine Roseobacters' lifestyles in biofilms forming conditions** Raphaël LAMI, Laboratoire de Biodiversité et Biotechnologies Microbiennes, France	PT S9-3 **Marine biofouling on flat panels with graded concentration of biocides** Hans ELWING, University of Gothenburg, Sweden
PT S7-9 **Implication of extracellular components of *Shewanella frigidimarina* NCIMB400 membrane on adhesion and biofilm formation** Aurore PUYMEGE, MAPIEM, FRANCE	PT S9-4 **A TLC-agar method as an alternative to liquid-culture method for the evaluation of algaecidal activity** Isabel FREIRE FONTANS, University of Santiago de Compostela, Spain
PT S8-1 **Study of gene expression along the settlement process of barnacle *Balanus improvisus*** Anna ABRAMOVA, University of Gothenburg, Sweden	PT S9-5 **Increased settlement rates of field-caught barnacle larvae in settlement assays adding metamorphosed juveniles** Kristina GALL, LimnoMar, Germany
PT S8-2 **Fouling in finfish aquaculture: a case study from Adriatic Sea** Alessandra BELLUCCI, Università Politecnica delle Marche, Italy	PT S9-6 **Early detection of bacterial biofilms in seawater lines: a powerful tool for preventing problems** Francesca GARAVENTA, Institute of Marine Sciences (CNR-ISMAR), Italy
PT S8-3 **A multivariate analysis of the attachment of biofouling organisms in response to surface properties** Eric R. HOLM, Naval Surface Warfare Center, USA.	PT S9-7 **The Mediterranean sea urchin *Paracentrotous lividus*: an effective embryotoxicity model** Eldad GUTNER-HOCH, Tel Aviv University, Israel
PT S8-4 **Investigating the *Amphibalanus improvisus* octopamine receptor – comparison between receptor binding, efficacy and physiological output** Lena LINDBLAD, I-Tech AB, Sweden	PT S9-8 **Characterisation of marine biofilms grown under different hydrodynamic regimes and their impact in ship operational efficiency** Jack HAYDEN, International Paint Ltd, UK
PT S8-5 **Coastal marine fouling monitoring: validation of an innovative field exposure system and comparison between covering assessment methods** Veronica PIAZZA, ISMAR CNR, Italy	PT S9-9 **A flow-through method of laboratory testing for the efficacy of antifouling paints using three types of fouling organisms: barnacle, mussel and green algae** Ichiro KATSUYAMA, Japan NUS Co., Ltd., Japan

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PT S9-10 **Development of bacteria and microalgae biofilm in photobioreactor to evaluate antifouling surfaces** Tiffany LE NORCY, Laboratoire de biotechnologie et chimie marines (LBCM), France	PT S10-3 **Advanced coatings for offshore renewable energy** Hans ELWING, University of Gothenburg, Sweden
PT S9-11 **Effect of cuprous oxide particules on the roughness boundary layer and drag characteristics of marine antifouling coatings** Chang LI, Newcastle University, UK	PT S10-4 **Using three dimensional printing to investigate the hydrodynamic effect of biofouling (*Chirona Hameri*) in relation to tidal energy** Rebecca FRANCIS, Plymouth University, UK
PT S9-12 **Combatting fouling on fish cages in three seas: towards protocol for long term static immersion tests** Rachel MAILICK, Tel Aviv University, Israel	PT S10-5 **Settlement of an alien mollusc in a Mediterranean industrial plant: strategy for the optimization and management of antifouling treatments** Francesca GARAVENTA, Institute of Marine Sciences (CNR-ISMAR), Italy
PT S9-13 **Development of a test platform for anti-fouling coatings** Raf MESKENS, Antwerp Maritime Academy, Belgium	PT S10-6 **In-service performance evaluation of low frictional AF marine coating based on ISO/DIS19030** Inwon LEE, GCRC-SOP, Pusan National University, South Korea
PT S9-14 **Optimization of the screening method for anti-biofouling compounds using the xCELLigence® system** Andrea MURAS, Universidade de Santiago de Compostela, Spain	PT S10-7 **Review and assessment of mechanical methods for underwater cleaning of marine structures** Tom MARQUARDT, Muehlhan AG, Germany
PT S9-15 **Matching forces applied in underwater hull cleaning with adhesion strength of marine organisms** Dinis OLIVEIRA, Chalmers University of Technology, Sweden	PT S10-8 **Similarity transform method to predict full scale ship performance based on various lab skin friction tests** Hyun PARK, GCRC-SOP, Pusan National University, South Korea
PT S9-16 **Adhesive properties of three marine bacteria towards FRC-SPC hybrid antifouling coatings** Aurore PUYMEGE, MAPIEM, FRANCE	PT S10-9 **Additive manufacturing for the control of biofouling in problematic vessel niche areas** Richard PIOLA, Defence Science and Technology Group, Australia
PT S9-17 **3D printing of biofouling organisms for hydrodynamic testing sessions** Scott STORMS, Naval Surface Warfare Center, USA	PT S10-10 **Assessment of fouling release coating degradation caused by grooming** Melissa TRIBOU, Florida Institute of Technology, USA
