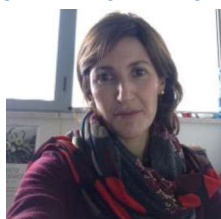


PERSONAL INFORMATION


Carla Lucia FARACI

Location: [REDACTED]

Phone: [REDACTED]

Email: [REDACTED]

Skype: [REDACTED]

ORCID: [REDACTED]

Sex: [REDACTED] Date of birth: [REDACTED] Nationality: [REDACTED]

WORK EXPERIENCE

- | | |
|--------------|--|
| 2022 - Today | Full Professor of Hydraulics at the Department of Engineering of the University of Messina
University of Messina. Department of Engineering C.da di Dio, S. Agata, 98166 Messina, Italy <ul style="list-style-type: none"> Research (she authored more than 100 publications on international and national peer reviewed journals, proceedings of international and national conferences and in books), Higher education (she teaches: "Hydraulics" to Bachelor students in Civil Engineering and "Coastal Engineering" to Master students in Civil Engineering". |
| 2018 | Visiting researcher
Danish Hydraulic Institute (Horsholm, Denmark) <ul style="list-style-type: none"> Research activities related to the interaction of waves and currents over rough beds |
| 2018 - Today | Coordinator of Master Degree Course in Civil Engineering
University of Messina. Department of Engineering C.da di Dio, S. Agata, 98166 Messina , Italy <ul style="list-style-type: none"> She promotes higher education activities, by integrating them to obtain a mutual motivation and qualification. |
| 2018-Today | Member of the Technical and Scientific Committee of River Basin Catchments Authority of Sicilian hydrographic district
Presidenza della Regione Sicilia Palermo, Italy <ul style="list-style-type: none"> Consultancy activity in the field of hydraulics |
| 2016-Today | External Member of the Technical and Administrative Committee of Provveditorato Interregionale per le Opere Pubbliche Sicilia – Calabria
Infrastructure and Mobility Ministry, Italy <ul style="list-style-type: none"> Consultancy activity in the field of hydraulics and maritime engineering |
| 2014-2022 | Associate Professor of Hydraulics
University of Messina. Department of Engineering C.da di Dio, S. Agata, 98166 Messina, Italy <ul style="list-style-type: none"> Research and teaching activities in the field of hydraulics. |
| 2013-Today | Member of PhD Teaching Board of the PhD course in Civil, Environmental and Security Engineering
Consortium of the Universities of Messina and Reggio Calabria , Italy |
| 2009 - Today | Scientific manager of Hydraulic Laboratory
University of Messina. Department of Engineering C.da di Dio, S. Agata, 98166 Messina , Italy |

- She leads physical modelling activities in the field of theoretical and applied hydro-morphodynamics.

2002-2014 Assistant Professor of Hydraulics

University of Messina. Department of Engineering C.da di Dio, S. Agata, 98166 Messina , Italy

- Research and teaching activities in the field of hydraulics

2000 Visiting researcher

Hydrodynamic and Water Resources Department, Danish Technical University (Lyngby, Denmark)

- Research activities on wave current interaction over rippled beds

2000 Visiting researcher

University of Genova, Italy

- Numerical modelling of hydrodynamic processes

EDUCATION AND TRAINING

1998-2001 PhD in Hydraulic Engineering

Consortium between the Universities of Catania, Reggio Calabria, Cosenza and Palermo (Italy)

- PhD thesis: Geometry, migration and evolution of sea ripples

1992-1998 Master Degree

University of Catania (Italy)

- MSc in Civil Engineering, Hydraulic section (Mark 110/110 cum laude), Thesis: Tecniche sperimentali per lo studio delle strutture vorticosse generate dalla presenza di, un cilindro verticale investito da onde (in Italian)

PERSONAL SKILLS

Mother tongue Italian

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C1	C1	C1	C1

Communication skills ▪ Good communicative skills acquired during the experience of researcher and professor.

Organisational / managerial skills ▪ Good organizational and managerial skills acquired during the several research projects that she has been responsible for scientific or research units, and as part of his activities as Coordinator of the Master Degree Course in Civil Engineering.

