dr. CLAUDIO DI IACONI **– SHORT CV**

**Personal details**

First name: Claudio
Last name: Di Iaconi
Place/date of birth: Salerno (Italy)/August 20th, 1968
Nationality: Italian
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**Current position**

Permanent position as “environmental research scientist” at Water Research Institute (IRSA) of Italian National Research Council (CNR), Department of Bari.

**Scientific interest**

- Biofilm technologies;
- Aerobic granular biomass technologies;
- Novel processes for wastewater treatment;
- Integration of chemical and biological oxidation processes for industrial wastewater;
- Ozone processes;
- Biomass characterization;

**Languages**

Italian - mother tongue;
English - fluent;

**Education**

- 1993. M.S. in Industrial Chemistry, University "La Sapienza" of Rome, Italy (final grade: 110/110 cum laude).
- 1994. Research fellowship at Department of Chemistry, University "La Sapienza" of Rome, Italy.
- 1995. Research fellowship at Water Research Institute of Italian National Research Council (CNR), Department of Rome, Italy.
- 1998. Academic Visitor at Water Quality and Waste Management Institute of Technische Universitat Munchen within Cost Action 624 of the European Commission working on treatment of process water from biowaste digestion (July 1998).
- 2005. Academic Visitor for four months at Advanced Water Management Centre of University of Queensland, Brisbane (Australia), working on aerobic granular biomass systems (March – June 2005).

**Responsibility in national and international research projects**

- 1996/1997. Project Manager for a study on the transport of dangerous substances funded by the Italian Environment Ministry.

- 2002/2006. Scientific Responsible for IRSA in a four years Project (Aquatec), funded by Italian University and Scientific Research Minister, for developing a new wastewater treatment technology.
- 2005/2008. Scientific Responsible of PERBIOF Project (A new technology for treating municipal and/or industrial wastewater with low environmental impact) financed by Life Environment Programme of the European Commission for transferring at demonstrative scale an innovative wastewater treatment technology.
- 2006/2009. Scientific Responsible of the activity: “Study of landfill leachate treatment by SBBGR integrated with ozonation” within INNOWATECH Project (Contract No. 036882) “Innovative and integrated technologies for the treatment of industrial wastewater” financed by the European Commission under Thematic Priority 'Global Change and Ecosystems' of the Sixth Framework Programmes.
- 2007/2008. Project Manager of PERBIOF Project (A new technology for treating municipal and/or industrial wastewater with low environmental impact) financed by Life Environment Programme of the European Commission for transferring at demonstrative scale an innovative wastewater treatment technology.
- 2009/2010. Leader del work package “Aerobic granulation” of INNOWATECH Project (Contract No. 036882) “Innovative and integrated technologies for the treatment of industrial wastewater” financed by the European Commission under Thematic Priority 'Global Change and Ecosystems' of the Sixth Framework Programmes.
- 2009/2010. Scientific Responsible of a project focussed on textile wastewater treatment by integrating chemical and biological process funded by Lariana Depur SpA.
- 2010/2013. Scientific Responsible for IRSA in MEDIWAT project “Sustainable management of environmental issues related to water stress in Mediterranean islands” funded by the European Commission within Med Programme.

**Other activities**

-- 2010/2011. He is serving as an editorial board member for Journal of Waste Water Treatment & Analysis and Journal of Bioprocessing & Biotechniques of OMICS Publishing Group.
- 2000/2006. Invited lectures in seminars and specialized courses on biological wastewater treatments, wastewater treatment plant design and management on behalf of IRSA.
- 1998/2011. Reviewer for the following scientific journals: Environmental Chemistry Letters (Springer), Journal of Chemical Technology & Biotechnology (Wiley), Environmental Science & Technology (ACS), Biochemical Engineering Journal (Elsevier), Journal of Hazardous Materials (Elsevier), Bioresource Technology (Elsevier), Desalination and Water Treatment, Applied Microbiology and Biotechnology (Springer), Industrial and Engineering Chemistry Research (ACS), Water Research (Elsevier), Journal of Environmental Management (Elsevier), Waste Management (Elsevier), Water Science and Technology (Elsevier), Chemosphere (Elsevier).
- 2008. Member of the scientific committee of the IWA Biofilm Technologies Conference held in Singapore from 8th to 10th January 2008.
- 2008. Member of the scientific committee of the 4th IWA Sequencing Batch Reactor Technology Conference held in Rome from 7th to 10th April 2008.

**Awards and acknowledgements**

- 2006. “Premio Impresa Ambiente” award during the Italian edition of European Business Awards for the Environment organized by the European Commission's Environment Directorate-General.

- 2008. “Best presentation award” at IWA Biofilm Technologies Conference of Singapore (8-10 January 2008).
- 2009. Award from the Italian National Research Council for having achieved excellent and innovative results
- 2010. “Best Life Environment Projects” Award from European Commission for Perbiof Project.

## Publications

Co-author of more than 100 papers published in peer reviewed journals or presented to scientific conferences, book chapters and technical reports on different subjects within the environmental sciences and technologies.

- Selected publications in peer reviewed journals

**Di Iaconi C.,** Rossetti S., Lopez A., Ried A. (2011). Effective treatment of stabilized municipal landfill leachates. *Chemical Engineering Journal*, 168, 1085-1092.

**Di Iaconi C**., De Sanctis M., Rossetti S., Ramadori R. (2010). SBBGR technology for minimising excess sludge production in biological processes. *Water Research*, 44, 1825-1832.

**Di Iaconi C**., Del Moro G., De Sanctis M., Rossetti S. (2010). A chemically enhanced biological process for lowering operative costs and solid residues of industrial recalcitrant wastewater treatment. *Water Research*, 44, 3635-3644.

