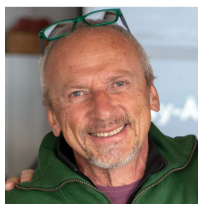


## PERSONAL INFORMATION

## LEONARDO LANGONE



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Sex Male | Date of birth 10/08/1959 | Nationality Italian

## POSITION APPLIED FOR

Member of Consiglio di Amministrazione at OGS

## PRESENT JOB

Director of Research at CNR  
Pro-tempore Director of the Institute of Polar Sciences of CNR (CNR-ISP)

TITLE OF QUALIFICATION  
AWARDED

Degree in Geology

## WORK EXPERIENCE

2019-present	Director of CNR-ISP, Mestre (Ve)
2010-present	Director of Research @ CNR-ISMAR, Bologna
2002-2009	Senior Researcher @ CNR-ISMAR, Bologna
2001-2002	Junior Researcher @ CNR-ISMAR, Bologna
1988-2001	Early career scientist @ CNR-IGM, Bologna

## EDUCATION AND TRAINING

1987	Qualification in the profession of Geologist
1986	CNR fellow @ CNR-IGM, Bologna
1984	Ms Degree in Geological Sciences (110/110, <i>cum laude</i> ), University of Bologna

## RESEARCH ACTIVITY

## Research sectors

He is interested at estimating the rate of the aquatic processes involving sedimentary particles by using radioactive tracers and automatic sediment traps. Particle dynamics is then applied to different research sectors linked to the effects of the climate change and human impact on marine and polar environments, such as:

- ✓ Biogeochemical cycles of carbon and biogenic silica in Southern Ocean, Fram Strait and Mediterranean Sea to check if the efficiency of the biological pump is decreasing;
- ✓ Nature, source and fate of sedimentary organic carbon on continental margins using elemental composition, stable isotopes and biomarkers;
- ✓ Late Quaternary paleoenvironmental reconstructions using biogenic components, major and minor elements, stable isotopes and radionuclides for the study of the natural or human-induced climate variability;
- ✓ Estimates of atmospheric CO<sub>2</sub> growth-rate by direct measurements in remote oceanic and polar regions to validate satellite observations;
- ✓ Role of cascading events of dense shelf waters in transferring particles, organic matter and nutrients toward the deep sea benthic ecosystems, and how it is

changing due to lesser dense water production and higher water column stratification;

- ✓ Geochronology of modern sediments via short-lived radionuclides for stratigraphic studies, mass balances, or pollution reconstruction in marine and lacustrine environments.

#### Scientific projects

- ✓ Participation with different role (PI, WP leader, action leader) to EU- or national projects in the Mediterranean (Euromarge-AS, MAST-II, Paliclas, Costa, EuroDELTA, Eurostrataform, Hermes, Sesame, Hermione, Perseus, Coconet come WP leader, Vector, MSFD, Ritmare), Antarctica (RossMize, Bioseso I e II, Baie, Ozono, Bottom water I & II, Rome, Holoferne, BedRose, Odyssea, Edistho, Beyond Epica) and Arctic (Hermione, Defrost, ARCA, Snow, Prepared, Burster, ARICE, Interact II and III);
- ✓ P.I. of projects funded by ONR (US-NAVY) and industry (Impresub Company, Projects Geotechnical Survey for Gendalo and Maha in Makassar Strait, Indonesia and Geotechnical Survey offshore Nile delta, Egypt, 2005-2007, 2011);
- ✓ Scientist in Charge of the project EC-PEOPLE SOMFlood (FP7-PEOPLE-2007, 2008-2011).

#### EDUCATIONAL ACTIVITY

2019-present

- ✓ Tutor of 6 PhD and 18 Ms thesis in Geological Sciences, Environmental Sciences, Biological Sciences and Natural Sciences at the Universities of Bologna, Ravenna, Rome, Siena;
- ✓ Component of the Teaching Board of PhD programme in Polar Sciences of the Ca' Foscari University of Venice, in partnership with the National Research Council - CNR (PhD Programme in cooperation with Research Institutions) and with the University of Milano-Bicocca;

2015-2019

- ✓ Component of the Teaching Board of PhD programme in "Environmental, geological and polar sciences and technologies" of the University of Siena

#### ACTIVITY IN MARINE AND POLAR AREAS

- ✓ Experience >25 years of oceanographic campaigns with about 90 participations (18 as Chief Scientist) in the Mediterranean, Atlantic, Southern Ocean and Arctic ocean;
- ✓ Scientific coordinator of marine activities during 2 Italian expeditions in Antarctica.