Job-related skills ▪ Excellent knowledge of problems related to hydraulic and maritime structures.

Digital competence SELF-ASSESSMENT

Information processing	Communication	Content creation	Safety	Problem solving
Independent user	Independent user	Independent user	Independent user	Independent user

- Competent with most Microsoft Office programmes
- Experience with hydraulic and maritime modeling software
- Good experience with digital image processing software

Driving licence B

ADDITIONAL INFORMATION

Research project responsibility

- She was Principal Investigator of the project “WINGS - Waves plus currents INteracting at a right anGLE over rough bedS” within the European project “Transnational Access to Major Research Infrastructure”, Access to Experimental Facility in DHI- Horsholm, Denmark (2018-2020).
- She was responsible for the research units of the University of Messina under the following projects funded by the European Union:
 - Italy-Israel MAECI: EPAF “Earthquake Potential of Active Faults using offshore Geological and Morphological Indicators” (2018-2020).
 - HYBRID “Hydrodynamics of breaking waves over a rigidized bar” within the European project “Transnational Access to Major Research Infrastructure” Access to Experimental Facility in Barcelona, Spain (2017-2019).
- She took part to the following research projects:
 - PON R&I TETI “TEcnologie innovative per il controllo, il monitoraggio e la sicurezza in mare” (2021-2023)
 - “Software Defined Cities: Knowledge sharing and services provisioning” Research and Mobility, University of Messina (2016-2017).
 - PRIN2012: “Modellazione di processi idromorfodinamici costieri per applicazioni ingegneristiche” (2014-2017).
 - POR-FESR 2007-2013: “RESET Rete di Laboratori per la Sicurezza, sostenibilità ed Efficienza dei Trasporti della regione Siciliana” (2012-2015)
 - PRIN 2008: “Strumenti operativi per la stima della vulnerabilità dei litorali sabbiosi anche in presenza di strutture costiere” (Operational tools for estimating the vulnerability of sandy coasts even in the presence of coastal structures) (2010-2013)
 - PRA 2008: “Metodi probabilistici per il dimensionamento di opere per la mitigazione del rischio da colate” (2009-2009).
 - PRA 2006: “Modellazione numerica e sperimentale dell’interazione tra onde e correnti in ambienti costieri” (2006-2007).
 - PRA 2005: “Modellazione teorico-sperimentale del campo di moto indotto da onde e correnti su un fondo ondulato” (2005)
 - PRA 2004: “Analisi probabilistica dell’attrito al fondo di onde di mare” (2004)
 - EC FPIV: “SEDMOC - SEDiment transport MOdelling in marine Coastal environments” Framework IV Project n. MAS-3-CT97-0015 (2003-2005).
 - PRA 2003: “Caratterizzazione della scabrezza di fondali marini in presenza di forme di fondo” (2003).
 - POR: “Laboratorio Integrato per l’Innovazione (LIPIN)”. POR (Programma Operativo Regionale)2000-2006, Misura 3.15 - Sottosazione C: Potenziamento delle Infrastrutture e dei Laboratori esistenti (2003-2006)
 - CNR-GNDCI: “Valutazione e riduzione del rischio costiero” (2003)
 - CNR-GNDCI: “Previsione e prevenzione dei rischi causati dal moto ondoso sulle coste” (2002)
 - PRIN 2000: “Analisi, validazione e applicazione di modelli per lo studio del comportamento dinamico di macroforme di fondo soggette a correnti” (Modeling of coastal hydromorodynamic processes for engineering applications) (2000)

She has been also the Principal Investigator of the following applied research projects:

- Prefect of Messina Province (Italy)

Year: 2008

Scientific responsible for the Department of Engineering of the University of Messina for the study "Studio Idraulico Marittimo". (Maritime hydraulic study) within the Convention "Progetto preliminare – Studi specialistici - Lavori di costruzione della piattaforma logistica intermodale di Tremestieri con annesso scalo portuale"

- SIGMA INGEGNERIA S.R.L. Palermo (Italy)