**Di Iaconi C.**, Pagano M., Ramadori R., Lopez A. (2010). Nitrogen recovery from a stabilized municipal landfill leachate. *Bioresource Technology*, 101, 1732-1736.

De Sanctis M., **Di Iaconi C.**, Lopez A., Rossetti S. (2010). Granular biomass structure and population dynamics in Sequencing Batch Biofilter Granular Reactor (SBBGR). *Bioresource Technology*, 101, 2152-2158.

**Di Iaconi C.**, Del Moro G., Lopez A., Ramadori R. (2009). The essential role of filling material in aerobic granular biomass generation in a periodic submerged biofilter. *World Review of Science, Technology and Sustainable Development*, 6, 144-155.

**Di Iaconi C.**, Del Moro G., Pagano M., Ramadori R. (2009). Municipal landfill leachate treatment by SBBGR technology. *International Journal of Environment and Waste Management*, 4, 422-432.

**Di Iaconi C.**, Del Moro G., Ramadori R., Lopez A., Colombino M., Moletta R. (2009). Influence of hydraulic residence time on the performances of an aerobic granular biomass based system for treating municipal wastewater at demonstrative scale. *Desalination and Water Treatment*, 4, 206-211.

**Di Iaconi C**., Ramadori R., Lopez A. (2009). The effect of ozone on tannery wastewater biological treatment at demonstrative scale. *Bioresource Technology*, 100, 6121-6124.

Balest L., Lopez A., Mascolo G., **Di Iaconi C**. (2008). Removal of endocrine disrupter compounds from municipal wastewater using an aerobic granular biomass reactor. *Biochemical Engineering Journal*, 41, 288-294.

**Di Iaconi C**., De Sanctis M., Rossetti S., Ramadori R. (2008). Technological transfer to demonstrative scale of sequencing batch biofilter granular reactor (SBBGR) technology for municipal and industrial wastewater treatment. *Water Science and Technology*, 58(2), 367-372.

**Di Iaconi C.**, Del Moro G., Lopez A., De Sanctis M., Ramadori R. (2008). Municipal wastewater treatment by a periodic biofilter with granular biomass. *Water Science and Technology*, 58(12), 2395-2401.

Balest L., Mascolo G., **Di Iaconi C.**, Lopez A. (2008). Removal of endocrine disrupter compounds from municipal wastewater by an innovative biological technology. *Water Science and Technology*, 58 (4), 953-956.

**Di Iaconi C.**, Ramadori R., Lopez A. Passino R. (2007). Aerobic granular sludge systems: the new generation of wastewater treatment technologies. *Industrial & Engineering Chemistry Research*, 46, 6661-6665.

**Di Iaconi C.**, Ramadori R., Lopez A. (2006). Combined biological and chemical degradation for treating a mature municipal leachate. *Biochemical Engineering Journal*, 31, 118-124.

**Di Iaconi C.**, Ramadori R, Lopez A., Passino R. (2006). Influence of hydrodynamic shear forces on properties of granular biomass in a sequencing batch biofilter reactor. *Biochemical Engineering Journal*, 30, 152-157.

Ramadori R., **Di Iaconi C**., Lopez A., Passino R. (2006). Wastewater treatment by periodic biofilter characterized by aerobic granular biomass. *Journal of Environmental Science and Health. Part A, Toxic/hazardous Substances & Environmental Engineering*, 41(9), 1781-1792.

Ramadori R., **Di Iaconi C.**, Lopez A., Passino R. (2006). An innovative technology based on aerobic granular biomass for treating municipal and/or industrial wastewater with low environmental impact. *Water Science and Technology*, 53(12), 321-329.

**Di Iaconi C.**, Ramadori R., Lopez A., Passino R. (2005). Hydraulic shear stress calculation in a Sequencing Batch Biofilm Reactor with granular biomass. *Environmental Science and Technology*, 39, 889-894.

**Di Iaconi C.**, Ramadori R., Lopez A., Passino R. (2005). Municipal wastewater treatment by periodic biofilter without excess sludge production. *Annali di Chimica*, 95(6), 447-455.

**Di Iaconi C.**, Bonemazzi F., Lopez A., Ramadori R. (2004). Integration of chemical and biological oxidation in a SBBR for tannery wastewater treatment. *Water Science and Technology*, 40(10), 107-114.

**Di Iaconi C.**, Ramadori R., Lopez A., Passino R. (2004). Preliminary biomass characterization in a sequencing batch biofilm reactor. *Annali di Chimica*, 94 (12), 889-898.

**Di Iaconi C.**, Lopez A., Ramadori R., Passino R. (2003). Tannery wastewater treatment by sequencing batch biofilm reactor. *Environmental Science and Technology*, 37, 3199-3205.

**Di Iaconi C.**, Di Pinto A.C., Ricco G., Tomei M.C. (2002). Treatment options for tannery wastewater II: integrated chemical and biological oxidation. *Annali di Chimica*, 92(5-6), 531-539.

**Di Iaconi C.**, Lopez A., Ramadori R., Di Pinto A.C., Passino R. (2002). Combined chemical and biological degradation for treating tannery wastewater. *Water Research*, 36(9), 2205-2214.

**Di Iaconi C.**, Lopez A., Ricco G., Ramadori R. (2001). Treatment options for tannery wastewater. I: alkalinization with or without post-ozonation. *Annali di Chimica*, 91, 587-594.

**Di Iaconi C.**, Ricco G., Tanzarella C and Tomei M.C. (1998). Chemical Oxidation combined with biological oxidation in removal of biorefractory compounds. *Annali di Chimica*, 88, 849-858.

Tomei M.C., **Di Iaconi C.**, Di Pinto A.C, Mappa G. (1996). Development of an expert system for nitrogen removal process control. *European Water Pollution Control*, 6 (6), 45-50.