



## Gabinete de Promoção do 7.º Programa-Quadro de I&DT



### PARTNER PROFILE FORM 7<sup>th</sup> Framework Programme Theme 2 – *Food, Agriculture and Fisheries, and Biotechnology* Specific Programme *Cooperation*

Date : 2008 10 07

**Note for attention:** further details on the Partner Profile Form (PPF) can be found in the Topic PPF\_FP7\_T2.8 (page 4/4).

PPF_FP7_T2.1 Details of the organization and of the main researcher				
<b>Contact person details</b>				
<b>Name, Title</b>	Bruno Sommer Ferreira, Dr.		<b>Gender (M/F):</b>	M
<b>Tel.:</b>	+351218419189	<b>Fax.:</b>	+351218419189	<b>E-mail:</b> bsf@biotrend.biz
<b>Personnel website:</b>				
<b>Organization/Research Group details</b>				
<b>Name:</b>	Biotrend – Inovação e Engenharia em Biotecnologia, S.A.			
<b>Street name and number:</b>	Rua Quinta São João do Cevadero, 33			
<b>City, Postal address:</b>	2665-307 Milharado	<b>P.O Box</b>	<b>Country</b>	Portugal
<b>Website</b>	www.biotrend.biz			
<b>Organization activity type<sup>1</sup></b>	<input type="checkbox"/> HES	<input checked="" type="checkbox"/> IND	<input type="checkbox"/> REC	<input type="checkbox"/> N/A <input type="checkbox"/> OTH _____
<b>Organization legal status type</b>	<input type="checkbox"/> Public	<input checked="" type="checkbox"/> Private	<input type="checkbox"/> Non-profit	<input type="checkbox"/> OTH _____

PPF_FP7_T2.2 Personal profile and work history of the research group/organization (brief description - max 12 lines)
<p>The company founders have a scientific career that gives them an extremely broad view of bioprocesses. They worked in areas as diverse as microalgae culturing, biocatalysis and biotransformation, the monitoring and optimization of the microbial production of recombinant proteins and the development of culture systems for stem cells. They are co-author of over 50 publications and member of several scientific societies. They have academic research and teaching experience and have worked as consultant for private companies and the government, and advised to national and international entities and projects on Industrial Biotechnology. Biotrend was founded with the aim of performing bioprocess engineering development in the field of Industrial Biotechnology. Biotrend carries out its own research and develops in-house projects aiming at the production of high value biomolecules. Current research effort is focused on exploring opportunities provided by Nature's microbial diversity. Processes developed by Biotrend include pure L-lactic acid produced from cheese whey, whole-cell steroid biotransformation, microbial production of natural carotenoids. Biotrend addresses process/product development in a highly integrated way right from the start taking into account constraints such as the regulatory environment, market requirements, large scale feasibility and economics.</p>

<sup>1</sup> **Organization activity type (fill all that apply):** **HES** - Higher Education (i. e. organisations only or mainly established for higher education/training, e. g. universities, colleges); **IND** - Industry (i. e. industrial organisations private and public, both manufacturing and industrial services such as industrial software, design, control, repair, maintenance); **REC** - Research organization (i. e. "research organisation" means a legal entity established as a non-profit organisation which carries out research or technological development as one of its main objectives); **OTH** - Others; **N/A** - Undefined.



## Gabinete de Promoção do 7.º Programa-Quadro de I&DT



### **PARTNER PROFILE FORM** **7<sup>th</sup> Framework Programme** **Theme 2 – Food, Agriculture and Fisheries, and Biotechnology** **Specific Programme Cooperation**