#### ORGANISATIONAL / MANAGERIAL SKILLS

2019-present

Director of Institute of Polar Sciences (CNR-ISP)

2019-present

CNR Representative in the Operational Technical Directorate (DTO) for the logistical management of the I/B "Laura Bassi" in a OGS-CNR-ENEA joint-effort

2018-present

CNR Member of the PNRA Working Group for Large Field Facilities (GIC)

2018-present

Member of the technical-scientific group for the implementation of the agreement between CNR-ENI\_Arctic (Research Center "Aldo Pontremoli", Lecce)

2017-present

Member of the Oceanographic Infrastructure Committee of CNR-USPO

2015-2019

Alternate Delegate of Italy in SCOR \_Scientific Committee on Oceanic Research

2015-2017

Coordinator of the CNR-ISMAR Working Group for the study of Human Impacts

2012-present

Responsible of 3 oceanographic moorings in the South-Western Adriatic margin

2014-present

Member of the CNR Working Group for the Arctic

2014-2016

Member of the President Committee of the AIOL (Associazione Italiana Oceanologia e Limnologia (AIOL))

2013-2017

Elected member of the CNR-ISMAR Scientific Committee

2009-2019

Manager of the CNR-ISMAR Laboratory of the Organic Matter Characterization

2007-2010

CNR-ISMAR Representative in CoNaGeM (COordinamento NAzionale per la GEofisica Marina)

- 2006-2009 Member of the President Committee of the AIOL (Associazione Italiana Oceanologia e Limnologia (AIOL))
- 2003-2010 Coordinator of the ISMAR-BO working group for the management of laboratories and large scientific infrastructures
- 2002-2009 Elected member of the CNR-ISMAR Scientific Committee

## PERSONAL SKILLS

Mother tongue(s) Italian  
English Understanding: B2; Speaking: B2; Writing: C1

## SCIENTIFIC PRODUCTION

### Bibliometrics

He is author or co-author of:

- ✓ ca. 100 scientific papers published on ISI journals with Impact Factor
- ✓ ca. 60 scientific papers published on no-ISI journals
- ✓ 7 chapters of book
- ✓ ca. 30 technical reports and cruise reports

Citation number amounts to about 2500, with a Hirsch factor (h-factor) of 27 (font Scopus).

### Editorial activity

- ✓ Associate Editor di *Advances in Oceanography and Limnology*
- ✓ Referee of journals *Marine Geology*, *Scientific Report*, *Continental Shelf Research*, *Science of the Total Environment*, *Polar Research*, *Progress in Oceanography*, *Paleoceanography*, *Env. Pollution*, *J. Arid Environments*, *Chemistry and Ecology*, *AIOL*, *Biogeosciences*...

### Papers (last 10 years)

- Aliani, S., Sciascia, R., Conese, I., D'Angelo, A., Del Bianco, F., Giglio, F., Langone, L., Miserocchi, S., 2016. Characterization of seawater properties and ocean heat content in Kongsfjorden, Svalbard Archipelago *Rendiconti Lincei*, 27, 155-162
- Barsanti M, Delbono I, Schirone A, Langone L, Miserocchi S, Salvi S, Delfanti R, 2011. Sediment reworking rates in deep sediments of the Mediterranean Sea, *The Science of the Total Environment* 409, 2959-2970.
- Bensi, M.; Kovačević, V.; Langone, L.; Aliani, S.; Ursella, L.; Goszczko, I.; Soltwedel, T.; Skogseth, R.; Nilsen, F.; Deponte, D.; Mansutti, P.; Laterza, R.; Rebesco, M.; Rui, L.; Lucchi, R.G.; Wählin, A.; Viola, A.; Beszczynska-Möller, A.; Rubino, A., 2019. Deep Flow Variability Offshore South-West Svalbard (Fram Strait). *Water* 11, 683.
- Bergami, C., Capotondi, L., Langone, L., Giglio, F., Ravaoli, M., 2009. Distribution of living planktonic foraminifera in the Ross Sea and the Pacific sector of the Southern Ocean (Antarctica). *Marine Micropaleontology*, 73 (1-2), 37-48.
- Cantoni, C.; Luchetta, A.; Chiggiato, J.; Cozzi S.; Schroeder K.; Langone L., 2016. Dense water flow and carbonate system in the southern Adriatic: a focus on the 2012 event. *Marine Geology* 375, 15-27, special issue "Cascading in the Adriatic", <http://dx.doi.org/10.1016/j.margeo.2015.08.013>.
- Capotondi, L., Bergami, C., Giglio, F., Langone, L., Ravaoli, M., 2018. Benthic foraminifera distribution in the Ross Sea (Antarctica) and its relationship to oceanography. *Bollettino della Società Paleontologica Italiana*, 57 (3), 187-202.
- Cappelletti, D., Azzolini, R., Langone, L., Ventura, S., Viola, A., Aliani, S., Vitale, V., Brugnoli, E., 2016. Environmental changes in the Arctic: an Italian perspective. *Rendiconti Lincei*, 27, S1-S6.
- Carniel, S., Trincardi, F., Benetazzo, A., Bergamasco, A., Boldrin, A., Falcieri, F.M., Langone, L., Sclavo, M., Bonaldo, D., 2016. Off-shelf Fluxes Across the Southern Adriatic Margin: Factors Controlling Dense Water-driven Transport Phenomena. *Marine Geology* 375, 44-63, special issue "Cascading in the Adriatic", <http://dx.doi.org/10.1006/j.margeo.2015.08.016>.
- Catalano G., Budillon G., La Ferla R., Povero P., Ravaoli M., Saggiorno V., Accomero A., Azzaro M., Carrada G.C., Giglio F., Langone L., Mangoni O., Misic C., Modigh M., 2010. Carbon and nutrient fluxes in continental margins. A global synthesis. In: *The Ross Sea*. Springer ed. pp. 303 - 318. Kon-Kee Liu, Larry Atkinson, Renato Quinones, Liana Talaue-Mcmanus (eds.). Berlin: Springer-Verlag, Berlin Heidelberg, 303-318.
- Catalano G., M. Azzaro, M. Bastianini, L. G. Bellucci, F. Bernardi Aubry, F. Bianchi, M. Burca, C. Cantoni, G. Caruso, R. Casotti, S. Cozzi, P. Del Negro, S. Fonda Umani, M. Giani, S. Giuliani, V. Kovacevic, R. La Ferla, L. Langone, A. Luchetta, L. S. Monticelli, S. Piacentino, A. Pignetti, M. Ravaoli, G. Socal, F. Spagnoli and L. Ursella, 2014. The Carbon budget in the northern Adriatic Sea, a winter case study. *Journal of Geophysical Research: Biogeosciences* (Impact Factor: 3.02).