Year: 2010

Scientific Responsible for the Department of Engineering of the University of Messina for the study "Nolo di apparecchiature e strumentazioni del laboratorio di Idraulica e Costruzioni Idrauliche del Dipartimento di Ingegneria Civile dell'Università degli Studi di Messina". (Rental of equipment and instruments from the Hydraulics and Construction laboratory Hydraulics of the Department of Civil Engineering of the University of Messina)

- PROVVEDITORATO INTERREGIONALE SICILIA-CALABRIA UFFICIO 4 OPERE MARITTIME PER LA SICILIA. Palermo (Italy)

Year: 2011

Scientific Responsible for the Department of Engineering of the University of Messina for the study "Studio diacronico di un tratto di mare prospiciente il Comune di Terme Vigliatore (ME)". (Diachronic study of a stretch of sea overlooking the Municipality of Terme Vigliatore (ME))

- PROVVEDITORATO INTERREGIONALE SICILIA-CALABRIA UFFICIO 4 OPERE MARITTIME PER LA SICILIA. Palermo (Italy)

Year: 2011

Scientific Responsible for the Department of Engineering of the University of Messina for the study "Studio diacronico di un tratto di mare prospiciente il Comune di Tusa (ME)". (Diachronic study of a stretch of sea overlooking the Municipality of Tusa (ME))

- COMMISSARIO STRAORDINARIO PER L'ATTUAZIONE DEGLI INTERVENTI PER LA MITIGAZIONE DEL RISCHIO IDROGEOLOGICO NELLA REGIONE SICILIANA PREVISTI NELL'ACCORDO DI PROGRAMMA SIGLATO IL 30.03.2010. Palermo (Italy)

Year: 2011

Scientific Responsible for the Department of Engineering of the University of Messina for the study "Analisi diacronica e delle tendenze evolutive del litorale del Comune di Pachino (SR) compreso tra la punta Castellazzo e Punta delle Formiche". (Diachronic analysis and evolutionary trends of the coast of the Municipality of Pachino (SR) between Punta Castellazzo and Punta delle Formiche)

- COMMISSARIO STRAORDINARIO PER LO STATO DI EMERGENZA DETERMINATOSI A CAUSA DELLA CRITICITA' DEL SISTEMA PORTUALE E DELL'APPROVVIGIONAMENTO IDRICO NEL TERRITORIO DELL'ISOLA DI PANTELLERIA. Pantelleria (TP) (Italy)

Year: 2011

Scientific Responsible for the Department of Engineering of the University of Messina for the study "Studio dell'agitazione ondosa a largo del porto di Pantelleria". ("Study of the wave agitation off the port of Pantelleria")

- EUROLINK S.C.P.A (Italy)

Year: 2014

Scientific Responsible for the Department of Engineering of the University of Messina for the study "Prove di laboratorio consistenti in modellazione fisica di una barriera soffolta realizzata mediante sacchi in geotessuto riempiti di sabbia, finalizzate alla valutazione degli effetti della presenza della barriera sull'idrodinamica dei litorali costieri in prossimità dell'Opera nonché della sua stabilità all'azione del moto ondoso"(Italy).

- ACQUE BUFARDO E TORREROSSA S.R.L.

Year: 2014

Scientific Responsible for the Department of Engineering of the University of Messina for the study "Studio di fattibilità di impianti microidroelettrici in località Fiumefreddo (CT)" (Feasibility of micro-hydro plants in Fiumefreddo (CT)).

Consultancy activities

She was technical consultant in the following projects:

- ✓ UNIVERSITA' DEGLI STUDI DI CATANIA DIPARTIMENTO DI INGEGNERIA CIVILE E AMBIENTALE (Italy)

Year: 2002

Research collaboration contract funded by CNR-GNDCI entitled: "Previsione e prevenzione dei rischi causati dal moto ondoso sulle coste", encharged to carry out experiments on run-up estimate over steep structures.