<b>PPF_FP7_T2.3 Areas of expertise and interest of the Research Group [activities and areas under the 2009 Work Programme for the "Food, Agriculture and Fisheries, and Biotechnology" Theme: <a href="#">Call FP7-KBBE-2009-3 e FP7-2009-BIOREFINERY CSA e FP7-2009-BIOREFINERY CP</a>]</b>		
<b>Activity / Area</b>		2009
<b>2.1 Sustainable production and management of biological resources from land, forest and aquatic environments</b>		√
<input type="checkbox"/>	2.1.1 Enabling Research	√
<input type="checkbox"/>	2.1.2 Increased sustainability of all production systems (agriculture, forestry, fisheries and aquaculture); Plant health and crop protection	√
<input type="checkbox"/>	2.1.3 Optimised animal health, production and welfare across agriculture, fisheries and aquaculture	√
<input type="checkbox"/>	2.1.4 Socio-economic research and support to policies	√
<b>2.2 Fork to farm: Food (including seafood), health and well being</b>		√
<input type="checkbox"/>	2.2.1 Consumers	√
<input type="checkbox"/>	2.2.2 Nutrition	√
<input type="checkbox"/>	2.2.3 Food processing	√
<input type="checkbox"/>	2.2.4 Food quality and safety	√
<input type="checkbox"/>	2.2.5 Environmental impacts and total food chain	√
<input type="checkbox"/>	2.2.6 European Research Area <b>(New)</b>	√
<input type="checkbox"/>	2.2.7 Coordinated Call with India (Department of Biotechnology – DBT) <b>(New)</b>	√
<b>2.3. Life sciences, biotechnology and biochemistry for sustainable non-food products and processes</b>		√
<input checked="" type="checkbox"/>	2.3.1 Improved biomass and plant based renewables	√
<input checked="" type="checkbox"/>	2.3.2 Bioprocesses	√
<input checked="" type="checkbox"/>	2.3.3 Environmental biotechnologies; Use of waste and by-products	√
<input checked="" type="checkbox"/>	2.3.4 Biorefinery <b>(New)</b>	√
<input checked="" type="checkbox"/>	2.3.5 Environmental biotechnology <b>(New)</b>	√
<input checked="" type="checkbox"/>	2.3.6 Emerging Trends in biotechnology <b>(New)</b>	√
<input checked="" type="checkbox"/>	2.3.7 Biorefinery Joint Call <b>(New)</b>	√
<b>2.4. Other activities</b>		√
<input checked="" type="checkbox"/>	4.1. Coordination and support actions across the Theme	n.a

n.a. – Non applicable.



## Gabinete de Promoção do 7.º Programa-Quadro de I&DT



### **PARTNER PROFILE FORM** **7<sup>th</sup> Framework Programme** **Theme 2 – Food, Agriculture and Fisheries, and Biotechnology** **Specific Programme Cooperation**

<b>PPF_FP7_T2.4 Description of previous and present experience in International Cooperation (max. 10 lines)</b>	
Biotrend members have participated both in several EU-funded projects with partners from several EU-countries, bi-lateral Portugal/Germany cooperation initiatives and contract research projects financed by multinational foreign (German and Dutch) companies, together with a history of research periods abroad (The Netherlands, Germany, Canada). Biotrend has recently consolidated its networking mainly by establishing relationships with European companies acting in the field of Industrial Biotechnology. Resident experience exists on the participation of EU and OECD working groups for the implementation of a Knowledge-Based Bioeconomy. Biotrend currently manages projects with research groups and companies of 5 different countries.	
<b>PPF_FP7_T2.4.1 Participation in EU's Framework Programme (FP) projects</b>	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
<b>If yes:</b>	
<b>Project 1</b> Title / Acronym (Activities performed)	EPOBIO: Realising the Economic Potential of Sustainable Resources - Bioproducts from Non-food Crops – Member of the advisory board.
<b>Project 2</b> Title / Acronym (Activities performed)	Integrated bioprocess design for large scale production and isolation of recombinant proteins – Optimization of the production of genetically engineered cutinase (an industrially important lipase) with protein tags for the design of selective extraction systems.
<b>Project 3</b> Title / Acronym (Activities performed)	Enantioselective biotechnological resolution of racemic epoxydes in the production of optically pure epoxydes – Studies of process productivity and optimization, mainly in organic solvents, at the level of immobilized cells, containing novel enzymes that resolve cheap racemic epoxide mixtures to very valuable optically pure epoxides to be used in subsequent industrial chemical syntheses of optically pure bioactive compounds.
<b>Project 4</b> Title / Acronym (Activities performed)	Terpene Biotransformations – Development of novel production processes of trans-carveol and carvone from limonene. Development of analytical methods for physiological studies of whole cells in biphasic systems.



**Gabinete de Promoção do 7.º Programa-Quadro de I&DT**

**PARTNER PROFILE FORM**  
**7<sup>th</sup> Framework Programme**  
**Theme 2 – Food, Agriculture and Fisheries, and Biotechnology**  
**Specific Programme Cooperation**