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- Chiarini F., Capotondi L., Dunbar R.B., Giglio F., Mammì I., Mucciarone D.A., Ravaioli M., Tesi T., Langone L., 2013. A revised sediment trap splitting procedure for samples collected in the Antarctic sea. *Methods in Oceanography* 8,13–22
- Chiggiato, J., Bergamasco, A., Borghini, M., Falcieri, F.M., Falco, P., Langone, L., Miserocchi, S., Russo, A., Schroeder, K., 2016. Dense-water bottom currents in the Southern Adriatic Sea in spring 2012. *Marine Geology* 375, 134-145, special issue "Cascading in the Adriatic", <http://dx.doi.org/10.1016/j.margeo.2015.09.005>.
- Combi, T., Miserocchi, S., Langone, L., Guerra, R., 2016. Polychlorinated biphenyls (PCBs) in sediments from the western Adriatic Sea: Sources, historical trends and inventories. *Science of the Total Environment* 562, 580-587.
- Combi, T., Pintado-Herrera, M.G., Lara-Martín, P.A., Lopes-Rocha, M., Miserocchi, S., Langone, L., Guerra, R., 2020. Historical sedimentary deposition and flux of PAHs, PCBs and DDTs in sediment cores from the western Adriatic Sea. *Chemosphere*, 241, art. no. 125029.
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- Conese, I., Fanelli, E., Miserocchi, S., Langone, L., 2019. Food web structure and trophodynamics of deep-sea plankton from the Bari Canyon and adjacent slope (Southern Adriatic, central Mediterranean Sea). *Progress in Oceanography*, 175, 92-104.
- Covelli S., L Langone, A Acquavita, R Piani, A Emili, 2012. Historical flux of mercury associated with mining and industrial sources in the Marano and Grado Lagoon (northern Adriatic Sea). *Estuarine, Coastal and Shelf Science* 113, 7-19.
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- Giuliani S., Capotondi L., Maffioli P., Langone L., Giglio F., Yam R., Frignani M., Ravaioli M., 2011. Paleoenvironmental changes in the Pacific sector of the Southern Ocean (Antarctica) during the past 2.6 Ma. *Global and Planetary Change* 77, 34-48.
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## Personal Data

I authorize the processing of my personal data pursuant to Legislative Decree 30 June 2003, n. 196 "Code regarding the protection of personal data".

Pursuant to Article 76 of Presidential Decree 28 December 2000, n. 445 and aware that anyone who makes false statements, issues false documents or uses them in the cases referred to in this text is punishable according to the Penal Code and special laws and incur, furthermore, in loss of benefits in accordance to Article 75 of the above mentioned Presidential Decree 445/2000).

