



Name Anna Rosa Sprocati
Date of birth 06/08/1953
Degree 1978
Biological Sciences
University of Milan
Cum Laude

Nationality Italian

Present position: Senior researcher, coordinator of microbiology activities of the Environmental Characterization, Prevention and Recovery UNIT
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Educational background and Experience

After studying biology and ecology at the University of Milan (Italy) (1973-1978), Anna Rosa Sprocati attended the European Joint Research Centre of Ispra (EURATOM), first completing her thesis and later cooperating in researches on freshwater ecology applied to the effects of heavy metals on planktonic communities, studied by the method of *in situ* mesocosms (1978-1980). She attended several international courses on biotechnology (i.e: University of Rome "La Sapienza", University of Paris VII (FR), Ispra-courses (CE), Massachusetts Institute of Technology (Cambridge-USA), acquiring knowledge and competences on microbial biotechnology, mainly applied to industrial processes and the environment. Since 1983 she is researcher at ENEA-Casaccia. Presently she is coordinator of the microbiology group of the ENEA's Environmental Characterization, Prevention and Recovery UNIT, Bio-geo-chemistry Laboratory. She obtained several projects at national and international level (i.e: Technological Platform of Soustons, Fr; projects funded by the National Research Plans: MURST 1996-200, FIRB 2002-2005, TIDe 2002-2006, the project UMBRELLA FP7-ENV- N° Project 226870 2009-2012, MIPAAF VEROBIO 2010-2013,). All mentioned projects are interdisciplinary and in cooperation with different Universities and Enterprises and are related to the field that is the focus of investigations in current EU strategic research.. She is named by ENEA and Government as member of several Scientific committees on microbial biotechnology and soil bioremediation. Since 2004 Anna Rosa Sprocati is tenured of the course "Environmental Microbiology" at the University of Rome "Sapienza" (Italy) as contracting Professor. She is tutor of numerous thesis and PhD, stages and fellowships. She assists the European Community as an independent expert, acting as evaluator of research projects in relation to white biotechnology.

Specialist areas of knowledge

- Recycling of renewable sources by biotechnological means: microbial conversion of biomass, industrial by-products and municipal urban wastes for biofuels production through innovative processes; energetic valorisation of biomass by coupling anaerobic digestion with molten carbonate fuel cells technology
- Characterisation of microbial communities native to harsh and polluted biotopes, in view of harnessing the intrinsic bioremediation potential
- Microbial technology applied to diagnostic, conservation and bio-restoration of artistic heritage.

Other relevant information

Patent

Procedure for ethanol production through high resistant microbial strains. Inventors **Anna Rosa Sprocati** and Silvio Sora. Patent ENEA n 48059-A/87 Italy and n 8807909/88 France.

Five Selected Publications

Chiara Alisi, Rosario Musella, Flavia Tasso, Carla Ubaldi, Sonia Manzo, Carlo Cremisini and **Anna Rosa Sprocati** (2009) *Bioremediation of diesel oil in a co-contaminated soil by bioaugmentation with a microbial formula tailored with native strains selected for heavy metals resistanc.* Science of the Total Environment, 407 (8), 3024-3032.

Anna Rosa Sprocati , Chiara Alisi, Lia Segre, Flavia Tasso, Mara Galletti, Carlo Cremisini. Investigating heavy metal resistance, bioaccumulation and metabolic profile of a metallophile microbial consortium native to an abandoned mine. Science of the Total Environment 366 (2006) 649–658

D. Braconi M. Sotgiu, L. Millucci, A. Paffetti, F. Tasso, C. Alisi, S. martini, R. Rappuoli, **A.R. Sprocati**, C. Rossi, and A. Santucci. *Wild-type wine Saccharomyces cerevisiae as a tool to evaluate the effects on eukaryotic life of locally used herbicides.* International Journal of Ecodynamics 1(3)(2006) 266-283

Daniela Braconi, Michele Sotgiu, Lia Millucci, Alessandro Paffetti, Flavia Tasso, Chiara Alisi, Silvia Martini, Roberto Rappuoli, **Anna Rosa Sprocati**, Claudio Rossi and Annalisa Santucci Comparative analysis of the effects of locally used herbicides and their active ingredients on a wild type wine *Saccharomyces cerevisiae*. J Agric Food Chem. Pub on Web 3/22/06. Page est:9.2(2006).

Chiara Alisi, Giovanna Jona Lasinio, Claudia Dalmastrì, **Anna Rosa Sprocati**, Silvia Tabacchioni, Annamaria Bevivino, Luigi Chiarini. Metabolic profiling of *Burkholderia cenocepacia*, *Burkholderia ambifaria*, and *Burkholderia pyrrocinia* isolates from maize rhizosphere. Microbial Ecology 0, 1–11DOI: 10.1007/s00248-005-0223-y (2005)

Anna Rosa Sprocati, Chiara Alisi, Flavia Tasso, Lia Segre and Carlo Cremisini. Comparison of Microbial Communities Native to three Differently Polluted Ecological Niches in the Industrial Site of Bagnoli (Naples, Italy) in *Recent Research Developments in Multidisciplinary Applied Microbiology (2006). Understanding and Exploiting Microbes and Their Interactions. Biological, Physical, Chemical and Engineering Aspects.* Ed. Wiley-VCH.

Links:

La Sapienza:

<http://w3.uniroma1.it/dibenj/specialistica/corso.asp?idcor=151&Nome=Microbiologia%20Ambientale&code=1001834&crediti=5&ac=2009-2010&ssd=BIO/08>

Technical Unit for Environmental Characterization, Prevention and Recovery (UTPRA)

http://www.enea.it/com/ingl/New_ingl/research/sust_eco_dev/prevention_recovery.html