- ✓ PROVINCIA REGIONALE DI TRAPANI, Regione Siciliana (Italy).
Year: 2004
Consultancy activities for the “ *Studi preliminari per il progetto definitivo delle opere di riqualifica del litorale di Marsala, dal porto a Torre Tunna*” (Preliminary studies for the final design of the coastal redevelopment works of Marsala, from the port to Torre Tunna).
- ✓ AMRA (Centro Regionale di Competenza Analisi e Monitoraggio del Rischio Ambientale), Salerno (Italy)
Year: 2007
Consultancy Services aimed at the redaction of the Maritime Hydraulic Study relating to the coast of Salerno that extends from the port to Punta del Pagliarolo.
- ✓ COMUNE DI RIPOSTO, Italy.
Year: 2009
Consultancy activities for the assessment of structural changes for the safety of the piers of the first basin of the touristic port within the project “*Lavori per la Realizzazione del primo bacino del porto turistico*”.
- ✓ TRIBUNALE DI MESSINA- Sezione distaccata di Taormina procedimento N. 1111-1/2008 R. G.
Year: 2010
Consultancy activities concerning the system of conveyance of surface runoff water in the municipality of Taormina.
- ✓ TRIBUNALE DI MESSINA- Sezione distaccata di Taormina procedimento N. 889/2009 R. G.
Year: 2010
Consultancy activities concerning the system of conveyance of surface runoff water in the municipality of Santa Teresa di Riva.
- ✓ SOCIETÀ ITALIANA PER LE CONDOTTE D'ACQUA(Italy)
Year: 2011
Consultancy activities for the “Comparative evaluation of the reflection induced by different design solutionsproposals for the adaptation of a section of the quay of the commercial port of Augusta for mooring mega-container ships and equipping with gantry cranes ”
- ✓ DIPARTIMENTO DI INGEGNERIA CIVILE E AMBIENTALE DELL'UNIVERSITA' DEGLI STUDI DI CATANIA
Years: 2012
Consultancy concerning “Analysis of the dynamics of the coasts of the province of Messina for the purpose of identifying sites subject to nourishment”, within the convention “*Studi propedeutici relativi alla possibilità di impiego dei materiali di scavo per il ripascimento delle coste e analisi rischio idraulico dei bacini interessati dalle opere previste nel Progetto Definitivo del Collegamento Stabile dello Stretto di Messina sul versante Sicilia*”.
- ✓ PROCURA DELLA REPUBBLICA DI REGGIO CALABRIA, Reggio Calabria (Italy)
Year: 2016
Consultancy for the identification of the interventions to combat coastal erosion in locality Punta Pezzo - Villa San Giovanni.
- ✓ NET scarl - Ente gestore del Polo di Innovazione Regionale per Energie Rinnovabili, Efficienza energetica e Tecnologie per la gestione sostenibile delle risorse ambientali (Italy)
Year: 2016
Scientific expert for testing of the GREEN PORTS Project - Strategic Agenda of the Calabria Region .
- ✓ PROCURA DELLA REPUBBLICA DI MESSINA, Messina(Sicily)
Year: 2017
Consultancy activity concerning the assessment of the state of degradation of some city streams .
- ✓ PROCURA DELLA REPUBBLICA DI REGGIO CALABRIA, Reggio Calabria (Italy)
Year: 2018
Consultancy for the identification of the disservices of some sections of the water supply network of the municipality of Reggio Calabria.
- ✓ AUTORITA' DI SISTEMA PORTUALE DELLO STRETTO, Messina (Italy)
Year: 2019
Component of the Commission for the selection of the contractor for the project “*Commissione di valutazione per la comparazione delle istanze in concorrenza delle società Me.Comb-Mericdionale Combustibili s.r.l. e Med Fuel s.r.l. finalizzate al rilascio della concessione*”

demaniale marittima di un'area, della superficie complessiva di mq. 743,20 ubicata in località Porto nel Comune di Milazzo, in catasto al foglio n. 27, porzione delle particelle n. 246, 248 e 251, per esercitare un'attività di distribuzione di carburante"

✓ ECC s.p.a. (Italy)

Years: 2020

Consultant aimed at "Verifica di stabilità della diga foranea del porto di Augusta, a seguito di lavori di rifiorimento e ripristino statico delle testate e delle zone limitrofe alla bocca centrale" (Verification of stability of the breakwater of the port of Augusta, a continuation of reflowering and static restoration works of the heads and of the areas adjacent to the central mouth).

