

## CV- OKNO URBAN BEE LAB

OKNO is an independent non-profit organization (NGO) located in Brussels. It was founded in 2004 by a collective of artists, engineers and scientists focusing on three objectives (i) to explore the interaction between art, science and technology, (ii) to raise awareness about issues in sustainability and contribute to well functioning urban communities, and (iii) to foster pan-European collaboration, particularly between similar Western, Central and Eastern European organizations. During the past decade OKNO has achieved these objectives through a large number of national and international projects, and it became known internationally as the leading centre for art-science-technology interaction in Belgium. The national projects are funded by the Flemish Government and the Brussels region through structural subsidies. The international projects are funded by participation and coordination of various European projects mostly funded by the EU DG Culture. More than hundred artists, scientists and technologists have been involved in OKNO projects, mostly on a short-term project basis.

The OKNO projects often involve the creation of new and state-of-the-art technologies (both software and hardware) for recording environmental data, for storing data and its annotations, for sonification and visualization. These technologies are experimentally tested in open fields and urban settings. OKNO strongly pushes for bottom-up citizen action, open source developments, the creation of on-line collaborative knowledge repositories, and self-sufficiency through DIY and fabrication labs. Impact is achieved through festivals, exhibitions, art works, publications and public workshops. There are strong interactions with academic institutions (as some members of OKNO work at universities or research laboratories) but OKNO remains primarily oriented towards citizen engagement, artistic impact, and interdisciplinary dialog. Projects in the past have focused on topics such as sound, time, urban agriculture, seed exchange, wind and solar energy, animal behavior, and open architecture.

Since 2009, OKNO has focused intensely on urban beekeeping as a vehicle for raising environmental awareness and contributing to a sustainable world. This has lead in 2010 to the creation of an **Urban Bee Lab** within the framework of OKNO (Figure 3.1.). The lab has installed and maintains various instrumented observation beehives on rooftops in Brussels and has created urban rooftop gardens designed for providing adequate food for bees, particularly in early spring and late summer. The OKNO Urban Bee Lab has carried out a broad range of projects such as for developing the database Open Greens that records plants and plant-growth for 'edible' bee-oriented urban rooftop agriculture, for mapping out the flight routes of the urban bees and their foraging activities in order to understand and stimulate green corridors in cities (recently shown at the Fields exhibition in Riga, Latvia (may-august 2014)), and for sonification and visualization of activities inside a beehive (shown recently at the Bozar Electronic Arts Festival in Brussels (September 2014) and the Buda Green Light District Festival in Kortrijk (Belgium) (November 2014)).