PT S9-18 **Targeted in-field macro-fouling tests in Singapore** Wensley Louis WIDJAJA, AkzoNobel, International Paint Singapore Pte Ltd, Singapore	PT S10-11 **Investigation of the biofouling and corrosion performance of thermal spray coatings subjected to static immersion in Australian marine site** Scott A. WADE, Swinburne University of Technology, Australia
PT S9-19 **The use of a simple x-ray fluorescence method (XRF) for quantification of Cu, Zn and Sn (TBT) content in marine coatings** Erik YTREBERG, Chalmers University of Technology, Sweden	PT S10-12 **Identification of variables that are significant to the rate of change in a ship's powering penalty** J. Travis HUNSUCKER, SHIPWRIGHT, LLC, USA
PT S10-1 **The impact of microbial biofouling on marine resource extraction: a case study involving uranium adsorbents** George BONHEYO, Pacific Northwest National Laboratory, USA	PT S11-1 **Antifouling properties of nature-inspired synthetic compounds** Joana ALMEIDA, CIIMAR/CIMAR - University of Porto, Portugal
PT S10-2 **The impact of fouling control coating selection on hull roughness: an updated review** Haoliang CHEN, International Paint Singapore Pte Ltd, Singapore	PT S11-2 **Natural antifouling compounds: promising non-biocidal alternatives from cyanobacteria** Joana ALMEIDA, CIIMAR/CIMAR - University of Porto, Portugal

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PT S11-3 **Cardiac glycosides and aglycones as potential green antifoulants** Danqing FENG, Xiamen University, China	PT S12-2 **New antifouling coating containing polymeric biocide polyhexamethylene guanidine molydbate** Olena MOSHYNETS, Institute of Molecular Biology and Genetics of NAS, Ukraine
PT S11-4 **Algae against algae: microalgae as source of novel antifouling compounds** Isabel FREIRE FONTANS, University of Santiago de Compostela, Spain	PT S12-3 **Diffusion of biocides in polymeric matrices: a tool for rational coating design** Alexander PAPIEZ, Northumbria University, UK
PT S11-5 **Antifouling properties of the brown alga *Taonia atomaria* (Woodward) J. Agardh from Tunisian coasts: field experiments** Leila KTARI, INSTM,National Institute of Marine Sciences and Technologies, Tunisia	PT S12-4 **Grafting antifoulant groups into silicone based polyurethane: combination of antifouling and fouling release properties** Qingyi XIE, South China University of Technology, China
PT S11-6 **Evaluation of bioactive properties of *Cystoseira foeniculacea L.* (Grev. Emend. Sauvageau) and *Halocnemum strobilaceum* (Pall.) Bieb 1819 extracts from Trapani saltworks (NW Sicily): antioxidant and antimicrofouling** Concetta Maria MESSINA, University of Palermo, Italy	PT S12-5 **Contrasting biofouling in steam condenser: MATChING Approach** Rob ONDERWATER, Materia Nova ASBL, Belgium
PT S11-7 **Exploiting the chemodiversity of tropical microalgae for the discovery of natural antifoulants through the BIOPAINTROP project** Damien REVEILLON, MAPIEM, France	PT S13-1 **Self-structuring surfaces with polydimethylsiloxane-thiole-acrylate coatings** Andreas BRINKMANN, Fraunhofer Institute for Manufacturing Technology and Advanced Materials, Germany
PT S11-8 **Antifouling potentials of marine macroalgae extracts from coasts of La Paz bay, Mexico** Ilse SANCHEZ-LOZANO, Instituto politécnico Nacional, CICIMAR- IPN, Mexico	PT S13-2 **A new sensitive self-polishing coating** Clément DEZANET, MAPIEM, France
PT S11-9 **Bridging the gaps over a sea of biofouling – SP Technical Research Institute of Sweden aims to facilitate the antifouling innovation process for research groups** Johan SVENSON, SP Technical Research Institute, Sweden	PT S13-3 **Tethered liquid surfaces as high performance anti-fouling coatings** Deniz DOGAN, University of Paderborn, Germany
PT S11-10 **Synthesis of α,α-disubstituted amino acid isocyanide derivatives and antifouling activity: structure–activity relationship studies** Shuhei TAKASHIMA, Tokyo University of Agriculture and Technology, Japan	PT S13-4 **Development of novel test platform for textured antifouling surfaces** Alan BARRETT, Dublin City University, Ireland
PT S11-11 **Seaweed mediated synthesis of Ag/Ti, Ag/Zn and Ti/Zn nanoparticles: potent antifouling property** Vijayan Sri RAMKUMAR, Bharathidasan University, India	PT S13-5 **Liquid adhesion test bench with reclining ramp** Valentin GATE, SILSEF, France
PT S11-12 **Tropical microalgae isolated on Reunion island (France, Indian Ocean) as sources of antifouling molecules: the BIOPAINTROP project** Jean-François BRIAND, MAPIEM, FRANCE	PT S13-6 **Phase separation mechanisms in polydimethylsiloxane copolymer containing UV-curable polyurethane coatings** Simon RUTHMANN, University of Paderborn, Germany
PT S12-1 **Synthesis and antifouling properties of non-metal acrylic boron polymers for marine antifouling application** Yakun LI, Harbin Engineering University, China	PT S13-7 **The use of the sea anemone *Aiptasiomorpha minuta* as a possible agent to control biofouling on oysters during culture** Cyril Glenn Perez SATUITO, Nagasaki University, Japan