✓ UNIVERSITA' DEGLI STUDI DI MESSINA, Messina (Italy)

Year: 2020

"Supporto al RUP nell'ambito dei lavori di recupero e ripristino strutturale e funzionale di un'area protetta percorsa dal fuoco mediante interventi di ingegneria naturalistica in località Annunziata" (Support to the RUP as part of the structural and functional recovery and restoration work of a protected area crossed by fire through interventions of naturalistic engineering in the locality of Annunziata)

Research activity

She published over 100 papers in international peer reviewed journals and in international or national conferences. The main topics are:

- Coastal hydro-morphodynamics;
- Wave-current interaction in the presence of rough beds;
- Wave energy and Wave Energy Converter;
- Experimental analysis of the evolution of sand bottoms with computer vision techniques;
- Estimate of bed shear stresses with unconventional techniques (e.g. bioluminescence; ferrofluids);
- Mass transport over steep bottoms or over rippled beds;
- Erosion risk associated to extreme events;
- Reflection and transmission of waves due to wave-structure interaction;
- Littoral currents effects on the formation of sedimentary structures in the late quaternary;
- Acceleration skewed flows;
- Design and performances of floating bodies for wave estimate.

Referee and editorial activity

- She has served as a referee for several international journal (Physics of Fluids, Water International, Journal of Geophysical Research, European Journal of Mechanics/B, Experiments in Fluids, Coastal Engineering, Journal of Waterways Port, Coastal and Ocean Engineering, Environmental Fluid Mechanics, Journal of Marine Science and Engineering, Ocean Engineering, Renewable Energy, etc.);
- She has served as a referee of several Research Projects of National Relevance for the Italian Ministry of Education, University and Research.
- She has served as a guest editor of several special issues, such as "Mathematical Modeling of Fluid and Structure Interaction in Ocean Engineering" for Mathematical Problems in Engineering, 2015; "Wave-Current Interaction in Coastal Areas" for Journal of Marine Science and Engineering, 2020; "Wave-driven processes in the coastal zones" for Water, 2021-22.

Master and PhD thesis

- She has been advisor or co-advisor of about 50 MSc students, who received also important international awards, and of 8 PhD students.

ANNEXES

- List of scientific publications in peer reviewed journals

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali".



ANNEXES - List of scientific publications

Journals (Peer reviewed)

