

RDI Project - Research Microproject

A literature review in response to a scientific issue

Carried out by groups of two or three students from several of the school's specialities, the RDI projects are designed to **address technological and scientific issues in the form of a state-of-the-art bibliography.**

To achieve the objectives determined jointly, the student engineers carry out a technology watch, a summary of patents or comparative analyses of innovative processes on a scientific subject, highlighting the avenues explored, completed or under development. They can also, on the basis of an exhaustive analysis of publications, define a draft research plan to enable you to launch your own developments.

This work is carried out **in close collaboration with your team** in the form of regular working meetings at the school, on your premises or remotely.

Practical work (chemical formulation, analysis...) cannot be carried out by the students during the RDI project.

Examples of issues addressed

- Replacement of titanium dioxide in pharmaceutical products
- Application of Bayesian optimization to process development
- Methods for monitoring roads condition
- Cationic chromatography of metals in lithium-ion batteries
- State of the art on BPA-free epoxy resins
- Selection of bio sourced compounds for specific cosmetic and pharmaceutical applications
- Mapping of catalysts and their supports to improve a synthesis pathway
- Research of methods to recover waste or production by-products
- Application of green chemistry principles to improve a specific synthesis pathway
- Comparative analysis of glass substrate coating techniques
- Research and selection of conductive nanoparticles for paints
- State of the art of organic/inorganic hybrid photovoltaic systems

Time period: from mid-September to mid-January

Duration: 120 to 180 work hours (60h/student), including collaborative work sessions

Supervision

- technical by your team
- scientific supervision by a university professor/researcher
- managerial supervision by a professional

Assessment: written report and oral presentation

Contribution to costs: A fee of **1200 €** (exempted from VAT) is requested for the research microproject (including supervision, travel expenses, use of software, and access to bibliographical databases).

Your Contacts for the Research Microprojects

Scientific Manager **Administrative Manager**

Nathalie Viart Mérédith Gassmann

+33 (0)3 88 10 71 29 | nathalie.viart@ipcms.unistra.fr +33 (0)3 68 85 27 94 | mgassmann@unistra.fr

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YOUR PROJECT	
Subject title	
Major focus <input type="checkbox"/> Technological benchmark <input type="checkbox"/> Selection of concepts/technologies <input type="checkbox"/> Mapping of scientific knowledge <input type="checkbox"/> Patent analysis	Major scientific area covered <input type="checkbox"/> Analytical chemistry <input type="checkbox"/> Organic chemistry <input type="checkbox"/> Materials Science <input type="checkbox"/> Polymers
Brief description	
Contact Details	
Company name	
Address	
Postcode	
City	
Your name	
Your position	
Tel.	
Email	

Date

Signature

Please send this form before June 14th to **Nathalie Viart
(nathalie.viart@ipcms.unistra.fr)**

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