

E-NICHE: A European Network In Chemical Ecology: Translating the language of life into sustainability

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E-NICHE COST ACTION CA22102

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The main aim and objective of this EU COST Action network is to unify European players in chemical ecology, enhancing cooperation, promoting visibility and sharing knowledge, tools, and platforms. It addresses major societal issues for environmental and sustainable development goals by describing chemodiversity, evolutionary forces, and global changes that will impact biodiversity and ecological interactions. E-NICHE is bringing together researchers and companies who study natural compounds that can act as semiochemicals (i.e., communication signals) across a diversity of organisms and ecological systems, including insects. This work will be nourished by a deeper understanding of the living world through the lens of chemical mediation, the main system of biological communication. It will also aim to prevent the loss of the chemical biodiversity found in nature, under threat because of global changes. Within this collaborative scientific effort, the participation of Young Researchers plays a key role in fostering innovation, ensuring continuity, and promoting inclusiveness within the European chemical ecology community.

Consequently, E-NICHE's overarching objective is to establish a strong, extended European CE network that catalyses international, interdisciplinary, and cross-sectoral exchanges with a view to building knowledge and intergenerational sustainable development solutions. Ultimately, the Action aims to build a European Association in Chemical Ecology as it exists already in Asia-Pacific (APACE) and the Latino Americas (ALAEQ) linked to the international one (ISCE).