- J.1 C. FARACI, E. FOTI, S. BAGLIO (2000). Measurement of sandy bed scour processes in an oscillating flow by using structured light. *Measurement*, 28 (3), 159–174, Elsevier Science Ed., Amsterdam, The Netherlands. DOI: 10.1016/S0263-2241(00)00009-9.
- J.2 S. BAGLIO, C. FARACI, E. FOTI, R.E. MUSUMECI (2001). Measurements of the 3D Scour Process Around a Pile in an Oscillating Flow Through a Stereo Vision Approach. *Measurement*, 30 (2), 145–160, Elsevier Science Ed., Amsterdam, The Netherlands. DOI: 10.1016/S0263-2241(00)00064-6.
- J.3 C. FARACI, E. FOTI (2001). Evolution of Small Scale Regular Patterns Generated by Waves Propagating Over a Sandy Bottom. *Physics of Fluids*, 13 (6), 1624–1634, American Institute of Physics Ed., USA. DOI: <http://dx.doi.org/10.1063/1.1367871>.
- J.4 C. FARACI, E. FOTI (2002). Geometry, migration and evolution of small scale bedforms generated by regular and irregular waves. *Coastal Engineering*, 47 (1), 35–52, Elsevier Science Ed., Amsterdam, The Netherlands. DOI: 10.1016/S0378-3839(02)0009
- J.5 K.H. ANDERSEN, C. FARACI (2003). The wave plus current flow over vortex ripples at an arbitrary angle. *Coastal Engineering*, 47 (4), 35–52, Elsevier Science Ed., Amsterdam, The Netherlands. DOI: 10.1016/S0378-3839(02)00158-8.
- J.6 C. FARACI, E. FOTI, R.E. MUSUMECI (2008). Waves plus currents crossing at a right angle: the rippled bed case. *Journal of Geophysical Research: Oceans*, 113 (C7), C07018, 1–26, American Geophysical Union Ed., Washington, USA. DOI: 10.1029/2007JC004468.
- J.7 E. FOTI, C. FARACI, R. FOTI, G. BONANNO (2010). On the use of bioluminescence for estimating shear stresses over a rippled seabed. *Meccanica*, 45 (6), 881–895, Springer Ed., Germany. DOI: 10.1007/s11012-010-9301-4.
- J.8 G. FARACI, S. GIBILISCO, A.R. PENNISI, C. FARACI (2011). Quantum size effects in Raman spectra of Si nanocrystals. *Journal of Applied Physics*, 109 (7), 074311, 1–4, American Institute of Physics, Ed., USA. DOI: 10.1063/1.3567908.
- J.9 G. FARACI, C. FARACI (2011). Raman theory of quantum wires. Evidence of ripples in Raman spectra of thin wall Si nanotubes. *European Physical Journal B*, 109 (7), 074311, 425–429, Springer Ed., Germany IF 1.347, DOI: 10.1140/epjb/e2011-20472-7.
- J.10 C. FARACI, E. FOTI, A. MARINI, P. SCANDURA (2012). Waves Plus Currents Crossing at a Right Angle: The Sandpit Case. *Journal of Waterway, Port, Coastal, and Ocean Engineering*, 138 (5), 339–361, American Society of Civil Engineers (ASCE) Ed., USA. DOI: [http://dx.doi.org/10.1061/\(ASCE\)WW.1943-5460.0000140](http://dx.doi.org/10.1061/(ASCE)WW.1943-5460.0000140).
- J.11 P. SCANDURA, E. FOTI, C. FARACI (2012). Mass transport under standing waves over a sloping beach. *Journal of Fluid Mechanics*, 701 (5), 460–472, Cambridge University Press, UK. DOI: [http://dx.doi.org/10.1061/\(ASCE\)WW.1943-5460.0000140](http://dx.doi.org/10.1061/(ASCE)WW.1943-5460.0000140).
- J.12 Y. LIU, C. FARACI (2014). Analysis of orthogonal wave reflection by a caisson with open front chamber filled with sloping rubble mound. *Coastal Engineering* 91, 151–163, Elsevier Science Ed., Amsterdam, The Netherlands. DOI: 10.1016/j.coastaleng.2014.05.002.
- J.13 C. FARACI, P. SCANDURA, E. FOTI (2014). Bottom profile evolution of a perched nourished beach. *Journal of Waterway, Port, Coastal, and Ocean Engineering* 140 (5), American Society of Civil Engineers (ASCE) Ed., USA. DOI: [http://dx.doi.org/10.1061/\(ASCE\)WW.1943-5460.0000253](http://dx.doi.org/10.1061/(ASCE)WW.1943-5460.0000253).
- J.14 C. FARACI, P. SCANDURA, E. FOTI (2015). Reflection of sea waves by combined caissons. *Journal of Waterway, Port, Coastal, and Ocean Engineering* 141 (2), American Society of Civil Engineers (ASCE) Ed., USA.
- J.15 P. SCANDURA, C. FARACI, E. FOTI (2016). A numerical investigation of acceleration skewed oscillatory flows. *Journal of Fluid Mechanics* 808, Cambridge University Press Ed., UK, DOI: 10.1017/jfm.2016.641.
- J.16 C. FARACI (2018). Experimental Investigation of the Hydro-Morphodynamic Performances of a Geocontainer Submerged Reef *Journal of Waterway, Port, Coastal, and Ocean Engineering* 144 (2), American Society of Civil Engineers (ASCE) Ed., USA. DOI: 10.1061/(ASCE)WW.1943-5460.0000434
- J.17 C. FARACI, P. SCANDURA, R.E. MUSUMECI, E. FOTI (2018). Waves plus currents crossing at a right angle: near-bed velocity statistics. *Journal of Hydraulic Research*, 56 (4), Taylor and Francis Ed., London. DOI: <http://dx.doi.org/10.1080/00221686.2017.1397557>.
- J.18 F. PEPE, V. DI DONATO, D. INSINGA, F. MOLISSO, C. FARACI, M. SACCHI, R. DERA, L. FERRANTI, S. PASSARO (2018). Seismic stratigraphy of upper Quaternary shallow-water contourite drifts in the Gulf of Taranto (Ionian Sea, southern Italy). *Marine Geology*, 397, Elsevier Science Ed., Amsterdam, The Netherlands. DOI: <https://doi.org/10.1016/j.margeo.2017.12.004>,
- J.19 C. PETROTTA, C. FARACI, P. SCANDURA, E. FOTI (2018). Experimental investigation on sea ripple evolution over sloping beaches. *Ocean Dynamics* 68 (9), Springer Ed., Germany. DOI: <https://doi.org/10.1007/s10236-018-1197-x>.
- J.20 C. FARACI, P. SCANDURA, C. PETROTTA, E. FOTI (2019). Wave-Induced Oscillatory Flow Over a Sloping Rippled Bed. *Water* 11 (1618), MDPI Ed., Switzerland. DOI: 10.3390/w11081618.
- J.21 A. RUGGERI, R.E. MUSUMECI, C. FARACI (2020). Wave-current flow and vorticity close to a fixed rippled bed. *Journal of Marine Science and Engineering*, 8 (867), MDPI Ed., DOI: <http://dx.doi.org/10.3390/jmse8110867> Switzerland.
- J.22 P. SCANDURA, C. FARACI, P. BLONDEAUX (2020). Steady Streaming Induced by Asymmetric Oscillatory Flows over a Rippled Bed *Journal of Marine Science and Engineering*, 8 (142), MDPI Ed., Switzerland. DOI: 10.3390/jmse8020142.
- J.23 M. MARINO, C. FARACI, R.E. MUSUMECI (2020). Shoaling Waves Interacting with an Orthogonal Current *Journal of Marine Science and Engineering*, 8 (281), MDPI Ed., Switzerland. DOI: 10.3390/jmse8040281.
- J.24 L. CARLO, S. BRUSCA, F. CUCINOTTA, A. GALVAGNO, C. FARACI, F. ARENA (2020). Validation of a wave energy converter numerical model through small scale laboratory measurements *Italian Journal of Engineering Geology and Environment*, 1, Sapienza Università Ed., Roma. DOI: 10.4408/IJEGE.2020-01.S-04
- J.25 M. MARINO, C. FARACI, R.E. MUSUMECI (2020). An experimental setup for combined wave-current flow interacting at a right angle

