



## Technology Request

Diffusion	International
Title	Italian SME seeks cooperation on biomolecules conjugation (bioconjugation) in the healthcare sector for pharmaceuticals production
Reference	51319
International Ref.	TRIT20161007001
Deadline	10-10-2017
Abstract	<p>An Italian biotechnology company has gained expertise in In Vitro Diagnostics, diagnostics and molecular design applied to pharmaceuticals. The company is seeking transnational cooperation with universities, research centres and private industry to further explore processes and optimization of bioconjugation technology in drugs production. Technical cooperation agreement, manufacturing agreement or commercial agreement will frame the cooperation sought.</p>
Description	<p>An Italian biotechnology company, active in the field of micro- and nanotechnology for biological sciences, has gained a strong expertise in the development and production of In Vitro Diagnostics (IVD) reagents, mainly immunofluorescence tools. In diagnostics and molecular design applied to pharmaceuticals/drugs, an important role is played by biomolecules conjugation (bioconjugation). Bioconjugation is one particularly promising strategy, e.g., for increasing the effectiveness of injectable drugs, as it allows to obtain new chemical entities presenting specific features; these positively influence the pharmacokinetics (effects of the organism on the drug: drug absorption, distribution, chemical metabolism and elimination from the body) and pharmacodynamics (biochemical effects of pharmaceutical drugs on the organism) of the drug.</p> <p>The company has a long-time experience in biomolecules conjugation with fluorochromes, proteins, and nanoparticles. At the current stage, the bioconjugation expertise can be easily adapted upon request in order to obtain products not commonly available on the market sold by other suppliers. Those expertise are currently offered by the company to clients; the technology is already on the market.</p> <p>The advantages lie in:</p> <ul style="list-style-type: none"><li>- the extreme versatility of the bioconjugation offered</li><li>- the ability to conjugate antibodies, peptides or other biomolecules to fluorochromes, enzymes, proteins and other, according to each specific research project.</li><li>- the company's processes are tailored on the basis of partners' requests</li><li>- the entire process is set up completely in-house.</li><li>- for the client, the possibility to be updated during the whole process and to interact directly with the technical staff in order to obtain a product responding to required features.</li></ul> <p>The company is willing to pursue a transnational cooperation with Academy, (university) research centres to further explore processes and optimization of bioconjugation technology in its technical aspects. Also partners from the industrial world who need to optimize specific processes or who need products out of usual suppliers lists are interesting for the client company. The aim is to co-create new products in order to fulfill requests. Moreover, the Italian company wishes to improve the already existing products according to the results of this joint research. The cooperation would take the form of a technical cooperation agreement; also manufacturing agreement and commercial agreement with technical assistance will be considered by the company, depending on partners met.</p>
Innovative Aspects and Main offer advantages	
Development phase comments	
Industrial Property Rights comments	
Collaboration Types	Manufacturing agreement

Type of partner sought

The company is seeking transnational cooperation with Academy, universities and research centres to further explore processes and optimization of bioconjugation technology in its technical aspects: deeper characterization of final products; discovery of new fields of application. Also partners from the industrial world who need to optimize specific processes or who need products out of usual suppliers lists are interesting for the client company in this phase of research. The partner has to be able to work on the co-creation of new products in molecular design, bio-nanotechnology for pharmaceuticals.

Specific area of activity of the partner

- Type of partner sought: academy, (university) research centres, private companies
- Specific area of activity of the partner: bio nanotechnology, biological sciences, In Vitro Diagnostics (IVD), pharmaceuticals
- Task to be performed: deeper characterization of final products; discovery of new fields of application. The final aim is to co-create new products in order to fulfill new requests. Moreover, to improve the already existing products according to partners know-how and suggestions.

Task to be performed