

## Partner Search

### 1. Call Information

<b>Call for proposal</b>	4 <sup>th</sup> Call of ERA-net ERA-IB2 (Industrial Biotechnology) in cooperation with EuroTransBIO
<b>Topic</b>	"Industrial biotechnology for Europe: an integrated approach" Multilateral research projects using Industrial Biotechnology
<b>Funding Scheme</b>	--
<b>Deadline</b>	Pre-proposal 26.3.2013 Full proposal 28.06.2013
<b>Internal Deadline</b>	08.03.2013

### 2. Project Information

**Project Title:**

Novel microbial exopolysaccharides for industrial applications

**Abstract of the project (max. 500 characters):**

A German University is looking for a R&D partner in order to complete the consortium of an EU project proposal. The project aims to identify and to obtain novel promising microbial polysaccharides and their derivatives capable to enlarge the market of these important and useful biopolymers, especially in the field of construction industry.

Screening of different habitats will identify novel microbial producers as well as novel exopolysaccharides. These exopolysaccharides have to be characterized concerning rheological behaviour and chemical structure. In addition existing, already isolated and characterized strains should be optimized concerning biosynthesis and in vivo modifications of the biopolymers.

The partner sought should be an expert in system biology and/or metabolic engineering of bacteria. Perfect would be a focus on bacterial polymers. Metabolite analysis also might be applied to modified strains.

### 3. Target Partner

<b>Target Partner</b> <i>(SMEs, Research Institute, University...)</i>	- Biotech- SME preferred, - Universities or Research Centers as second choice.
<b>Partner profile sought</b> <i>(further description of the requested partner)</i>	- Specialist in systems biology and/or metabolic engineering, - expertise in bacterial polymers
<b>Preferred countries</b>	RU, UK, PL, TR, NO, FI, BE, AT, DK, ES
<b>Role of the partner within the project</b>	full partner in consortium
<b>Partners already involved</b>	Universities (DE, PT, RO, DK), Industry (DE)

### 4. Further Information

Please, describe or add important information about your project idea / proposal.

A similar project idea has already been positively evaluated in a prior call but rejected due to weaknesses in microbial optimization / metabolic engineering. Adding special expertise in this field should render the project proposal highly competitive.

#### Project rationale

Microbial polysaccharides represent an attractive alternative to plant and macro algae polysaccharides. They can be produced by renewable sources and in contrast to plants, microbial production does not depend on environmental factors as certain geographical, climatic, availability constrains and limitations.

Furthermore, the use of microbes enables facile manipulation of biosynthetic pathways to enhance productivity or influence the polysaccharide composition. Biogenic polysaccharides show a very large field of applications, mainly in the food sector.

In industrial applications only few polysaccharides are used, compared to the extremely large number of publications and patents. The major limitation in their market is due to the difficulty of identifying new and superior properties, efficient technology compared as cost/efficiency ratio to traditional polysaccharides of land plants or marine origin.

### 5. If interested please contact

<b>Name</b>	Steirische Wirtschaftsförderung
<b>Organisation Type</b>	Non profit
<b>City / Country</b>	Graz/Austria
<b>Contact Person</b>	Michael Kerschbaumer (michael.kerschbaumer@sfg.at)