

**Pr. Ali Harzallah**  
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### **a. Professional Preparation**

- Maîtrise (BS+1year) Applied Mechanics, Faculty of Sciences of Tunis. 1984
- Diploma of Advanced Studies (MS) ocean-atmosphere dynamics, University Paris 6, France, 1985
- PhD geophysics, Laboratory of Dynamical Meteorology, University Paris 6, France, 1990
- Diploma of Habilitation to Supervise Research (PhD+7), Laboratory of Dynamical Meteorology, University Paris 6, France, 1997
- Postdoc, Laboratory of Dynamical Meteorology, Paris, France, 1990-1991

### **b. Appointments**

2015- Head of Laboratory of Marine Environment, INSTM, Tunisia

1997- Researcher INSTM, Tunis, modeling of ocean dynamics and interaction with the atmosphere

2005-2009 Professor, geophysical fluid dynamics, National Engineering School, Tunis

2003-2009 Professor, ocean waves, National Engineering School, Tunis

### **c. Publications**

(i)

Bejaoui B., Solidoro C., **Harzallah A.**, Chevalier C., Chappelle A., Zaaboub N., and Aleya L., 2017. 3D modeling of phytoplankton seasonal variation and nutrient budget in a southern Mediterranean Lagoon. *Marine Pollution Bulletin*. 114-2, 30. 962-976.

Sánchez-Arcilla, A., Mosso, C., Sierra, J.P., Mestres, M., **Harzallah, A.**, Senouci, M. and Raey, M.E., 2011. Climatic drivers of potential hazards in Mediterranean coasts. *Regional Environmental Change*, 11: 617-636.

Alioua M., **Harzallah A.**, 2008. Imbrication d'un modèle de circulation des eaux près des côtes tunisiennes dans un modèle de circulation de la mer Méditerranée [Nesting of a water circulation model along the Tunisia coasts in a Mediterranean Sea model]. *Bull Inst Nat Sci Tech Mer, Salammbô*, 35:169-176.

Agnew M.D., Hemming D., Goodess C.M.,...Harzallah A. and co-authors, 2013. Navarra and L. Tubiana (eds.), *Regional Assessment of Climate Change in the Mediterranean: Volume 3: Case Studies, Advances in Global Change Research* 52, DOI 10.1007/978-94-007-5769-1\_1, © Springer Science+Business Media Dordrecht 2013.

Gualdi S., Somot S., ....**Harzallah A.** and co-authors, 2013. Future Climate Projections, In: *Regional Assessment of Climate Change in the Mediterranean. Volume 1*. Eds. Navarra, A., and L. Tubiana, Springer, Dordrecht, The Netherlands, 53-118.

(ii)

Ruti P.M., Somot S., Giorgi F., Dubois C., Flaounas E., Obermann A., Dell'Aquila A., Pisacane G., **Harzallah A.**, Lombardi E, and co-authors, 2015. MED-CORDEX initiative for Mediterranean Climate studies. *Bull Amer Meteo Soc*, in press.

**Harzallah A.**, Jordà G., Dubois C. , Sannino G., Carillo A., Li L., Arsouze T., Cavicchia L., Beuvier J, Akhtar N., 2016. Long term evolution of heat budget in the Mediterranean Sea from Med-CORDEX forced and coupled simulations, *Climate Dynamics*, DOI 10.1007/s00382-016-3363-5.

**Harzallah A., 2009.** Flow variability in the Strait of Gibraltar: The Mediterranean adjustment to tidal forcing. *Deep-Sea Research I* 56, 459–470.

**Harzallah A.,** Alioua M., Li L., 2014. Mass exchange at the Strait of Gibraltar in response to tidal and lower frequency forcing as simulated by a Mediterranean Sea model. *Tellus A* 66: 23871, <http://dx.doi.org/10.3402/tellusa.v66.23871>.

Gualdi S., Somot S., Li L., ..., **Harzallah A.** and co-authors, 2013. The CIRCE Simulations: Regional Climate Change Projections with Realistic Representation of the Mediterranean Sea. *Bull Amer Meteo Soc* 94:65-81.

#### **d. Synergistic Activities**

- Member of the European initiatives 2010-2020 HyMeX and MedCORDEX (scientific committee of the 2014 and 2020 workshops).
- Host and organizer of 2015 workshop on numerical simulation of the Mediterranean Sea and ecosystems, Monastir and 2005 and 2007 workshops: numerical modeling of marine ecosystems, Tunis; Summer School on numerical modeling, Tunis 2019.
- INSTM lead partner of the European projects MATER 1998-2001, CIRCE 2007-2010
- 4-year projects funded by Tunisia research administration, 1997-2019.
- PI of a PEER-USAID project on marine energy, 2017-2019.
- From 2002: Member of JCOMM (*Joint Commission for Oceanography and Marine meteorology*) of IOC (*Intergovernmental Oceanographic Commission*) and WMO (World Meteorological Organization).
- Participation to the Tunisia national communication to the United Nations Agreement on the United Nations Framework Convention on Climate Change.
- Trainer in workshops co-organized by UCAR in Alanya 2010 and by USAID-NOAA in Istanbul, 2013.

#### **e. Collaborators & Other Affiliations**

##### **(i) Collaborators**

- Jordas Gabriel, IMEDEA, CSIC-UIB, University of Balearic Islands, Spain
- Li Laurent, Laboratory of Dynamical Meteorology, University Paris 6, France
- Moussa Mahmoud, LMHE laboratory, Tunis Engineering School, Tunis
- Somot samuel, National Center of Meteorological Research-GAME, Toulouse, France
- Thiaw Wassila, International Desk at the Climate Prediction Center (CPC) at NOAA
- Augustin Vintzileos, Heat events forecast, University of Maryland.

##### **(ii) Graduate and Postdoctoral Advisors**

Dr. Daniel Cadet, Laboratory of Dynamical Meteorology, CNRS, Ecole Polytechnique, Palaiseau, France; currently at a private company.

Pr. Robert Sadourny, Laboratory of Dynamical Meteorology, CNRS, Paris, France; currently retired.

##### **(iii) Thesis Advisor and Postgraduate Sponsor**

Bechir bejaoui, INSTM; Mohamed Alioua INSTM; Ouni Mawa, INSTM; Sana Chaouch, INSTM; Rihem Jabnoun, INSTM. 12 graduate students

#### **f. Research Impacts**

- Maps of marine and lagoon use provided to stakeholders (fisherman, fish farmers, ...)
- Use of the research findings in the national strategy plan concerning climate change impacts, vulnerability and mitigation.
- Use of the developed numerical models for limiting the impacts of industrial discharges into the marine environment of the Gulf of Gabès.