<b>PPF_FP7_T2.5. Topics of interest in the Theme 2 Work Programme (WP) for 2009</b>	
<b>Call reference</b>	All calls within 2.3.# activities
<b>WP Topic</b>	
<b>Project Type</b>	<input checked="" type="checkbox"/> Small Collaborative Project <input type="checkbox"/> Coordination and Support Action <input checked="" type="checkbox"/> OTH _____
<b>PPF_FP7_T2.5.1 Expertise/ Commitment offered</b>	
<b>Keywords specifying the expertise:</b>	Bioprocess development, process optimization, process integration, high-throughput screening of biocatalysts and process conditions
<b>Description of the expertise:</b>	<p>Biotrend is R&amp;D-lead process development company which operates in any industrial sector in which microbial processes are in use, with particular emphasis on the food and feed additives industry and on the fine chemicals industry. Past achievements include the development of a bioprocess for a national client (L-lactic acid production from cheese whey) and the feasibility evaluation of a biotransformation process for a leading chemical specialties multinational. Biotrend is currently performing the conceptual design of a process for the production of a biopesticide and of a process for the production of a biopolymer for biomedical for two Portuguese client companies.</p> <p>BioTrend runs a state of the art facility for the development and optimization of bioprocesses. Biotrend's high-throughput platform allows the screening of over 10000 strains or process conditions a year. The strains are cultured in arrays of 96-deep-well plates with efficient gas-liquid mass transfer to deliver results as similar as possible as those obtained in shake flasks. All downstream and analytical procedures are also performed in 96-well format, providing an unparalleled strain selection platform before upscaling to the bioreactor trials.</p> <p>Process development is performed with our bioreactor battery, connected to data acquisition and control software. The reactors are sampled automatically and samples are analyzed for biomass, substrates, metabolites and products. Biotrend's resources allow close and around-the-clock monitoring of all the parameters that reveal the process dynamics right from inoculation, required to perform process feasibility assessment and fast process optimization.</p> <p>Further to its highly qualified human resources, Biotrend collaborates with a first-rate network of partners, being able to cover any point from the discovery process to engineering design, with constant adherence to the relevant regulatory and market frameworks.</p>
<b>Role/Commitment offered</b>	<input checked="" type="checkbox"/> Technology development <input checked="" type="checkbox"/> Research <input checked="" type="checkbox"/> Demonstration <input checked="" type="checkbox"/> Training <input type="checkbox"/> Dissemination <input type="checkbox"/> OTH _____
<b>PPF_FP7_T2.6 Interests on other Themes of the 7FP Specific Programme "Cooperation"</b>	
	<input type="checkbox"/> No <input checked="" type="checkbox"/> YES
<b>If yes:</b>	



## Gabinete de Promoção do 7.º Programa-Quadro de I&DT

### **PARTNER PROFILE FORM** **7<sup>th</sup> Framework Programme** **Theme 2 – Food, Agriculture and Fisheries, and Biotechnology** **Specific Programme Cooperation**

	<input checked="" type="checkbox"/> T1 - Health <input type="checkbox"/> T3 - Information and Communication Technologies <input checked="" type="checkbox"/> T4 - Nanosciences, Nanotechnologies, Materials and New Production Technologies <input checked="" type="checkbox"/> T5 - Energy <input type="checkbox"/> T6 - Environment (including Climate Change) <input type="checkbox"/> T7 -Transport (Including Aeronautics) <input type="checkbox"/> T8 - Socio-Economic Sciences and the Humanities <input type="checkbox"/> T9 - Space <input type="checkbox"/> T10 - Security
--	--

<b>PPF_FP7_T2.7 I agree with the publication of my/our data:</b>	
	<input type="checkbox"/> NO <input checked="" type="checkbox"/> YES

<b>PPF_FP7_T2.8 Short guidelines on filling this Partner Profile Form (PPF)</b>	
The present form aims to help the researchers in disseminating their activities and interests as potential partners within the Theme 2 of the FP7 by assisting the process of partner search.	
<b>PPF_FP7_T2.1</b>	The fields should be filled in order to allow the identification as a partner proponent and further contact by possible coordinators or other entities.
<b>PPF_FP7_T2.2</b>	A short description on the research team will allow the acknowledgement of the past and present activities.
<b>PPF_FP7_T2.3</b>	The activities and areas of interest under the 2009 calls of Theme 2 should be indicated.
<b>PPF_FP7_T2.4</b>	Description of previous and present experience in International Cooperation (e.g. projects and partners involved).
<b>PPF_FP7_T2.5</b>	If the interest of the organization regards several topics under the same area, or different areas, additional lines can be introduced in order to cover all the information considered relevant.
<b>PPF_FP7_T2.6</b>	Information on activities and interest on areas of other Themes allows the identification of potential synergies – multidisciplinary projects/approaches.
<b>PPF_FP7_T2.7</b>	In order to best fulfil the goals intended, this form should be circulated to the international community of National Contact Points, and also among potentially interested parties. Note that also the online publication of the present information could be of great help in the process of consortium search for a submission of a proposal.

<b>Please fill in the Partner Profile Form (PPF) and return it to:</b>	
<b>NCPs for Theme 2</b>	Joana Camilo and /or Maria João Fernandes
<b>Organisation</b>	GPPQ – Gabinete de Promoção do 7º Programa-Quadro de I&DT / FP7 Promotion Office
<b>Tel.</b>	(+351) 21 782 83 09
<b>E-mail</b>	<a href="mailto:joana.camilo@gppq.mctes.pt">joana.camilo@gppq.mctes.pt</a> and /or <a href="mailto:faria@itqb.unl.pt">faria@itqb.unl.pt</a>