

## MATEisResponsible: raise awareness, promote and perform actions in every mission of the MATEIS Laboratory community to decrease its environmental impact

Renaud G. Rinaldi<sup>\*1</sup>, Solène Tadier<sup>\*1</sup>, Marion Fregonese<sup>\*1</sup>, Marta Gallo<sup>2</sup>, Christelle Der Loughian<sup>\*1</sup>, Stephanie Deschanel<sup>\*1</sup>, Florent Dalmas<sup>\*1</sup>, Laura Preiss<sup>\*1</sup>, Erica Roitero<sup>\*1</sup>, Helen Reveron<sup>\*1</sup>, Justine Taurines<sup>\*1</sup>, Sylvain Fournier<sup>\*1</sup>, Mathieu Bouyer<sup>3</sup>

<sup>1</sup>Univ Lyon, INSA-Lyon, CNRS UMR5521, Mateis, Villeurbanne, France

<sup>2</sup>Department of Applied Science and Technology, Politecnico di Torino, Corso Duca degli Abruzzi 24, Torino, Italy

<sup>3</sup>Univ Lyon, INSA-Lyon, DIRPAT DD, Villeurbanne, France

\*Corresponding authors: [mateisresponsible@insa-lyon.fr](mailto:mateisresponsible@insa-lyon.fr)

In the French system, the laboratories are powerful established entities of universities: As schemed in figure 1, they have countless connections and their members intervene in part or all the three major assignments of a campus, namely *education* to share the knowledge, *research* to deepen the knowledge and somehow solve problems and *actions* to enhance the everyday lifestyle of the campus community members. Consequently their role is plural.

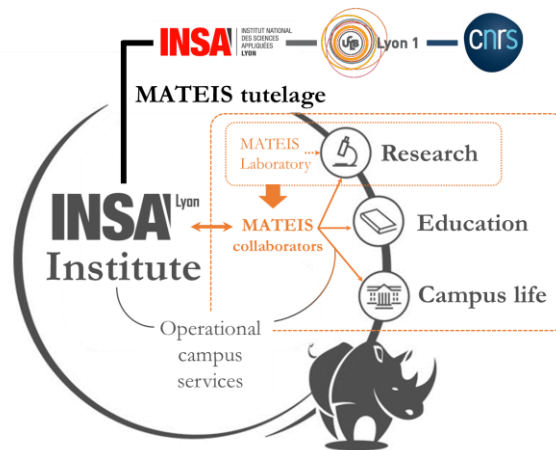


Figure 1: the MATEIS laboratory and its neighboring environment (non-exhaustive scheme).

Now considering one of the greatest challenge of our lifetime, listening to the unanimous community of colleagues and specialists [1,2], laboratories, whatever their field of expertise, can thus play a key strategic role in addressing the problem of anthropogenic environmental impacts, and should arguably represent a driving force. MATEIS [3] which stands for “Materials Engineering and Science” is a multi-materials science laboratory which naturally contributes, working for instance on the materials durability yet accounting for the environmental impact of the solutions. Nevertheless, with the aim to go beyond its research themes, its internal MATEisResponsible group is actively working on pulling the many thinkable strings to raise awareness, encourage and perform actions to decrease the laboratory environmental impact whatever the scales, benefits and fields of actions. In this work, many examples of the actions taken (e.g. greenhouse gas balance, reporting, seminars,...) will be presented spanning throughout the three aforementioned major scopes: search, educate, act. Focus will be made on the many possible fruitful connections to gain support, essentially from the students via the numerous technical and/or personal projects they complete during their curriculum, but also the operational campus services, the associations and the voluntary colleagues.

**Keywords (from 3 to 5 max):** environmental impact, greenhouse gas balance, awareness, campus communities.

### References

[1] UNION, OF CONCERNED SCIENTISTS–UCS. "World scientists' warning to humanity." Cambridge, Mass., November, 8, 1992.

[2] Ripple, William J., et al. "World scientists' warning to humanity: A second notice." *BioScience*, 67, 12, 2017, 1026-1028.

[3] <https://mateis.insa-lyon.fr/>