- over a plane beach Italian Journal of Engineering Geology and Environment , 1, Sapienza Universita Ed., Roma. DOI: 10.4408/IJEGE.2020-01.S-11
- J.26 D. ALIZZIO, M. BONFANTI, N. DONATO, C. FARACI, G.M. GRASSO, F. LO SAVIO, R. MONTANINI, A. QUATTROCCHI (2021). Design and Performance Evaluation of a Fixed-Point Spar Buoy Equipped with a Piezoelectric Energy Harvesting Unit for Floating Near-Shore Applications. Sensors 21 (5), MDPI Ed., Switzerland. DOI: <http://dx.doi.org/10.3390/s21051912>.
- J.27 C. FARACI, R.E. MUSUMECI, M. MARINO, A. RUGGERI, L. CARLO, B. JENSEN, E. FOTI, G. BARBARO, B. ELSAßER (2021). Wave- and current-dominated combined orthogonal flows over fixed rough beds. Continental Shelf Research in press, Elsevier Science Ed., Amsterdam, The Netherlands. IF: 2.424. DOI: 10.1016/j.csr.2021.104403.
- J.28 IUPPA, C., CARLO, L., FOTI, E., FARACI, C. (2021) Calibration of CFD numerical model for the analysis of a combined caisson. Water (Switzerland), 13(20), 2862, DOI: <https://doi.org/10.3390/w13202862>
- J.29 RUGGERI, A., FARACI, C. (2022) Collinear Interaction of Waves and Current in the Presence of Ripple in the U-Tube. Water 2022, 14, 470. DOI: <https://doi.org/10.3390/w14030470>